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A COMPARATIVE CASE STUDY OF A STUDENT INVOLVEMENT CO-

CURRICULAR PORTFOLIO AND TRANSCRIPT

A Dissertation Presented

by

BRUCE R. PERRY

Submitted to the Office of Graduate Studies,
University of Massachusetts Boston,
in partial fulfillment of the requirements for the degree of

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May 2018

Higher Education Program

A COMPARATIVE CASE STUDY OF A STUDENT INVOLVEMENT CO-

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ABSTRACT

A COMPARATIVE CASE STUDY OF A STUDENT INVOLVEMENT CO-

CURRICULAR PORTFOLIO AND TRANSCRIPT

May 2018

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Directed by Professor Katalin Szelényi

This case study examined co-curricular portfolios and transcripts at two institutions to investigate the use of co-curricular portfolios, how they are developed, how institutions utilize them, and how they shape student learning. This research contributed to the literature by documenting evidence of student learning, describing how students and institutions utilize these programs, and providing in-depth comparative analyses of two cases. Five assessment frameworks and the conceptual framework of Preparation for Future Learning were used to analyze the data gathered.

Twenty-four students, four administrators, and one faculty member participated in interviews on two campuses where co-curricular involvement is documented by portfolios or transcripts. The findings indicated evidence of intrinsic student gains in the areas of self-awareness, pride and self-confidence, and transfer of learning; as well as extrinsic benefits including enhanced remembering and marketability. In addition,

findings related to institutional perspectives described design and practice

recommendations, practicality benefits, and challenges in implementing these programs.

ACKNOWLEDGEMENTS

The 90th Academy Awards were held on the eve of my dissertation defense. The following day when I defended, was the last day of what would have been my father's 90th year, had he lived. These were two apt reminders for me to express my gratitude to those who have helped me reach this milestone. My father, Bud, was my first inspiration on this journey. He earned his doctorate at almost the same age, but admonished me to not wait as long. I now know how wise he was. His off-beat sense of humor and desire to learn are ingrained in me. I am forever grateful for his love and his guidance in developing my writing. My mother, Norma, was also a constant source of support, love, and encouragement. I would not have had this opportunity without her selfless, unconditional love. I regret that she was unable to see me complete this dissertation but I am grateful that we were able to be together when she passed away.

Words cannot express my love and thankfulness for my best friend and partner in life, Rae. I am so grateful for your love and faith in me, your patient support through this seemingly endless endeavor, and your tolerance of the many times I've been accompanied by a laptop or a stack of articles. Together, we share the joy of watching two fascinating, young adults emerging and becoming, before our eyes. Thank you to our children, Alex and Zach, for your technical assistance, humor, support, and love. As my father did for me, let this accomplishment be a source of inspiration for you. The strength and resilience that you both get from your mother is a gift more powerful and deeper than you realize. It will sustain you through your challenges in life, as her support sustains me.

Make your own dreams, chart your own course, and pursue them with unending passion and purpose.

I am deeply appreciative of the generous support and astute guidance I received from my committee. Thank you, Dr. Szelényi, for your dedication, patience and supportive feedback through many early morning revisions. The painstaking devotion you gave to this research was astounding; and undoubtedly why final revisions were so minimal. Dr. Blanco-Ramirez, I appreciate your enthusiastic encouragement and insightful suggestions, such as the portfolio generation discussion. Dr. Owen, I am grateful for your expertise in recommending key literature and frameworks to further inform my research.

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CHAPTER 1

INTRODUCTION

In their analysis of higher education mission statements, Morphew and Hartley

(2006) identified several common elements appearing in the first few sentences of

institutional missions. Among their observations, Morphew and Hartley found that "much

of the language is superficially similar" in these statements of purpose (p. 468). A few

factors they cite as emphasized in mission statements are "instilling civic duty in

students…promoting student development, and helping prepare students for the 'real

world' through programs that are academically rigorous" (p. 464). As a result of the

superficiality of the declarations and the similarities they identified among mission

statements, Morphew and Hartley call into question the value of creating such

institutional statements if they lack depth and distinctiveness.

At the same time, educators have sought to identify more specifically what

outcomes should be expected from a collegiate experience. For example, in the report

College Learning for the New Global Century, authors developed the following "essential

learning outcomes: knowledge of human cultures and the physical and natural world;

intellectual and practical skills; personal and social responsibility; [and] integrative

learning" (Association of American Colleges & Universities [AAC&U], 2007, p. 12).

Additionally, the Degree Qualifications Profile (DQP) identifies five categories of

learning to describe what students "should know and be able to do" to achieve different postsecondary degrees (Adelman, Ewell, Gaston, & Schneider, 2014, p. 1). The general learning categories articulated in the DQP include specialized knowledge; broad and integrative knowledge; intellectual skills; applied and collaborative learning; and civic and global learning (Adelman et al., 2014). The National Association of Colleges and Employers (NACE) (2017) similarly identified a set of eight competencies to define professional career readiness for recent college graduates. Developed by corporate and education leaders, the NACE competencies include critical thinking, communication, teamwork, digital technology, leadership, professionalism, global/intercultural fluency, and career management (NACE, 2017). Furthermore, the National Association for Campus Activities (NACA) applied NACE outcomes data from employers in identifying the skills incorporated in NACA Next (Navigating Employability and eXperience Tool, 2017), an online self-assessment and evaluation resource for undergraduates (Peck, 2017). Such efforts to articulate the outcomes of higher education reflect the desire for students to develop in a multiplicity of directions, underscoring the need to capitalize on all available learning opportunities, including those outside of the classroom. Moreover, business and higher education leaders contend that, "to succeed in an environment of continual change, students must now graduate with highly developed cross-functional, flexible skills in leadership, teamwork, problem solving, time management, self-management, adaptability, analytical thinking, global consciousness and communications" (Business-Higher Education Forum, 1999, p. v; see also AAC&U, 2007; Dean, 2015; Oaks, 2015; U.S. Department of Education, 2006).

However, higher education' s ability to achieve the aspirational goals espoused in institutional mission statements and/or the expected outcomes articulated by educators and business leaders have been called into question for over a decade (Dean, 2015; Oaks, 2015; Penny & Light, 2010). Specifically, "employers report repeatedly that many new graduates they hire are not prepared to work, lacking the critical thinking, writing and problem-solving skills needed in today's workplaces" (U.S. Department of Education, 2006, p. 3; see also AAC&U, 2007; Arum & Roska, 2011; Business-Higher Education Forum, 1999; Koc, 2018; Morgan, 2015; Schneider, 2008; Sidhu & Calderon, 2014). According to employers, too few college graduates possess the ability to work well in diverse groups (Bikson & Law, 1994; Engberg & Hurtado, 2011), lacking the "skills needed to succeed in the global economy" (Schneider, 2008, p. 3). Recent Gallup/Lumina survey results indicated that "43 percent of Americans believe college graduates are prepared for success in the workforce," which was consistent with employer perceptions, as "only 33 percent of business leaders [agree that] educational institutions are graduating students with the skills and competencies their businesses need" (Sidhu & Calderon, 2014, p. 1; see also Koc, 2018; Morgan, 2014). Furthermore, researchers using the Collegiate Learning Assessment assert that college students "might graduate, but they are failing to develop the higher-order cognitive skills that it is widely assumed college students should master" (Arum & Roska, 2011, p. 2). Although Arum and Roska's (2011) statistical research has been criticized on a number of fronts (Astin, 2011; Jaschik, 2013; Johnson, 2011; Lane & Oswald, 2012; Stoner, Jr., 2011) their conclusion that many undergraduates are "academically adrift" is supported by students' self-reported lack of time applying themselves to studying and pursuing academically challenging activities.

Moreover, higher education "is no longer the preferred pathway to middle-class jobs—it is increasingly the only pathway" (Carnavale, Smith, & Strohl, 2010, p. 13; see also Koc, 2018; Morgan, 2014). For example, in 1973, 28 percent of prime-age workers filled 25 million jobs requiring some college education (Carnevale et al., 2010). By 2007, workers with some postsecondary education represented 59 percent of the prime-age workforce occupying 91 million jobs (Carnevale et al., 2010). Since January 2013, college graduates were hired for 71 percent of the approximately 10.6 million new jobs added to the economy (Koc, 2018; Shapiro, 2018). Further evidence of the insufficient numbers of graduates who possess the types of skills and outcomes needed for the current workforce is also "seen in the amount of retraining that employers do" (Christensen, Horn, Caldera, & Soares, 2011, p. 7). Yet, higher education "will have produced 3 million fewer college graduates than demanded by the labor market" by 2018 (Carnevale et al., 2010, p. 16). Thus, colleges and universities are not producing sufficient numbers of graduates with the skills and abilities employers need, as illustrated by the claim that "employers say paradoxically they cannot find the right people to fill jobs even though the country is facing its highest unemployment rates in a generation" (Christensen et al., 2011, p. 1).

Implicit in this critique of today's workforce are concerns about how college students are prepared. Keller (2011) asserts that "the interface between college outputs and corporate inputs is poorly meshed and in a constant state of flux" (p. 25), which has led organizations to develop training programs to bridge this gap (Christensen et al., 2011). While in higher education, efforts proliferate to promote change in order to address these concerns about adequate preparation of graduates (AAC&U, 2002; U.S.

Department of Education, 2006), to identify best practices (AAC&U , 2007; Bok, 2005; Kuh, 2008), and to foster change and reform in teaching and learning (Barr & Tagg, 1995; Bass, 2011; Chickering & Gamson, 1987; Ewell, 1997). Bass (2012) asserts that, "our understanding of learning has expanded at a rate that has far outpaced our conceptions of teaching" (p. 1). Thus, educators assert that higher education has been too slow to adopt more collaborative, integrative, and active models of teaching and learning to sufficiently engage students inside and outside of the classroom, to enhance teaching and learning practices, to improve institutional decision-making, to better utilize existing resources, and to maximize student learning and development (AAC&U , 2007; Bok, 2005; National Association of Student Personnel Administrators [NASPA] and American College Personnel Association [ACPA], 2004; U.S. Department of Education, 2006).

At the same time, rapidly developing technologies have also accelerated the pace of change and the expansion of information so quickly that human knowledge is estimated to double every 13 months and this process continues to increase in speed (Shilling, 2013). Some educational analysts warn that "the day is growing nearer when quality higher education confronts the technological disruptions that have already upended the music and book industries" (Keller, 2011, p. 25). Bass (2012) argues that, "the porous boundaries between the classroom and life experience, along with the power of social learning, authentic audiences, and integrative contexts, [have] created not only promising changes in learning but also disruptive moments in teaching" (p. 1). Moreover, given the pace of change in higher education, forces such as the growth of online learning also pose a disruptive innovation threat to traditional colleges and universities (Christensen et al., 2011; Eyring & Christensen, 2011; Frey, 2009; Keller, 2011). Even

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though "there is remarkably little data showing that technology-centric schooling improves basic learning" (Keller, 2011, p. 25), such a rapidly changing environment underscores the need for higher education practices to adapt, in order to better prepare and to more efficiently and effectively educate students to develop the skills and outcomes expected by business and education leaders (Bass, 2012; Christensen et al., 2011; Eyring & Christensen, 2011; Frey, 2009; Keller, 2011). Authors of *The Student Learning Imperative* assert that "the key to enhancing learning and personal development is not simply for faculty to teach more and better, but also to create conditions that motivate and inspire students to devote time and energy to educationally-purposeful activities, both in and outside the classroom" (ACPA , 1996, p. 1).

While educators and critics appropriately focus on transforming teaching and learning practices and the curriculum, the co-curricular experience also offers meaningful opportunities to assist in better preparing graduates. For example, Bass (2012) observed that in focus groups and informal discussions, students, "almost always point enthusiastically to the co-curricular experiences in which they invested their time and energy" (p. 4). Moreover, in studying student learning, Light (2001) reflected,

> I assumed the most important and memorable academic learning goes on inside the classroom, while outside activities provide a useful but modest supplement. The evidence shows the opposite is true…When we asked students to think of a specific, critical incident or moment that had changed them profoundly, four-fifths of them chose a situation or event outside the classroom. (p. 8)

Bass (2012) asserts that "the formal curriculum is being pressured from two sides. On the one side is a growing body of data about the power of experiential learning in the

co-curriculum; and on the other side is the world of informal learning and the participatory culture of the Internet" (p. 2). In addition, while these pressures are transforming "what we think of as the formal curriculum…higher education is being asked to become more accountable for what students are learning" (p. 2; see also Dean, 2015; Oaks, 2015). Consequently, among the implications that have emerged from these pressures on higher education is the need for educators to conceptualize the student experience holistically, to leverage the potential for learning outside of the classroom more.

Out-of-class experiences, which represent the largest, most flexible block of time available to students, have historically been overlooked as potential opportunities to enhance student learning (Kuh, 2008; Kuh, Douglas, Lund, & Ramin-Gyurnek, 1994; Kuh, Kinzie, Schuh, Whitt, & Associates, 2005; Terenzini, Pascarella, & Blimling, 1999). Out-of-class experiences are defined as "structured and unstructured activities or conditions that are not directly part of an institution's formal, course-related, instructional processes" (Terenzini et al., 1999, p. 611). For the purposes of this study, out-of-class experiences will also be referred to as co-curricular activities or experiences. Studies examining students' out-of-class experiences can provide important information for institutions interested in demonstrating and improving the range and extent of student learning occurring (Pascarella & Terenzini, 2005). Moreover, to the degree that learning is "socially based…students' social and extracurricular involvements have important implications for what is learned in college" (Pascarella & Terenzini, 2005, p. 120). Thus, efforts to explore student learning without considering co-curricular experiences may

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provide an incomplete picture of the learning and development occurring on college campuses.

Business and education leaders assert that through participation in co-curricular activities, portfolios, community service, and a focus on real-world problems, students can develop the skills and abilities in demand from employers (Banta, Griffin, Flateby, & Kahn, 2011; Business-Higher Education Forum, 1999; Casner-Lotto & Barrington, 2006; Dean, 2015; Hettich, 2000; Oaks, 2015). Co-curricular activities offer the opportunity to develop skills and abilities, such as teamwork, coping with ambiguity, appreciating differences, communicating achievements and competencies, assessing one's own work, and developing a sense of responsibility toward the community (Business-Higher Education Forum, 1999; Dean, 2015; Hettich, 2000; Oaks, 2015). There is, then, considerable value for students and institutions to explore ways to promote greater student involvement in co-curricular activities and to seek methods to maximize the learning that occurs through these activities.

Recently, some educators have also sought to promote a more integrative perspective on learning by focusing on the credentials awarded by higher education institutions (American Association of Collegiate Registrars & Admissions Officers [AACRAO]/NASPA, 2015; Fain, 2015; Parks & Taylor, 2015; Parnell & Green, 2016; Ragan, 2000; Straumsheim, 2016; Weinhausen & Elias, 2017). For example, two professional associations, AACRAO and NASPA, launched a joint project in 2015 to create a student transcript that is more comprehensive and inclusive of learning across the institutions. In another example, University of California at San Diego administrator Bill Haid, described the value-added potential in these credential modification efforts at his

institution when he noted, "the transcript hasn't changed in 100 years. I think [creating the enhanced electronic transcript and the co-curricular transcript] is a way to add value…if we can add value, we're really enriching the experience" for students (Hope, 2016b, p. 1). Weinhausen & Elias (2017) argue that credentials, "focus primarily on completing requirements and reporting courses, majors, and grades. What is left out is what and how students learned, and the skills and competencies students acquired within and beyond the classroom" (p. 14; see also AACRAO/NASPA, 2015; Fain, 2015; Parks & Taylor, 2016; Parnell & Green, 2016; Ragan, 2000; Straumsheim, 2016). While these efforts to reform the undergraduate transcript reflect a shift in thinking about learning, their focus is primarily on the reporting function rather than ways to enhance learning holistically.

Several other institutions have developed educational tools to promote involvement, record participation, and/or assess student learning outside the classroom (Bresciani, 2005; Brown & Citrin, 1977; Bryan, Mann, Nelson, & North, 1981; Cosgrove & Marino, 1997; Gutowksi, 2006; Hodges, 1992; Reardon, Lumsden, & Meyer, 2004, 2005). Institutions refer to these programs by many names, including co-curricular transcripts, e-portfolios, leadership records, student development transcripts, leadership portfolios, involvement records, and co-curricular portfolios (Brown & Citrin, 1977; Brown, Citrin, & Richard, 1999; Gutowski, 2006). Although the names of these tools vary, their purposes and aims make them more distinct. These co-curricular instruments evolved in different ways across a variety of campuses as each institution has its own involvement opportunities, administrative structures, technological systems, and investment in out-of-classroom learning.

Co-Curricular Transcripts and Portfolios

Brown, Citrin, and Richard (1999) describe three types of formats for what they refer to as "a student development transcript" (p. 507). These possible formats include 1) an experiential checklist; 2) a competency-based checklist; and 3) a portfolio (Brown et al., 1999). The distinguishing difference among these formats is that the first two are listings of out-of-class experiences or related skills that students document, while portfolios use artifacts or evidence to demonstrate student learning and/or skill development, which is consistent with how other researchers have described these tools (Bresciani, 2005; Brown et al., 1999; Gutowski, 2006). Palomba and Banta (1999) define portfolios as "a type of assessment in which students' work is systematically collected and carefully reviewed for evidence of learning and development" (p. 131).

A review of institutional web pages reveals a number of functions and goals associated with co-curricular transcripts and portfolios. Specifically, functions associated with co-curricular transcript and portfolio programs include documenting co-curricular experiences (Hobart and William Smith Colleges, 2011; Kean University, 2011; University of South Florida, 2011; West Chester University, 2011); validating student involvement by a faculty or administrator (Colby Sawyer College, 2011; University of South Florida, 2011); reflecting on learning and skill development (Kean University, 2011; Morrisville State College, 2011; West Chester University, 2011); and assessing learning and skills (Kean University, 2011; Mansfield University, 2011). Additionally, institutional goals associated with co-curricular transcripts and portfolios include enabling students to gain transferable skills (Hobart and William Smith Colleges, 2011; University of South Florida, 2011); encouraging students to be more intentional in their

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involvement decisions (Morrisville State College, 2011); promoting greater student participation (Kean University, 2011); and making students more marketable to employers and graduate schools (Colby Sawyer College, 2011). Through the use of these educational tools, institutions seek to provide opportunities for students to direct, deepen, expand, and benefit from their co-curricular learning. In addition, as the need to articulate student learning outcomes has grown (Kuh & Ewell, 2010), co-curricular portfolios have expanded to incorporate learning outcomes, structured reflection, self-assessment, and assessment rubrics to gauge student learning and development (Bresciani, 2005; Kuh et al., 1994).

However, despite the potential benefits of using portfolios and the fact that some institutions use these types of educational tools, there is a lack of research on co-curricular portfolios. Specifically, "research is needed to examine the extent to which an e-portfolio helps students conceptualize strategies for acquiring and documenting general skills from available educational experiences within and outside the formal curriculum" (Reardon et al., 2005, p. 379). Without exploring the extent of such learning and development over time, it is not possible to gauge the potential value added to the educational process for students who use co-curricular portfolios. In fact, Reardon, Lumsden, and Meyer (2005) assert that "there are indications that portfolios will become an important component of future university accreditation reviews" (p. 379). In addition, despite the development of co-curricular portfolios, there is little recent research to support or challenge the assumption that students who use these types of products may be "more marketable to graduate admissions officers or to employers" (Gutowski, 2006, p. 2). The literature, then, reflects the lack of contemporary quantitative and qualitative

analyses of co-curricular portfolios in terms of their development, composition, viability as an assessment tool, the role they play in shaping student learning, and the various ways in which students experience the process of developing co-curricular portfolios. Moreover, as portfolios become more prevalent, additional research into the process of reflection is needed, as well as portfolio systems that structure or scaffold learning opportunities which may allow students much needed time to develop their capacity to reflect (Yancey, 2009).

Although emerging in popularity both for pedagogical purposes and programmatic assessment, more investigation is also needed to understand the specific role that co-curricular portfolios may play in facilitating student learning and development (Bresciani, 2005; Kuh & Ewell, 2010). Until the impact of using the co-curricular portfolio is systematically examined, institutions will not know how well these programs perform, what students may learn through using them, or to what degree they may be instrumental in enabling students to develop the skills and capabilities needed to be successful in their careers. Without knowing how effective co-curricular portfolios are at promoting, documenting, and assessing student out-of-class involvement and growth, institutions are limited in their ability to assess their students' co-curricular learning or to make informed resource allocation decisions about these types of programs, as well as ways to maximize student learning outside the classroom.

The problem that provides the foundation for this proposed study is thus the lack of alignment between the increasing popularity of co-curricular portfolios and our understanding of their outcomes, effectiveness, and impact on student learning and development. This lack of understanding and investigation of these educational tools may

be a factor contributing to the inability of colleges and universities to promote learning

and skill development sufficiently to develop an educated and skilled workforce and

citizenry. The insufficient preparation of graduates both in terms of the total numbers

needed (Carnavale, 2006; Frey, 2009), and in terms of the individual skills necessary for

workers to possess, highlights the need to seek out educational tools to address these

concerns (AAC&U, 2007; Arum & Roksa, 2011; Business-Higher Education Forum,

1999; Christensen et al., 2011; Eyring & Christensen, 2011; U.S. Department of

Education, 2006).

In order to better prepare graduates, colleges and universities need to seek ways to

maximize student learning, including co-curricular opportunities, and to foster the

development of skills and competencies that will prepare students for the rapidly

changing workforce environment. The literature reflects considerable evidence of the

impact of co-curricular experiences on student learning (Kuh, 1995; Pascarella &

Terenzini, 2005; Whitt, Edison, Pascarella, Nora, & Terenzini, 1999), which underscores

the importance of using tools, such as co-curricular portfolios, to document and assess

student learning for the benefit of institutional decision-making and the enhancement of

student learning. In particular, co-curricular experiences offer opportunities for students

to learn the types of skills that employers are looking for in the workplace (Business-

Higher Education Forum, 1999; Dean, 2015; Oaks, 2015). Unless higher education

develops sufficient means and methods to enable more students to acquire the skills and

abilities necessary to be successful in a rapidly transforming economy, employers will

continue to be challenged to find adequate numbers of these graduates (Arum & Roska,

2011; Business-Higher Education Forum, 1999; Christensen et al., 2011; Eyring & Christensen, 2011; U.S. Department of Education, 2006).

Purpose of the Study and Research Questions

The purpose of this proposed research is to explore specific examples of co-curricular portfolios at institutions of higher education to understand how they are developed, how institutions utilize them, and how they shape student learning. Due to the challenges facing college graduates entering the workforce, it is essential for higher education to seek ways to enable students to develop the capabilities to achieve success in today's high-performance environment (AAC&U, 2007; Business-Higher Education Forum, 1999; U.S. Department of Education, 2006). This study 1) examined the uses of portfolios in higher education and 2) explored how portfolios enhance co-curricular learning. Such an analysis contributes to the literature on co-curricular portfolios by investigating the alignment in specific detail between the potential and the realized outcomes achieved in using these educational tools.

The study addressed one overarching question: To what extent do co-curricular portfolios facilitate student learning and personal development? Additional research questions included:

1. Does the use of co-curricular portfolios aid students' abilities to learn new information and relate their learning to previous experiences?

2. Does the process of creating co-curricular portfolios aid students in understanding and articulating the skills they may be gaining?

3. How do institutions of higher education develop and utilize co-curricular portfolios?

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Significance of the Study

Calls to reform the undergraduate experience have proliferated for more than a decade from faculty, librarians, student affairs administrators, educational leaders, and national organizations (AAC&U , 2002, 2007; Association of College and Research Libraries, 2000; Boyer Commission, 1998; NASPA & ACPA, 2004; VanderPol, Brown, & Iannuzzi, 2008). These efforts have been fueled, in part, by demands from legislators, accrediting bodies, and the general public for higher education to be more responsive to current challenges (NASPA & ACPA, 2004; Schroeder, 1999; U.S. Department of Education, 2006). Rising costs, low persistence and completion rates, competing institutional priorities, gaps between student performance and academic standards, and underprepared graduates are among the issues that have eroded higher education's credibility and led to demands for increased accountability, productivity, and efficiency, even while public funding and private endowments have declined (Levine, 1997; Merrow, 2006; U.S. Department of Education, 2006).

While initiatives, such as *Learning Reconsidered*, *Greater Expectations,* and *Reinventing Undergraduate Education*, offer critiques for specific audiences, there is considerable consensus among these reports about the need for transformation, increased accountability, and a renewed focus on student learning and learning outcomes in higher education (VanderPol et al,. 2008). Implicit in these demands for greater accountability are concerns about what college students learn (Arum & Roska, 2011). Such concerns are significant because public criticism of institutional teaching efforts undermines the reputation and perceived efficacy of colleges and universities. Critics assert that some faculty practice a cynical quid pro quo in which grade inflation covers up mediocre

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teaching and minimal learning (Merrow, 2006). Such allegedly suspect teaching practices undermine the commitment to student learning and institutional mission (Merrow, 2006; U.S. Department of Education, 2006). Therefore, assessing, documenting, and maximizing student learning are issues of critical importance to colleges and universities to inform effective teaching and learning practices, to expand and integrate available learning opportunities, and to increase institutional accountability and credibility.

Co-curricular portfolios offer an accessible and available method to utilize the relatively vast amount of time students spend outside of the classroom to deepen, expand, and increase student learning and growth. If institutions and faculty make greater use of existing research about the benefits of active learning and engaged pedagogies, they can realize significant benefits for students through the creation of environments that truly engage students in their own learning, deepening learning, and enhancing development (Bok, 2005). Furthermore, the potential exists for improving student learning further by integrating co-curricular activities with academic experiences and developing the means to promote, document, and assess student learning outcomes through tools such as co-curricular portfolios. Thus, the potential for leveraging co-curricular experiences for the benefit of students and institutions through the use of such educational tools is considerable.

However, much of the literature on co-curricular portfolios is descriptive in nature. The majority of empirical research (Brown, Baier, Baack, Wright, & Sanstead, 1979; Brown, Citrin, Pflum, & Peterson, 1978; Bryan, Mann, Nelson, & Norris, 1981; Cosgrove, 1984, 1985, 1986a, 1986b; Reardon et al., 2004, 2005) is dated and/or examines a single institution's experience. Little is empirically known about the impact

of co-curricular portfolios, even though a number of institutions maintain these types of programs, and at least a half dozen higher education technology support companies offer platform options enabling institutions to create their own co-curricular transcript or portfolio. Moreover, the growing body of literature on portfolios often focuses on the classroom environment (Bresciani, 2005; Brown & Citrin, 1977; Cosgrove, 1997), rather than co-curricular experiences. Thus, the importance of investigating the impact of co-curricular portfolios for higher education is six-fold:

1. To explore if students can expand and deepen their learning through the use of co-curricular portfolios;

2. To explore a potential means to enable students to develop the skills needed to become successful members of the workforce;

3. To explore the potential to maximize student learning and development, to increase institutional effectiveness, and to broaden tools for teaching and learning through the use of co-curricular portfolios;

4. To provide greater legitimacy for co-curricular learning through studying a program that has not received sufficient attention by researchers;

5. To better inform institutional resource allocation decisions concerning co-curricular portfolios;

6. To investigate any differences between using portfolios for curricular or co-curricular purposes.

Co-curricular portfolios may prove beneficial for students and institutions both in terms of the value added to the educational experience through maximizing student learning and as a means to make better use of the existing resources currently devoted to

co-curricular activities. Increasing the understanding of the outcomes, effectiveness, and impact of co-curricular portfolios on student learning will enable institutions to determine whether the interest in these types of programs is warranted, and to better assess these educational tools when making resource allocation decisions. If co-curricular portfolios can be shown to improve student learning and skill development, such findings suggest a readily accessible means of enhancing workforce skills and educational outcomes for students. Moreover, potential educational benefits for students from co-curricular portfolios may enhance the credibility and utility of co-curricular activities as valid learning opportunities.

CHAPTER 2

LITERATURE REVIEW

Two areas of the literature informed the exploration of these research questions.

These two topic areas are: 1) uses of portfolios in higher education and 2) enhancing co-

curricular learning through portfolios. Related empirical research primarily focused on

three areas: employer perceptions about these tools (Brown, Mann, Nelson, & North,

1981; Elias, 2014); formats for co-curricular transcript programs (NACA, 1986, 1992);

and studies specific to the Florida State University Career Portfolio program (Ford,

Lumsden, & Lulgjuraj, 2009; Lumsden, Lenz, Ford, & Reardon, 2007; Lumsden,

Pinataro, Baltuch, & Reardon, 2009; Reardon et al., 2005). However, while related, this

research was not directly relevant to this study and its focus on student learning and

institutional development and uses. The research on employer perceptions was beyond

the scope of this study; the co-curricular transcript formats research provided an historical

context, but current models are decidedly different; and the Florida State program, while

comprehensive, is also unique and substantially different from existing models that are

used more widely.

Although much of the remaining literature on co-curricular portfolios is

descriptive in nature (Bresciani, 2005; Brown & Citrin, 1977; Cosgrove, 1997), studies

also exist on student engagement and learning outside the classroom (Astin, 1984, 1985,

1993; Kuh, 1993, 1995, 2001, 2008; Kuh, Douglas, Lund, & Ramin-Gyurnek, 1994; Kuh, Palmer, & Kish, 2003; Mysliweic, Dunbar, & Shibley, Jr., 2005), portfolios in higher education (Butler, 2006; Clark & Eynon, 2009; Eynon & Gambino, 2017; Niguidula, 2005; Yancey, 2009; Yancey & Cambridge, 2001), and assessing student learning outcomes (Kuh & Ewell, 2010; Whitt, Pascarella, & Terenzini, 1999). These studies provided foundational knowledge, offering direction toward areas that have not been studied yet. These areas included exploring co-curricular portfolios as currently used, their impact on student learning, and describing the development and uses of co-curricular portfolios at additional higher education institutions.

Uses of Portfolios in Higher Education

The literature on the uses of portfolios in higher education highlights different types and functions of portfolios, including co-curricular ones, as well as the factors influencing the growth of the portfolio format in higher education. Investigating these educational tools will permit the exploration of the learning benefits, if any, for students. This section of the literature review explores the impact of portfolios on student learning as well as teaching and learning practices. Furthermore, it examines critiques of portfolios, including tensions within higher education about the overall purposes of this type of educational format. Among these issues are concerns about whether portfolios should focus on learning and/or assessment and whether this format should be driven by student learning or institutional accountability needs. This information will provide a context for defining and understanding co-curricular portfolios as they are used by practitioners and students.

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Many aspects of portfolios, electronic portfolios or e-portfolios, are described in the literature. For example, portfolios are described as personalized (Butler, 2006; Lorenzo & Ittleson, 2005); web-based (Lorenzo & Ittleson, 2005); created with the use of a computer (Butler, 2006); paper-based (Butler, 2006); collected over time (Barrett, 2000; Butler, 2006; Challis, 2005; Wickersham & Chambers, 2006); improving instructional practices (Heath, 2005; Lorenzo & Ittleson, 2005); showcasing best work for a specific audience (Heath, 2005); improving the use of technology (Heath, 2005); used for assessment (Chang, 2001; Smith & Tillema, 2003; Smits et al., 2005; Wade, Abrami, & Sclater, 2005); and grounded in shared outcomes (Bresciani, 2005). Investigators have created typologies of portfolios to reflect these many elements and different purposes. For example, one set of categories classified them as learning portfolios, credential portfolios, and showcase portfolios (Zeichner & Wray, 2001); another set described them as process portfolios, showcase portfolios, and assessment portfolios (Abrami & Barrett, 2005); while a third typology characterized them as dossier portfolios, training portfolios, reflective portfolios, and personal development portfolios (Smith & Tillema, 2003). These different distinctions reflect the functionality, utility, and adaptability afforded by the portfolio format.

There are, then, divergent purposes for portfolios. Barrett (2004) categorizes these different functions as "portfolio as story," or assessment for learning, when portfolios are used to achieve developmental goals from a constructivist paradigm; or as "portfolio as test," or assessment of learning when these tools are used to address accountability goals using a positivist paradigm (p. 8). Examples of assessment for learning uses include developing students' skills and abilities, to foster career preparation

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or to highlight students' best work. Examples of assessment of learning purposes include gauging performance against competency standards, showcasing what students are learning for external audiences, to achieve graduation requirements, to satisfy admissions expectations, or to demonstrate employment skills (Barrett, 2004; Lankes, 1995; Niguidula, 2005). "The idea is for students to demonstrate that they can meet standards while also showing who they are as individual learners" (Niguidula, 2005, p. 45). In addition, "the growth of e-portfolio use is directly related to its elasticity, to the diversity of purposes for which it can be used" (Clark & Eynon, 2009, p. 19). Many institutions combine multiple functions in their portfolio programs, "an integrative approach that allows for rich results" (p. 19).

Portfolios are rooted in constructivist philosophy (Abrami & Barrett, 2005; Chang, 2001; Klenowski, Askew, & Carnell (2006); Meeus, Questier, & Derks, 2006; Strudler & Wetzel, 2005). Constructivists contend that "knowledge is constructed through activities such as participatory learning, open-ended questioning, discussion, and investigation. Facilitation helps learners construct their own schema for internalizing information and organizing it so that it becomes their own" (Klenowski et al., 2006, p. 278). This definition of constructivism also illuminates the interactive and metacognitive processes inherent in portfolio development. As students engage in activities that may become part of their co-curricular portfolios, they learn through interacting with others. Yet, students also learn through the reflective process in creating and compiling co-curricular portfolios.

Portfolios provide many benefits to individual learning and institutional teaching and learning efforts. For example, institutions characterize the portfolio process as

essential to students developing a greater capacity for self-reflection and a deeper

understanding of subject matter (Basken, 2008). Portfolios are another expression of the

shifting paradigm from teacher-centered to learner-centered education (Barr & Tagg,

1995). The portfolio process "seeks to encourage students to become dynamic

participants in their own learning…students are not merely the users of the system; they

are or should be the authors of it" (Kimball, 2005, p. 442).   Preparing students to solve

problems that are known to them has limited utility and is not what employers in a

rapidly changing global economy need, nor what college-educated citizens in a diverse

society should be able to contribute. Students need to be able to use skills and

experiences to help them transfer their learning from one context to others in order to

solve new and novel problems (Phillips & Soltis, 2009). For example, the transfer of

learning is facilitated by teaching that engages the learner from the outset, the use of

active learning techniques, learning that involves understanding rather than

memorization, thinking deeply about a problem, and promoting metacognition by the

student (Bransford & Schwartz, 1999, pp. 64-65).

The use of co-curricular transcripts and portfolios provides ample opportunities

for educators to employ these methods to enhance student learning and promote greater

transfer of learning among the co-curriculum, curriculum, and the world of work. Many

other benefits of portfolios have been demonstrated in the literature, such as:

> Portfolios help to focus student thinking (Wade & Yarbrough, 1996), provide a
>
> means to translate theory into practice (Hague, 2006), and…document a learner's
>
> progress over time (Abrami & Barrett, 2005; Challis, 2005; Smith & Tillema,
>
> 2003). They can enhance students' communication and organizational skills, are a

way of identifying and recognizing prior learning, and lead to new learning

outcomes" (Brown, 2002). Through the process of portfolio construction, students

gain a broader sense of what they are learning (Young, 2002). They can see their

learning unfolding (Darling, 2001), acquire an awareness of their

accomplishments and come to understand how their learning takes place (Brown,

2002). Darling (2001) highlights one important point however: that while students

view portfolios as the creation process, evaluators see portfolios as the end

product. (Butler, 2006, p. 3)

In addition to the many learning benefits provided for students, portfolios also

"provide quantitative proof of how [institutions] help students learn while keeping the

right to define their own missions" (Basken, 2008, p. 1). The e-portfolio movement has

been applied at a diverse array of institutions, including community colleges, universities,

liberal arts institutions; and in different types of learning environments, such as urban,

rural, public, private, small and large campuses (Clark & Eynon, 2009; Yancey &

Cambridge, 2001). Moreover, to the degree that educators focus on holistic education, "e-

portfolios can facilitate this integration" (Clark & Eynon, 2009, p. 19). Furthermore,

electronic portfolios offer greater accessibility, portability, efficiency, and convenience

than paper or more traditional artifact portfolios (Butler, 2006).

The growth of the e-portfolio movement has primarily been driven by four

factors: 1) pedagogical change, as evidenced by the paradigm shift to more student-

centered approaches; 2) the growth and expansion of technology facilitating this

transformation; 3) increased pressure for accountability and demonstrating student

learning, as exemplified by the 2006 Spellings Commission report; and 4) the rapidly

increasing pace of change and transitions in careers and education, which necessitates greater portability of learning and accomplishments (Clark & Eynon, 2009). Through creating a portfolio, students discover how to reflect on their learning, construct meaning from it, and see where their educational path might take them next (Butler, 2006). Chen and Light (2010) assert that "the value of e-portfolios lies not in the specific tool itself, but in the process and in the ways in which the concept and the related activities and practices are introduced to students" (p. 27). Dean (2015) observed that "portfolios, particularly those that span a student's entire educational experience rather than a particular course or program, often include information about co-curricular participation and can highlight the contribution of such experience to student learning outcomes, such as teamwork, problem-solving, and communication" (p. 33). According to Barbara Cambridge, co-director of the Inter/National Coalition for Electronic Portfolio Research, "electronic portfolios are a way to generate learning as well as document learning" (Basken, 2008, p. 2).

Thus, in addition to enhancing learning potential, portfolios can also serve as tools for institutional assessment. Chen and Light (2010) further describe that

> e-portfolios allow students to develop their ability to assess the strengths and weaknesses of their own learning. This, in turn, leads to a more efficient assessment process that fully engages students and that creates an authentic and timely feedback channel for the educational system as a whole. (p. 27)

Moreover, employers responding to an AAC&U (2013) survey cited portfolios as a preferred means of assessment because it displays student work and is portable.

While it is unknown precisely how many institutions use portfolios, the use of e-portfolios has grown considerably (Clark & Eynon, 2009; Eynon & Gambino, 2017). E-portfolios dramatically change the way faculty teach, students learn, and institutions evaluate their educational environments (Clark & Eynon, 2009; Eynon & Gambino, 2017; Yancey, 2009). In fact, Clark and Eynon (2009) assert that "e-portfolios are literally remaking the landscape of education" (p. 18). Or, as Melissa Peet, a research scientist and leader in the e-portfolio program at the University of Michigan observed, "To me, asking questions about e-portfolios is synonymous with asking questions about the future of learning" (Clark & Eynon, 2009, p. 23).

Portfolio Critiques

Although the e-portfolio literature is growing, it is disjointed. Hundreds of institutions use e-portfolios, but only a few dozen use these tools to drive curriculum development and assessment efforts (Basken, 2008). There is not one professional umbrella organization leading the movement (Clark & Eynon, 2009). Instead, organizations such as the Inter/National Coalition for Electronic Portfolio Research and the American Association of Colleges and Universities (AAC&U), through their Valid Assessment of Learning in Undergraduate Education (VALUE) project, seek to engage institutions in the development of portfolio programs on their campuses, to support research and to discuss national standards for e-portfolios (Clark & Eynon, 2009). Future expansion of e-portfolios seems to be moving toward integrating faculty assessments of student work with standardized criteria for institutions, and possibly even the nation (Basken, 2008; Clark & Eynon, 2009; Eynon & Gambino, 2017).

However, portfolios are not without critics (Abrami & Barrett, 2005; Delandshere & Arens, 2003; Meeus et al., 2006). For example, Meeus, Questier, and Derks (2006) question the indirect quality of demonstrating learning through portfolios. "Portfolio only informs us about the student's competencies in an indirect way. There is no direct observation. The indirect nature of this representation raises the question as to the validity of portfolio" (p. 137). The materials submitted may not be the work of the student (Abrami & Barrett, 2005) or they may not accurately reflect the students' competency level; for example, if multi-media methods embellish the student's effort (Meeus et al., 2006). In addition, variation between different portfolio graders can lead to inconsistent or divergent interpretations of evidence and learning (Delandshere & Arens, 2003). Furthermore, some faculty are simply not comfortable with using electronic teaching methods, while others who are more technologically savvy may prefer their own electronic media approaches to a portfolio system (Basken, 2008). In order to be effective, electronic portfolios need to find a balance between structured formats, which "scaffold the learning…for novice portfolio users, and open-ended or self-directed portfolio tools," which encourage exploration and are appropriate for more advanced users too (Barrett & Knezek, 2003; Butler, 2006). Without such a balance, portfolios can fail due to problems such as superficiality in reflections, a lack of student ownership, or resentment over the difficulties in constructing the portfolio (Zeichner & Wray, 2001).

Striking an appropriate balance between individual learner and institutional needs is also a critical issue in portfolio development on campuses (Chambers & Wickersham, 2007; Clark & Eynon, 2009; Eynon & Gambino, 2017). When institutions attempt to use portfolios as summative evaluations, for their needs to demonstrate student learning, to

enforce achievement of competencies, or to address accountability concerns, these practices are considered assessment of learning techniques (Chambers & Wickersham, 2007; Clark & Eynon, 2009; Eynon & Gambino, 2017). In contrast, when portfolios are used as formative assessments, for guiding students through the learning process, for the benefit of students' learning, focused on reflection and development, these practices are considered assessment for learning practices (Chambers & Wickersham, 2007; Clark & Eynon, 2009; Eynon & Gambino, 2017).

Some researchers (Abami & Barrett, 2005; Chang, 2001; Kimball, 2005; Loughran & Corrigan, 1995; Ma & Rada, 2005) consider the use of portfolios for developmental purposes, documenting the changes in students' thinking over time, as more genuine. Such formative assessments are favored by these investigators because they "rely on more than one piece of evidence, show [the] development of thinking, and more accurately represent student ability" (Butler, 2006, p. 2). However, according to Helen Barrett, a co-founder of the e-portfolio, "There's a major tension right now between student-centered and institution-centered portfolios. Between what I would call the Assessment *of* Learning on one hand, and on the other, Assessment *as* Learning" (Clark & Eynon, 2009, p. 22). In fact, one researcher characterized the emphasis on using portfolios for institutional accountability as hijacking this educational tool from the potential metacognitive gains for students (Batson, 2007). The danger of an imbalance between these forces is that learning may suffer or that potential gains not be realized to the degree that the portfolio process is designed primarily as a summative one. On the other hand, too great an emphasis on formative assessment may limit the institution's ability to demonstrate the learning achieved by students. The need to resolve this tension

and strike a balance is a major challenge facing portfolio users. However, these concerns are currently less salient for co-curricular portfolios as these tools are primarily formative assessment efforts, used by students to document their experiences, develop their skills, and learn from their co-curricular experiences.

In critiquing portfolios, researchers have also debated which aspect of the portfolio process is most important. The most critical element in assembling a portfolio, according to some investigators (Abrami & Barrett, 2005; Klenowski, Askew, & Carnell, 2006; Loughran & Corrigan, 1995; Smith & Tillema, 2003; Wade & Yarbrough, 1996) is the reflective component, deciding what was learned from which piece of evidence. "Reflection undergirds the entire pedagogy of portfolios" (Kimball, 2005, p. 451). Other researchers (Barrett, 2000; Challis, 2005) focus on the changes over time, reflecting the evidence of learning taking place as the key aspect of portfolios. The literature also suggests that a key aspect of the success of portfolios is engaging the student (Barrett, 2000; Yancey, 2001, 2009). The "creating, evidencing, connecting and reflecting involved in electronic portfolios engage students in new and beneficial ways" (Yancey, 2009, p. 28). For example, when portfolio programs succeed in engaging students, course completion rates, retention rates, and student engagement rates increase for students who participate when compared with those who do not (Eynon, 2009; Kirkpatrick, Renner, Kanae, & Goya, 2009; Yancey, 2009).

Some institutions that offer portfolios have also reported internally measured outcomes among students (Basken, 2008; Miles & Wilson, 2004). For example, students who used their institution's electronic portfolio system at Bowling Green State University achieved higher grade-point averages, earned more credit hours and had higher retention

rates than students who did not participate in the portfolio program (Basken, 2008).
These types of findings suggest the potential educational benefits of using a tool, such as a portfolio, to document learning, but they do not address the role of co-curricular experiences in student learning and development.

The vast majority of literature available addresses portfolios in an academic setting. Co-curricular portfolios enable students to understand the link between the co-curricular and the curricular program and foster the transfer of learning between the two learning environments seamlessly (Bresciani, 2005). Electronic co-curricular portfolios also offer opportunities to assess student learning and development (Bresciani, 2005). Moreover, to the degree that student affairs practitioners engage in campus discussions about student learning, they have much to offer in terms of providing evidence of "contributions to shared values such as ethics, problem solving, and diversity" (Bresciani, 2005, p. 69).

The Co-Curricular Learning Context

Although most educational institutions are organized in distinct, semi-autonomous departments, students do not learn in such a compartmentalized fashion (Oaks, 2015). Instead, experiences in and out of the classroom can enhance learning and be mutually reinforcing (Dean, 2015; Ewell, 1997; King & Baxter Magolda, 1996; Pascarella & Terenzini, 1991, 2005; Schroeder, 1999; Oaks, 2015). Thus, "cognitive and affective development are inextricably intertwined and … the curriculum and out-of-class activities are not discrete, independent variables, but rather affect each other in profound ways" (Schroeder, 1999, p. 12).

Student learning, then, extends well beyond the classroom, but also impacts learning within the classroom (Astin 1993; Dean, 2015; Kuh, 1995; Kuh et al., 1991; Pascarella & Terenzini, 1991, 2005; Oaks, 2015). Moreover, student learning in the classroom may be deepened and expanded upon through a variety of pedagogical practices and approaches outside the classroom (Bass, 2012; Kuh, 2008). Active learning techniques, as contrasted with educational practices such as lecturing, include the use of cooperative learning, student presentations, group projects, experiential learning, student evaluations of others' work, independent learning projects, student-selected course topics, class discussions, and student-designed learning activities (Astin, 1993; Milem, 2001). When active learning methods or engaged teaching practices are used in the classroom, student learning and development are enhanced (Astin, 1993a; Johnson & Johnson, 1985, 1986a, 1986b; Johnson, Johnson, & Smith, 1988; Milem, 2001; Milem & Wakai, 1996a, 1996b; Slavin, 1987, 1988). Moreover, according to Gallup (2014) internships and involvement in co-curricular activities and organizations were "among the most significant predictor of graduates' level of engagement in their work after college" (Dean, 2015, p. 34).

Student learning not only extends well beyond the classroom, it also impacts learning within the classroom (Astin 1993a; Dean, 2015; Kuh, 1995; Kuh et al., 1991; Oaks, 2015; Pascarella & Terenzini, 1991, 2005). Yet, despite access to the most current research on teaching and learning, some faculty and institutions have been slow to seek out or to put such knowledge to use for the benefit of their students (Bok, 2005). In fact, the Higher Education Research Institute (HERI) faculty survey has consistently shown that "extensive lecturing" has been the most common teaching method reported by

faculty up until 2008, when "cooperative learning" and "using real-life problems" surpassed "extensive lecturing" for the first time (DeAngelo, Hurtado, Pryor, Kelly, & Santos, 2009, p. 2). While the research in support of engaged practices accumulated over the last few decades, the didactic lecture appears to be gradually losing its dominance, as more dynamic, collaborative, and effective methods of teaching emerge (DeAngelo et al., 2009; Ewell, 1997).

Thus, a growing body of research points to the need for a more integrated approach to learning; one more reflective of the holistic and connected ways in which students learn (Dean, 2015; King & Baxter Magolda, 1996; Oaks, 2015; Pascarella & Terenzini, 1991; Schroeder, 1999; Terenzini, Pascarella, & Blimling, 1999). The integration of the affective and the cognitive aspects of personal development and learning makes possible "the hallmark of a successful educational experience…when increased cognitive understanding is complemented by increased sense of self, personal maturity, and interpersonal effectiveness" (King & Baxter Magolda, 1996, p. 163). This type of integrated educational approach "defines learning as a comprehensive, holistic, transformative activity that integrates academic learning and student development" (NASPA & ACPA, 2004, p. 3).

Moreover, learning is best facilitated through active, interactive, experiential opportunities (Astin, 1985; Davis & Murrell, 1994; Kuh, 1996; Wickersham & Chambers, 2006) that exemplify the type of relationship and understanding of learning evident in literature such as Chickering and Gamson's (1987) "Seven Principles for Good Practice in Undergraduate Education," and Ewell's (1997) "Organizing for Learning." Students can develop the higher-order affective and cognitive skills that

employers seek through co-curricular experiences (Business-Higher Education Forum, 1999; Johnson & Rayman, 2007). Such co-curricular opportunities provide additional pathways for students to develop these higher-order skills and abilities in a real-world context. Furthermore, *Powerful Partnerships* is another example of the effort to integrate research about teaching and learning with efforts to integrate student affairs and academic affairs (American Association for Higher Education, 1998). This document calls for faculty and student affairs to integrate their collective efforts centered around a common set of learning principles.

One of the recent innovations in higher education, capitalizing on the goal to create more integrative learning opportunities, and the ubiquitous nature of social media, is the digital badges movement (Wu, Whiteley, & Sass, 2015). Modeled after the skill-specific badges earned by Boy Scouts and Girl Scouts for completing a set of related tasks, digital badges emerged as an electronic means to acknowledge individual skills developed in academic and/or professional development settings (Gamrat, Zimmerman, Dudek, & Peck, 2014; Walker, Lee, & Lonn, 2014; Wu et al., 2015). Digital badges grew out of internet forums and became accessible and portable through online and social media platforms (Wu et al., 2015).

These types of badges can be used to authenticate skills or abilities that more established credentials do not recognize (Gligoski, 2012; Matkin, 2012; Wu et al, 2015; Young, 2013). Co-curricular activities, therefore, provide numerous opportunities in which digital badges could be applied (Walker et al., 2014). Wu et al. (2015) suggest that one of the advantages badges offer is providing, "documentable evidence of skills that were once difficult to quantify and document on resumes or transcripts" (p. 49). In 2011,

Secretary of Education, Arne Duncan characterized digital badges as a potential "game-changing strategy," because of their flexibility and adaptability as micro-credentials (Duncan, 2011; Wu et al., 2015). Yet, Selingo (2013) asserts that the career advancement value of badges remains uncertain, because. "the big question, of course, is whether employers would view badges as credible" (p. 69).

Portfolios, however, remain a highly valued resource to document and assess student learning electronically. Portfolios can be a powerful tool in demonstrating the contributions to student skill development from a more holistic approach to teaching and learning (Butler, 2006; Johnson & Rayman, 2007). "Now that there is an e-portfolio culture, there is a legitimate place for these co-curricular learning outcomes to come into the conversation" within the academy (Johnson & Rayman, 2007, p. 24). Rather than perpetuating past dualities such as affective and cognitive or in-class and out-of-classroom learning, portfolios provide the means to demonstrate the holistic way that students learn (King & Baxter Magolda, 1996; Pascarella & Terenzini, 1999; Terenzini, Pascarella, & Blimling, 1999).

For example, *Greater Expectations* (AAC&U, 2003) calls for faculty and staff to discuss common institutional learning goals (Bresciani, 2005). Thus, e-portfolios offer the opportunity to foster collaborations between student affairs and academic affairs to assess student learning within and outside of the classroom. In fact, Bresciani (2005) advocates for the use of electronic portfolios to address the goals put forth by the AAC&U's *Greater Expectations* report "to bring the unique work of each [institutional] program together to articulate shared learning outcomes and provide the means for…evaluation" of each (p. 70).

Co-curricular portfolios, then, reflect an extension of the work currently being done by faculty and student affairs staff advising students participating in co-curricular activities. The portfolio is the technological result produced from students documenting and reflecting on their engagement beyond or perhaps in conjunction with traditional classroom activities. In most models, students are self-directed in developing their portfolios, although there are institutions where faculty may incorporate co-curricular portfolios into their pedagogy (University of Florida, December, 2011). Since student affairs personnel often administer these programs, there may be concerns among some faculty about such educational tools being overseen by administrators. However, the role of student affairs personnel working with co-curricular portfolio programs is largely a practical one with more concrete goals such as assisting students in developing a resume (University of Florida, December, 2011) or creating supplemental materials for employment or graduate school applications (West Chester University, April, 2011).

Co-Curricular Transcripts and Portfolios

The use of co-curricular portfolios offers methods to document, assess and maximize such student learning in ways that promote collaboration across traditional barriers between the curriculum and the co-curriculum, between faculty and student affairs, and between advocates of cognitive and affective development. Researchers and practitioners may find that co-curricular portfolios enable them to bridge these historical divisions which impede the transformational change that many within and outside of the academy seek. Co-curricular portfolios, though, grew out of the efforts to develop co-curricular transcripts, a related approach to enhancing student learning, development, and involvement outside the classroom.

Co-curricular transcript models, which include leadership records, involvement records, and student development transcripts are primarily used by institutions to document and validate student out-of-class involvement in campus activities (Cosgrove & Marino, 1997; Gutowski, 2006; Hodges, 1992; Ragan, 2000). Students typically report the dates and descriptions of their participation and achievements while a staff or faculty member verifies this information (Cosgrove & Marino, 1997; Gutowski, 2006; Ragan, 2000; Tilden, Jr., 1985). Out-of-class activities captured in these documents commonly include "one of four categories: leadership activities and roles in a wide variety of student organizations and athletic teams; educational development, including participation in seminars, conferences, and training programs; awards and recognition received…; and community or volunteer service" (Gutowski, 2006, p. 1).

When co-curricular transcripts began to proliferate in the 1970's and 1980's, reporting by students was through paper forms, but many institutions have since developed online and software versions to facilitate the data collection and verification process (Cosgrove & Marino, 1997; Gutowski, 2006; Ragan, 2000). The result is a listing of a student's co-curricular activities with practical value for creating a resume and for students to use as a complement to their academic records when applying for jobs, graduate school, or other advancement opportunities (Cosgrove & Marino, 1997; Gutowski, 2006; Hodges, 1992; Ragan, 2000). Although most institutions promote co-curricular transcripts as a means for students to demonstrate increased marketability, several also stress the developmental growth that occurs through learning transferable skills outside the classroom. The 'co-curricular transcript' name was intentionally chosen to stress the importance of student learning outside the classroom by attempting to equate

efforts to quantify and record co-curricular learning with the analogous process undertaken by faculty and academic administrators to compile grades in the creation of academic transcripts (Cosgrove & Marino, 1997; Gutowski, 2006; Hodges, 1992; Ragan, 2000).

Brown and Citrin (1977) in early theoretical work on this topic, described three potential formats for a co-curricular transcript: (1) as a list of experiential activities, recording student participation and guiding student decision-making, (2) as an inventory of competencies, providing assessment data, and (3) as a portfolio, including evidence of co-curricular involvement and student performance. Although this description places portfolios within the category of co-curricular transcripts, at that time their description of a portfolio was somewhat limited. Brown and Citrin (1977) characterized the compilation of portfolio materials as a collection of examples, "like a painter or photographer uses a portfolio" (p. 507). However, portfolios have evolved over time into a more comprehensive educational tool that is now distinct from co-curricular transcripts in multiple ways.

Portfolios are "a type of assessment in which students' work is systematically collected and carefully reviewed for evidence of learning and development" (Palomba & Banta, 1999). With the advent of technology, portfolios have become a popular electronic tool, as hundreds of institutions use some type of digital system to store and document student work (Basken, 2008). Portfolios can be used for multiple purposes, including demonstrating students' best work; showing that students have met standards; and illustrating to accreditors or other audiences what students are learning (Niguidula, 2005). Typically, co-curricular portfolios are used to "ask students to reflect on their own

learning (Alverno College, 2001) as well as to provide evidence of their learning to others" (Bresciani, 2005, p. 71).

Co-curricular portfolios share similarities with co-curricular transcripts in that students using these portfolios collect and record experiences in categories such as leadership opportunities, student organizations, educational development, honors, and service (Gutowski, 2006; Kean University, 2011; West Chester University, 2011). However, the primary emphasis of co-curricular portfolios is on student learning through reflection, goal-setting, and skill development (Old Dominion University, 2011; Springfield College, 2011; West Chester University, 2011). Barbara Cambridge, a co-director of the Inter/National Coalition for Electronic Portfolio Research describes e-portfolios as "a way to generate learning as well as document learning" (Basken, 2008 p. 2). Thus, portfolios are methods to link assessment and learning by evaluating student learning over time based on performance and/or intended outcomes, as well as to produce learning through the initiation of reflective and metacognitive processes in completing the documentation and/or evidence collection process. In contrast, many co-curricular transcripts may simply be used to document participation or to guide involvement with a greater emphasis on marketability and career advancement (Colby Sawyer College, 2011; Hobart and William Smith Colleges, 2011).

There are several potential benefits, none of which have been empirically examined, thought to derive from the use of co-curricular portfolios for students, student affairs practitioners, and institutions. First, the reflective nature of this type of effort may make students more intentional learners, taking greater ownership for and potentially deepening their learning experience (Oaks, 2015; Pascarella & Terenzini, 2005). Second,

completing the portfolio may raise students' awareness of their skills, encouraging them

to apply what they learn in the classroom to co-curricular activities and vice versa

(Cosgrove, 1997; Gutowski, 2006; Oaks, 2015). Third, this type of evidence promotes

and acknowledges the learning taking place through co-curricular activities and

experiences, serving to validate and reward students' efforts (Cosgrove, 1997; Gutowski,

2006; Oaks, 2015). Fourth, to the degree that student affairs practitioners provide co-

curricular learning opportunities, the validation of student learning in co-curricular

settings enhances the perception of student affairs practitioners as educators in their own

right and not simply administrators (Cosgrove, 1997; Dean, 2015; Gutowski, 2006).

As a fifth benefit, co-curricular portfolios may serve as a guide to involvement

opportunities for students, enabling them to make more conscious decisions about how to

spend their time out of the classroom (Gutowski, 2006). Sixth, such a portfolio product

enables student affairs practitioners to align co-curricular learning opportunities with

institutional outcomes, thereby embedding co-curricular experiences in student learning

(Gutowski, 2006; Keeling, 2006). Seventh, the portfolio may add to the marketability of

students for employers or for graduate schools (Bryan et al., 1981; Gutowski, 2006).

According to Tom Herman, Academic Vice President for Acadia University in Nova

Scotia, "This kind of document is far more valuable than curricular transcripts in terms of

telling [employers] something about the students and what their abilities and interests

are" (Lewington, 2010, pp. 2-3; Oaks, 2015). Eighth, the co-curricular portfolio can help

to promote the institution as one where students can obtain a holistic, integrated

education (Gutowski, 2006; Oaks, 2015). Thus, to the degree that students, practitioners

and institutions are able to realize the promise of such a co-curricular program, "the

educational benefits of the co-curriculum [are] multiplied through participation" in this effort (Dean, 2015; Oaks, 2015; Tilden, Jr., 1985).

While these potential benefits are promising, they remain largely intuitive and theoretical due to the lack of research on co-curricular portfolios. Co-curricular portfolios, though, are only one potential method to enhance learning in conjunction with or outside the classroom. Other methods, such as some high-impact educational practices and specific attributes, what may be considered core characteristics of co-curricular portfolios, have been explored in the literature. It may be possible to derive insights from this research about how out-of-classroom learning may be enhanced, specifically as it relates to the use of portfolios. These approaches will be explored in greater depth in the review of the next literature area.

Enhancing Co-Curricular Learning through Portfolios

This section of the literature review is an effort to understand how learning outside the classroom can be improved, specifically as such learning efforts relate to the use of portfolios. Although much of the literature regarding co-curricular portfolios is descriptive in nature (Bresciani, 2006; Reardon et al., 2005), portfolios are still widely touted as a tool with the power to transform higher education (Ayala, 2006; Batson, 2002), and the potential for teaching and learning benefits for students and student affairs professionals (Reardon & Hartley, 2007). Yet, few research efforts specifically address the impact of portfolios on students and their learning (Ayala, 2006; Reardon & Hartley, 2007).

Co-curricular learning (Chickering & Reisser, 1993; Dean, 2015; Storey, 2011) encompasses structured educational opportunities that exist outside of the curriculum

(e.g., participation in student organizations, leadership positions) or that may be offered by institutions in conjunction with the curriculum (i.e., internships or service-learning). According to Storey (2011), "these programs assist in preparing students for life experiences. From working on projects to improving communication skills, college student development programs can assist students with learning skills for future academic programs and employment" (p. 28). Among the methods to enhance student learning that also seem closely related to the use of portfolios are engaging students in high-impact educational practices (Kuh, 2008). These ten educational practices represent the most effective approaches at improving student learning (Kuh, 2008). To the degree that co-curricular portfolios are consistent with high impact practices, these tools offer opportunities to enhance and expand co-curricular learning in ways that may be highly impactful in preparing students for future career and life challenges.

There are a number of core characteristics of co-curricular portfolios that similarly seem related to enhancing student learning. These core characteristics of co-curricular portfolios overlap with one another, but include the following: experiences, self-assessment, metacognition, reflection, and relationships. Each of these core characteristics of co-curricular portfolios will be discussed in relation to student learning. An examination of these high-impact practices and the core characteristics of portfolios may provide a better understanding of ways to enhance co-curricular learning.

High-Impact Practices

Using data from the National Student Survey on Engagement (NSSE), Kuh (2008) identified a set of educational practices shown to have a positive impact on student engagement for students from diverse backgrounds in *High-Impact Educational*

Practices, a report by AAC&U. These "high-impact practices" (Kuh, 2008, p. 9) include

first-year seminars and experiences, common intellectual experiences, learning

communities, writing-intensive courses, collaborative assignments and projects,

undergraduate research, diversity/global learning, service learning or community-based

learning, internships, and capstone courses or projects. Kuh (2008) argues that these

practices have a high-impact,

> because they increase the frequency of meaningful interactions with faculty and
>
> peers, induce students to spend more time and effort on research, writing, and
>
> analytic thinking, and involve them in more hands-on and collaborative forms of
>
> learning. While these practices have even greater benefits for traditionally
>
> underserved students—students of color and first-generation students—these
>
> students are the least likely to actually participate in them. (AAC&U, 2008, p. 1)

Kuh (2008) argues that the application "of active learning practices is unsystematic, to

the detriment of student learning" (p. 9). He advocates for greater utilization of "high-

impact practices that educational research suggests increase rates of student retention and

student engagement" (p. 9).

In this report, Kuh (2008) describes six characteristics of these high-impact

practices that account for their effectiveness. High-impact practices:

1. Require time, energy, and investment by the student, which increases their

   commitment to the high-impact practice, the academic program, and the

   institution.

2. Facilitate the development of substantive relationships with faculty and peers

   through collaborative efforts, which foster frequent feedback.

3. Provide students with rich opportunities to interact with diverse individuals and ideas, increasing their exposure to different people and ways of thinking.

4. Offer students direct, timely feedback about their performance.

5. Create opportunities to assimilate, experiment, and use what students learn in novel situations, which are "essential to deep meaningful learning experiences" (Kuh, 2008, p. 17).

6. Enable students to identify and clarify their values, develop their academic skills and moral decision-making, and "to better understand themselves in relation to others and the larger world" (Kuh, 2008, p. 17).

Collectively, these high-impact practices offer promising methods to enhance student learning, each of which is positively correlated with increasing student retention and student engagement (Kuh, 2008). However, "these high-impact practices still reach only a fraction of today's college students" (Schneider, 2008, p. 2). The implication from this research is that institutions can increase and deepen student learning by making these high-impact practices more widely available to students (Kuh, 2008; Schneider, 2008).

Other educators have endorsed the benefits of high-impact practices. For example, in a presentation entitled "E-Portfolios and the Problem of Learning in the Post-Course Era," Bass (2011) describes six outcomes associated with these high-impact practices. Bass asserts that these high-impact practices are "experiences that help students: attend to underlying meaning; integrate and synthesize; discern patterns; apply knowledge in diverse situations; view issues from multiple perspectives; acquire gains in skills, knowledge, practical competence, personal and social development" (p.22). This analysis of high-impact practices incorporates most of the characteristics described by

Kuh (2008), but Bass also illuminates deeper and broader connections between students and the learning process than are evident in the original report. Bass (2011) observes that high-impact practices are "largely in the extra-curriculum (or co-curriculum)" (p. 24). Furthermore, to underscore his support of high-impact practices and his critique of contemporary teaching methods, Bass rhetorically asks whether "low-impact practices [are] formally known as 'the curriculum'?" (p. 25).

The broader context of this report is that many institutions are not providing sufficient learning opportunities for students and thus many students are not reaching their potential (Bok, 2005; Kuh, 2008; Merrow, 2006; Schneider, 2008). For example, through the Liberal Education and America's Promise (LEAP) initiative, AAC&U "places strong emphasis on global and intercultural learning, technological sophistication, collaborative problem-solving, transferable skills, and real-world applications—both civic and job-related" (Schneider, 2008, p. 3). However, "in AAC&U's 2006…survey of employers, 63 percent reported that too many college students lack the skills needed to succeed in the global economy" (Schneider, 2008, p. 5). As George Mehaffey, AAC&U Vice President for Academic Leadership and Change (2011), asks, "how do we educate more students, with greater learning outcomes, at lower costs?" These high-impact practices make the difference for improving student learning, but in order to derive the educational benefits that research indicates are available, these practices must be done well, made scalable for larger student audiences, and made more available to all students, but especially to students of color and first-generation students, those who demonstrate the greatest gains despite having the least access (Kuh, 2008; Mehaffey, 2011).

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Co-curricular portfolios share many commonalities with the six characteristics that Kuh (2008) uses to describe high-impact practices, and they offer the opportunities to achieve the six outcomes that Bass (2011) suggests. For example, students may engage in different stages in the process of creating a co-curricular portfolio. These stages may include collecting experiences, selecting skills or artifacts to document, reflecting on what they may have learned, and connecting with others about their progress. Thus, similar to the characteristics of high-impact practices cited by Kuh (2008), the creation of the co-curricular portfolio is effortful; offers opportunities for students to demonstrate and apply their learning; and students are able to reflect on who they are becoming. As Kuh (2008) notes, portfolios offer the type of high-impact experience described in capstone courses:

> A well-designed culminating experience such as a…portfolio of best work can also be a springboard for connecting learning to the world beyond the campus. NSSE results show a net positive relationship for students who have had some form of culminating experience after controlling for a host of student and institutional variables. (p. 17)

The strength of the similarity between factors that contribute to the success of high-impact practices and the functions and attributes of co-curricular portfolios suggests the potential for increased student learning through the use of such educational tools. In fact, co-curricular portfolios could complement virtually any of the ten high-impact practices, serving as a tool for students to document learning related to them. In addition, through co-curricular experiences, students may develop substantive relationships with peers, faculty/staff advisors; they may interact with diverse individuals and ideas, and they will

likely receive feedback from peers or faculty/staff advisors through their involvement. Furthermore, co-curricular portfolios provide greater potential access for students as the ability to participate is limited only to the time and energy students devote to creating a portfolio and the technological platform available on a given campus. As a result of these related aspects among co-curricular portfolios, Kuh's high-impact practices, and Bass' high-impact outcomes, it is possible that these attributes may prove beneficial for learning with co-curricular portfolios too.

Core Characteristics of Co-Curricular Portfolios

There are then a variety of high-impact practices and high-impact outcomes (Bass, 2011; Kuh, 2008) that share some of the attributes of co-curricular portfolios. Similarly, there are also features of co-curricular portfolios that share similarities with these ways of enhancing student learning. These features will be described as core characteristics of co-curricular portfolios and each will be explored individually. These core characteristics of portfolios overlap with one another but include the following: experiences, self-assessment, metacognition and reflection, and relationships. While portfolios used in other settings serve a variety of purposes, co-curricular portfolios are primarily learning and/or showcase portfolios (Zeichner & Wray, 2001). These types of portfolios are used to highlight students' best work; to showcase what students are learning; to foster career preparation; and/or to demonstrate skill development (Lankes, 1995; Niguidula, 2005). For example, although institutional models vary, a student using a co-curricular portfolio will likely be asked to document out-of-class activities or involvement, describe the skills used or developed through these experiences, reflect on what has been learned through this process, and use this information for future goal-

setting and advancement opportunities (Florida State University, 2011; Springfield College, 2011; West Chester University, 2011). Students may also select artifacts (Florida State University, 2011) to illustrate their learning and skill development, which adds another dimension to the learning process as students must choose what evidence to include in their portfolios.

Thus, portfolios offer students and institutions an innovative tool to engage and stimulate learning (Corbett-Perez & Dorman, 1999), which in a co-curricular environment can be used to foster transferable skills and personal development outcomes (Reardon et al., 2004). Florida State University's portfolio program, for example, is used by thousands of students and was rated highly (> 80% on each item) on a series of learning outcomes, including developing transferable skills, showing evidence of interpersonal skills, demonstrating skills developed through volunteer experiences, and articulating skills to potential employers (Reardon et al., 2004, pp. 27-28). Moreover, in a study investigating service-learning experiences, McClam, Diambra, Burton, Fuss, and Fudge (2008) observed that "student reflections proved to be a rich source of information…[as] through written reflection students were able to verbalize the subjective impact of their experiences" (p. 245). Researchers argue that "students can best gain from their years of study when the systematic reflection that is characteristic of portfolios engages them" (Wright, Knight, & Pomperleau, 1999, p. 89).

Although there is considerable overlap conceptually among them, in the following sections, each of the four core characteristics of co-curricular portfolios is reviewed individually. How each characteristic enhances student learning and how each aspect relates to co-curricular portfolios is explored. For example, perceptions about the value

added for students through co-curricular experiences is discussed. The learning benefits

from using self-assessment, and metacognitive and reflective practices are investigated.

In addition, the importance of relationships to enhance learning through interactions with

peers, staff and faculty, including the "social pedagogy" (Bass, 2011) of portfolios, is

considered. Finally, the broader, cumulative impact of college on student learning is

explored in relation to the methods discussed to enhance student learning, including

Kuh's (2008) high-impact practices and the core characteristics of co-curricular

portfolios.

Experiences. Co-curricular experiences reflect the range of activities and learning

opportunities available to students in conjunction with and/or independent from the

curriculum (Storey, 2011). Chickering and Reisser (1993) distinguish between in-class

and out-of-class activities, but include both in their definition of co-curricular activities as

they relate to student learning because some activities may be directly relevant or

applicable to learning inside the classroom. Dewey (1938) conceived of experience not

just as what happens, but rather as the product of two tenets: continuity and interaction.

The former principle connects one event to the next for the individual in a unified

understanding, while the latter demonstrates how the past influences the future, as each

occurrence impacts the next (Dewey, 1938). These connections between individual

understanding and action represent the nature of experience for Dewey. Through co-

curricular involvement, continuity is evident in the individual student experience, while

interaction is visible in the choices made over time that define one's experience.

Experiences are essential components of any co-curricular portfolio. Whether

they represent co-curricular involvement or achievements, experiences provide the raw

material for student articulation of skills, reflections about learning, and future goal-setting in the creation of content for a co-curricular portfolio. Thus, co-curricular portfolios can promote student involvement in activities that are educationally and/or personally enriching with the vast resource of time available to students outside the classroom.

Inside the classroom, institutions award credits at the conclusion of a course. However, "most graduates place high value on the educational experience, the things that happen outside the classroom that usually have little or nothing to do with their academic studies" (Frey, 2009, p. 8). Since institutions do not offer credits for such co-curricular or extra-curricular experiences, they may seem to be worthless or insignificant, even though the campus life can be one of the key differentiators between institutions in a competitive market (Frey, 2009). Although many institutions promote their collegiate community as a value-added asset, this dynamic between co-curricular experiences and course credits undermines this effort. Consequently, a diminished perspective of co-curricular learning opportunities may be reinforced. However, co-curricular portfolios offer a means to demonstrate and enhance the value of campus co-curricular involvement for students, raising the status of such experiences, while also further differentiating the value added by those institutions that use this type of educational tool.

Self-assessment. Another core characteristic of co-curricular portfolios is the self-assessment process. Students participate in this practice when they select activities to include in their portfolio, determine skills and abilities they have developed, reflect on their experiences, and determine future goals to pursue. Portfolios involve the learner directly in self-assessment (Hill, 2002), which "can help students learn how to learn"

(Murphy, 1998, p. 9). However, no matter how well-designed a portfolio is, students need to engage in the process for learning to be successful (Bowers, 2005), as with any of the methods identified previously to enhance co-curricular learning. If the student is invested in the portfolio program, then two design requirements are needed for an effective process: 1) connecting students with developmentally appropriate assignments; and 2) constructing prompts that are engaging and applicable for students to respond to (Bowers, 2005). In *Assessing English: Helping students reflect on their work*, Johnston (1983) asserts that if students cannot explain what they are learning, "they are not learning in a way which is conscious and under their control" (p. 2).

Students benefit from portfolios "by becoming better evaluators and practicing self-reflection in their work" (Cook-Benjamin, 2001, p. 6; see also Gilman & McDermott, 1994; Lambdin & Walker, 1994; Newman & Smolen, 1993; Tierney, 1992). Portfolios enable students to examine their own efforts, and when programs are so structured, the performance of peers, too. Some programs include a peer review component in providing feedback on portfolio composition (Murphy, 1998). Through this process, students can evaluate their own success, compare themselves with others, critique others' work, make new plans for the future, assume responsibility for their own development, and contribute to the learning of their peers (Fernsten & Fernsten, 2005; Murphy, 1998). Thus, "through portfolios, students become partners in documenting, assessing, and improving their own learning" (Jacobson, 2011, p. 7).

Receiving timely feedback is one of the beneficial characteristics cited in describing some of the high-impact practices (Kuh, 2008), and prompt feedback is one of the principles valued in Chickering and Gamson's (1987) "Seven Principles for Good

Practice in Undergraduate Education." With the advent of the technological

advancements of e-portfolios, students can share their efforts and receive feedback almost

immediately when working with peers or faculty on an assignment in real time (Ellaway

& Masters, 2008). As a result, "students' motivation is raised if feedback is given early

and is constructive" (Moores & Park, 2010, p. 48).

Self-assessment, then, plays an important role in portfolios. Some educators

contend that students learn more from the process of creating the portfolio than from the

end result; the portfolio itself (Roberts, 2009; Smith & Tillema, 2003). However, students

do not develop the ability to perform "complex metacognitive practices" simply because

the portfolio provides a place for their reflections (Jacobson, 2011, p. 6). Rather, student

reflections may well be superficial, exaggerated, inaccurate, or even unrealistic

(Jacobson, 2011). In order to understand what factors impact students' ability to reflect,

Roberts (2009) reviewed research exploring reflections by students in building

professions, such as architecture and construction management. Three factors were

identified that influenced the levels of reflection that these specific groups of students are

likely to achieve (Roberts, 2009). These factors are students' "individual propensity and

willingness to reflect, the focus of reflection that students perceive they need to adopt,

and the structure and support students are provided with to help them reflect" (p. 633).

Although many students interviewed in these studies believed that reflecting led

to positive outcomes, Roberts (2009) found that students had divergent attitudes and

motivations toward reflection. He grouped the students into three categories based on

their inclination to reflect—ranging from those who did so intuitively (Natural

Reflectors), to those who came to value reflection gradually (Converts), to those

(Disengaged) students who did not value reflection (Roberts, 2009). Roberts' analysis has important implications for the future design and implementation of portfolios. For example, further research is needed to investigate the possible impact of the method (e.g., journals, portfolios, etc.) of collecting reflections; or to understand the implications of knowing a student's inclination to reflect before initiating a reflection exercise. Most importantly though, Roberts (2009) concludes that, "what remains unclear is the extent to which an individual's propensity to reflect can be developed, and whether reflection can be taught" (p. 637). The answer to this question has important implications for portfolios and methods used to enhance student learning.

One approach that has been demonstrated to enhance self-assessment and reflection is scaffolding. In fact, some investigators assert that "deeper levels of reflection which are a highly valued part of the learning process require significant scaffolding" (Harris, 2008; Moon, 2004; Roberts, 2009). Scaffolding is supporting and guiding the learner to complete an assignment that may be beyond their current understanding or ability (Verenikina, 2008). Owen and Stupas (2009) found that pharmacy students' skills at reflection improved in cases where supplemental scaffolding was provided. In a co-curricular portfolio format, scaffolding may include prompts, templates, directions, peer support, or institutional support services that guide the student to and through their next involvement choice. However, the impact of scaffolding is an aspect of using portfolios that has not been investigated by researchers in the co-curricular context.

Reflection. Another core characteristic of portfolio use is reflection. Portfolios involve metacognitive practices when students reflect and evaluate their own abilities and their development, becoming aware of their own assessment standards and decision-

making process (Murphy, 1998; Yancey, 1992). More specifically, metacognition "involves one's internal dialogue before, during, and after a performance and includes knowing what one knows, knowing when and how it came to be known, thinking and planning, representing knowledge effectively, and being able to evaluate competence" (Fernsten & Fernsten, 2005, p. 306; see also Pesut & Herman, 1992).

Different types of reflection have been distinguished by researchers (Dewey, 1933; Hatton & Smith, 1995; Moon, 1999, 2004; Owen & Stupans, 2009; Rodgers, 2002; Schön, 1983). Among these forms of reflection are "descriptive reflection" and "critical reflection" (Owen & Stupans, 2009, p. 274; see also Hatton & Smith, 1995). Descriptive reflection varies from a common description; to a description and an explanation; to a description, explanation, and discussion of possible approaches (Owen & Stupans, 2009). Critical reflection, however, is a more complex metacognitive process. When students engage in critical reflection, it "is…a deliberate process…to focus on their performance and think carefully about the thinking that led to particular actions, what happened, and what they are learning from the experience, in order to inform" future actions (King, 2002). Portfolios offer two ways for students to critically reflect: 1) in reflecting on the artifacts or evidence selected and 2) through the interaction with a faculty, advisor, or reviewer of their portfolio (Jacobson, 2011). Such metacognitive practices support "higher level learning processes" (Moon, 1999, 2004).

Perhaps because of the metacognitive processes involved, educators interpret the relationship between reflection and experience differently. Some investigators portray reflection as an activity that should be detached from experience and subjectivity (Illeris, 2007). Dewey, however, did not view reflection as distantly summarizing experience

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(Fernsten & Fernsten, 2002; Jordi, 2011; Rodgers, 2002). Instead, reflection for Dewey (1933) is a complex, active, iterative process requiring time and effort to master, which is intellectually and emotionally engaging. (Fernsten & Fernsten, 2002; Jordi, 2011; Rodgers, 2002). His definition of reflective practice is summarized by Carol Rodgers (2002) into four principles:

1. Reflection is a meaning-making process that moves a learner from one experience into the next with deeper understanding of its relationships with and connections to other experiences and ideas. It is the thread that makes continuity of learning possible…

2. Reflection is a systematic, rigorous, disciplined way of thinking, with roots in scientific inquiry.

3. Reflection needs to happen in community, in interaction with others.

4. Reflection requires attitudes that value the personal and intellectual growth of oneself and of others. (p. 845)

These principles are also illustrative of the process that students creating a co-curricular portfolio may undergo. In fact, co-curricular portfolios offer students a potential platform to integrate all of these complex, active, reflective principles in a way that allows faculty and reviewers to see the students' thinking and learning evolve. For example, in creating a co-curricular portfolio, students give meaning to their activities and achievements, connecting skills and experiences with purpose and direction. Their approach may be thoughtful and structured, providing opportunities for experimentation and application of learning in future endeavors. The experiences often cited in a co-curricular portfolio typically occur in a social setting, within the campus or surrounding

community, while the evidence and artifacts may be topics for group discussion. Finally, enhancing student learning and developing students are primary goals of the co-curricular portfolio process. In short, "reflection is at the heart of e-portfolio practice" (Bass 2011, p. 45).

However, there may be situations when time or other constraints make it difficult or impossible for the learner to express or engage in the depth of reflection that Dewey describes. This insight led Schön (1983) to investigate the role of reflection in the work of diverse professionals. In analyzing their approaches, Schön proposed an "epistemology of practice" (p. 133) to describe the interaction between action, reflection, knowing, seeing, and doing, among these practitioners. He developed new concepts such as "reflection-in-action," "reflection-on-action," "reflection-in-practice," "see-as," "do-as," and "knowing-in-action" to explain "the art by which practitioners sometimes deal well with situations of uncertainty, instability, uniqueness, and value conflict" (pp. 50, 54, 59, 140, 276). Schön's ability to dissect the reflective practices of professionals as they intuitively "think on their feet" demonstrates the process of reflecting while doing, and how such thinking informs and transforms previous assumptions and future actions.

Sodhi (2006) identified similar practices engaged in by social workers during their reflective efforts. These social workers explained how after meeting with clients, they may "sit with a feeling" (Sodhi, 2006), rather than use more cognitive reflective practices to gain insight and understanding of the situation. While this example relies on emotional interpretations of reflections, the principles remain the same as those articulated by Schön (1983).

There are a number of similarities between Dewey's and Schön's concepts of reflection. Despite the metacognitive processes involved in reflection, action is closely connected to reflection for both Dewey and Schön (Roberts, 2009). For both educators, the end goal of the reflection is to continually inform future action, even if it means abandoning past beliefs or practices. In addition, the cyclical, iterative nature of how each educator conceives of reflection is similar.

Schön's tools for reflection and solving problems in applied situations are also consistent with the demands on students engaged in co-curricular activities. For example, students may utilize these methods when they "ask themselves questions during experiences (reflection-in-action) or after experiences reflecting on past actions (reflection-on-action)," which may lead them to new understandings, decisions, and actions (Owen & Stupans, 2009, pp. 278-279). In fact, according to Hatton and Smith (1995), the ability to effectively practice reflection-in-action should be the desired outcome when seeking to develop the reflective capabilities of students. The co-curricular portfolio, then, becomes both the repository of these student reflections and an additional tool to facilitate the metacognitive process of examining student reflections, actions, and options.

Reflection is commonly thought of as the "activity in which people recapture their experience, think about it, mull it over, and evaluate it" (Boud, Keough, & Walker, 1985, p. 33). However, as illustrated by the breadth and depth of Dewey's and Schön's conceptualizations, the understanding and application of reflection has evolved and transformed over time (Illeris, 2007; Mezirow, 1991), and even varies based on context (Hoyrup, 2004). Yet, from the constructivist perspective, "cognitive reflection is the key

process through which individuals extract knowledge from their concrete experience" (Jordi, 2011, p. 182; see also Fenwick, 2001; Illeris, 2007). Thus, through the use of reflection, experiences can be threaded together to facilitate learning (Blackwell, Bowes, Harvey, Hesketh, & Knight, 2001); meaning can be ascribed to the individual, subjective experience (Platzer, Snelling, & Blake, 1997); and theory and practice can be brought together (Bain, Ballanyne, Packer, & Mills, 1999; Calderhead, 1988) to be assessed, tested, and applied again.

Davis, Ponnamperuma, and Ker (2009) assert that "reflection…is an important prerequisite for producing self-directed learners" (p. 96). Yet, Jacobson (2011) observes, "we don't give students very much practice thinking about their learning in terms of how it has changed them" (p. 6). For example, a number of studies in service-learning (Landeen, Byrne, & Brown, 1994; Richardson & Maltby, 1995; Wessel & Larin, 2006) have found that "students new to the reflection process did not demonstrate deep learning or critical thinking in their writing" (Molee, Henry, Sessa, & McKinney-Prupis, 2010, pp. 251-252).

As a result, Molee et al. (2010) recommend a number of interventions (e.g., multiple rewrites, expanded feedback sessions, etc.) to enhance and deepen student learning. In these studies, one semester was found to be too little time for students to develop critical reflection skills (Landeen et al., 1994; Molee et al., 2010; Smith, 1998), but rather a period of years is needed to develop the ability to "reflect at deep levels" (Molee et al., 2010, p. 252; see also Grossman, 2009). Moreover, in a study involving pharmacy students, Owen and Stupans (2009) reported that although students valued

reflecting on their placements, they complained that they were "time consuming" (p. 277).

Other researchers suggest that in order to internalize reflective practices and be able to self-regulate their learning, students need guidance and opportunities, such as the use of portfolios, to practice and develop reflective skills (Jacobson, 2011; Martin-Kniep, 200; Moores & Parks, 2010). In some fields, such as the medical profession, the literature demonstrates that there is a more direct use of portfolios contributing to student learning (Challis, 2001; Driessen, van Tartwijk, Overeem, Vermunt, and van der Vleuten, 2005; Freidman, Davis, Harden, Howie, Ker, & Pippard, 2001; Snadden & Thomas, 1998; Stecher, 1998). Davis et al. (2009) assert that "portfolio assessment leads to reflective learning" (p. 96). Thus, although reflection offers gains for student learning, it also requires student effort and care, enhanced by feedback, structure, and practice over time, to be most productive.

However, despite their popularity, success, and ubiquity, some investigators assert that there is not yet sufficient broad-based research evidence to generalize about the impact of portfolios, largely due to their diversity and adaptability, which limits the ability to conduct research across disciplines (Wright, Knight, & Pomerleau, 1999). Among the implications from these results are that additional research into the process of reflection is needed, and that portfolio systems that structure or scaffold learning opportunities may allow students much-needed time to develop their capacity to reflect (Yancey, 2009).

Additional researchers have been critical of an "inherent cognitive bias" (Jordi, 2011, p. 182) in the concept of reflection (Coulter, 2001; Fenwick, 2001, 2006;

Michelson, 1996, 1998). Such critics claim that the study of reflection has been "more concerned with thinking…and less with experiences, feelings, or interaction" (Illeris, 2007, p. 65). For example, Jordi (2011) argues for a broader definition of reflection to include the "complex mix of bodily held feeling, memory, external stimulus, internal emotions, ideas, and new and old information that require integration and meaning making…[and] involve…reflective processes that pay as much attention to the body as the mind" (p. 186). Professional sports offer illustrations of this more expansive definition of reflection, as some athletes describe approaches such as "feeding off their emotions" or "playing within themselves" to describe either more physical or more restrained ways to engage an opponent that integrate emotion, thought, and bodily function toward a purpose.

Schön (1983), for example, describes the common experience related by baseball pitchers of needing to "find their groove" during a game in order to make effective pitches to a batter. This process seems to be part physical muscle memory, and part mental and emotional concentration, informed by reflection in action, reflection on action, and interaction with others such as the catcher and coaches observing the pitcher's performance. Reflection, then, is a complex, multi-dimensional process that has the potential to enhance learning, understanding, and performance in both conscious and non-conscious ways.

Relationships. A final core characteristic of co-curricular portfolios is the relationship that students have with peers also creating portfolios and with the faculty member or advisor who oversees the student in creating the portfolio. Co-curricular portfolios are based out of different departments within institutions, but typically are

based in an area within student affairs. Some universities offer co-curricular portfolios

through career services (e.g., Florida State University, 2011), while others are available

from the Dean of Students Office (e.g., University of Wisconsin at Madison, 2011) or

student activities departments (e.g., West Chester University, 2011). Some institutions

require that students validate their activities and accomplishments with a faculty or staff

advisor (e.g., University of South Florida Polytechnic, 2011) whom they work with

during their involvement, which creates additional opportunities for relationships to

provide the student with feedback and support.

A number of investigators have cited the value of the interactions inherent in

portfolio creation and review (Bass, 2011; Jacobson, 2011). As faculty or advisors

respond to student portfolios, they are demonstrating for students their own knowledge

and expertise while guiding students in their ability to critique their own work and

identify areas for further development (Jacobson, 2011). Reflection, then, need not be a

silent, solitary process.

In fact, "it is difficult to know where 'reflection' stops and where 'dialogue'

begins" (Murphy, 1998, p. 8; see also Camp, 1998). The exchange from the relationship

between the student, peers, and the reviewer can be a powerful source of feedback and

learning (Bass, 2011; Jacobson & Florman, 2011; Moores & Parkes, 2010; Race, 2005).

Moreover, "reflection provides a unique window on the concerns and issues of the

individual…[student, which] provides a way to "make learning visible" leading to more

dialogue, discussion and learning (Murphy, 1998, p. 8; see also Camp, 1998). Bass

(2011) even describes portfolios as a "social pedagogy," due to the multi-dimensional,

interactive nature of this educational tool. Thus, "the social nature of reflection" (Yancey,

1998 p. 13) through the relationships with others involved, provides enhanced learning opportunities for students that are also indicative of the use of portfolios.

Implications from Core Characteristics of Co-Curricular Portfolios

Many researchers study the significance of a wide variety of aspects of attending college. Yet, the totality of the experience appears to be greater than the sum of its parts (Dean, 2015; Oaks, 2015; Terenzini et al., 1999). While parsing the experience to study various elements is extremely valuable, "the impact of any given collegiate experience is smaller than the cumulative effect of multiple experiences, particularly when they are mutually supportive and reinforcing" (Terenzini et al., pp. 616-617; see also Dean, 2015; Oaks, 2015; Pascarella & Terenzini, 1991). Typically, rather than arising from a single dramatic event, the growth in students during college stems from multiple internal and external sources that are mutually interacting (Kuh, Palmer, & Kish, 2003), including the investment of time and energy by the student (Astin, 1993a; Kuh et al., 1994). Thus, students develop holistically, as growth in one aspect of a student's development is usually accompanied by changes in other areas (Dean, 2015; Kuh, et al., 2003; Oaks, 2015; Terenzini et al., 1999).

The implications of this research for higher education practitioners and policy makers are clear. Educators need to "promote and sustain, purposefully and intentionally, a learning-centered environment or culture on a campus" to maximize student learning and development (Terenzini et al., 1999, p. 620). In order to create this culture, student affairs and academic affairs must collaborate to develop educational practices, policies, and programs that are complementary and reinforcing of shared institutional learning goals. Thus, "learning-centered decision-making should become a dominant philosophy

in student and academic affairs…units" (Terenzini et al., 1999, p. 620). Moreover, such efforts to span traditional boundaries between classroom and out-of-class learning can aid in promoting collaboration between areas, such as student affairs and academic affairs, while also reflecting more holistic, integrative models of learning which are more closely aligned with how students learn (Dean, 2015; King & Baxter Magolda, 1996; Oaks, 2015; Pascarella & Terenzini, 2005; Schroeder, 1999).

Colleges and universities can realize these transformative changes to improve student learning by implementing or expanding programs demonstrated by research to be effective (Kuh, 2008). Specifically, through the increased use of the ten high-impact practices, more students can reap the learning gains from these successful, research-tested efforts. Consequently, institutions can significantly increase student learning, student engagement, and student retention (Kuh, 2008). In addition, portfolios, in the context of a capstone course, have already been shown to be a method to achieve these goals (Kuh, 2008).

In view of the research supporting the learning potential related to the core characteristics of co-curricular portfolios, these educational tools may represent another opportunity available for students and institutions. Investigating the impact of co-curricular portfolios on student learning, then, is a significant prospect to capitalize on under-utilized institutional resources, such as students' time involved and the ubiquity of co-curricular activities on university campuses. The potential to enhance student learning and skill development, largely by using existing resources available to students, through the use of co-curricular portfolios to create more value-added benefits is a promising prospect for educators to explore further.

Implications of the Literature Review

A synthesis of the literature reviewed in this study emphasizes the wide-ranging, high-impact educational gains students can achieve through their involvement in "educationally purposeful out-of-class experiences" (Kuh et al., 2003, p. 1), as well as the pressing need for students to develop skills and abilities that will prepare them for the rapidly changing economy, as well as to become productive citizens (AAC&U, 2007; U.S. Department of Education, 2006). Co-curricular portfolios provide the means to "integrate and document the learning students gain from involvement within a campus community" through the use of powerful new technologies promoting greater intentionality among students and integration of experiential learning opportunities (AAC&U, 2007, p. 37). However, due in part to their increasing popularity, more research efforts on these types of educational tools in a co-curricular setting are needed to provide a more complete picture of student learning, to harness the potential for learning through out-of-class experiences, and to improve institutional resource allocation decisions (Bresciani, 2005).

While the effectiveness of portfolios is receiving greater attention by researchers as "both a pedagogical and a programmatic assessment mechanism" (Kuh & Ewell, 2010, p. 11; see also Butler, 2006), there is scant evidence in the literature of their specific application to co-curricular learning opportunities. Given the need for students to develop "cross-functional, flexible skills" (Business-Higher Education Forum, 1999, p. v; see also AAC&U, 2007) to be successful members of the workforce, engaged citizens, and the imperative for institutions to improve teaching and learning (Bok, 2005; U.S. Department of Education, 2006), co-curricular portfolios offer a potentially compelling method to

capture information about and enhance student learning through out-of-class experiences. More research into the use of co-curricular portfolios is needed to test the effectiveness of these approaches in documenting and promoting student learning.

The success of the research efforts detailed in *High-Impact Educational Practices* (Kuh, 2008) indicates a number of approaches that institutions can utilize to increase student learning and engagement. The core characteristics of co-curricular portfolios incorporate many factors that contribute to learning, including reflection (Bass, 2011; Davis et al., 2009; Jacobson, 2011; Moores & Parks, 2010), feedback (Jacobson & Florman, 2011; Moores & Parkes, 2010; Race, 2005; Yancey, 2009), and metacognitive practices (Moon, 1999, 2004). The relationship between co-curricular portfolios and these contributing factors to learning support the potential for co-curricular portfolios to provide evidence of student growth and development. Such evidence would encourage colleges and universities to devote additional resources to expand co-curricular portfolios for the benefit of student learning and demonstrating institutional effectiveness.

The implications of such efforts are significant for improving student learning, preparing students for the global economy, and enhancing institutional success. The use of co-curricular portfolios also offers the potential of greater collaboration between academic and student affairs by incorporating curricular and co-curricular efforts together, and enhancing institutional efficiency through the creation and adoption of shared learning outcomes (AAC&U, 2003; Bresciani, 2005). The significance of developing such partnerships and integrating educational efforts is substantial to expand and multiply the educational benefits from out-of-class experiences (NASPA & ACPA, 2004; Association of College Personnel Association, 1996).

CHAPTER 3

METHODOLOGY

Seeking to understand what students learn from creating co-curricular portfolios guided the selection of a methodology for this study. In order to contextualize the student perspective, the campus environment was considered. Institutional data and administrative perceptions were explored additionally to provide the context and framework for understanding co-curricular portfolio programs on particular campuses. This approach provides multiple levels of analysis that include examining the student experience, as well as the institutional perspective of campus administrators who oversee such programs to provide a broader context for this study.

This chapter consists of three components. First, the chapter begins with a description of the assessment frameworks and conceptual framework guiding the study. An overview of the problem, the goals of the study, and the research questions follows. Next, the qualitative research design is discussed, including the limitations, site selection, the participants, and the interview process.

Assessment Frameworks and Conceptual Framework

This study used five assessment frameworks to examine the structure and outcomes of the co-curricular portfolio and transcript used at two institutions of higher

education, in addition to a broader conceptual framework that guided the overall research design.

Assessment Frameworks

The analyses based on the five assessment frameworks focus on the written data collected from the co-curricular portfolio and transcript, including the co-curricular documents themselves, institutional statements about them, and written reflections by the students at one of the institutions, where such reflections were available. The goal of these analyses was to examine the ways in which the objectives of the co-curricular documents are reflected in the actual structures of the programs and the written data that one of the institutions collected from students as part of the portfolio process. This set of assessment frameworks was useful in analyzing the ways in which readily available data—that is, information without further data collection—can inform the design and implementation of co-curricular documents at higher education institutions.

The five assessment frameworks include a) Barrett (2004) model of Assessment Systems and Electronic Portfolios; b) the Blank-Godlove et al. (2008) rubric outlined in "An Emergent Typology of Use of Evidence in ePortfolios" (2008); c) the AAC&U (Rhodes, 2009, 2013) VALUE rubrics; d) the NACE (2017) career readiness competencies; and e) the 2012 set of single-item adapted LEAP rubrics (New Century College Assessment Committee, 2012).

Barrett's (2004) model of Assessment Systems and Electronic Portfolios outlines a structure consisting of "1) a digital archive of learners' work; 2) a learner-centered electronic portfolio; and 3) a central database to collect teacher-generated assessment data" (Barrett & Wilkerson, 2004, p. 3). The Blank-Godlove et al. (2008) rubric examines

frames of evidence from portfolio content along multiple dimensions, including the item

used as evidence, the purpose of incorporating evidence, and the associated learning

activity. The VALUE rubrics provide a means to assess evidence of learning along 16

outcomes that were operationalized from the LEAP Initiative outcomes (AAC&U, 2007;

Rhodes, 2009, 2013). Developed from the work of a task force of educators and

employers, the NACE competencies establish a common definition of career readiness

used for advising or assessing students according to these guidelines. The 2012 set of

single-item LEAP rubrics were adapted by the New Century College Assessment

Committee to assess student learning and development.

Conceptual Framework: Preparation for Future Learning

One of the challenges for learning theorists to explain is how to maximize the

transfer of learning (Phillips & Soltis, 2009). The classical definition of transfer is "the

degree to which a behavior will be repeated in a new situation" (Detterman & Sternberg,

1993, p. 4). Preparing students to solve problems that are known to them has limited

utility and is not what citizens or employers in a rapidly changing global economy need.

Students need to be able to use skills and experiences to help them transfer their learning

from one context to others in order to solve new and novel problems (Phillips & Soltis,

2009).

In reviewing the transfer literature, Schwartz, Bransford, and Sears (2005) note

the divergent views of researchers on transfer, as some (e.g., Dyson, 1999) claim that it is

pervasive, while others find it hard to demonstrate (e.g., Detterman & Sternberg, 1993).

They conclude that "transfer research has not developed a set of constructs or methods

suited" to assess, demonstrate or encourage the transfer of learning (Schwartz, Bransford,

& Sears, 2005, p. 59). Citing the shortage of research examining transitions from school to work and life, Schwartz et al. (2005) argue that much of the experimental research on transfer tests individuals' ability to directly apply previous knowledge to new situations. They assert that "this is very different from asking if people have been prepared to learn to solve novel problems and engage in other kinds of productive activities" (Schwartz et al., p. 60).

Broudy (1977) notes similar concerns about the ability to demonstrate the concept of transfer. In exploring how pre-college education prepares students for life, Broudy describes three kinds of knowing: "replicative," "applicative," and "interpretive" knowledge. Broudy argues that the majority of educational measures test students on either "knowing that" (replicative knowledge); or "knowing how" (applicative knowledge) abilities. Students are asked in school to learn a fact, principle, concept, or a set of procedures and either remember it or apply it to a new situation. Yet, he also asserts that there is a third type of knowing that is not examined in most educational testing. Broudy characterizes this third type of knowing as "associative" and "interpretive," which he describes as "knowing with" (Broudy, 1977, p. 12).

Broudy's (1977) ways of knowing are analogous to research of different types of memory tests. Ebbinghaus (1885, 1900), for example, differentiated between recall, recognition, relearning, and reconstruction to describe direct methods of assessing memory. These tests of memory seem to provide examples of Broudy's (1977) ways of knowing as memories can be recalled (replicative knowing), recognized or relearned (applicative knowing), reconstructed (interpretive knowing), or forgotten.

Representing one's collective knowledge accumulated over time, "knowing with" is how a person "thinks, perceives, and judges with everything…studied in school, even though [one] cannot recall these learnings on demand" (Broudy, 1977, p. 12). Our previous knowledge and experience, what Broudy calls "knowing with," is part of our perceptual field, impacting what we attend to and how we interpret events (Bransford & Schwartz, 1999; Broudy, 1977). Based in part on Broudy's concept of "knowing with," Schwartz et al. (2005) assert that "what one notices about new situations and how one frames problems has major effects on subsequent thinking and cognitive processing" (p.14). Schwartz et al. argue that "for many new situations, people do not have sufficient memories, schemas or procedures to solve a new problem, but they do have interpretations that shape how they begin to make sense of the situation" (p. 14). As this knowledge and experience base grows, "knowing with" informs the ability to develop more well-differentiated knowledge structures (Bransford & Schwartz, 1999).

Re-conceptualizing the approach to studying transfer, Bransford and Schwartz (1999) proposed a new model to identify and understand the transfer of learning known as "preparation for future learners," or PFL (Bransford & Schwartz, 1999, p. 64). This theory offers a means to interpret and understand learning through experiential activities "(e.g., studying the humanities; participating in art, music, and sports; living in a different culture) that seem important intuitively but are difficult to assess" whether learning has transferred from the experience (Bransford & Schwartz, 1999, p. 95). In order to more accurately and more fully understand the significance of such experiential activities to the transfer of learning, Bransford and Schwartz (2001) emphasize "the importance of using dynamic assessments to measure the degree to which people's past experiences have

prepared them for future learning" (p. 95). Rather than using static, one-time assessments of the transfer of learning on specific tasks, in using the PFL approach,

the focus shifts to assessments of people's abilities to learn in knowledge-rich environments. When organizations hire new employees, they do not expect them to have learned everything they need for successful adaption. They want people who can learn, and they expect them to make use of resources (e.g., texts, computer programs, colleagues) to facilitate this learning. The better prepared they are for future learning, the greater the transfer. (Bransford & Schwartz, 1999, p. 69)

Bransford and Schwartz (1999) argue that "future learning frequently requires 'letting go' of previous ideas, beliefs and assumptions" (p. 94). When the questions and assumptions learners reveal demonstrate a greater complexity and sophistication about a topic, then it is more likely people will gain the knowledge needed through the learning process. Thus, transfer is more likely to occur when learners' perspectives are adjusted as needed based on new information, rather than simply incorporated into existing frameworks and understanding. Bransford and Schwartz contend that "conceptual change rather than the persistence of previous behaviors and beliefs" is critical to future learning (p. 94).

Bransford and Schwartz (1999) conclude that the transfer of learning is facilitated by several approaches that have been shown to be independently effective. These factors include: 1) teaching that engages the learner from the outset to allow enough "original learning" (Bransford & Schwartz, 1999, p. 64) to take place (e.g., Klahr & Carver, 1988; Lee, 1998; Littlefield et al., 1988; Lee & Pennington, 1993); 2) learning that involves

understanding rather than memorization (Bransford & Stein, 1993; Brown & Kane, 1988; Chi et al., 1989; Chi, Slotta, & DeLeeuw, 1994; Judd, 1908;); 3) thinking deeply about a problem (e.g., Adams et al., 1988; Lockhart, Lamon, & Gick, 1988; Michael et al, 1993; Sherwood et al., 1987); 4) providing a sufficient amount of context for learning (Bjork & Richardson-Klahaven, 1989; Bransford et al., 1990; Gick & Holyoak, 1980, 1983); 5) using problem-based or case-based approaches (Chen & Daehler, 1989; Luchins, 1942; Singley & Anderson, 1989); and 6) promoting metacognition by the student (e.g., Brown, 1978; Flavell, 1976). The use of co-curricular portfolios provides ample opportunities for educators to employ these methods to enhance student learning and promote greater transfer of learning between the co-curriculum, curriculum, and world of work. Thus, skills and abilities that students may learn through co-curricular activities could represent the type of experiential opportunities that, when organized and reflected upon through the use of a portfolio, may demonstrate the transfer of learning and the benefits of knowledge-rich environments.

This approach offers a theoretical model for understanding the impact of learning through co-curricular portfolios and experiences. "Asking students to reflect on what and how they have learned—in other words, to engage in metacognition—has several benefits" (Middle States Commission on Higher Education, 2007, p. 45). Co-curricular portfolios afford students an opportunity to reflect, organize, synthesize, and make meaning of their learning from co-curricular experiences, which may enable students to develop a better-differentiated knowledge structure.

Addressing the assessment of student learning in the classroom in an accreditation context, Middle States Commission on Higher Education (2007) asserts that "student

self-assessments give faculty members useful insights into the learning process, help students integrate what they have learned, and provide students with an understanding of the skills and strategies they need to learn most effectively" (p. 45). Furthermore, Harper (2007) contends that "portfolios that combine reflective writing with supporting materials…are helpful in making sense of students' trajectories" (p. 66). Thus, this model underscores the potential for realizing greater educational benefits from the use of co-curricular portfolios to maximize the transfer of learning and skill development. Moreover, "portfolios are becoming increasingly popular ways to document student learning outcomes" (Harper & Kuh, 2007, p. 11). Co-curricular experiences and the process of creating a portfolio to document learning, may be preparing students for future learning.

This broader conceptualization of the transfer of learning as described by the PFL model guided the development of research questions, data collection, data analysis, and interpretation in this study of the learning that may be occurring through using co-curricular portfolios. The PFL perspective explores the interconnectedness of the learning process as experiences may build upon one another, enhancing future learning. This theoretical approach provides a means to understand and interpret how people may be able to use skills and experiences to help them transfer learning from one context to another (Bransford & Schwartz, 1999).

This study used a variety of methods to provide the type of dynamic assessments called for by Bransford and Schwartz (1999) to more accurately gauge the transfer of learning. These methods include interviews with students, as well as document analyses. As Bransford and Schwartz describe, "the ideal assessment from a PFL perspective is to

directly explore people's abilities to learn new information and relate their learning to previous experiences" (p. 70). Interviews sought to identify the learning that may be occurring through the use of co-curricular portfolios; and how student experiences and reflection on those experiences may inform future learning. Individual student portfolios were also reviewed and analyzed for evidence of learning. In addition, interviews were conducted with administrators while institutional documents and literature were reviewed to understand the context of the portfolio program. These sources of data were examined from the PFL perspective, where "one looks for evidence of initial learning trajectories" to assess "whether they are prepared to learn to solve new problems" (Bransford & Schwartz, 1999, p. 70).

For example, what knowledge and experiences did students bring to a situation that may impact their assumptions or problem-solving approach? What have they learned over time through previous experiences? How have they incorporated feedback? Is there evidence of ways that students critically evaluated new information to adapt their views? Are there dispositions they held that might influence their future learning? How open were students to re-assessing their approach? Were there assumptions or ideas that they needed to let go of to be successful? How prepared do students feel for future learning? Or, as Bransford and Schwartz (1999) ask,

> Are they carefully evaluating new information rather than simply assimilating it to existing schemas? Are they able to work collaboratively with others? Are they reaching sound conclusions based on existing evidence? Are they able to reflect on their learning processes and strategies? (p. 96)

Bransford and Schwartz (1999) argue that "the PFL perspective suggests that these kinds of activities [e.g., evaluating, reflecting, collaborating, deciding based on the evidence, assessing their own ability to learn, etc.] arise from a well-differentiated knowledge base that students are able to 'know with'" (p. 96), in accordance with Broudy's (1977) assessment. Therefore, a qualitative analysis of the impact of the co-curricular portfolio process was employed in order to understand what, if any, learning occurs for students who utilize this educational tool and how it may prepare students for future learning.

Research Questions

The purpose of this research is to explore how the use of co-curricular portfolios may facilitate student learning. Through investigating co-curricular portfolios at specific institutions, this study seeks to understand how they developed on the campuses being studied, how those institutions utilize them, and how they may impact student learning at these institutions.

The primary question guiding this research is: To what extent do co-curricular portfolios facilitate student learning and personal development? Related sub-questions include:

1. Does the use of co-curricular portfolios aid students' abilities to learn new information and relate their learning to previous experiences?

2. Does the process of creating co-curricular portfolios aid students in understanding and articulating the skills they may be gaining?

3. How do institutions of higher education develop and utilize co-curricular portfolios?

Rationale for the Research Method

Merriam (1998) identifies five hallmarks of the qualitative research paradigm, which include: "the goal of eliciting understanding and meaning, the researcher as primary instrument of data collection and analysis, the use of fieldwork, an inductive orientation to analysis, and findings that are richly descriptive" (p. 11). Each of these characteristics of qualitative research was salient in designing the research method for this study. Collectively they form the rationale for the selection of a qualitative approach. The five main reasons for pursuing this topic through a qualitative approach are, first, the research questions for this study are essentially "how," "why," and "what does it mean" questions. Such questions, specific to investigating process and understanding meaning, are typical of qualitative inquiries (Merriam, 1998, Yin, 1984).

Second, an inductive rather than a deductive approach was more appropriate to addressing these research questions. In contrast with qualitative methods, "experiments and surveys usually have a narrow focus" (Bromley, 1996, p. 23). For example, an experimental study such as a pre-test/post-test method using a co-curricular portfolio as the treatment, may show evidence of learning, but such an approach would not address the process questions posed by this study. However, an inductive approach allowed the exploration of specific instances to inform more general conclusions.

While portfolios in general are receiving more attention from educators and investigators, the lack of documented data on co-curricular ones as well as the variety of institutions using co-curricular portfolios, the range of different technology platforms available, and the many variables that exist across different campuses further complicate the study of these educational tools. The variability in these factors also makes

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comparative studies challenging to undertake. Thus, the third reason to adopt a qualitative approach was the need to gather data in the field, strongly embedded in context, to study co-curricular portfolios as diversely planned and implemented learning tools.

Fourth, gathering such data in the field must be done by an individual researcher working across different institutional systems. Yin (1994) identifies characteristics such as the lack of control over the context and setting and the difficulty in separating subject from situation as other key components in a qualitative approach. These attributes recognized by Yin (1994) apply to studying co-curricular portfolios on different campuses. To the degree that each campus setting varies from other institutions, my ability to control the context was limited. Moreover, a significant challenge for my study was to identify student learning as a result of the portfolio process rather than from the co-curricular involvement itself, or seeking to separate subject from situation. Therefore, a methodology was needed that would allow a researcher to gather data about such bounded portfolio systems across different campuses.

Fifth, an investigative approach with a wide focus on the context and use of co-curricular portfolios was needed to understand these emerging educational tools. "The product of a qualitative study is richly descriptive…data in the form of participants' own words, direct citations from documents, …and so on, are likely to be included to support the findings of the study" (Merriam, 1998, p. 8). This type of qualitative data could provide educators with foundational research for the future study of portfolios.

Strategy of Inquiry: Case Study

Defined as "an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-world context, especially when the boundaries between

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phenomenon and context are not clearly evident" (Yin, 2009, p. 18), case study is the specific method used in this research. This approach is the most appropriate methodology because of the primary focus on a broad, descriptive, subjective, and relativistic investigation of student learning through using co-curricular portfolios. Flyvbjerg (2006) asserts that "a scientific discipline without a large number of thoroughly executed case studies is a discipline without systematic production of exemplars" (p. 1). Since foundational research on this subject is lacking, the case study method enabled me to describe the development, context, and process of using portfolios in depth. Additionally, the case study also provides flexibility for the researcher in exploring this emerging topic. Thus, Flyvbjerg (2006) concludes that "social science may be strengthened by the execution of a greater number of good case studies" (p 1).

Another reason for adopting this approach was that data could be collected from multiple sources, including interviews, observation and document analysis, allowing for a more comprehensive description. Merriam (1998) explains that,

Case study design is employed to gain an in-depth understanding of the situation and meaning for those involved. The interest is in process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation.

(p. 19)

This study compares the use of co-curricular portfolios at two institutions. Descriptions of students' experiences with co-curricular portfolios were informed by the perceptions of campus administrators as well as a review and analysis of the portfolio documents.

However, since the tool and its application differ by campus, the environment and use of the portfolio as it exists within each respective college or university was also

explored. The setting and context was captured through interviews with administrators responsible for creating and implementing the co-curricular portfolios, and also informed by the students' perceptions. In addition, institutional literature and documents were reviewed to understand the purpose, goals and assessment of the respective co-curricular portfolio initiatives. Collectively, this information was gathered to describe student learning and the student experience through using co-curricular portfolios, in addition to capturing and interpreting the institutional context and perspective about these educational tools.

Research Design

Conducting a qualitative case study is appropriate for the study of co-curricular portfolios for multiple reasons. First, since little research has been conducted on co-curricular portfolios, interviewing students shed new light on this topic in a way that allowed students' voices and interpretations of their experience to be heard. Such perspectives are shaped from our interactions with others, as well as the societal norms in which we live. Second, using co-curricular portfolios is a reflective and subjective process, and the interviews sought to understand the "essence" and the "structure" of this experience (Marshall & Rossman, 2006, p. 104). This methodological approach also assumed that there is a fundamental nature to shared experiences that can be described (Marshall & Rossman, 2006). Third, qualitative interviewing is comprised of a three-step process which acknowledges and seeks to minimize the impact of the researcher in conveying the voice of the research participants. This process also includes "identifying the essence of the phenomenon" and "structural synthesis" of the diverse viewpoints and understandings obtained from the participants (Marshall & Rossman, 2006, p. 105). Thus,

case study allows for the complexity and richness of students' experiences to be explored concerning a subjective process, creating co-curricular portfolios, while also recognizing the role of the researcher in the data collection process.

The specific design of this study was a holistic, intrinsic/instrumental multiple-case study design. The study is described as holistic because the use of co-curricular portfolios at each institution was examined as independent cases (Yin, 2011). When a case is selected because of the need to understand that particular case, Stake (1995) describes this type of inquiry as an "intrinsic case study" (p. 3). When there is "a need for general understanding" of a case because it will illuminate other cases or phenomena, Stake (1995) describes this type of analysis as an "instrumental case study" (p. 3). Stake (1995) calls a study of multiple cases a "collective case study," yet cautions not to use such inquiries as a way to increase representativeness or generalizability. Stake asserts, "selection by sampling of attributes should not be the highest priority. Balance and variety are important; opportunity to learn is of primary importance" (p. 6).

Yin (2009) asserts that evidence from this type of design is often viewed as more robust because of the greater capacity to generalize. Yet, I did not select this design for that reason alone. Primarily, this research design was chosen due to the research questions being asked about the nature of co-curricular portfolios and the collegiate environments where they are used. Specifically, variations in how different campuses use co-curricular portfolios, the characteristics of their unique technology platforms, as well as their relative newness led to the selection of this research design. What students may gain from co-curricular portfolios is of 'intrinsic' interest; how different campuses use

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these tools is of 'instrumental' interest; and the ability to compare and contrast among cases is of 'collective' interest (Stake, 1995).

Stake (2005) contrasts intrinsic and instrumental case studies. Intrinsic case studies are concerned with the specifics of the case, "because in all its particularity and ordinariness, this case is of interest" (p. 445). Whereas in the instrumental case study, the "case is of secondary interest, it plays a supportive role, and it facilitates our understanding of something else" (p. 445). Stake (1994) asserts that these two types of case studies are not necessarily mutually exclusive. Instead, a case may be a combination of both types, if "we simultaneously have several interests, often changing, there is no line distinguishing intrinsic case study from instrumental" (Stake, 1994, p. 237). This study was similarly a combination of both intrinsic and instrumental factors. Co-curricular portfolios are of interest because of their particularity as a case. Additionally, how universities use them and what students learn from using them were also a focus of this study because they further our understanding of learning outside the classroom, how to document it and assess it.

Limitations

There are two main limitations to this study. First, co-curricular portfolios are an emerging method of documenting and assessing student learning through co-curricular experiences. As such, these programs are unique to each campus and differ among campuses, making it difficult to draw overall conclusions about the use of co-curricular portfolios. Second, it may be difficult for students to differentiate what they may learn through the portfolio process compared to what they may learn from participation in the

co-curricular activity. I made these distinctions through the interview process and asked participants to distinguish between the two in their comments.

Data Collection

There were four levels of data collection included in the research design. First, institutional documents and literature that describe the co-curricular portfolio were reviewed to explore the institutional setting, goals, and context where the portfolio is used. Next, campus administrators were interviewed to gather their perspectives and understanding of the portfolio effort and what students gain from it. Third, student portfolios were reviewed to understand the reflections and observations they shared through the process of creating their co-curricular portfolios. Finally, those students whose portfolios were reviewed were interviewed to understand their experience in using these educational tools.

Interview data were gathered by digital audio recording. Interviews asked students to reflect on learning related to their co-curricular involvement, the experience of creating their portfolio, and how it may have prepared them for future learning. Administrators were asked for their perceptions of the student experience in using co-curricular portfolios, as well as their goals with the program and their experiences in overseeing it. During and immediately following the interview, I took observation notes, methodological notes, theoretical notes, and analytic notes as recommended by Schatzman and Straus (1973). Each audio recording was transcribed verbatim. Pseudonyms were assigned to the interview participants to protect their identities. Responses were grouped into general categories initially that were created based on the literature reviewed to serve as a template to code the interview data, as recommended by

Crabtree and Miller (1992). I coded each response and categorize the responses to interpret and understand the themes that emerged from the analysis. Further, the accounts from students and administrators interviewed were used to edit category names to more precisely label critical themes. I analyzed themes and condensed similar categories. Next, final themes were chosen and put into a matrix chart for further analysis and description of the data.

Table 1

Data Collection Methods

Method	Focus
Interviews	• Campus administrators from each university in the study involved in the development and/or oversight of the co-curricular portfolio • Student who have created a co-curricular portfolio from each university in the study.
Document Analysis	• University, divisional and departmental mission, goals, strategic plans, and learning outcome statements • Internal university documents related to the development and/or management of the co-curricular portfolio program • Website information related to co-curricular involvement in general, and the co-curricular portfolio specifically • Literature (brochures, posters, letters, etc.) promoting or describing co-curricular involvement generally and specifically the co-curricular portfolio, including sample documents and procedural information about how to create one • Co-curricular portfolios created by students

Case Sample Selection

Purposeful sampling begins with identifying the criteria for selecting cases (Merriam, 1998). Stake (1995) asserts "we do not study a case primarily to understand other cases. Our first obligation is to understand this one case" (p. 4). In case study research, then, choosing the case is purposeful, selecting "a sample from which the most can be learned" (Merriam, 1998, p. 61). LeCompte and Preissle (1993) describe this process of purposeful sampling as "criterion-based selection," to "create a list of the attributes essential" (p. 70) to the research and then to find cases that meet these criteria. Patton (1990) explains that the "logic and power of purposeful sampling lies in selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research, thus the term purposeful sampling" (p. 169).

There are two levels of sampling used in case studies: defining the boundaries for the case and then identifying who or what is to be studied within the case (Merriam, 1998). In selecting cases for this study, an examination of college and university websites showed a range of institutional documents used to record undergraduate student co-curricular involvement. The processes of capturing such data and the types of information gathered vary substantially too. Some models focus on simply listing the student's co-curricular activities or awards and may not focus on either student learning, competencies, skill development or include opportunities for student reflection and/or feedback. Such models do not leverage the full potential for learning from the co-curricular activities or the process of documenting student learning from these experiences. However, the most comprehensive efforts appear to include six criteria:

using an electronic method; documenting co-curricular involvement; providing a holistic view of students' skills and abilities; including a reflection component; using a social constructivist paradigm; and being verified by the sponsoring institution. While the names that institutions give to this model (e.g., co-curricular portfolio, co-curricular resume, co-curricular transcript) vary, these characteristics seem to provide the best opportunities for enhancing and deepening student learning (Barrett, 2004). Those models which incorporate all of these six criteria appear to be the cases where we can learn the most, so for this study they were used as the selection criteria for cases. The six criteria specified seem to maximize opportunities for student learning through the use of reflection and the exploration of co-curricular experiences as they relate to skill development. These portfolios represent "assessment for learning" (Barrett, 2004, p. 3) models, which is a social constructivist approach. Knowledge, then, from this process is constructed by the student, perhaps in conjunction with a faculty or staff advisor, and the assessment is largely formative. This type of portfolio is distinct from the "assessment of learning" (Barrett, 2004, p. 2) models which are positivist in nature, often relying on a set of institutional standards as a primarily summative assessment.

This review of possible sites yielded North University and South University as the sites for this research. These institutions offered a mix of attributes that were beneficial for comparative purposes, including suburban and rural settings, and institutional sizes ranging between 6,000 – 16,000 students. In addition, the location of these institutions was more accessible for me than other possible programs throughout the country.

North University is a comprehensive public university enrolling over 16,000 undergraduates and located in the suburbs of a large, east coast city. The majority of

students come from in-state and the surrounding states. Over 90 percent of students are under 25 years old, with students of color comprising almost 20 percent, while nearly 40 percent of the student population are male. Over 90 percent of first year students live on campus; however, less than 40 percent of all students reside in university housing. North University students participate in over 200 student organizations.

South University is also a comprehensive public university enrolling over 6,500 students. The institution is located in a rural part of their state, an hour and a half from the nearest major city. The majority of students come from within the state and there are 14 campus residence hall options. Students of color comprise 32% of the undergraduate population at the time of the interviews, while 38% of the population are male. South University students have access to over 800 leadership positions, including over 200 student organizations.

The North University co-curricular portfolio program began in the 1990's. However, North University recently revamped their program, incorporating the program into their online platform for managing student organizations and student involvement. Consequently, the majority of students participating in the North program are sophomores and at the time of the interviews were concluding their second year at the institution, having used the co-curricular portfolio program over two to four semesters.

South University's history with documenting co-curricular experiences goes back over a decade, also beginning with pre-online versions. The current online program was launched in 2011. As Associate Vice President for Student Affairs, Ellen Lipton explained, "this transcript has morphed, really, over the years," going through multiple stages of development. "Students just weren't doing it," she said, "[so we] create[d] this

homegrown system so that we could do it online." Moving from paper to an online version built in-house was the first significant transition.

A total of 732 South University students had an active transcript at the time of these interviews, representing progressive growth over time for the transcript program. Gradually, the program is being integrated with on-going efforts. In recent years, more and more student affairs offices require students submit their transcript with applications for campus leadership positions and/or related jobs. In addition, the transcript is one of the items on the checklist used by academic advisors to promote it to students and to reinforce those who are using the transcript program.

Undergraduate students who have participated in the co-curricular portfolio or transcript program at each campus were recruited for this study. Only those students who agreed to participate in an interview, and share their co-curricular portfolio, whether released by the institution or by the student, were included in the study. A monetary incentive was provided to encourage students to participate in the study and compensate them for their time. The sample size was at least ten undergraduate students from each campus, with ten students interviewed at North University and 15 students interviewed at South University. However, one of the South students did not provide their co-curricular transcript, reducing the sample size from that institution to 14.

Student participants included students with various gender identities, of various racial and ethnic backgrounds, as well as involved in different campus involvement opportunities and with different majors. All students at North were members of the university's honors program at the time they were interviewed. The North University co-curricular portfolio program is integrated into the honors program curriculum. Four North

students identified as female, five as male, and one indicated they prefer not to answer a gender identification question. One of these students identified as Hispanic/Latina, while the other nine students interviewed identified as Caucasian/White. All North students have lived on campus for at least two semesters, although one was a commuter at the time of the interview.

Among the 14 students included in this study from South University, nine students identified as female, three as male, one as gender non-conforming, and one preferred not to answer related to their gender. Four South students identified as Hispanic/Latinx, seven identified as Causcasian/White, and three identified as Asian/Pacific Islander. Thirteen of the South students have lived on campus for two semesters or more. One has always been a commuter and one was a resident student, but lived off campus at the time of the interview.

Administrators charged with overseeing these programs on the respective campus sites for this study assisted with the recruitment of students and were also interviewed about the goals, operation, and administration of the co-curricular portfolio or transcript program on their campuses. Two administrators were interviewed on each campus, for a total sample size of four. Administrators were limited to those who have direct responsibility for overseeing the co-curricular portfolio or transcript program on their campus. Administrators were not compensated for participating in the study. All interviews with students and administrators lasted approximately one hour and were conducted in person or via internet-based conferencing.

Both institutions share these common characteristics for their co-curricular reporting programs:

- Use of an electronic reporting method;

- Documenting co-curricular involvement;

- Providing a holistic view of students' gains;

- Including a reflection component;

- Using a social constructivist paradigm; and

- Being verified by the institution for authenticity of the reported experiences.

Interviews were conducted on each campus in the spring of 2017. Subsequently, interviews were transcribed and analyzed. An open coding approach was used to construct categories and to allow themes to emerge (Merriam, 2009, p. 178). Interviews were read, with extensive note-taking, and initial category observations were made. Searching for potential categories, the initial goal in reviewing the interview comments was to collect "instances from the data, hoping that issue-relevant meanings will emerge" (Creswell, 2013, p. 199). Stake (1995) refers to this approach as "categorical aggregation." Interview comments, then, were re-read and organized into tables using the interview questions as a framework, grouping responses to similar questions among respondents for comparison. Merriam (2009, p. 178) writes of "having a conversation with the data, asking questions of it, making comments to it, and so on."

The tables constructed allowed not only the researcher to converse with the data, but also the interview subjects to converse with each other as their direct comments to similar questions were grouped together. This approach allowed the researcher to look for patterns among the data, another technique advocated by Stake (1995), in order to identify themes. Next, as categories began to emerge from seeing the interview comments side by side, the interview comments were re-organized into two broad groupings,

intrinsic and extrinsic observations. Distilling the interview comments even further, five related themes emerged, plus two additional categories of comments related to the application of the portfolio or transcript.

Participant Sample Selection

A diverse pool of students who were active in multiple co-curricular activities, as well as a balance between genders was sought from the two institutions. The available pool of students (i.e., those who participate in the co-curricular portfolio program) was identified by campus administrators. I contacted these students prior to conducting open-ended interviews and requested to obtain a copy of the portfolio from potential participants.

An invitation was sent to those students who were identified by campus administrators as part of the pool. All students included in the study met the following criteria:

1. Participation in the co-curricular portfolio program for at least one semester.

2. Demonstrated leadership and involvement in campus activities.

3. Permission to review the student's portfolio.

4. Willingness to participate in an interview.

Once this process was successfully completed, I determined with the host campus administrators whom to interview from the university or college administrators. These administrators were contacted and invited to participate in the study. The criteria for selecting campus administrators involved in the co-curricular portfolio program included:

- direct involvement in the development of the program;

- direct supervision of the program and/or administrators involved in managing the program; and/or,

- direct administration or management of the program.

Therefore, administrators who were able to provide their perspective either as a developer/initiator of the portfolio, or as an administrator/supervisor of the program, or both, were needed to understand the goals, context, process and outcomes in using co-curricular portfolios. A philosophical perspective and experience in working directly with students using co-curricular portfolios were needed to describe the ways in which different institutions implement this innovative program. The institutional context and procedures were also important to understand in order to make meaningful comparisons of approaches used at colleges and universities participating in the study.

Through the host institution, I contacted these individuals and invited them to join the study through multiple means including email, letter, and phone calls until an adequate number of participants have been identified. Only those students who agreed to participate in an interview, and share their co-curricular portfolio were included in the study. A nominal monetary incentive ($25 per student) was offered to encourage students to participate in the study and compensate them for their time.

Documents

A variety of documents were sought from the institution and individual students to review. Each type of document provided information about the co-curricular portfolio at the student or institutional level. These documents included the following:

1. University, divisional and departmental mission, goals, strategic plans, learning outcomes were requested to provide an institutional context.

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2. Internal university documents related to the development and/or management of the co-curricular portfolio program were sought to explore the goals, purposes, operation, and assessment of the portfolio program.

3. Website information related to co-curricular involvement in general, and the co-curricular portfolio specifically were collected to learn how the program is marketed and presented to the campus and the community.

4. Literature (e.g., brochures, posters, letters, etc.) promoting or describing co-curricular involvement generally and specifically the co-curricular portfolio, including how to create one, was sought to understand how the program is marketed, how students access it, and the specific form and appearance of the co-curricular portfolio.

5. Actual co-curricular portfolios were requested from students to provide samples of how they use the program, how their involvement opportunities are documented, and how their reflections are incorporated.

Documents were sought from three sources. First, students who were interviewed about the process of creating their portfolio were asked to provide their portfolio prior to the interview for review. Information was requested from the staff members who administered and previously developed the program to provide an institutional context. Finally, each institution was asked to provide institutional documents broadly related to goals, mission, etc. and also more specifically related to the co-curricular portfolio program.

Interviews

The institutional office responsible for overseeing the co-curricular portfolio was contacted to request permission to proceed with this study. IRB approval was sought from each campus. Students and administrators participated in an approximately hour-long interview. The interviews were "guided by a set of questions and issues to be explored, but neither the exact wording nor the order of questions is predetermined" (Merriam, 1998, p. 93). This semi-structured interview approach was used to maintain consistency across the interviews while allowing the individual's voice to emerge and permitting me to follow-up on questions and issues as they arose rather than follow a rigid, pre-determined script. As Merriam (1998) describes, "the design of a qualitative study is emergent and flexible, responsive to changing conditions of the study in progress" (p. 8). Interviews continued until saturation or redundancy was reached (Guba & Lincoln, 1985).

Furthermore, permission was requested from the host institutions and all student participants to examine their portfolios. Prior to meeting with each student interview subject, the student's portfolio was reviewed. Individualized interview questions were developed for each student based on the review of their portfolio. During the interview, each student was asked to review and describe the contents of their portfolio.

Students and administrators participated in interviews focusing on a series of questions (see Appendix A and B, respectively) to inquire what students have learned through the process of completing the co-curricular portfolio until saturation was reached. Additionally, administrators were asked about the goals, context and administration of the program, as well as their perceptions of student learning through the use of the

portfolio. All interviews were conducted within a consistent time frame following

completion of the portfolio for one semester or more. The swift completion of the

interviews was critical to gather data following the completion of the portfolio, but before

additional, subsequent co-curricular involvement may influence student perceptions of

their learning. I transcribed each audio recording verbatim and assigned pseudonyms to

the interview participants to protect their identities.

Data Analysis

Data analysis began with organization of the data, and then focused on theme

development, followed by report writing. In reviewing the portfolios, documents, and

interview transcripts, five approaches were used to analyze the data. First, all of the

interviews were recorded and transcribed verbatim to capture the totality of the comments

shared. These reflections were described and synthesized to identify themes that emerged

from the interviews with students and those with campus administrators from each

university. Second, AAC&U's (2007) Valid Assessment of Learning in Undergraduate

Education (VALUE) rubrics and the set of single-item adapted LEAP rubrics (New

Century College Assessment Committee, 2012) were applied to identify evidence of

student learning expressed in the student interviews and portfolios. Third, Barrett's

(2004) Assessment Systems and Electronic Portfolios: Balancing Accountability with

Learning model (see Appendix D) was used as a lens when reviewing the portfolios, the

administrator interviews, as well as the institutional documents and literature to examine

the respective campus' goals, framework, and process in using the co-curricular portfolio

program. Fourth, I used the Blank-Godlove et al. (2008) rubric in order to explore frames

of evidence gathered from the two co-curricular documents. Fifth, the conceptual

framework was applied to the data gathered from students and administrators to identify

evidence of preparation for future learning (Bransford & Schwartz, 1999). Finally,

themes were identified across institutional cases as well. These multi-case themes were

compared with the findings from each university (Stake, 2013). The themes and the

findings were merged in a cross-case synthesis of the data from each institution and

examined applying both the conceptual framework and Barrett's model to compare and

contrast the student experience and how different institutions use co-curricular portfolios.

Table 2

Data Analysis

Data	Framework(s) for Analysis
Interviews with campus administrators from each university in the study involved in the development and/or oversight of the co-curricular portfolio	• Themes identified • Barrett model, 2004 • Preparation for Future Learning model, 1999
Interviews with students who have created a co-curricular portfolio from each university in the study	• Themes identified • Barrett model, 2004 • Preparation for Future Learning model, 1999 • AAC&U Value Rubrics, 2009; 2013 • New Century College Rubrics, 2012
University, divisional and departmental mission, goals, strategic plans, and learning outcome statements	• Barrett model, 2004 • Preparation for Future Learning model, 1999 • New Century College Rubrics, 2012 • NACE competencies, 2017
Internal university documents related to the development and/or management of the co-curricular portfolio program	• Barrett model, 2004 • Preparation for Future Learning model, 1999
Website information related to co-curricular involvement in general, and the co-curricular portfolio specifically	• Barrett model, 2004 • Preparation for Future Learning model, 1999

Data	Framework(s) for Analysis
Literature (brochures, posters, letters, etc.) promoting or describing co-curricular involvement generally and specifically the co-curricular portfolio, including sample documents and procedural information about how to create one	• Barrett model, 2004 • Preparation for Future Learning model, 1999 • Blank-Godlove et al., Typology 2008
Co-curricular portfolios created by students	• Barrett model, 2004 • AAC&U Value Rubrics, 2009; 2013 • Preparation for Future Learning model, 1999 • Blank-Godlove et al., Typology 2008 • New Century College Rubrics, 2012 • NACE competencies, 2017
Cross-case synthesis	• Themes identified • Barrett model, 2004 • Preparation for Future Learning model, 1999 • Blank-Godlove et al., Typology 2008 • New Century College Rubrics, 2012 • NACE competencies, 2017

This case study employed a linear-analytic structure for reporting results from the document analysis and interviews. Similarities and differences between campus approaches are compared and contrasted as the institutional context and framework for understanding the co-curricular portfolio on each campus are examined. In addition, the degree to which each institution views the portfolio in a positivist paradigm, as assessment of learning, or in a constructive paradigm, as assessment for learning, was explored.

Portfolios and student interviews were analyzed for evidence of skill acquisition and/or personal development resulting from involvement in co-curricular activities.

Results were also compared among the students participating in the study who have

completed the co-curricular portfolio after one semester or more. The goal of these

comparisons is to understand how the portfolio experience may vary for individual

students. Themes were inductively derived from the data as they emerged from the

analysis. Portfolio reflections and student interviews were analyzed using the AAC&U

VALUE rubrics for evidence of learning related to these essential learning outcomes

from the LEAP report (AAC&U, 2002, 2007, 2011). These results are compared and

described in the findings.

There are fourteen VALUE rubrics (see Appendix E) based on the essential

learning outcomes established in AAC&U reports, such as the Liberal Education and

America's Promise (LEAP) report (AAC&U, 2002, 2007, 2011). Many of these rubrics

are used to assess progress on learning outcomes that directly relate to skills and abilities

students may demonstrate through co-curricular involvement and leadership. These

VALUE rubrics include ones designed to assess critical thinking, creative thinking,

problem solving, teamwork, ethical reasoning, intercultural knowledge and competence,

integrative learning, oral and written communication, among other abilities (AAC&U,

2007). The VALUE rubrics provide a framework for assessing the learning described by

the student and demonstrated through their portfolio. As I reviewed the portfolios prior to

interviewing students, I made initial determinations about which VALUE rubrics seemed

most relevant to the student's experience while constructing related interview questions.

The application of the rubrics and the assessment of their learning were finalized after

their interview, integrating both the student's reflections from the interview and the

portfolio content into the analysis of the data.

The analysis of the portfolio documents sought to identify evidence of direct and/or indirect learning related to acquisition of workforce skills and/or personal development abilities. Direct methods of evaluating learning demonstrate "that actual learning has occurred relating to a specific content or skill. Indirect methods reveal characteristics associated with learning, but they only imply that learning has occurred" (Middle States Commission, 2007, p. 28). Portfolios and interviews offer both direct and indirect evidence of learning (Middle States Commission, 2007). Yet, while direct measures show what a student has learned, they do not reveal why the student has learned or not learned (Middle States Commission, 2007). On the other hand, indirect methods, such as interviews, often focus "on the learning process and the learning environment" (p. 33).

The portfolio experience is closely intertwined and may not be able to be separated from the learning that students may experience through their involvement in co-curricular activities. Precision was used in this analysis to determine to what degree measures, such as the VALUE rubrics, are applied to assessing learning from the portfolio rather than any gains from the actual co-curricular involvement. Administrators and students were asked to compare and distinguish between learning that occurred as a result of the portfolio experience from learning through involvement on campus. "We cannot begin to fully understand and foster conditions to replicate effective educational practices in the absence of voice and sense making among students who actually experienced them" (Harper, 2007, p. 56). Therefore, conducting a case study provided opportunities to learn directly from these students about their experiences using co-curricular portfolios and what they learned from those experiences.

Worldview

      This study primarily adopts a social constructivist perspective when the unit of measure is individual students and their learning. A social constructivist worldview is one in which "multiple realities are constructed socially by individuals" (Merriam, 1998, p. 4). As the research involved exploring what students learned and gained from using co-curricular portfolios, understanding their unique perspectives and interpreting their experiences is critical to the research design. As Merriam (1998) explains,

      The key philosophical assumption…is the view that reality is constructed by individuals interacting with their social worlds. Qualitative researchers are interested in understanding the meaning people have constructed, that is, how they make sense of their world and the experiences they have in the world. (p. 6)

      This research design is consistent with a social constructivist world view because of the focus on relativism and subjectivity in the methodology (Denzin & Lincoln, 2000). Specifically, data were collected through interviews with individual students who have created co-curricular portfolios and through document analysis of their portfolios. Through this study, I sought to understand the role that the portfolio may have played in contributing to their learning and development and how they make meaning from their involvement experiences, as expressed through constructing their portfolio.

      This type of qualitative design allowed me to be both flexible and responsive to evolving circumstances through the data collection process (Merriam, 1998). Using the data collected, I sought to accurately describe the findings as they emerged from the interviews and document analysis process. As Merriam (1998) notes, "typically,

qualitative research findings are in the form of themes, categories, typologies, concepts…which have been inductively derived from the data" (pp. 7-8).

However, the study also considers the perspective of university administrators and the context in which the portfolio was developed and used. The collection of this information is included in the research design in order to capture the environment and intended purpose of using co-curricular portfolios on the campus. This critical information about the institutional background and setting may contextualize differences and variations in the learning related to co-curricular portfolios.

Recognizing that there are those who conduct the study of portfolios using a positivist paradigm, there was also some consideration of this perspective at the institutional level. This dichotomy between positivist and constructivist interpretations of portfolio use represents the tension between assessment *of* learning and assessment *for* learning that Barrett (2004) describes in her model. The former assessment approach represents the constructivist view, while the latter one describes the positivist perspective. The positivist paradigm is based on an objective, knowable reality (Merriam, 1998) and is most relevant to the degree that institutional administrators seek to use the portfolio as a tool to record outcomes from the co-curricular portfolio in terms of assessment of learning.

The Barrett (2004) model was employed in this study because it provides a lens that allows for examining both worldviews in exploring co-curricular portfolios. In acknowledging these opposing worldviews, my primary approach remains on the social constructivist view of understanding the meaning both students and administrators make from using co-curricular portfolios. This constructivist perspective is the philosophical

orientation featured in the data collection and analysis. However, it would be inappropriate to ignore or invalidate the positivist viewpoint or not to acknowledge those institutions and administrators who may adopt this perspective in understanding the use of co-curricular portfolios. In using a social constructivist approach, I sought to portray those using a positivist perspective, who may view the use of portfolios as an assessment of learning initiative. The Barrett (2004) model provides a framework for understanding portfolio use from each worldview.

Trustworthiness

There are a variety of interpretations of how researchers can evaluate trustworthiness in case study research (Baxter & Jack, 2008; Lincoln & Guba, 1985; Merriam, 1998). Several general and specific strategies recommended by Merriam (1998) and Baxter and Jack (2008) were used in this case study analysis to increase trustworthiness in the data and conclusions. These strategies include: 1) selecting a research topic appropriate for the case study method; 2) establishing clear research and interview questions; 3) designing a study that provides sufficient detail by interviewing students and administrators to allow readers to determine the soundness of the study; 4) using purposeful sampling to bind the case; 5) planning and executing the data collection process systematically; 6) using multiple sources of data (e.g., document analysis and interviews with both students and administrators) on each campus; 7) using multiple campuses in the research to allow analysis within and comparison between cases, 8) triangulation of these data to foster "idea convergence and confirmation of findings" (Baxter & Jack, 2008, p. 556); 9) extended observation opportunities, gathering data over time to accurately capture multiple perspectives; 10) and finally the use of the

comprehensive Barrett (2004) model to explore this phenomenon through an examination of both positivist (assessment of learning) and constructivist (assessment for learning) paradigms. Collectively, I employed these strategies to increase trustworthiness in the research findings.

Moreover, concepts to support the qualitative methodology selected for this study include credibility, dependability, confirmability, and transferability. Credibility describes how well the research subject was "appropriately identified and described" (Marshall & Rossman, 2006, p. 201). Strategies used in this study to bolster credibility include active search for discrepant data through the use of different types of field notes (i.e., observational, methodological, theoretical) about the inquiry, using multiple sources of data and multiple campuses.

Dependability describes the researcher's efforts to take into account changing circumstances and/or a deeper understanding of the subject during the study (Marshall & Rossman, 2006). One of the basic assumptions of qualitative research "is that reality is holistic, multidimensional, and ever-changing; it is not a single, fixed, objective phenomenon waiting to be…measured" (Merriam, 1998, p. 202). Triangulation, purposeful sampling, and systematic data collection to create an audit trail are among the strategies to address dependability and confirmability.

Transferability describes the generalizability of the research findings. The nature of qualitative case study research is to delve in-depth into the particular, which for some limits the generalizability of findings or makes it an inappropriate criterion (Merriam, 1998). I used my observation notes, methodological notes, theoretical notes, and analytic notes from reviewing documents, interviews, and the transcribing of interviews to form

the basis of "thick description" in describing the cases (Merriam, 1998; Stake, 1995) so that readers can determine whether the findings of this study are transferable to other settings and institutions.

Role of the Researcher

Some educators (Astin, 1984, 1993; Bass; 2011; Kuh, 2008; Mehaffey, 2011) have focused on the value of learning opportunities available outside the classroom. The exploration of learning outside the classroom offers significant opportunities to contribute to new knowledge. In fact, only through the systematic study of learning through co-curricular involvement can researchers understand the impact, if any, of these educational opportunities. This study sought to shift the emphasis on learning from the more traditional focus, within the classroom, to outside the classroom, using the co-curricular portfolio as the object of investigation. Such a shift supports my own experience as a professional in the field of Student Activities for over twenty years, observing and valuing the educational benefits for students from co-curricular participation in general, and through the use of co-curricular portfolios, specifically.

As a professional in student activities, I had extensive experience working with experiential learning and student involvement opportunities. Through this work on my own campus, I developed a co-curricular portfolio program that meets the requirements of this study. My familiarity with this type of educational tool and conviction in its value were factors that drove my research interest. While I have an inherent belief in co-curricular portfolios, I also sought to describe how they are used and how they contribute to student learning in order to promote their use and proliferation. My goal was for my advocacy for co-curricular portfolios to end with the selection of this topic, while my

research interest began with understanding their impact and use. I maintained a personal

journal throughout this research project in order to record my own thoughts and

reflections during this process as an added approach to identifying and articulating my

own personal opinions related to this project.

CHAPTER 4

CO-CURRICULAR PORTFOLIO AND TRANSCRIPT: SIMILARITIES AND

DIFFERENCES IN STRUCTURE AND OUTCOMES

This study was conducted on two higher education campuses: North University, an institution that utilized a co-curricular portfolio (CCP) and South University, an institution that used a program that they call a co-curricular transcript (CCT). This chapter incorporates the institutional perspectives of administrators to contextualize the student perspective and the campus environment, while describing how institutions develop and utilize co-curricular portfolios and transcripts. Furthermore, the students' co-curricular documents, and institutional documents are analyzed, compared, and contrasted within and between institutional cases, in relation to a) Barrett's (2004) model of assessment systems and electronic portfolios; b) a set of single-item adapted Liberal Education and America's Promise (LEAP) rubrics (2012); c) the Association of American Colleges and Universities (AAC&U) Valid Assessment in Undergraduate Education (VALUE) rubrics (Rhodes, 2009, 2013); d) the National Association of Colleges and Employers (NACE) career readiness competencies (2017); and e) the rubric outlined in "An Emergent Typology of Use of Evidence in ePortfolios" (Blank-Godlove et al., 2008). These analyses are based on data collected about the structure of the co-

curricular portfolio and transcript, written institutional statements about the programs, and student reflections at the institution that required those as part of the process.

North University Co-Curricular Portfolio Program

Walter Charles, the North University administrator overseeing the CCP, served as the director of student leadership and involvement, where he had worked for 27 years at the time of our interview. He oversaw one graduate assistant, five undergraduate involvement coordinators, and 11 student peer leadership consultants, two of whom focused on the co-curricular portfolio program. The co-curricular portfolio program at North existed since the mid-1990's, modeled after programs at other regional institutions, with one important distinction: "We didn't call it a transcript. We chose the word portfolio," Charles explained. "We do not consider the portfolio complete without the reflection piece."

Describing the development of the program, Charles said, "We got an alum who was interested in sponsoring the program. The skeleton of the program hasn't changed; [it still features] five inter-related areas. We still require a reflective narrative. In the beginning, we were asking for narratives at the end of every year. We found…some repetition in those narratives… we decided, let's just ask for the students to submit one reflective essay that really encapsulates their collegiate experience."

Once the program launched, it was staffed with a graduate assistant, working 20 hours a week, who promoted the program and verified student submissions. At the time, in the late 1990's and into the 2000's, the program was not fully online. Charles explained that the co-curricular portfolio "was very labor intensive…Our role is to verify the information is valid. It became very unwieldy, very quickly as the program grew

exponentially those first years. By the early 2000's, we were around 1,300 – 1,500

portfolios per year." Subsequently, due to staffing reductions at the institution, "we lost

the impetus we had to really move it forward," said Charles.

In recent years, however, the university invested in OrgSync, an online student

organization management system for managing membership, registration, and other

aspects of student organizations and student involvement in co-curricular activities.

Working with the Honors College, Charles found they were able to do a great deal to

automate and integrate the co-curricular portfolio program into the new platform. "Over

the last two years, we're probably looking at about 500 students that are in some place or

another with their portfolio," said Charles. The program was open to all students and was

promoted through the peer leadership development staff and programs housed in Charles'

office. Yet, at the time of this study, most program participants came from the Honors

College. Through partnering with the honors program coordinator, Dr. Dean Howard, the

program was incorporated as an assignment in two honors courses for the last two years,

and expanded to a third honors course in the most recent year.

"Where we need to move to is [supporting and promoting] the on-going

maintenance of those portfolios," Charles said. When "we had 1,000 to 1,300

[participating students], we partnered with our writing center...we don't have that

relationship now, but I'm hoping to get that back again to make those narratives a little bit

more impactful. This generation today does not write well, they write in emojis and in

Instagram," Charles observed.

At North University, the focus of the co-curricular portfolio was career

advancement. Charles explained, "Our desired outcome is…to create a document that

gives students an edge over other students who are applying for the same job. Employers are looking for skill sets. Resumes don't necessarily provide the ability for you to talk about the skill sets that you're learning both in as well as out of class…with a portfolio...it gives them a vehicle to talk about how they have changed and grown and developed personally, interpersonally…giving them an edge. The co-curricular portfolio has been exceedingly valuable."

At first impression, the appearance of the North University co-curricular portfolio was more impressive than the South University co-curricular transcript. There was a cover page featuring school colors with the student's name, the month and date the document was produced, and the university logo. Student entries were listed in six involvement categories: leadership activities; paraprofessional work experience; honors, awards, and recognition; professional or educational development; participation in student organization or activity; and community service. The final page contained the student's personal reflection statement. At the conclusion of the personal reflection, there was a box which stated "the verified activities listed in this portfolio for [student's name] represent his/her co-curricular involvement while attending" North University. Beneath this statement, the university seal and the signature of the Vice-President for Student Affairs were included. Staff from the student leadership and involvement office were responsible for verifying the co-curricular portfolio entries with university personnel responsible for the activities or organizations students listed.

The co-curricular portfolio resembled a resume in appearance. Students had some flexibility in how they listed each activity or item in the document. Entries under each category typically included the name of the activity, the position held by the student, the

time frame or date(s) of the activity, and a description of what the student did or accomplished in this role. How these entries were listed and what information was included in each were determined by the student creating the portfolio document. Students used bold font, bullets, or different font sizes in their entries. The final entry was their personal reflection about themselves and how their involvement and/or accomplishments contributed to their development.

The six involvement categories were listed on each co-curricular portfolio, even if a student did not enter any involvement experience in that category. Students described being motivated to round out their portfolio by becoming involved in more varied activities. Yet, not being able to remove a category from the document without a specific request to Charles' office seemed to be disadvantageous. For example, someone who was very involved in one or two categories (perhaps community service or student organization or activity), but not involved in other areas would still have each of the other six categories listed on their portfolio. Rather than highlighting those accomplishments or involvement that they sought to do through the portfolio, this limitation in the design could serve to raise questions or even diminish students' achievements by including other categories of activities they did not participate in during their college experience.

South University Co-Curricular Transcript Program

The South University co-curricular transcript was printed on university stationary to provide an official appearance, once completed. This document, too, was laid out like a resume. Involvement categories available on the transcript were academic-related experiences; campus committee membership; community service; honors and awards; leadership activities; performances and shows; and student government and

organizations. In making entries, students selected an activity, reflected on what they have gained from their experience, and then selected up to five skills from ten institutional learning outcome options available to them through a drop-down menu.

The university's name was listed at the top of the document and below it was the title 'Official Student Co-Curricular Transcript.' In addition to the seven involvement categories that South University used to organize students' involvement opportunities, there were ten learning outcome or skill areas in which students reported gains through their participation. These learning outcomes included: cognitive skills, communication skills, cultural knowledge, leadership skills, social responsibility, ethical reasoning, financial management, computer and technology skills, reading and writing proficiency, and teamwork. Unlike the North University portfolio, if a student did not participate in an activity under any one of the seven involvement categories, that skill area was not included in their transcript.

The consistency in the learning outcomes reported gave the university a greater ability to report student involvement quantitatively. For example, both institutions could report how many documents have been created, how many entries have been made, how many entries there were in the respective categories. However, the consistency in the outcome or skill listing South University used gave them the ability to also report how many students reported gains in each of the ten skill areas. The data from portfolio entries at North University were more varied and subjective and thus could be assessed qualitatively more easily than quantitatively.

The South University transcript was limited in the content students could enter. The university continually added new involvement opportunities to the program, but

students could not personalize their entries beyond the selection of the activity and the

identification of outcomes achieved from the options available. They had to choose from

among the outcome or skill options provided. It was not possible for them to record

personal reflections or more subjective descriptions of the activities they participated in

or what specifically they may have done in those activities. Some students expressed

concerns over these limitations. The university recognized this student concern, but

decided that personalizing the document would add far greater complexity and challenges

in managing the verification process, which they felt was an important attribute to avoid.

Framing how students used the transcript was an important strategy for the university in

addressing this student concern. By encouraging first- and second-year students to

document their involvement, while suggesting that third- and fourth-year students use the

transcript to demonstrate their learning in interviews, the university sought to focus

students on how they can best use the transcript program at different stages of their

development.

The South transcript began with co-curricular involvement experiences, such as

participating in student organizations, and then expanded to include research with faculty

and study abroad experiences. Their next goal was to add credit-bearing internships.

Director of Student Activities Pat Mitchson said, "Our students have been a good part of

that [program development] process because we designed the program in-house, because

we didn't have the funds to go externally. That has been a blessing in disguise because

we've been able to morph…expand along the way. I get a lot of students who say, 'I'm

doing this...it's not in the system'…[I say to them] give me the information...[and we'll

review it and add more opportunities]. Students have really opened our eyes, in terms of

some of the experiences that are out there that we didn't even know existed and have opened those and established those relationships with faculty."

The co-curricular transcript started originally with 19 skill options for students to select. Associate Vice President for Student Affairs, Ellen Lipton acknowledged, "19 was just a little bit over the top." Mitchson explained that "those [skills] came directly from the [university's] Career Resource Center, from an employer survey…[which] identified…skills that we want to see from our graduates." However, after attending "an AAC&U integrative learning conference…it was really determined that 19 was…too much, too unwieldy," and they reduced the number of skills to ten. In re-creating a holistic document for co-curricular experiences, the administrators also sought to ground the transcript in frameworks that would be meaningful to students, student affairs professionals, faculty, and academic affairs administrators. Mitchson explained, "It's really based off of two primary objectives. First, the LEAP initiatives…[and] our student affairs division learning objectives [which] complement the LEAP initiatives." Through this evolution, Mitchson maintains, "we wanted to meld and bridge that gap with Academic Affairs...we really wanted to be speaking both languages, so that way we could open that translation between Academic Affairs and Student Affairs."

Advances in the type of content included in the transcript have also come from promoting the transcript to academic leaders across campus, getting them to buy into the program and to support incorporating more diverse learning experiences for students into the system. One of the opportunities Lipton saw from expanding the types of activities captured in the program was that "if [faculty are] really advising [students] in a holistic manner, they're gonna start looking at what [students are] taking academically and then

looking at the skills that they are developing and potentially seeing where they may need to get more experiences in a certain area, and be able to really help students with that," said Lipton.

Another beneficial feature is that "the co-curricular transcript can also serve as a search engine for a student. So let's say, this is a skill that I would like to develop, they can put that skill in and it's gonna populate all of the experiences…that relate to that particular skill," said Lipton. Mitchson described how this feature and the transcript are highlighted for students at different points in their academic career, "depending on year level we market the program differently. The first-year, second-year student, we're really focusing on the, capture [the skill], but use it as a search engine," too, to explore opportunities. "As students get toward the junior, senior year, we really shift the tide and turn to use this as a supplemental document in your journey post-graduation or [for applying for] summer internships," said Mitchson.

Initially, the South University leaders were careful not to duplicate items listed on a student's academic transcript, to be politically sensitive to academic areas, and to avoid overlap between the two records. Yet, they came to realize that while an academic transcript recorded that a student earned credit studying abroad or through a research opportunity, the academic document often does not provide information or sufficient context about what students learned, where or with whom, through these experiences. Consequently, they have been able to convince other university leaders that "by capturing [this additional information] in the co-curricular transcript we are really complementing what the academic transcript can offer," said Lipton.

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Thus, as Lipton described, they viewed the transcript as "one of three docs (academic transcript, resume, co-curricular transcript) students use for different functions…to highlight [their co-curricular] experience, in addition to their academic experience." Mitchson added, through the transcript, "we want students to be able to catalog and capture all the things that they've done so…it can A) serve as a memory, but B) because we connect to the learning outcomes associated with the program…It's really important [for] students to articulate what they've learned…that's why we ask folks to identify those skill sets as they go, knowing…someday…they might get a question, 'tell me how you've learned.' So…encouraging [students] to start practicing interviewing skills and demonstrating those practical hands-on experiences in the future" is an important goal.

Considering other co-curricular records, Lipton said, "ours is a little bit of a step above… because of the verification process and the identification of skills in each experience. It's not just a listing, per se." The co-curricular transcript was "ultimately housed in our registrar's office and [it] can come out with an official [university] seal," explained Lipton. The academic area agreed to produce the final product because the experiences are verified. Mitchson added that "[our state university system] has had this applied learning initiative and our campus community…we've talked a lot about...co-curricular experiences...how does that relate to applied learning? It's gotten embedded in terms of a lot of really faculty driven initiatives…[such that] we're getting faculty members that believe in and stand behind the program," said Mitchson.

The verification process was similar at South University, as each entry must be verified before the university will allow an official version to be released. Students could

print an unofficial version on their own through the program. The student activities office communicated with the personnel overseeing all activities to verify their authenticity. However, there was not a system for consistency or inter-rater reliability among staff and administrators approving student entries through the co-curricular transcript.

Between- and Within-Case Analyses

Based on the contextual information described at each institution, this section discusses analyses between and within the two cases. Multiple levels of analysis were employed in reviewing the students' co-curricular documents, institutional literature, and student reflection statements. Five models were used to analyze these materials provided by the respective institutions, as each model focuses on a different aspect of these documents. These sources of data were investigated using the a) Barrett (2004) model of Assessment Systems and Electronic Portfolios, to investigate the structure of the portfolio systems; b) the Blank-Godlove et al. (2008) rubric outlined in "An Emergent Typology of Use of Evidence in ePortfolios" to examine frames of evidence gathered from the portfolio and transcript; c) the AAC&U (2013) VALUE rubrics to apply all of the LEAP outcomes; d) the NACE (2017) career readiness competencies to assess the outcomes based on a post-graduate readiness model; and e) the 2012 set of single-item adapted LEAP rubrics to focus on a more succinct and accessible LEAP-based model (New Century College Assessment Committee, 2012).

Assessment Systems and Electronic Portfolios

Barrett (2006) defines a portfolio as "a collection of work that a learner has collected, selected, organized, reflected upon, and presented to show understanding and growth over time" (p. 1). Neither the North nor the South University co-curricular

documents are able to incorporate attachments as evidence of student learning. Instead, the artifacts of the co-curricular portfolio and the co-curricular transcript are the entries made by students, describing their involvement experiences and accomplishments. Students record their co-curricular participation and activities, reflect on what they have learned through these involvement experiences, and document their gains to show their learning over time, which is then verified by the university.

Barrett's (2004) model, Assessment Systems and Electronic Portfolios: Balancing Accountability with Learning, illustrates the dynamics of portfolio processes. In this model, an online portfolio system uses three different solutions that interact: "1) a digital archive of learners' work; 2) a learner-centered electronic portfolio; and 3) a central database to collect teacher-generated assessment data" (Barrett & Wilkerson, 2004, p. 3). Both institutions use elements of this model in their co-curricular portfolio and transcript, respectively. The online system at each institution is the digital archive where students' 'work' is collected as documented co-curricular involvement experiences. The second element of Barrett's model is captured through students' reflections on their experiences and what they learned through them. The North University co-curricular portfolio had a structured reflection statement, unlike South University's co-curricular transcript. Students at South reflected on their experiences only as they selected skills they utilized from their co-curricular involvement.

Figure 1. Barrett, Wilkerson, and Lang (2004).

At North University, the content shared was more student-centered, more qualitative in nature, more subjective in practice, as students articulated their experiences in making open-ended entries in their co-curricular portfolio. Assessment for learning was the focus of this element of the co-curricular portfolio process; enabling the student to formulate their own description of the activities and their experience with the goal of developing a unique artifact to present themselves more holistically and more positively to employers. Assessment for learning is described as more student-centered, focused on student engagement, ownership and learning with the opportunity for students to record and revise their reflections (Chambers & Wickersham, 2007; Clark & Eynon, 2009).

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Assessment for learning was the focus of this element of the co-curricular portfolio process; enabling the students to formulate their own description of the activities and their experience with the goal of developing a unique artifact to present themselves more holistically and more positively to employers. Through assignments and feedback from the Honors College faculty, North University students learned how to use the co-curricular portfolio to guide their future involvement. The focus was on formative assessment. As Charles describes, "their portfolio is an assessment. It's an assessment of what that individual learned through their journey here."

By contrast, assessment of learning is more institution-centered; focused on accountability and summative assessment of outcomes (Chambers & Wickersham, 2007; Clark & Eynon, 2009). At South University, the content shared was more institution-centered, more structured, more prescribed, as students chose from among several drop-down menu options to describe their gains. The South University model was less descriptive and not open-ended like North's portfolio. Students at South had less choice over the contents of their co-curricular transcript, which made it a strong model for summative assessment purposes. Yet, formative assessment was an important purpose in the South co-curricular transcript model. Assessment for learning was supported through students' use of the transcript in interviews for campus positions. By requiring students to adopt the co-curricular transcript in order to apply for many key student leadership positions, South University students were able to practice articulating their learning from co-curricular experiences in campus interviews, getting feedback from peers and potential future employers, and assuming greater ownership of the contents of their transcript.

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Finally, the third element of Barrett's model consists of the ability of each system to be used for summative assessment purposes. Thus, Barrett and Wilkerson (2004) assert that "an integrated system with these three distinct components can act as a workflow management system to support both formative (facilitating student feedback) and summative assessment (collecting and aggregating evaluation data)" (p. 3). Both universities had the ability to aggregate data from their respective systems. However, this capability remained largely unrealized potential, as neither institution invested much time or resources to consistently gather data from their systems. For example, when South University decided to reduce the number of skills they used, they were able to examine how many students selected each of the 19 original options, to help them decide which ones to eliminate. Yet, they did not regularly analyze these data. As Mitchson said, "Could we be doing better [analyzing data] and more frequently? Probably yes." Similarly, Charles lamented that he would like to look "through 50 or 100 [portfolios] to see their commonalities, and their takeaways that everybody's…sharing. Part of the frustration of not having enough staff to be able to dig deep into assessment as much as I would like."

The Barrett (2004) model provides a framework for understanding the different paradigms, purposes, goals, and activities of e-portfolios. The North University co-curricular portfolio focused on a student-centered, assessment for learning approach, with an internal locus of control for students. In contrast, according to Barrett's model, the South University co-curricular transcript reflected an institution-centered, assessment of learning approach, with an external locus of control for students. This framework was particularly helpful in understanding the philosophical differences between the two

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documents studied in this research, and how those differences impact the assessment

focus and the student experience. Blank-Godlove et al. (2008) developed an emergent

typology of the use of evidence in ePortfolios, which is the second model applied to the

analysis of the co-curricular portfolio and transcript.

Emergent Typology of the Use of Evidence in ePortfolios

This model categorized key characteristics about ePortfolio evidence, identified

frames of evidence for each, and posed related questions for the ePortfolio

creator/facilitator and the evaluator/researcher (Blank-Godlove et al., 2008). The

typology described ePortfolio evidence according to three attributes: 1) characteristics of

the item used (i.e., who exercised agency in producing it and what media format was

used?); 2) purpose of incorporating the evidence (i.e., what was the intended function of

the evidence?); and 3) characteristics of the associated learning activity (i.e., who

participated and was it self-directed or sponsored?). Applying this framework to the co-

curricular portfolio and the co-curricular transcript illustrated the strengths and the

weaknesses of each document.

For both the co-curricular portfolio and transcript, the frames of evidence used

consisted of artifacts created by the author (the student), which were then attested to by a

university faculty or staff member. Students were encouraged to document their

experience as a credential for future use in interview settings, which shaped the format

and content of the respective co-curricular products. The format of the evidence was text

only. The characteristics associated with the learning activity varied widely and could be

institution-sponsored, student-sponsored, or community-sponsored; curricular or co-

curricular; individualized learning, group activities, or engaged with a community. The evidence created reflected the author's experience or position; and knowledge or skills.

Both institutions sought to capture learning holistically. The CCP and CCT guided individuals to document their learning across multiple dimensions of sponsorship and participation through the respective categories of involvement provided. Additionally, the incentives (e.g., class credit at North University) or disincentives (e.g., students cannot apply for key leadership positions without this credential at South University) used respectively in each program promoted increased ownership, participation, and self-directed learning by students. However, there were also important differences between the co-curricular portfolio and transcript when applying the Blank-Godlove (2008) typology.

North University. Each of these co-curricular documents are heavily focused on skill development, recognition, and articulation, by design. In the co-curricular portfolio at North University, competencies were not captured, but knowledge, abilities and values may be as students are prompted to describe their experience and then provide a personal reflection statement about how they have developed as a person and a leader. Drop-down menus listed adjectives, helping students articulate their learning and experience. The individual activity entries and the personal reflection provided opportunities for authors to demonstrate learning, engagement, and integration. The CCP structure was very open-ended, allowing students to personalize their entries; however, their responses were often more descriptive than evidence-based. Consequently, students' ability to demonstrate or sufficiently explain their gains in their reflection statements, their ability to go beyond describing the activity and their role, was critical to assessing the extent of their learning.

Thus, there may not be congruence between an author's intended and espoused inclusion of evidence when the student did not go beyond mere description of the activity, which happened often in the North University reflection statements.

South University. In the co-curricular transcript at South University, as students document their learning and development through the document, they may also be gaining competencies, abilities, and values, but these attributes were not captured, largely by design. In transcript program literature, the intent of capturing skill and knowledge information was articulated as a three-step process: 1) creating an opportunity for students to reflect on what they learned; 2) asking students to select the top five skills or knowledge they gained from a list of ten LEAP-based options; and 3) enabling students to develop a vocabulary to articulate and name what they have learned. The skill or knowledge options in drop-down menus set the limit at ten for the range of responses available to students, while the structure of the program also did not allow more personalized responses. Using the evidence collected for the co-curricular transcript in this way reduced some students' motivation, engagement, and ownership, as students were restricted from expressing more about their experiences than selecting from a limited drop-down menu.

There was considerable unrealized potential in each program, primarily due to the lack of flexibility in student reporting in South's program and the lack of rigor in the guided reflection in North's program. Thus, deeper learning could be achieved more consistently if there were more structure in the reflection components for students at North and more flexibility in personalizing entries among South students. In addition to understanding the portfolio and the transcript systems and the uses of evidence, it was

also beneficial to identify frameworks for analyzing the student learning and development that may be taking place. The LEAP outcomes, VALUE rubrics, and NACE competencies were used to analyze students' co-curricular portfolios and transcripts.

Analyzing Student Outcomes Based on LEAP Outcomes, VALUE Rubrics, and NACE Competencies

In addition to the Barrett (2004) model and the Blank-Godlove et al. (2008) rubric, three frameworks were applied to examine student outcomes from co-curricular portfolios and transcripts. In addition, promotional literature, university webpages, and institutional frameworks for both the CCP and CCT were examined. The LEAP outcomes were identified by South University administrators as a model they used in developing 10 learning outcomes for the co-curricular transcript. The VALUE rubrics provided a means to assess the LEAP outcomes, but only for the reflection statements of the co-curricular portfolio. Additionally, the NACE competencies were referenced by North University staff as relevant to their portfolio program.

Launched in 2005, the LEAP initiative sought to develop consensus among educators and employers about the outcomes of a college education for students, for a democratic society and for the worldwide economy (Rhodes & Finley, 2013). In order to operationalize and measure student progress in achieving the LEAP outcomes, AAC&U next developed a set of rubrics to assess student learning related to each of these outcomes. The VALUE rubrics were released in 2009 and supplemented in 2013 to make a total of 16 rubrics (Rhodes & Finley, 2013). Educators have adapted these LEAP outcomes and VALUE rubrics in different ways. For example, the New Century College Assessment Committee at George Mason University (2012), developed a set of single-

item adapted LEAP rubrics that are simplified and more accessible (2012). Both the single-item adapted LEAP rubrics and the VALUE rubrics were applied to analyze outcomes from the co-curricular portfolio and transcript. While the LEAP outcomes were not specifically cited by North University staff in regard to the co-curricular portfolio, the LEAP outcomes were consistent with the learning domains and outcomes of North University's student affairs division, and the rubrics provided a means to assess student learning through using the portfolio.

Since one of the North University administrators specifically referenced the NACE competencies in describing the co-curricular portfolio, that model was also compared to both programs. NACE (2017) identified eight competencies to define career readiness for the recent college student graduate. These competencies were determined collaboratively from a task force of employers and educators, based in part on data collected from NACE's annual survey of employers. NACE's goal in this effort was "closing the gap between higher education and the world of work" (NACE, 2017, p. 2). The NACE competencies were also relevant to both the co-curricular portfolio and the transcript because career preparation and readiness were important to both programs. Below is a chart that compares the North University learning domains, the outcomes defined by South University, the single-item adapted LEAP rubrics, the VALUE rubrics, and the NACE competencies. Table 3 reflects considerable conceptual overlap and consistency regarding desired outcomes across the university frameworks, the LEAP-related outcomes, VALUE rubrics, and the NACE competencies.

Table 3

Learning Outcomes Comparisons

North University Learning Domains	South University Learning Outcomes	Single-Item Adapted LEAP Rubrics	VALUE Rubrics for LEAP Outcomes	NACE Career Readiness Competencies
Critical thinking/Problem solving	Cognitive skills	Critical thinking	Critical thinking	Critical thinking/ Problem Solving
Communication	Communication skills	Communication	Oral communication	Oral/Written communications
Integration and application of knowledge	Computer and technology skills	Digital literacy	Written communication	Digital technology
Inter/Intrapersonal development	Teamwork	Group collaboration	Teamwork	Teamwork/ Collaboration
Values and ethics	Ethical reasoning	Aesthetic awareness	Ethical reasoning	Professionalism/ Work Ethic
Civic discourse/ intercultural fluency	Leadership skills	Well-being	Problem solving	Leadership
Community engagement/global awareness	Social responsibility	Civic engagement	Civic engagement	Career Management
	Cultural Knowledge	Global understanding	Global learning	Global/Inter-cultural Fluency
	Financial management		Quantitative literacy	
	Reading and writing proficiency		Reading	
			Creative thinking	

North University Learning Domains	South University Learning Outcomes	Single-Item Adapted LEAP Rubrics	VALUE Rubrics for LEAP Outcomes	NACE Career Readiness Competencies
			Intercultural knowledge and competence	
			Information literacy	
			Integrative learning	
			Inquiry and analysis	
			Foundations and skills and lifelong learning	

Note. This table lists the North University learning domains (2017); South University learning outcomes (2015); the Single-Item LEAP rubrics (2012); VALUE rubrics (2013); and NACE Career Readiness Competencies (2017)

North University

In the marketing materials provided to students about the CCP, there were three stated goals for the North University co-curricular portfolio: 1) providing a framework for students to document their campus involvement activities; 2) offering an opportunity for students to reflect on their out-of-classroom experiences; and 3) complementing a student's transcript and resume when applying to professional or post-graduate positions (Charles, 2016). The program can be used for formative assessment, enabling students to articulate their individual involvement experiences and to reflect on their learning, as they build upon their experiences over time.

North University was four years into a ten-year strategic plan. The co-curricular portfolio related to two of the five themes, enrichment and engagement, in this strategic plan. Listed under the strategic plan's enrichment theme was the goal to foster student development that included an action item to initiate a new field of leadership studies at the university, which would include creating mechanisms to acknowledge learning and development outside the classroom.

The co-curricular portfolio program was also consistent with the North University student affairs mission, where staff described using co-curricular experiences and environments to educate students to achieve a set of institutionally-defined values. Moreover, five of the seven North University learning domains (including critical thinking/problem solving, communication, inter/intrapersonal development, civic discourse/intercultural fluency, and community engagement/global awareness) were also consistent with the single-item LEAP learning outcomes. The co-curricular portfolio linked

most directly to the North University learning domain about integrating and applying knowledge.

In reviewing the personal reflections from the North University students, it was possible to assess their demonstrated learning. Using a single-item set of rubrics adapted from the LEAP learning outcomes, their statements are charted below. Ratings were made based on the content that the author (student) addressed in their personal reflection. Ratings used the scale of 1 = Novice; 2 = Emerging; 3 = Competent; and 4 = Advanced, for each of eight adapted learning outcomes. None of the students addressed global understanding in their reflection, although some students participated in related activities.

Table 4

North University Personal Reflections

Name	Communication	Critical Thinking	Group Collaboration	Global Understanding	Civic Engagement	Digital Literacy	Aesthetic Awareness	Well-Being
Karen	3	3	3	X	X	X	X	X
Marcus	2	2	X	X	X	X	X	X
Kalise	3	3	2	X	2	X	2	2
Mason	2	2	X	X	X	X	X	1
Dahlia	3	3	3	X	3	X	2	X
Sam	3	2	3	X	X	X	2	2
Allen	3	3	X	X	X	X	X	X
Leslie	2	1	1	X	2	X	2	X
Mitch	3	2	3	X	X	2	X	X
Rita	2	2	2	X	3	X	X	X

As Table 4 illustrates, student learning was demonstrated through the co-curricular portfolios. The student expressions and reflections were also able to be assessed across almost all of the eight single-item adapted LEAP rubrics (New Century College Assessment Committee, 2012). Communication, critical thinking and group collaboration were the most consistently reported outcomes, as described in students' reflection statements.

When their reflections were analyzed using the single-item adapted rubrics, most students demonstrated competent or emerging skill levels for these three outcomes. The only outcome that students did not report in their reflections was global understanding. Individual differences were documented demonstrating the application of the adapted rubrics. Although these rubrics could not be applied to the South University co-curricular transcript, evidence of assessable learning was created through the North University co-curricular portfolios. The results from such analyses could be provided to students as a means of formative assessment, giving them feedback to support their continued learning and development across these outcomes. Moreover, while the personalized entries and reflections made it challenging to aggregate the data, the CCP can also be used for summative assessment purposes when applying a framework such as the single-item LEAP outcomes.

In analyzing the reflection statements from the ten North University co-curricular portfolios, seven of the 16 VALUE rubrics could be applied to assess learning from the students' personal reflections. VALUE rubrics could be applied to the LEAP outcomes of critical thinking, oral communication, written communication, teamwork, civic engagement, information literacy, and problem solving. For example, the critical thinking

and communication rubric was applicable when Allen reflected on how his experience in the student organizations, Students for Liberty and College Democrats, impacted his ability to communicate and think critically:

From participating in various organizations involving the discussion of problems and finding solutions, I gained strong critical thinking and communication skills. My two primary clubs, both of which are politically oriented, forced me to become aware of a variety of issues, think about how problems in government and society could be fixed, and to effectively communicate my ideas to others. Since politics is such an interdisciplinary field, I learned to apply knowledge I acquired from my other interests to situations beyond their original use, which empowered my critical thinking skills…I've learned to speak assertively, but not disrespectfully, while defending my points with thorough details and sound logic.

Karen, another North University student, demonstrated skills that could be assessed using the teamwork and problem solving VALUE rubrics when she described in her reflection statement that through her involvement in the Honors Student Association, she learned to "understand the benefits of pulling from various members within the organization. I better recognize each member's abilities and reach out to specific people based on my needs." In addition, the oral communication and ethical reasoning VALUE rubric was applied when Mitch reflected on his marching band experience and wrote that he learned, "to be short and direct with my commands and to speak loud and clear. Being a leader who is always approachable, honest, professional, and kind is essential to the success of any organization." Each of these personal reflections addressed the involvement experiences of the student, giving them "an opportunity to reflect on their

co-curricular accomplishments and personal growth and development," as described in the North University's promotional materials that introduced the program to students.

Through the Honors Program assignments to develop a co-curricular portfolio, North University students also received peer feedback on their emerging portfolios, as well as feedback from their faculty member. These assignments were integrated into students' first two years at the institution. Additionally, creating a co-curricular portfolio was required for a new minor in Civic and Professional Leadership. There were also proposals to develop a minor or major in Leadership Studies at the institution, which could also be another opportunity to integrate the CCP into the curriculum. Beyond these opportunities, there were no systematic efforts to provide feedback for students or to aggregate data from the CCP. North University students were largely on their own to sustain their efforts in continuing the co-curricular portfolio after the first two years.

As the staff at North University explained, the goals of the co-curricular portfolio were very compatible with the NACE competencies. Career readiness was a high priority for the North University staff, exemplified by their commitment to the co-curricular portfolio. NACE provides resources for campus career centers to promote and support the competencies. However, unlike the VALUE rubrics, there is not a specific measurement tool used to assess these competencies.

The institutional literature that promoted the CCP, and the North University goals advocated for career preparation and readiness. Six of the eight NACE competencies corresponded closely to North University learning domains. These complementary competencies included critical thinking/problem solving, oral/written communication, digital technology, teamwork/collaboration, global/intercultural fluency and

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professionalism/work ethic. Only the NACE competencies of leadership and career management were not explicitly part of the North University outcomes, but these competencies stretch across multiple domains in the institution's framework.

South University

The South University co-curricular transcript was a collaborative effort between the departments of student activities, the career resource center, and records and registration. The webpages and marketing materials dedicated to promoting the co-curricular transcript program touted the program benefits and opportunities to multiple audiences, including first-year students, seasoned students, faculty, and parents. These materials promoted practical benefits and opportunities to use the transcript for formative assessment. Some of the comments from promotional materials included:

- "monitor and track your out-of-classroom activities for future employers,"

- "a great way to search for opportunities that exist on campus,"

- "showcase your talents, use the CCT to maximize and demonstrate the broad set of experience you have gained,"

- "track the experiences and skills employers desire,"

- "acquiring valuable skills through…extracurricular activities…that will benefit…greatly in…post-college job search,"

- "acquire the vocabulary required to convey those skills to future employers,"

- "stand out as much as possible when…applying to jobs after graduation," and

- Helps faculty "be a better, more informed advisor" and with faculty "letters of recommendation."

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The steady increase in students using the co-curricular transcript in recent years was the first item cited under the university's second strategic planning goal, which was focused on enhancing holistic learning in the campus community. The co-curricular transcript was also highlighted in the university performance improvement plan, among other high-impact practices available to students. While not specifically cited in the Student Affairs mission, the co-curricular transcript was consistent with the mission statement. In addition, the CCT could also contribute to the achievement of each of the five learning outcome statements identified by the division, which included developing life skills, critical thinking, cultural competency, and community engagement.

In verifying that students achieved any of the 10 outcomes defined in the CCT, the university personnel most closely associated with that program, activity, or organization were the ones determining whether the outcomes identified by the students completing the co-curricular transcript were in fact accomplished. However, there was no other content or rationale provided by the student to demonstrate the achievement of the skill or outcome. Outcomes proposed were either approved or not approved by the related university personnel; there were no formalized opportunities for additional feedback, or for systematically established norms between the staff or faculty confirming student participation and achievement of the outcomes.

As noted previously, South University administrators did have the ability to produce data in the aggregate about the number, amount, and types of outcomes students were achieving through analyzing co-curricular transcripts, according to the definitions provided for each outcome. This type of summative data could be very valuable to the institution in demonstrating the impact of the co-curricular program. However, the

system lacked the ability to gather formative assessment data to further support student learning and/or to demonstrate the student learning being attested to in the co-curricular document.

Yet, through the design and implementation of the CCT, South University administrators created opportunities where they believed formative assessment, or assessment for learning, occurred. When students reflected on their experiences and selected the skills they felt they gained, South students learned to identify their gains. Additionally, the commitment that South University staff made to require students to maintain their transcripts to apply for future positions, as well as to ask students to describe their transcript entries in interviews reinforced student learning from this process. Thus, when students were asked in subsequent interview situations to articulate the skills they have achieved and how they have developed through their co-curricular experiences, the South University staff leveraged additional opportunities in which students made meaning from their transcript entries and involvement opportunities.

South University student affairs leaders identified 10 learning outcomes related to co-curricular experiences (see Table 3), using the LEAP learning outcomes as a foundation. Six of these outcomes related closely to one of the eight single-item adapted LEAP outcomes. These overlapping outcomes from South University included cognitive skills, communication skills, computer and technology skills, teamwork, social responsibility, and cultural knowledge. Aesthetic awareness and well-being were the two single-item adapted LEAP outcomes that were not reflected in South University's outcomes, while the CCT also included financial management, leadership skills, ethical reasoning, and reading and writing proficiency.

Nine of these 10 South University learning outcomes related to the 16 VALUE rubrics (see Table 3). Some of the South learning outcomes connected directly to one of the VALUE rubrics, such as ethical reasoning, social responsibility, and teamwork. Regarding the remaining closely associated outcomes, the CCT outcome may be more specific than the VALUE rubric. For example, the South University definition of *financial management* appeared to relate to the VALUE rubric for quantitative literacy; while the South definition for *computer and technology skills* connected to the VALUE rubric for information literacy. In these cases, by adapting the LEAP outcomes and the VALUE rubrics to the types of out-of-classroom experiences available to students on their campus, South administrators tailored outcomes to the specific opportunities available to their students.

In other cases, South administrators defined their outcomes more broadly than the VALUE rubrics. For example, *communication skills* seemed to be a combination of two separate rubrics (oral communication and written communication), while another South learning outcome, *reading and writing proficiency*, spanned the two LEAP-defined VALUE rubrics of reading and written communication. The one learning outcome that South used that did not correlate with a specific VALUE rubric was *leadership skills*, which appeared to span multiple outcomes.

Despite the efforts to ground the learning outcomes available in the co-curricular transcript in the LEAP literature, it was not possible to apply the VALUE rubrics to any of the South University co-curricular transcripts. The transcript product was a listing of the skills or outcomes identified by the student and verified by the university, but there was not sufficient information available on the transcript to apply the VALUE rubric to

any of these outcomes. The transcript did not encompass the situation-specific, qualitative information needed to make an assessment of student behavior in achieving any of these outcomes. Qualitative data from South University students could be collected and assessed through using tools such as the VALUE rubrics, but the transcript is not designed to collect such data. Moreover, initiating student interviews or focus groups to assess the program would undoubtedly be highly labor-intensive and unlikely to be systematic or sustainable under the current model used at South.

The NACE competencies were highly consistent with the South University learning outcomes. The NACE goal of career readiness matched well with the promotional literature and the South University staff practices in supporting the co-curricular transcript. Seven out of the eight competencies defined by NACE matched with the South University learning outcomes for the CCT (see Table 3). These complementary competencies included critical thinking/problem solving, oral/written communication, digital technology, teamwork/collaboration, global/intercultural fluency, professionalism/work ethic, and leadership. Career management, which NACE (2017, p. 1) defined as being able to, "identify and articulate one's skills, strengths, knowledge, and experiences," was the only competency that did not have a corresponding South University learning outcome. However, the definition of the career management competency was ingrained in the fundamental purpose of the South University co-curricular transcript.

Summary

This chapter described the development and utilization of a co-curricular portfolio and transcript at the two higher education institutions participating in this study. It also

presented an analysis of the two co-curricular documents through the use of five assessment frameworks, relying on data available through the programs and written statements about them. The Barrett (2004) model captured the philosophical and functional differences between the co-curricular portfolio and transcript. The co-curricular portfolio was primarily situated on the assessment for learning side of the Barrett model, but the potential existed to use other frameworks, such as the VALUE rubrics to make assessments and aggregate summative data. Similarly, the co-curricular transcript was designed to be positioned on the assessment of learning side of Barrett's diagram, yet through the application of the implementation practices employed at South University, the transcript also offered potential benefits for formative assessment.

Regarding the other frameworks applied, the Blank-Godlove et al. (2008) typology illustrated differences between the two programs related to their evidence collection. The LEAP-related models and VALUE rubrics were applicable to the North University CCP and could be used to assess student learning and development. The North University Student Affairs Division has a well-defined framework of learning domains and outcomes but there are not yet specific outcomes linked to the co-curricular portfolio program in the same manner that South University has done. The South University transcript outcomes were conceptually aligned and integrated with LEAP-related outcomes and the VALUE rubrics, but due to the lack of reflective content captured in the CCT, student learning could not be assessed using these rubrics. The NACE competencies complemented both the North University learning domains and the South University learning outcomes. The consistent conceptual alignment between national outcome-based initiatives, such as the LEAP outcomes, VALUE rubrics, and NACE

competencies, and the co-curricular portfolio and transcript reflected how firmly

grounded both the CCP and CCT programs were in the higher education literature.

CHAPTER 5

FINDINGS FROM STUDENT, ADMINISTRATOR, AND FACULTY INTERVIEWS

The narratives of the North University and South University students, administrators, and faculty are reported and analyzed in this chapter. A total of seven themes emerged from the 29 student, administrator, and faculty interviews. These themes were organized into three broad categories: those with an intrinsic, extrinsic, and institutional focus.

The three intrinsic themes that emerged were self-awareness, pride and self-confidence, and transfer or learning. Two extrinsic themes described were remembering and marketability. The final two themes identified with an institutional emphasis were practicality and challenges and barriers.

The experiences of students from each institution are discussed thematically in relation to the primary research question: What do students learn from using co-curricular portfolios? In addition, the second research question will also be discussed: Does the process of creating co-curricular portfolios aid students in understanding and articulating the skills they may be gaining? The institutional themes are discussed related to the third research question: How do institutions of higher education develop and utilize co-curricular portfolios?

Narratives

This section focuses on the narratives of the 24 undergraduate students, the four administrative staff members and one faculty member interviewed about co-curricular portfolios or transcripts. Participants were asked interview questions about their background at the institution generally; their experiences related to co-curricular learning and involvement; experiences with the co-curricular portfolio or transcript used at their institution; and applications of the respective portfolio or transcript programs on their campus. The students interviewed were involved in a wide variety of activities. As students at each university described their use of the co-curricular portfolio (CCP) or co-curricular transcript (CCT) during interviews, they were asked to differentiate learning and development resulting from using the portfolio or transcript as opposed to their involvement experiences, a process that at times posed challenges to distinguish. For some students, their experiences were discreet, while for others, they were more intertwined.

These programs produce a tangible product, the portfolio or transcript, and the marketing literature for both programs focused heavily on developing and verifying learning outcomes or skills for co-curricular or career advancement. These programs have the potential for institutions to track learning outcomes and student development more broadly, but neither university has devoted resources to more systematically assess knowledge, competencies, and values. Their focus was primarily on promoting and sustaining the programs for those students who utilize them. Students described several intrinsic and extrinsic gains from using the co-curricular portfolio or transcript. Interview

comments were sorted into the broad categories of intrinsic gains and extrinsic observations.

North University

The ten students interviewed from North University included seven sophomores and one from each of the other class years (freshman, junior, and senior). The organizations they belonged to were related to such divergent interests as academic major, leadership roles, residence hall living, honors program, media, music, dance, theater, politics, fraternities, faith, and community service. All of the students started creating their co-curricular portfolio in their first year at the university. The student interviewees were honors program students who began their portfolios as a requirement for an honors class, taught by Dr. Howard.

Table 5

North University Students

Name	Year	Types of Activities	Self-Awareness	Pride/ Confidence	Learning Transfer	Remembering	Marketability
Karen	Sophomore	Service, Faith, Major, Tutor	X			X	X
Marcus	Sophomore	Major, Service, Leadership	X		X	X	X
Kalise	Sophomore	Honors, Faith, Service, Major	X	X	X	X	
Mason	Sophomore	Leadership, Major, Service, Radio, Clubs, Honors, Tutor	X				X
Dahlia	Freshman	Service, Res Hall, Theater	X	X	X	X	
Sam	Sophomore	Music, Major, Leadership, Tutor, Honors	X		X	X	X
Allen	Sophomore	Politics, Faith, Honors	X	X	X	X	X
Leslie	Sophomore	Honors, Radio, Performing Arts, Music	X				
Mitch	Senior	Band, Service, Leadership, Fraternity	X			X	
Rita	Junior	Dance, Honors, Service	X	X			

Note. This table overviews the students interviewed, the types of activities they participated in, and the themes they expressed related to their Co-Curricular Portfolio in their interview comments.

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South University

Fourteen students were interviewed from South University: four seniors; five juniors; four sophomores, and one first-year student. Like the students at North University, these students were also involved in organizations related to their academic major, leadership roles, residence hall living, honors program, and community service. South students who were interviewed were also involved in activities such as academic research, athletics, tutoring, study abroad, internships, sororities, and jobs on campus. All of the students started creating their co-curricular transcripts in their first or second year at the institution.

Table 6

South University Students

Name	Year	Types of Activities	Self-Awareness	Pride/Confidence	Learning Transfer	Remembering	Marketability
Anika	Senior	Leadership, Hall gov't, Tour guide, Service, Research	X		X		X
Jannell	Junior	Tutor, Cultural leadership, Front desk staff, Hall gov't., Stu. Activities Mgr.		X	X	X	
Ibrahim	Sophomore	Hall gov't., international medical service	X	X	X		X
Heather	Freshman	Service, Leadership, Alternative Spring Break	X		X	X	X
Asia	Junior	Major, Clubs, Research	X	X			X
Jordyn	Sophomore	Tour guide, intern, learning community, Major Club, emerging leader	X		X	X	X
Gillian	Sophomore	Hall gov't. Sorority, Club	X			X	X
Jamal	Junior	RA, study abroad, intern, hall gov't, security, study abroad, peer counselor, Admissions ambassador	X	X	X	X	X
Skyler	Junior	Service, Hall gov't., Student Activities Mgr.	X			X	X
Jennifer	Junior	Honors, tutor, program board, Club, Alt. Spring Break	X		X	X	X

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Name	Year	Types of Activities	Self-Awareness	Pride/Confidence	Learning Transfer	Remembering	Marketability
Flynn	Senior	Tutor, study abroad	X	X		X	X
Kadeesha	Sophomore	Tour guide, Leadership, Admissions ambassador, Club	X	X		X	X
Josie	Senior	Service, Com-muter Assistant, Major club	X	X		X	X
Pia	Senior	Alternative Spring Break, Honor societies, Tutor athlete, Study Abroad	X	X	X	X	X

Note. This table overviews the students interviewed, the types of activities they participated in, and which themes they expressed related to their Co-Curricular Transcript in their interview comments.

Intrinsic Gains

Some findings reflected more internal, self-focused gains that students described as authentically their own. These comments were grouped into three intrinsic themes, including gaining self-awareness, feeling pride and self-confidence, and transfer of learning. Other comments appeared to be more external observations, including remembering and marketability, that students could apply or derive benefits from, after producing their co-curricular document. Since fewer students participated at North University, their observations are discussed first, while South University student experiences are discussed next within each theme category.

Gaining Self-Awareness

As they sought to improve themselves and maximize their future opportunities, each student gained insight about themselves and the challenges facing them as college students. Findings related to the theme of self-awareness were the most extensive of the five themes reported from these interviews. Some contextual information is provided about each interview subject, such as describing their involvement experiences; however, the central focus of these findings is specific to their use of a co-curricular portfolio or transcript.

North University narratives. In their self-discovery process, the co-curricular portfolio contributed to student learning in different ways for North students. Within the theme of self-awareness, these sub-themes of being intentional, becoming more well-rounded, developing character, and articulating gains from the CCP, also emerged and are described in this chapter. Several students explained how they applied what they learned from reflecting on their CCP with future intentions. Other students described

using the CCP to affirm their efforts to become more well-rounded in their experiences. Some students expressed how they learned more about their character from using the CCP, while other students described how the CCP helped them articulate and name their gains.

The co-curricular portfolio helped Karen learn more about herself as a person and as a leader. Karen tutored low-income students and volunteered at an assisted living center. She was also active in an organization related to her major, a women's leadership honor society, and a religious student group. Explaining how she came to be involved, Karen said, "you kind of dip your toe in a lot of different involvements," as she sought to find opportunities that might be a "good fit" for her. "They feed me in different ways," she said, describing how her varied activities nurtured her identity as a woman, as well as her faith, passion to serve others, and academic interests. Through her involvement, she described learning about herself, and her character. In addition, creating her portfolio helped Karen "reflect on what I've learned" and "how I function as a leader." She credits the reflection process through the CCP with helping her gain a deeper sense of "self-awareness," which she said she would use in her career as an educator.

Marcus learned a more concrete lesson from using the CCP; not to spread himself too thin, participating in too many co-curricular activities. As a freshman, Marcus attended the university's involvement fair, where student leaders recruit new members. He signed up for twelve student organizations. When he thought back on this time, Marcus said he wanted to "tell my first year self to focus on four or five activities rather than try to do twelve." He described reaching "a physical moment when looking at [his] long list of clubs [he decided that] was enough." Since then, Marcus started putting most

of his time and energy into groups related to his major, networking with those who can help him advance his future career in Communications.

Marcus decided that, "instead of having one foot in every single door; have both feet in a few doors." Seeing his list of clubs through the portfolio enabled him to become more selective, more intentional, and more practical about where to focus his time and energies. Marcus realized, "I should slim down a bit…Looking back helps you look forward." Marcus added, "I think [the CCP was] a good way to be able to analyze what I've already done and realize what I should do for the future, or what I can do for the future."

Mason was another very involved student who also used the CCP to re-focus his efforts. Mason was involved in many different activities, including judo club, university conduct board, computer science club, and exercise science club at the time of his interview. He was also a DJ for the campus radio station, and tutored fellow students in a peer mentoring program. In addition, as the international outreach chair for the honors association, he was working with the Nobel Prize Institute in Norway to develop a program to host one of the Nobel Laureates at the university annually.

Mason explained, "My mom has always said this about me. I'm just a very ambitious kid, and I always just want to go out and just conquer the world. But you can't do it all in a day." After describing his initial impatience with how long it was taking to achieve some of his initiatives, Mason said he adopted the motto, "Start small and dream big." He explained that, "I don't think I would have realized it if I never was able to put anything down in writing. Sometimes we get all caught up in our heads, and if we just let everything go, and just write down everything and plan everything out, then you finally

just see where the pieces of the puzzle fit together. I think that's what the CCP helped me realize." Mason explained, "I was aware of my potential, but I had no idea how to get there…because of the people and everything I'm involved in here, it just kind of made me expand on it." Using the personal statement on the CCP "really helped me write down what I thought, to make connections between what I was doing and learning." Reflecting on his experiences through the CCP helped Mason visualize more clearly what he hoped to accomplish, adjust his expectations, and take the small steps needed to work toward his big dreams.

Another North student, Leslie, also used the CCP to gain greater self-awareness and apply learning to inform future actions. Plural pronouns (i.e., they, them, their) are used to describe Leslie's interview comments as this student preferred not to identify a gender. They said their co-curricular portfolio "helped me visualize all the stuff that I've done, where I found my strengths and where I found my weaknesses." The co-curricular portfolio groups student activities into broad categories (i.e., community service, professional development, leadership, etc.), which students use to help them organize and plan out their campus involvement. Leslie chaired a music and performing arts committee and was involved in the campus radio station. Leslie said that the portfolio "helps with being intentional. It helps [me expand] the diversity of what I've done. If I know I've done several of one volunteer opportunity…I would rather find something different." Thus, Leslie saw other opportunities that were available through the CCP, which helped them diversify their involvement experiences.

Being more intentional in her future choices and developing a well-rounded portfolio were among the self-awareness goals that Rita pursued in using her CCP. The

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lone junior among the North University study participants, Rita served as the community service director for the honors program and was the director of a dance group for people with Down syndrome. "CCP is just so extensive and it just covers so many different areas that looking at it really helps me to reflect on my skills and see what I do have and what I might need to hone in the future…just doing it makes me reflect on what I've done and just makes me relive the whole experience and it takes me back to what I did." Rita used the CCP to reflect on what she's learned as well as to identify where she might focus her energies in the future, similar to the self-awareness gains described by Marcus, Mason, and Leslie. Seeing the different categories in the CCP also helped Rita adopt the goal of broadening and diversifying her experience. Rita described the activities included in her CCP, "mine is mostly under volunteerism. So, I think, 'Oh, I need a little bit more in like the professional development area or the leadership area'…because you want to be a well-rounded person."

Developing greater self-awareness is also a theme that emerged from Allen's interview. Allen served as an officer in two political organizations, and he belonged to a religious student group and the honors student association. When describing his motivation for being involved, Allen shared that, "I've always wanted to be involved in a lot of different communities…having all these different groups with different interests and activities was something I was interested in from the get go, and still am." Although the CCP began as a course requirement, he developed a plan for how to use it most effectively, illustrating how this tool helped Allen apply his self-awareness to capitalize on the potential benefits of the CCP:

Rather than just listing skills, like giving a narrative of a deeper look into who I am as a person and the things that drive me…it probably speaks better to me as a person to prepare something like this than to say, "I did this, that, and the other thing in college." It will be something better to show employers or organizations I want to be a part of, more of what my ideas are, what my character is, than a resume. I think that's probably its biggest strength.

As Karen described in her interview, Allen also viewed the CCP as a way to deepen his self-awareness and better promote himself in the future by highlighting his character.

The utility of the CCP is a quality of the program that Mitch realized when discussing his awareness of his leadership abilities during his interview. Mitch is the only senior from North University who participated in the study. He began his co-curricular portfolio as a freshman and used the CCP during each of the four years of his college career. The program was formally re-launched using an online format at the start of his junior year with first-year students. He was one of the few students to provide feedback on the new incarnation of the co-curricular portfolio while it was being re-developed. Mitch described being able to adapt his leadership style to different situations, which the broad categories of the co-curricular portfolio seemed to help him identify: "Holistically, within any of my involvement, I've been able to tap into a number of different facets in order to become a more well-rounded leader [which is] an element of CCP I had not thought about until right now." Through his leadership experiences, Mitch learned to adapt his leadership skills situationally. During his interview, Mitch's self-awareness deepened, as he articulated how the various involvement categories (i.e., community

service, professional development, leadership, etc.) in the CCP also reinforced his efforts to be more well-rounded.

In her interview, Dahlia described using the CCP to concretely support her own development. Dahlia is the only first-year student interviewed from North University. She participated in leadership workshops for residential students and was involved in theater and community service. She hoped to become a Resident Assistant, a paraprofessional living and working in the residence halls in the future. Dahlia said, "I've always been raised that school comes first, that grades come first but then people do want to see that you're well-rounded." Regarding her involvement in campus activities, Dahlia said, "Extra-curriculars, it's really like I'm the leader of my own personal growth and emotional growth, which also helps my academics a lot." Dahlia used the co-curricular portfolio to pursue her goal to become more well-rounded, too. "I especially think in our society there's this paralyzing pressure to be perfect, like to get sleep, to be fit, and be healthy mentally and physically, but also be involved, but also get good grades…It can feel like 'Oh, I don't apply myself—I'm not doing the most; the CCP is nice because it's your own unique summary of your experience, makes you feel less stretched." Dahlia explained how she gained perspective on her experiences by reviewing her CCP. She used this enhanced self-awareness to buoy her sense of accomplishment, to consider future goals, and to help her resist the societal pressure to be perfect.

In furthering his development as a student leader, Sam described being more intentional with great excitement. Another student with broad interests and leadership experiences, Sam was involved in acapella singing groups, student government, theater, the education student association, and he tutored calculus. He described working on being

fully present and engaged as a student leader and using the co-curricular portfolio to help him in that process. "I feel like I've developed a much stronger set of tools [as a student leader]. I've been able to really develop that skill I guess you could call it 'mindfulness'…I have been really able to take in and really appreciate what's going on, and really be able to reflect on how it's developing me as a person." Sam explained that using the co-curricular portfolio "has done a really strong job…allowing me to recognize what important takeaways I have from everything [I've been involved in]…It keeps me honest; it doesn't let me forget things, like you're shooting a basketball, it's a little bit of a backboard." Rather than imagining reflection as a mirror, Sam envisioned it as a sounding board for what he learned about himself as a leader.

Community service activities helped Kalise learned more about herself. Kalise described a service activity she participated in that was particularly impactful for her. "I did a family night at the YMCA…There was a birthday party. This kid, this was his birthday party, with strangers. I felt bad" because there weren't family or friends there to celebrate. Kalise remembered that during the activity, she thought, "I am grateful...I'm glad for what I have, but it was for a split second." Later, when she completed the reflection in her CCP, she realized, "When I was reading my reflection [while completing the CCP and describing how I felt], it was like, gratitude. I stopped and thought a bit more. Yeah, I am blessed for what I have." Kalise also said that the portfolio "helps [her] reflect better, helps [her] articulate, and helps [her] with learning lessons." The act of documenting her service and articulating her thoughts and feelings in the CCP helped Kalise deepen her self-awareness from this particular event, comparing her experience with the child from the YMCA.

Each of these North University students was involved in various campus opportunities and described how their use of the co-curricular portfolio helped them gain greater self-awareness, which they were able to apply in their lives. Within the broader theme of self-awareness, therefore, four overlapping sub-themes emerged from these interviews. These sub-themes included: 1) being intentional; 2) becoming more well-rounded; 3) developing character; and 4) articulating gains. These sub-themes described, more specifically, ways in which students gained self-awareness through using their co-curricular portfolios. Several students explained how their reflections informed future actions. Among the students who used the CCP with intention were Marcus (who reduced how many activities to participate in); Mason (who planned out future initiatives); Leslie (who assessed her strengths and weaknesses); Rita (who looked for ways to diversify her involvement); and Allen (who considered how best to promote himself). Students who focused on being more well-rounded in their involvement pursuits included Mitch, Rita, and Dahlia. Another sub-theme emerged from Karen, Allen, and Sam, who highlighted character development in different ways through their use of the CCP. Finally, students who focused on articulating or naming benefits from the CCP included Allen, Mitch, Sam, and Kalise. These sub-themes emerged in explaining how students gained self-awareness through using their co-curricular portfolio, providing greater depth in understanding this theme.

South University narratives. While self-awareness was an over-arching theme that emerged from the interviews at South University, students there focused more narrowly on naming the skills they developed through participating in activities. The process that South students engaged in when completing their co-curricular transcript was

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more structured, more specific, and less open-ended than at North University. A reflection statement was not a component of the CCT.

South students described engaging in reflection when adding to their CCT; however, student interview comments tended to hone in on discussing the skills they gained from the set of outcomes related to each experience. While students were not able to document their reflections, those interviewed were able to share extensive comments about their experience and perceived gains in using the transcript. The CCT appeared to be more central to South students' experiences than the CCP was for North students, largely because it was broadly available, promoted across student-centered departments, and it was a required credential when students sought most additional employment and/or leadership positions. Related sub-themes were also manifest from the South student interviews. Within the broader theme of self-awareness, sub-themes expressed included South students who identified and named skills they gained, while some were motivated to achieve more and others focused on being intentional to guide their future involvement.

Among South students, Pia's extensive involvement across her college career exemplified how students used the co-curricular transcript to document and articulate their gains. Alternative spring breaks, athletic leadership academy, tutoring at a juvenile detention center, studying abroad, three honor societies, and the varsity volleyball team were among the activities that Pia participated in during her four years at South University. As she described her path through different involvement opportunities, Pia explained, "I grew, and I evolved, and I kind of like shed that skin, like in a snake. I think any experience, if you really reflect and look at it, you can make it into something

bigger." Connecting her experiences specifically to the co-curricular transcript, Pia noted: "That's something that I think people would maybe get from looking at the drop-down menu [from the transcript] of where the check marks of different skills that they've learned in different settings, because you don't always think about everything like that. So, it's nice to have it all laid out like that."

Her co-curricular experiences were transformative for Pia, and the transcript helped her process and describe her development. She shared, "When I went to study abroad I had to be super independent, and a really good problem solver because you are alone. At volunteer sites you have to advocate for people…problem solving is a big thing that I've learned…I don't think I would ever think problem solving with study abroad…when you put study abroad on your resume, 'oh, this is what I've done.' But then if you actually sit back and you reflect on that, you do think about independence, you think about problem solving, money management…it's nice to have those check marks [on the CCT]."

Pia went on to explain the process further: "The transcript, when you do it, they give you options and they [say], 'you could have learned all these skills in this' [activity]. And then you start to think 'Oh, I've learned this. Oh, maybe I did do that. [One of the skills listed] was like ethical reasoning or something. And you're like, 'That one time that the ref asked me if the ball was called in or out, what did I say?' It just makes you think of things differently, as opposed to you just putting it on the resume, never thinking about it again…But with [the] co-curricular [transcript], you check them off and you have to think about it…because you can't check all of them. You pick five. So, you really have to kind of think about it. What did I learn? What…sounds better in a job interview? Can I

talk about ethical reasoning? Or…working with a team, solving problems. I think it's really good, it breaks it down for you."

Like Pia, Heather also used the transcript to help her identify the skills she gained, but Heather also saw the transcript as a potential road map for her future. As a freshman, Heather was involved in community service activities as well as participating in a year-long leadership development program. Her first-year involvement activities led her to apply and be selected for a Community Mentor position for next year, supporting the RA staff in developing community in the residence halls. When she talked about creating her co-curricular transcript, she said she learned, "more about myself...stepping out of my own comfort zone because I was shy. But when you push yourself out of your comfort zone, and you say, 'I'm going to do this because I want to do it.' And even though you feel you're not going to get it, you might as well try because you're not going to lose anything from it. And the more skills you learn can benefit other things in the future."

Creating her transcript helped Heather articulate her growing self-awareness about pushing herself, but it also helped her explain the significance of using the transcript to pursue future opportunities. When asked if the transcript impacted her self-confidence, Heather responded, "Definitely, because I feel like - I can do more because the more you put on your transcript, the more advanced [opportunities you're able to work up to]…Each level is different so it shows that you're improving every year and you're doing more." The institutional requirement that students create a CCT to apply for many leadership positions has spurred participation but also shown students pathways toward advancement on campus, which students like Heather are following.

Another student who was able to describe how the transcript helped them become more self-aware of their gains was Flynn. Based on this student's self-identification during the interview, plural pronouns (i.e., they, their, them) are used to describe Flynn's comments. When asked what role the co-curricular transcript may have played in their development, Flynn said, "it definitely made me aware of the fact that I'm doing these things and they are helping me…in my professional, academic, and personal life, so it was something that I hadn't really put a name to…something I hadn't really identified until I had to do the co-curricular transcript, and then it made me think more consciously about it."

A senior, Flynn tutored students in Sociology, English, and Spanish. Flynn explained that tutoring peers in multiple subjects was an important role in their development toward becoming a teacher. They described their experiences and approach as a tutor, "I've always kind of leaned towards mentoring other people…refining those skills and developing my practice as a future educator…One of the things I've learned…is to take a strengths-based approach…a push and pull approach in which I acknowledge their strengths, recognize those strengths, and I'll be like, 'Hey, you're doing this thing really good but, you know you could also do this thing a little bit better'." Flynn's supervisor at the Center for Student Success encouraged them to start a co-curricular transcript.

The CCT helped Flynn apply the type of strengths-based approach used in tutoring to their own experiences. Flynn explained, "I had to go through a conscious process of what did I gain from these experiences, right? There was a list, so that helped, but like okay what did I gain, then thinking…being able to go through that process and

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think about what I've been doing every day with this organization, then identifying how that transfers into labels and skills." Assessing their learning through the CCT, Flynn was able to name the gains they achieved through their co-curricular experiences.

Although she initially did not intend to get involved, Gillian also used the CCT to name and articulate a greater self-awareness of her gains. When she went to college, Gillian said, "I was heck-bent on not joining anything. I just wanted to make my own friends, not really be involved...but friends didn't come easy. So I decided to join hall government." As a sophomore, she joined a sorority and discovered that the co-curricular transcript is "helpful in identifying skills. The [transcript] list really helped because I never would have thought of financial management and ethical reasoning...but a really big part of what we do is budgeting and making decisions for the good of the organization [sorority]." Gillian learned to value of joining the sorority, and she was able to identify new skills that she was not aware she was using through her participation.

Kadeesha also explained how she used the CCT to advance herself and to look inward to assess her own learning through her co-curricular involvement. Participating in the year-long emerging leaders program, leading admissions tours, and serving as the president of a club for vegans and vegetarians, were among the activities Kadeesha had taken advantage of as a sophomore. She appreciated the practicality of the co-curricular transcript. She used it "applying for [campus] jobs, it helped a lot because I was able to write down what I had done in the programs at school…Especially this part [she indicates pointing to the skill listing] where it says [what] you learned in those. For me, it was cognitive skills and social responsibility was a big one. Being able to sit there and go through and identify what skills it helped foster. For me, that was really eye-opening."

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Kadeesha also described how the CCT helped her become more self-aware, "You can critically look at what you did…it helps…because you...start looking at yourself...and seeing how you can improve upon that and change what you did for the better for the next coming years." Looking forward, Kadeesha saw how she could use the CCT intentionally to advance her interests, "I only have two things [on my transcript], but...[the transcript] helps you plan what you want to do, if you want to hold E-board [officer] positions and things like that." Kadeesha added, "I definitely think [the things I learn will] translate into my professional life beyond college, but also…while I'm in college or working outside [the university]."

Josie focused on realizing the skills she developed when describing her co-curricular transcript experience, too. When she began her co-curricular transcript, Josie said, "it just seemed like it would only benefit me. I started doing it and it seemed like a good thing to keep track of what I was doing and it kind of motivated me a little bit to be involved in more things kind of by seeing what I was doing." Josie was a senior who had been involved as a commuter assistant and president of the psychology association. She also participated in community service. Using the co-curricular transcript, Josie says, "It helped me reflect and also realize the skills that I did use in these positions. When you are involved in the activity, you don't really get to have an outside perspective and see the different skills that you used…The transcript helped me see that ok, yes, this did help me with diversity awareness and leadership skills. It was a big component of me self-reflecting on the work that I did."

Jennifer's introduction to the CCT was similar to Josie's experience. When first filling out the co-curricular transcript, Jennifer immediately saw learning and

development opportunities for herself, "There are some things on the list that you wouldn't necessarily think of off the top of your head. Ethical Reasoning is one, Social Responsibility is one…freshman year, the first time I saw this list of things, I was like, 'Oh yeah, these are areas that I should be looking in'." Honors program advisory board, alternative spring break, tutoring at a juvenile detention facility, programming board and president of the Quidditch club were among the many activities Jennifer participated in as a student leader. "I want to be a teacher in the future…an elementary school teacher, that's my career path…the idea of being in a leadership role, or talking to a room of people, those are big future applicable skills." Jennifer, too, became more self-aware of what she was learning, better able to identify her skills, after the initial exposure to the learning outcomes framework in the transcript.

Jamal, on the other hand, was more attuned to what he wanted to explore as a student leader, but he needed the CCT to help him further develop his self-awareness and abilities. The CCT program is searchable to allow students to investigate available opportunities and learn what they may gain from pursuing them. Jamal explained, "I would go through the website and [see] which ones of these [activities/positions] gives you ethical reasoning or whatever. It would be intentional to try to get those skills and try to get involved with the kind of things that mean a lot to me. Oftentimes I would click off diversity, read the kinds of positions they have, [then] go...to the website to see what it's all about."

A junior when he was interviewed, Jamal was involved across the campus based on his focused efforts to develop himself further. He was a Resident Assistant, studied abroad in South Korea, worked as a peer counselor in the study abroad office, served on

hall government, and he worked at the residence hall security desk and as an Admissions Ambassador. With all of the positions he's held, Jamal said his co-curricular transcript "is a very good way of helping identify those skills…putting them on my resume, articulating it in an interview." Jamal used the CCT to match his interests with the opportunities that could best advance his abilities and goals further. Consequently, Jamal also enhanced his own self-awareness, which he applied in subsequent interview settings.

Self-awareness from using the CCT came more generally to Asia. She said, the CCT "definitely helped me reflect on my ability to learn how to deal with people and how to represent the people, and give the groups what they want." Asia also said, "I've definitely learned that I am active on campus, and that it really is important to put down on paper what you do...It made me learn more about myself and how I like to be so involved and active, and try to be more helpful with students and my peers." She was one of the few South students not to specifically frame her learning as skills she gained. Based on the student comments, the focus on skills at South appeared to be so imbedded that almost all other students interviewed have adopted that emphasis in describing their experience.

A junior at the time of her interview, Asia was a leader in the biology club and has presented at research symposia. She also started 'beauty lab,' a student organization which began as a make-up club, but became a forum for individual expression. Students decided to spell the group's first name, Be-YOU-ty to "show more individualism and more self-love and self-care for people." She is the president of both organizations. When she thinks about the role she plays in each, she says, "I feel like I'm almost a totally different person in each situation. With bio[logy club], I wanted to get more creative;

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with BeYOUty I wanted to do more of the science behind make-up." Asia valued this contrast as an additional benefit of the CCT because it showcased her versatility and accomplishments. "The transcript really helps show I can do the creativity and the intelligence, and that there is no harsh divide between art and science."

Like Asia, Jordyn also described increased self-awareness related to the CCT, mostly beyond specific skills. A sophomore at the time of the interview, Jordyn lived in a learning community for students who identify as LGBTQ. Jordyn belonged to the Business Club, participated in the first-year internship program, was selected for a year-long leadership development program, and was an admissions tour guide. Plural pronouns (i.e., they, them, their) are used in relating interview comments from Jordyn, as they preferred not to identify a gender. They described themselves as quiet and shy in high school, but they were determined to meet other students, make friends, and find places to belong at college.

Jordyn explained that the "co-curricular transcript did help me see things that I love to do - like what things were similar, what things fall under what category [in the system] the most. They just helped me see what I usually gear towards more...[the CCT] helps me see my accomplishments so far...seeing those...pushes me to keep going for those leadership roles, so that I can add them and...the list gets longer." The co-curricular transcript helped Jordyn reflecting; "just going back to one of the very first things - it helped list the things that I've learned so I can always go back to this and refer. It helps me see which [experiences] I did learn from where I've made mistakes and learned from them." Jordyn expressed that the CCT affirmed their interests and values, in addition to serving as a future motivator. Looking ahead, Jordyn added, "When I go to a new

experience, seeing the skills…I can see very similar outcomes in a lot of them." This consistency that Jordyn observed was one of the ways that they gained greater self-awareness through using the CCT.

As the South students interviewed outlined, the structure of the CCT provides a framework for students to self-assess their experiences in relation to the university-defined outcomes, name the skills they gained, as well as motivate students to view these experiences along the arc of advancing their undergraduate and/or post-graduate careers. Students described reflecting on their experiences to realize the skills they developed through these experiences. Self-awareness was expressed, but the learning South students described was often within the confines of the skills and the university-defined learning outcomes.

Many of these students were able to discuss their learning experiences related to using the co-curricular transcript at length. In addition, students also described four sub-themes related to the self-awareness theme: 1) naming and prioritizing skills; 2) enhancing credentials; 3) becoming motivated to achieve more; and 4) becoming more intentional. South students, including Pia, Heather, Flynn, Gillian, Kadeesha, Josie, Asia, and Jennifer, used the CCT to name and prioritize the skills they have gained from their co-curricular experiences, selecting no more than five from a list of ten outcomes. Some students explained the need to develop their CCT to enhance their credentials, such as Pia, Kadeesha, Asia, and Jordyn, as they pursued opportunities at South or beyond. Other students were motivated to achieve more through creating the CCT, as Heather and Jordyn detailed. Several students, including Heather, Kadeesha, Jennifer, Jamal, Asia and Jordyn, described becoming more intentional, using the CCT to guide their involvement

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choices. Thus, self-awareness was a consistent theme among South University students interviewed.

Feeling Pride and Self-Confidence

Another theme evident in student comments about their co-curricular portfolio and transcript was pride in their achievements, coupled with a positive impact on their self-confidence. Seeing their involvement documented, reflecting on their experiences, often had an affirming effect on the student leaders interviewed. All of the students interviewed expressed a sense of accomplishment about their campus involvement. When they expressed self-satisfaction in their co-curricular participation, several students cited the portfolio or transcript as contributing to their sense of pride and self-confidence, and in some cases, spurring increased motivation to achieve more. A few students, however, took pride in their accomplishments as student leaders, apart from their experience using the co-curricular portfolio or transcript. These students thus provided a counter-narrative within the theme of pride and self-confidence, attributing their development to their involvement experiences, rather that the portfolio or transcript. Their comments are included at the end of the respective narrative sections for each institution.

North University narratives. Students articulated their pride related to some of the comments already shared, such as Kalise's gratitude, "[the CCP] helps my self-confidence to know that I'm actually making a difference. I can see that what I'm doing for the community, [it] raises my confidence because I know that I'm a valuable citizen." Rita expressed a feeling of pride when reviewing her CCP, too. She observed that "it was really nice to see a bunch of things in front of me of what I had done, what I'd accomplished. I'm a perfectionist, so I like to have a lot of accomplishments out in front

of me, so it definitely helped my self-confidence." Dahlia's pride emerged while discussing the pressures she felt, "sometimes I've felt like I'm not doing enough but when you look at your portfolio, it's like a little pat on the back. It gives you more of a reflection and a moment to be like, I have done quite a bit with my time here."

Allen's pride came through in how he created and used his co-curricular portfolio. "I wanted to use this document to show what my passions were and what I was converting my energy towards, and have that be a bit better view of who I am to people who are looking at me possibly for employment or other things, than what you'd get on your normal resume. Hopefully something better than a resume to send to people that are interested in me in some regard." Allen was one of the few North University students in this study who has shared his co-curricular portfolio as a credential, turning it in with an application for a summer job.

North University counter narrative. Mitch also shared tremendous pride in his leadership activities and accomplishments. As a senior, Mitch was a four-year member of the university marching band, becoming a section leader in his second year, and a drum major his last two years. In addition, he belonged to a national gender inclusive fraternity, the honors council, a student service organization, and played on a band supporting the basketball team at their games. However, Mitch was proud to credit the leadership experience for his gains and to note that the co-curricular portfolio did not impact his abilities as a leader. "Overall [the CCP] hasn't shifted my mindset at all. Adding in my leadership positions doesn't make me a better leader…I'd rather show them [my leadership abilities] in practice rather than on paper…being a student in a rather rigorous

program and rather rigorous organizations, you're kind of hard-wired into understanding how you've grown."

Mitch affirmed his feelings of pride and self-confidence, yet clearly differentiated them from his use of the co-curricular portfolio. Mitch attributed these feelings to his leadership experiences and achievements rather than any contributing role from the CCP. He separated his strong sense of pride and intrinsic gains as a student leader from what he perceived as the extrinsic experience of reflecting and documenting his accomplishments. Thus, Mitch's comments represented a counter-narrative within the pride and self-confidence theme.

South University narratives. Pride and self-confidence related to their co-curricular transcript was also expressed by several South University student leaders. As a transfer student, Jannell appreciated that the CCT documented her activities and accomplishments. She said that her co-curricular transcript showed that "I was involved from the moment I got to this campus." The CCT "shows me the importance…It emphasizes how necessary it is to be involved…contributing to your school, harvesting that environment where you're contributing something and people know your face and people are familiar with who you are because you make a difference and you have unique traits you're bringing to them."

Jannell was a writing tutor. She also served as the Public Liaison for Afro-Latino Leaders of the Future, had been involved in her residence hall government, and worked at the student union front desk and as a Student Activities Manager. Proud of what she has accomplished, Jannell said that the co-curricular transcript "shows me that even as a transfer student, I was able to dive in to the campus community and get myself involved."

Describing his co-curricular transcript, Ibrahim said, "The transcript shows other people what I've done. Every time I look at this transcript, I'm really happy that I was able to do all this." Ibrahim found the experience of creating his co-curricular transcript to be very affirming. "College is about finding yourself and after doing what I did last year throughout the whole year and after reading this, I felt like after I looked at it, I'm like wow, I'm a team player. I have good communication skills, cultural knowledge, wow! Even though I didn't notice I was doing it, now that I see it, I'm like, 'Wow, I'm good at this.' The co-curricular transcript is so nice. It doesn't only tell you what you've done, it tells you detailed where and what you're good at as a person and as an individual. The transcript brings out some characterizations in me that I didn't notice before. Cultural knowledge was definitely not on my mind. The more you see it, the more you remember it."

The strong sense of pride and accomplishment Ibrahim felt was evident throughout the conversation with him. "I'm looking back at [the co-curricular transcript] again and seeing like…I've done so much. Oh, this is what I'm good at. There's some things that I'm better at than others so I should definitely improve on some things. It's just good to look back to. I feel more confident every day knowing that I was able to do this much. [The co-curricular transcript] is not only a piece of paper, it's like, it's a little like a photo...it brings back memories." The process of creating the transcript seemed to validate his experiences, to give him a vocabulary to describe in greater detail what he's gained, while also motivating him to continue to be involved and to strive to improve himself more.

Asia also exhibited a great deal of pride in what she's achieved through her involvement and how the transcript has helped her reflect on and highlight her experiences. Through creating her co-curricular transcript, Asia says, "I hope to gain opportunity and show that I'm flexible and able to do what I want to do, and being a leader of so many clubs, while retaining a good transcript from school. It's more of a representation of who I am and how I am a natural leader, but I still like to be involved and work in a team with people." Asia also said that, "I feel like I want and need more on [her co-curricular transcript], and that makes me want to go out and do more and say that I was more active…I want to be more involved in doing what I do so that I can have a bigger co-curricular transcript…It's motivating…I felt bad, but it's making me want to make myself feel better and more proud about it."

The transcript was a source of pride and motivation for Jamal as well. "I would look back in notes and say oh wow, like...I've been involved in so many different things. If I can do this, I can do this other position, it might be a little more difficult, but I could apply different skills there in these positions." Jamal benefitted from the opportunities available to him. "When I first came from high school, I really had no public speaking skills, no interviewing skills, things like that." He explained that he "started off with kind of lower positions, like easier positions to get to…and just worked my way up." Building on these successes, helped Jamal continue to expand the breadth and depth of his co-curricular involvement.

When asked if the co-curricular transcript impacted their self-confidence, Flynn said, "before I did the co-curricular transcript, I was like ok, working at the Center for Student Success has made me work with people better and has made me better at

teaching. But then…as I was going through a list of skills I was like, 'oh, actually I got more than I thought I did out of this' and I've grown more than I thought than I did,' so yeah." The process of selecting skills for each activity not only helped Flynn identify the gains they were making from their co-curricular involvement, but also positively impacted their self-confidence.

Completing her co-curricular transcript for the first time was a very positive experience for Josie, it had "an immediate impact…I didn't realize all the skills that were used in the job. As soon as I was listing off things...'Oh my God, I didn't realize that I did this.' I think once you look back at it, it helps. Of course it wasn't like a life-changing self-esteem boost but there was little bit of that" feeling of pride.

Pia referenced the sample transcript that the university staff use to explain the CCT to new students, to encourage them to begin documenting their activities. She said, "to be able to look at mine now and to remember what the sample [transcript] looked like, mine is more, from what I remember, mine has more [activities and accomplishments] on it than the sample did. And that makes me feel good. Makes me feel like I did really well managing my time and balancing my life." Pride and self-confidence again exuded from students in their interviews. The CCT provided a means for students to articulate and visualize their learning and achievements, contributing to their feelings of pride and self-confidence.

South University counter narrative. Similar to Mitch's comments from North University, Skyler also provided a counter narrative to this theme. As a Junior, Skyler also proudly described how he worked his way up through different leadership positions during his time at South. He explained, "I started out as a floor rep...I built myself up to a

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public relations officer…a treasurer…a president. I like to see that progression...and how I'm not…spending too much time as one position…because then I'm not really improving on myself in terms of leadership skills." Skyler valued the co-curricular transcript for the extrinsic benefits it offers but did not use it to reflect on his experiences, or see it as a source of learning or introspection, "It's a tool I can use. It's a good one. It keeps everything organized, but it's after the fact. It doesn't really drive my actions." Skyler firmly dismissed any potential contributions of the CCT to inform his actions and his accomplishments. Instead he attributed his co-curricular advancement to his own abilities contributing to his feelings of pride and self-confidence rather than the co-curricular transcript.

Each of these North and South University students articulated the pride and self-confidence they felt as students and student leaders. Reflecting on their experiences through their co-curricular portfolios or transcripts helped most of them explore their feelings further and gain a deeper appreciation for their impact and accomplishments. In addition, seeing the results of their efforts through the transcript or portfolio also motivated some to express their desire to achieve more. Recognizing their pride and expressing those feelings also seemed to deepen their sense of self-confidence and self-esteem.

Transfer of Learning

The third intrinsic theme that arose from the student interviews related to the potential, or the experience of applying learning from one setting to another environment. Students reported expectations and gains in regard to the transfer of learning through using co-curricular portfolios or transcripts. This theme emerged as students talked about

what they have learned from using the CCP or CCT and how they may apply that learning in the future. The transfer of learning theme identified in this study was the last of the intrinsic themes that emerged from the interviews.

Focusing on the role of the portfolio or transcript in the transfer process was challenging for some students to determine in interviews. When asked about how the portfolio or transcript may have impacted their learning, students often cited specific instances of lessons learned or things they might do differently related to their co-curricular roles. Separating their involvement experiences from the impact of reflecting through their portfolio or transcript was more difficult to isolate for most interview participants.

North University narratives. When Marcus served as a teacher's assistant in a class where the CCP was assigned, he described seeing other students' portfolios. Making comparisons with other portfolios helped raise Marcus's awareness of other skills and abilities to develop. Marcus asked rhetorically, "you can flip through [a peer's portfolio] and be like, what did you, and could I do that too? Could I take a path that you're taking right now and learn what you did?" Marcus further explained, "There's a certain intersectionality with almost every club; …I think there's definitely skills to learn in anything that can be applied to any other program." Extolling the value of the CCP in contributing to the transfer of learning, Marcus added, "If you actually, diligently put that stuff down [on your CCP], a few years from now, your future self will thank you and [you'll] be like, thank God I have this!"

Dahlia also valued the portfolio's role in helping her identify and apply learning to other situations. [The portfolio] "helps with organization. It gives you an ability to sit

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down and look at what you've done. [It] helps more with critical thinking and engagement, not just 'oh, I went to this from 2:00 to 6:00.' but, I went to it and now I'm thinking about it, like this is how I was especially helpful, for whatever it was." She used the reflection component of her co-curricular portfolio to "describe my personal skills I contributed to each community service event, not just what I did, but how my major related to it, and how I foresee it helping me in the future."

Kalise talked about the role the CCP played in helping her understand the skills she developed through her involvement experiences and how they may be applied in her post-graduate career. She agreed that the CCP raises [your] awareness of skills and abilities. When asked whether she would be able to transfer that learning in the future, Kalise said, "With working, getting out of college, and working, I think so…one thing about [my] involvement, working as a team, [is] really important; and I'm going to be a nurse. You really have to work as a team there...hear what other people are saying so that you are doing the right thing."

The open-ended nature of the portfolio, Allen explained, "asks you to provide a bit more of a narrative than a list of what you're doing. I think it encourages you to put in a little bit more detail and show people...that every activity you do is not just another item on a list that you use to build up this resume, but rather it showcases a particular skill or quality." When asked about what he's learning and whether it may transfer to other situations in the future, Allen said, "Absolutely. I've learned a ton about managing finances... helping me manage money that's not my own...I have to keep track of receipts, fill out forms in order to get reimbursed, and make sure I'm delivering it to those people, so it helps with record keeping and keeping track of how much money you

have...managing meetings and discussions...could be useful in any kind of situation with cooperative work." Allen appreciated the potential to use the CCP to demonstrate his new knowledge and the transferability of his learning.

Sam, too, felt strongly that the CCP would help him transfer the skills he was gaining in the future. He said, "Without a doubt. Absolutely." Specifically, concerning the role of the CCP, Sam explained that, "I've definitely done it all in college…[the CCP]…opened my eyes…it kept me open, rather than allowing me to forget something, like personal development…[The CCP] gives you a list of things you've done, and it allows you not to forget them…it's just invaluable in that sense. There's so many things that can just slip through the cracks in your mind…Yeah, I did it, so what? [The CCP] keeps you honest…So, I think it's really, really cool in that sense." Thus, when relating their perceptions of the CCP's role in the transfer of learning, North students generalized from what they had already learned and/or focused on applying their gains in the future.

South University narratives. The transfer of learning theme also emerged among interview comments from students at South University, although some students from this institution provided a counter narrative, too. Among those who expressed support for the transfer of learning using the CCT, Anika said she felt that "the skills" she was learning "will transfer" because they already have transferred for her at South University. She asserted that choosing her top five skills when adding to her co-curricular transcript "gives [her the] self-confidence" to use them in other settings. Anika explained, "I've been thrown into multiple times of being told, 'you have to do it.' I'm able to be comfortable and take the lead in a work setting, to say, 'I can do that,' rather than being afraid to do something."

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"As a transfer student," Jannell said, "I had more of a sense of the skills I had, [or] am developing. The co-curricular transcript allows you to pinpoint the skills that would be transferrable." For example, communication skills was something she's identified in different positions. "Strong communication skills carries over to a lot of positions I hold."

Since he has only been involved in two different organizations, Ibrahim described how he uses his transcript to see possibilities, to help guide his future involvement, and to affirm what he's learned. "Looking at my co-curricular transcript, I could tell I know where I belong and this helped me understand what I should take on, where I should go, what clubs I should join next and who I am and what I can do. The transcript really helps me get the edge, to another position somewhere else. I hope to gain more positions [from continuing the co-curricular transcript]. This will definitely help me in real-life situations…After doing this I'll know how to speak to people and what to do." Ibrahim's enthusiasm and optimism in the CCT belied his faith that the abilities and experiences he gains will transfer to future settings.

The co-curricular transcript helped Jordyn in identifying what they were learning from different involvement opportunities. Jordyn explained, "When you add something to your co-curricular [transcript], there's these seven options you can click, and they're things that you've learned or gained from that experience." Seeing that list helped Jordyn figure out what they learned and how to include it. "The leadership involvement I have, the skills I've learned, I always learn something new in each one, so those things that I learn, I apply to the future leadership roles that I'm going to apply for." Thus, Jordyn described how they used the CCT to advance their co-curricular experiences and facilitate the transfer of learning.

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On the other hand, Pia did not realize ways that she transferred her learning until she participated in the interview for this study. When asked about the prospect of learning transferring to different settings, she described how the co-curricular transcript made that evident, "I have never really thought about it in that way but it's true. Now I think about study abroad and the problem solving that I learned there and how I've applied it to different volunteer opportunities...having [my experiences] laid out like this [in the transcript] definitely paints a clearer picture for me. But I've never really thought about it exactly like this." Pia added, "Yeah, [the transcript] helps me connect…the check marks on what potential skills that you could have learned from each experience. It makes you think...like ethical reasoning. I remember that was on one of [the learning outcome options], and I was like 'What?' and then I was like, 'oh, wait, I did do that.' It really makes you reflect on your experience and you kind of grasp it for everything it was." Pia described skills she gained from her co-curricular experiences, which she applied in different settings, and she also explained how reviewing her transcript in the interview helped her make those connections.

Half of the North students and almost one-third of the South students interviewed articulated a specific, contributing role for the co-curricular portfolio or transcript, respectively, in supporting the transfer of learning from their co-curricular experiences. Comments from most of these students focused on the future application of their learning. Those who had not yet experienced transfer of learning benefits expressed their faith that they will do so either in subsequent leadership roles or in their future careers. However, students, such as Mitch, clearly felt that the CCP did not contribute to their learning and development. In addition, a few South students also voiced counter narratives related to

this theme. Some of these students also offered critiques of the co-curricular transcript, suggesting ways they sought to improve the program and to further enhance the transfer of learning.

South University counter narratives. Among those South students who provided counter narratives to the transfer of learning theme, Jamal described his experiences from a variety of leadership situations. "As an RA, I've had to deal with a lot of difficult situations, a lot of ambiguity," Jamal explained. "Making judgement calls, make quick decisions. Overall adaptability and being able to…balance everything." Jamal used those skills and abilities he learned as an RA during his study abroad experience in South Korea. "I was able to interact with people of different cultures and bring to the other communities…work as a team; you have got to work together, so that was really important when I began studying abroad…we need to navigate…work as a team; listening to other people, having their input, kind of putting it all together. That was very useful and just general problem solving skills because when you're in South Korea and you don't know a single word of the language...it's a big challenge."

Yet Jamal also offered a critique of the CCT related to the transfer of learning. "I can see the potential of [the CCT] really playing a role in transferring skills if it was a bit more specific…If you were to say, this kind of written communication...like something more specific set of guidelines, then I'll be able to see more overlap…I kind of think that this is so broad I don't know exactly how they overlap, [despite many different activities, the skill recorded] is the same thing." Consequently, absent a greater level of specificity in identifying involvement gains, Jamal felt that using the CCT did not contribute to the transfer of learning in his experience.

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Kadeesha, too, saw unrealized potential for the transcript to contribute to the transfer of learning, through more consistently using "the listing of what you learned. I think that's probably the most influential part." Kadeesha was a counter narrative voice based on her self-described use of the CCT. Since she does not keep her transcript updated Kadeesha felt she was, in part, limiting her learning. Kadeesha explained, "if I were to look at the transcript more and see, 'oh, in [giving admissions tours] I learned this and this…I could translate that more into what I'm doing. I don't think I do it now, but I think that if it was something that I added into my routine that it could definitely help me with that."

Jennifer provided a different counter narrative related to this theme because she viewed the CCT as unnecessary for her own development. The ability to apply lessons learned in other settings, to challenge and develop oneself, was something Jennifer realized and sought out early on, "Even in high school, I have a very future-minded brain, so I was always involved, trying to seek out things that I thought would be helpful in giving me skills, or would look really nice for future endeavors. So, [the co-curricular transcript] didn't hurt that process." Yet, the structure or the extrinsic rewards of the co-curricular transcript was not something she felt she needed.

Jennifer described her motivation to seek out learning and development opportunities to apply toward her career goal. She explained, "I don't think I needed the transcript, or really anyone to be like, 'You should intentionally seek things out'." She saw the types of skills listed in the CCT as important outcomes that she could seek out, develop, and apply in other settings to further her goal to become an elementary school teacher.

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These three counter narratives regarding the transfer of learning provided different student perspectives on the contributions the co-curricular transcript made to this theme. Jennifer critiqued the usefulness and widespread use of the CCT, and argued that some students do not need tools like the CCT. The other viewpoints described two potential ways to enhance the transfer of learning from the co-curricular transcript. Jamal offered a structural critique that called for more flexibility to personalize CCT content, while Kadeesha recommended more engaged and timely practices by students in using the transcript. Additional findings presented later in this chapter will highlight more comments from students interviewed on the challenges, barriers, and opportunities for both the co-curricular transcript and portfolio programs.

<center>**Extrinsic Gains**</center>

In addition to the intrinsic themes discussed, including greater self-awareness, feeling pride and self-confidence, and transfer of learning, students interviewed were also motivated by significant extrinsic gains in creating their co-curricular portfolios and transcripts. While the intrinsic themes were inherent in the student experience of using one of these co-curricular programs, the extrinsic themes manifest as external motivators students sought, gained, or applied after using the co-curricular portfolio or transcript. Two broad, extrinsic themes emerged from the interview comments: 1) remembering and 2) marketability. The first extrinsic benefit, remembering, was expressed in multiple ways by different students, such as remembering as a record, as a competitive advantage, and/or as a measuring stick. Marketability, the second extrinsic benefit described ways in which the portfolio or transcript may make students more in demand or sought-after by employers.

Remembering

At a fundamental level, the portfolio and transcript are lists of students'
involvement activities, including some level of reflection about their experiences.
Students appreciated the benefit of using the portfolio or transcript to remember what
they did. Capturing what students participated in and the gains they articulate through
these opportunities is a primary focus of both programs. The theme of remembering
manifested in three distinct ways that students used the portfolio or transcript to refer
back to: 1) portfolio/transcript as record; 2) portfolio/transcript as a competitive
advantage; and 3) portfolio/transcript as measuring stick.

North University narratives. Several students from North University articulated
the value in building a record of their involvement experiences, as well as the relief that,
if not for the portfolio, they would have to remember all that they did when they made a
resume or went into an interview. First, some students valued the fact that the portfolio
gave them a document they could reference. Karen explained that, "Recording them [her
involvement experiences], helps me remember, recall things, process, reflect." She
described the experience of reviewing her CCP and realizing, "Oh yeah, I forgot that I
did that," when she saw some listings. "When I'm a senior," Karen added, "I'm going to
be very grateful that I had to create a CCP."

Marcus also characterized the portfolio as a record to remember, "I think it's a
catalog…It's a good log. It's a good way to keep track of everything you've done,
because there is so much one does without even realizing… You don't realize how much
service you get engaged with on campus until you have a log of it." Dahlia, too,
described the utility of creating the CCP because it is "useful to have all this [information

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about your involvement] in one spot." She described going back to her portfolio to copy sections for scholarship applications or other purposes. Thus, each of these students cited ways that they valued the portfolio as a record of their involvement, a reference tool to help them remember what they accomplished.

Second, other students valued the portfolio for the comparative advantage it could provide them by documenting what they achieved. The verification process at both institutions was valued by students and administrators as a way to authenticate the student experience, highlighting this type of credential compared to other documents, like a resume, that would lack such proof or depth of context. Students who possessed such a university-validated record would be better able to remember all that they had done, giving them a competitive advantage over others who may not recall and/or could not validate what they had accomplished.

For example, Leslie said, "It's definitely good to have a record of stuff that you know happened, so that proves that you actually did it and you're not just trying to fill lines on a resume." Rita, too, appreciated the portfolio as a record but also valued the competitive edge it may offer. "It'll help me remember things that I had done, whereas other people may not have that tool, so they don't really have all the things they've done listed, and they might not remember it, and then their resume or portfolio is not as extensive as mine."

In addition, Allen noted, "I think the part that asks you to provide a bit more of a narrative than a list of what you're doing. I think it encourages you to put in a little bit more detail and show people that every activity you do is not just another item on a list that you use to build up this resume, but rather it showcases a particular skill or quality

that you have that would look better than just saying, 'I did this.' It's more like, here's why I did this." Furthermore, Dahlia observed, "It's not always what you know, it's who you know and I think making connections is important no matter what you do. [The portfolio] does ready you, if you want to update your resume or go for an interview you have something you can look over and it can be a refresher, then you can go in more prepared." These students valued the documenting aspect of the CCP because of ways that the portfolio can be an advantage over others in competitive situations, such as for an interview or in seeking a job. The portfolio can provide valuable benefits to support remembering, including as a university-verified document, as a more detailed and comprehensive record, and as a resource to help students prepare.

Finally, other students valued the remembering and record-keeping aspect of the portfolio as a measuring stick, for how it helped them in gauging their own experiences or exposing them to other opportunities. The portfolio categories, for example, helped Kalise see how she could diversify her experiences. In completing the online forms, she said, "I see where I don't do this [involvement category] at all, but I'm always filling out this other one, so maybe I should get involved with this category." Sam also commented on the benefits of seeing other opportunities available, "I really love about the CCP, how much diversity there is in the categories." Rita, too, saw the value in remembering and reviewing her involvement, as a measuring stick, to guide future decision-making. She said, the "portfolio was very beneficial because it's easy to see everything I've done in one place, and make comparisons, see all the leadership experiences that I've held, see all of the different ways I've influenced the community, and I think it's...really good to have it all in one place...reflecting on myself was really beneficial...just doing it makes me

reflect on what I've done and just makes me relive the whole experience and takes me back to what I did."

Yet, while Mitch noted, "Having…written what I have done is a great way to keep record," he also starkly contrasted the value of keeping a record with the abilities and achievements he's accomplished, indicating that he did not feel the CCP contributed to his development as a leader. Allen, too, made a similar distinction, saying, "How I had to develop my skills through leadership…that's more something I get from the experience of it, rather than reflecting on the portfolio." However, Allen did add, "I think [the CCP] gave me reasons to branch out a little bit more than I would otherwise. By having a variety of things to add on there, it kind of encourages you, not just how can you fill this out, but how can you show people that this is a part of your life as well, instead of throwing yourself into a bit more of a niche field. I think it's helpful with that." Thus, students also used the CCP as a measuring stick, comparing their experiences to other opportunities available, using it to shape future decisions, and even distinguishing between what they learned as leaders and what they gained or did not gain through the portfolio experience.

South University narratives. The remembering theme manifested among the South University students in the same three ways as it did with the North students. Most students at South focused on remembering through record-keeping. There seemed to be less of an emphasis on the transcript as a competitive advantage among the South University students interviewed. Perhaps this difference appeared as a result of South University requiring all students who apply for leadership positions to create a co-curricular transcript, making it seem like less of a competitive advantage among peers.

Still, remembering what students documented in their transcripts was also valued 1) as a record, 2) as a competitive advantage, and/or 3) as a measuring stick at South.

First, the role of remembering was evident in Heather's description of the record-keeping process she went through in completing her co-curricular transcript. "You pick out what department the activity is from and what you learned. I lose track of where I've been and if you can put it on a transcript, it helps jog your memory…because I've made so many memories. When you have to pick between the choices like cognitive skills, ethical reasoning and all...I sometimes have a hard time picking because they all relate, but I have to think about what I actually did…and what I picked up from the workshop."

Gillian also focused on the importance of documenting in order to remember. When asked what she would tell other students about the co-curricular transcript, Gillian said, "I would tell another student definitely get moving on it; remind them that you have to put it in yourself, but to really plug things in as you're going along, because you won't remember it later on...keep up with it throughout your years." Similarly, the benefit of documenting experiences to remember was apparent to Flynn. "It's definitely helpful in identifying what you have been doing. It's easy to forget that stuff. It's like what have I been involved in…so it definitely helps you identify that and also reflect on what you've gained from those experiences."

Likewise, when asked whether the transcript was helpful in remembering, Jennifer said, "I would say that [helping you remember] is one of the strengths of the co-curricular transcript. College is crazy, there's so much that has happened between freshman year and now that I don't always remember." Josie also appreciated the record that the transcript provides, "Especially not having great memory, I would say this is

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definitely a thing...to help me see what I've done and also make myself remember and keep track of what I'm doing."

Extrinsic benefits were also something that Jordyn realized from making their co-curricular transcript, "I think it's really helpful, because it gives an official…proof [of what you've done]. I just like seeing this; it's kind of like an award. I feel really accomplished, even when my classes get hard…I have something I can look to and feel good about, like pushing forward...knowing I have this helps me keep pushing. Helps with remembering, especially when I do a ton every semester."

Second, Pia valued the utility in using the transcript to remember, too, but she also saw it as a competitive advantage in presenting herself to prospective employers. "People always say like, 'Get involved, get involved' but it is hard to remember as you go…if a student goes through and…[documents on the transcript] every experience as they go, then they're not gonna miss anything. And it kind of gives you a good track record of your experience and lets you lay it all out, what you did in college, so that you can speak about it in the interview or in a job someday or something. I couldn't add [some] community service on my resume. But this kind of breaks it down. So if you can't fit on here like you still have this back-up plan to show your employer. It's just kind of another document that you have, another thing you pull out...to give depth to your work."

Heather also saw the transcript as a competitive advantage. Using it to highlight her achievements was a way for her to remember them and to stand out compared to other candidates. She described the transcript as "a place where you can kind of like keep record of the things you have accomplished and things that you should be proud of that

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you have done and things you can bring to an interview, to your resume, and it can give you a spark that's different from others' in the room."

Jamal also found value in using his transcript as a resource to recall his activities and applied it to benefit him as a potential candidate for hire. "One of the ways that I use it is I have all my things down there and then whenever I want to make a resume I look back I'll say, hey, oh yeah, I was [in a particular organization or position]. That's kind of how I use it, at least to see the experiences that I have, to have it somewhat written down, and transferring it to resumes or when I am going to go on an interview. I would review it." Remembering through the transcript became a competitive advantage for Jamal in these situations.

Like Jamal, Kadeesha used the transcript to help her advance during her college career. She said, "just having a comprehensive list of what you did, the year you did it, that definitely helps a lot because sometimes I'm like…'In this month you did this and in this month you did this'…so…having that [list] clearly helps" [me remember]. Kadeesha, too, used this comprehensive list to her competitive advantage. "Applying for jobs, it helped a lot because I was able to write down what I had done in the programs at school…Especially this part [she said, pointing to the learning outcomes listed on her CCT] where it says [what] you learned in those. For me, it was cognitive skills and social responsibility was a big one. Being able to sit there and go through and identify what skills it helped foster. For me, that was really eye-opening."

Third, South students also exhibited remembering by using the co-curricular transcript as a measuring stick. For example, when relating their experiences in gaining greater self-awareness, several South University students described how reviewing the

institutional outcomes listed in the drop down menus helped them name and explain the skills they demonstrated. Furthermore, Jannell saw value in the transcript as a way of determining her success in different positions. "Keeping track of what I've done, so I can see how it all ties in and how one skill can be transferable to the next, so when I carry on this role, I can meet the standards. I can meet the expectations."

Skyler also illustrated the importance of using the transcript as a way to guide future efforts through remembering. When sharing his co-curricular transcript during the interview, Skyler said, "To be honest, there are some things on here that I forgot that I did, because I have a lot of other things on my mind. It's definitely a good reminder of what I've done. And where I can go from there." Among other South students, Skyler used the transcript as a measuring stick to help him articulate the skills he gained and to decide on future leadership positions. Skyler explained that the CCT, "gives me a great way of going back saying, 'look I did this. This [experience] will help me with this in this position.' I will definitely use this co-curricular transcript to…support the skills that I need for the job [in an interview]. [I can] say, 'I can use this [transcript], the skills that I've obtained here.' I like how they include specific skills that you learned from these positions."

The theme of remembering, then, resonated across students at both institutions in similar ways. Students valued the portfolio or transcript as a tool to help them recall their experiences and accomplishments. Some used the co-curricular document as a record, others saw it as a competitive advantage, while some students used it as a way to measure their progress relative to other opportunities.

Marketability

Although not all students have had the opportunity to test out this hypothesis, almost all of them had faith that documenting their experiences in the co-curricular portfolio or transcript will enhance and increase their marketability with future employers. The prospect of making themselves more marketable led some students to explore how to best showcase their accomplishments. Most students saw the potential of these co-curricular documents to make them more competitive on campus, others saw benefits for their post-college careers, while some students have already experienced direct benefits from using their portfolio or transcript when they applied for positions. In addition, a few students also offered critiques to improve the co-curricular records on their campus in hopes of making students more marketable.

North University narratives. Most of the North University students agreed that the co-curricular portfolio would make them more marketable to future employers, but their level of confidence was much less than the students at South expressed. Allen, the lone North University student who used the CCP externally, received positive feedback from the prospective employer interviewing him for a summer job. Allen said that his interviewer "thought it was a more interesting document to look at than a resume," but more importantly for Allen, he got the job.

The co-curricular portfolio is "a nice addition to a resume," Mason said. "When I'm a senior, I just reach into my back pocket and be like, here you go," he said as he motioned to hand a prospective employer his portfolio. "I think the CCP would be just really strong in an interview. It's like a secret weapon," he added. Marcus agreed that the

portfolio "makes you more marketable;" as did Karen, who said she believed, it 'helps with employers, future jobs, makes me more marketable.'

Allen agreed, "I think it's cool just being able to look at it and see, yeah I did all that. I have these accomplishments and life experiences which are interesting to look at. [It] makes me more marketable…a much better way to organize your past experiences than a resume." Sam also said it "makes me more marketable." Students at North did not dispute that potential marketability benefits from using the co-curricular portfolio, but the students at South University were far more vocal in their support of this theme, as some of them experienced such benefits already.

South University narratives. South University students have had more experience than North students with the marketability of the co-curricular transcript. Since many of the offices at the university began requiring that students start a CCT in order to apply for campus leadership positions, the number of students participating has grown by a few hundred. Students interviewed reported that staff asked students about their transcripts during interviews, which reinforced the importance of maintaining a current CCT, as well as the potential marketability benefits of the program. South University students are strong believers in the transcript's ability to make them more marketable to employers.

For example, Heather used her co-curricular transcript in applying for positions on campus, but learned to review it to prepare for interviews. "When you turn this [co-curricular transcript] in…Then in the interview, they're like, 'Oh, I see you've done this;' and I'm like yes. It is a nice thing to go back on and be like, 'Yes, I did this and that is an achievement.' Depending on what you have on your transcript, it shows who you are and

what your values are...like what you're passionate about. Like for me it's all service stuff, so I definitely like volunteering."

When she had a similar experience, Kadeesha saw the value in maintaining her transcript to be able to access more future opportunities. "[It is important to] keep it updated for jobs…if you want to apply for any job on campus, they ask for your co-curricular transcript…it's one of those things you want to keep updated. You do a lot more than you realize. It's just [a way of] getting people ready to apply for things and to start looking at what they've done." She's already been able to use her transcript in applying on campus. "I definitely think it's super helpful."

Ibrahim used the transcript to learn how to sell himself to others with "the 60 second elevator pitch; the important part of the co-curricular transcript tells me who I am and tells me what I'm good at." Ibrahim also shared his co-curricular transcript with potential employers in interview settings. "Sometimes I've turned it in applying for jobs. Some employers were very happy, impressed with the amount of things I've done." He looks forward to doing more with his co-curricular transcript through future involvement opportunities, "I want to build on this transcript. I could look at the things I'm good at here and derive from it where I should be and where I belong."

Anika also appreciated the potential benefits of using the co-curricular transcript to make her more marketable. "It's a good place to mark down what you have done…so you are able to market yourself," said Anika. She observed that, "having to sit down and figure out the top five things was the most beneficial thing. It's verified from the school. It helped me pinpoint what to put on my resume. I think it will help me market myself…It helps me articulate my skills. When I look at the skills [I identified] I can pick

out a skill and explain more on it," she said. Skyler agreed that, "It's a good tool to show your future employers, potential employers…[that] I've gained skills in college through extra-curricular activities. In addition to balancing out with all my other coursework...the visual aspect is really important," endorsing one of the extrinsic benefits of creating the document.

Asia started her transcript because "I wanted my opportunities to be seen and I wanted to show what I did." She planned to use her transcript to help her get internships, "I want to be able to showcase how much I've done in college and how active I was able to be." She added that, "As a club president, I take days out where I tell my e-board (fellow officers, executive board members in the student organizations she belongs to)…I show them how to put these [activities] on their co-curricular transcripts, and I show them how to do it because it makes you better. It makes you a more marketable person."

Looking ahead to their future careers, both Gillian and Jordyn saw opportunities to benefit from using their co-curricular transcripts. Gillian said, "I hope to gain ways to market myself. I plan to be a teacher, so a lot of the skills I'm learning are definitely going to be really helpful for dealing with people in general. [The CCT is] definitely giving me an edge for interviews more so. I'm feeling a little bit of an ego boost." When asked if the transcript will make them more marketable, Jordyn replied, "I think so, because I'm very involved...so I feel like I've learned different things from each category." Jordyn also said, "When I apply for things outside of college, this is probably something I will bring with me to an interview...so this will definitely help me in the future."

When a friend of Pia's was hired for a post-graduate job, using her co-curricular transcript as a credential, Pia was convinced that this tool could also help her be more marketable. "My friend…she told me that she landed a job with it. And I was like, 'oh my gosh, so this thing really works.' I would have done it before graduating, but that was the motivating factor when [my friend] told me...'Yeah, it works.' Employers like to see it. It's like an official document that you didn't just fudge it on your resume. I think that's when I started to take it real seriously…I think it's a great thing."

Like Pia's friend, Flynn used [the transcript] when applying for a post-graduate job. "I'm going to be a Teaching Assistant at the University of Oviedo in Spain," Flynn said. Flynn speculated that in using the CCT as another credential, "It probably helped to...identify these different skills, like cognitive, cultural, social responsibility, and teamwork. I think that…having these listed on a transcript where it's kind of like a formal document may have helped me get that position that I just got for after graduation." Regardless of whether the transcript was determinative in the hiring process for Pia's friend or Flynn, the perception that it was, or that it could be, was a powerfully affirming experience of the marketability of the transcript for those students and their friends.

South University counter narratives. Although most of the South University students strongly articulated their faith that the co-curricular transcript did or will help them be more marketable, some students also offered critiques. For example, the broad nature of the drop down menus was valuable to many students, but Jamal found it limiting. "It would make me more marketable I think if it was a little bit more specific. I wish it was a little bit more detailed." When asked if it helps him reflect, Jamal added, "To an extent; it's like...if it was more in depth then I'll be able...looking back in seeing

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all these things I did. That remembering aspect of it...that's pretty much the biggest way to add impact in my marketability." As someone who was involved in many activities, Jamal had an extensive co-curricular transcript. However, his desire to personalize his entries, to make them more specific than the ten learning outcomes available in the drop down menu, provided a counter narrative for the theme of the CCT's marketability.

Likewise, Jennifer too felt that the broad learning outcome options restricted her. In addition to seeing limitations from the drop down menu choices, Jennifer expressed frustration about missed opportunities to increase the marketability of the transcript. Jennifer observed, "You can't list campus jobs on your co-curricular transcript. Or, like I make Dean's List every semester, and that's not one of the Honors things that you're allowed to list on it...even the things that are on it, it makes you look a lot better to have an expanded explanation [as on a resume] of what you learned...than to see 'Oh, well she used cognitive skills and cultural knowledge.' I know a lot of people don't use it to be honest...It's a thing that our college offers but it's definitely not the biggest thing that people here take advantage of, or use." Thus, while most South students were excited by the opportunities to enhance their marketability, other students saw limitations and offered specific ideas to improve the transcript's potential in this area.

Themes Related to Institutional Practice

Beyond the intrinsic and extrinsic themes discussed, two additional themes with an institutional focus emerged. During interviews, students, administrators, and a faculty member shared perceptions and observations regarding the respective program and related institutional practices. In some cases, these findings have already been reported as counter narratives to the five broad themes that emerged. However, some comments were

less related to the student experience, but spoke more directly to specific features of the programs and their utility or lack thereof, which impacted the effectiveness of the portfolio or transcript. The themes of 'practicality' and 'challenges and barriers' inform the discussion of implications and recommendations concerning this third research question.

Practicality

The theme of 'practicality' describes ways in which students addressed the implementation and design features of the portfolio or transcript that were beneficial from their perspective and experience. During interviews, students discussed how they use the portfolio or transcript in practice, how they plan to apply it in the future, and their opinions about these tools. This theme includes those aspects of the portfolio or transcript that students positively highlighted in their interview comments. Practicality, as a theme, arose from students' interview comments based on their experiences using these co-curricular documents. These findings relate to the institution-focused research question, providing potential lessons to inform future practice.

North University narratives. Students from this institution focused on three aspects of the co-curricular portfolio related to practicality: 1) using content in other ways; 2) discovering options; and 3) timing. First, once students documented their involvement experiences, the co-curricular portfolio provided the means to re-purpose content for other needs. For example, Karen used to "pull from my portfolio [to] add to my resume," as needed for different purposes. Dahlia, also noted the utility of having her experiences documented. She said, the "personal reflection [where you] write what you learned, is actually helpful because a lot of scholarships want that information." Dahlia,

too, re-purposed content from her CCP in different ways, such as for resumes tailored for specific purposes and scholarship applications. Students reported this ability to re-purpose content as an additional benefit of documenting their involvement in the co-curricular portfolio.

Second, during the process of completing the co-curricular portfolio, students are able to access drop down menus with prompts to help them describe their involvement and reflect on their learning. This structure exposed students to more open-ended choices to describe their experiences, insights, and future goals. For example, Kalise observed the practical benefit for her of accessing these alternatives, "There were so many options to tell you how you feel about it. I find those really helpful. Those adjectives, and all those things really help, in the personal reflection, for each activity." She added, "One of the things that's on there I actually find really helpful is the three responses [e.g., the reflection prompts: 'what happened; so what; and now what'] about how you felt about something."

While this observation is similar to comments from South University students related to remembering their experiences, a key difference was the open-ended nature of the North University prompts. By contrast, the South University drop down menus are not open-ended but a fixed set of learning outcomes that students choose from when describing what they learned. North students also saw this ability to rely on prompts to help them personalize their entries as a beneficial feature of the program, whereas South University students have reported, through counter narratives, feeling more limited by the options available in their program.

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A third feature of the practicality theme that students cited was timing and keeping current with the content in the portfolio. Although many students described positive experiences creating their portfolio, in some cases their self-reported behavior demonstrated a lack of commitment to maintaining it. Most students voiced support that it was worthwhile to create a portfolio, but often due to other demands on their time and energies, a number of them were not able to keep their portfolio or transcript current.

However, during interviews, some students explained their realizations that they could have benefitted more from consistently maintaining their portfolio or transcript. For example, Allen said, "If I were to perhaps use it a bit more adamantly...to show how I've evolved as a member of these organizations…I don't think I utilized it enough, though." Timely completion of portfolio entries has a number of practical benefits for remembering, depth of reflection, and reinforcing learning. Thus, North students identified multiple practical benefits from using their portfolios, such as the utility in applying their entries for other needs; the value of the online prompts in enabling them to articulate their reflections; and the importance of recording their experiences in a timely manner.

South University narratives. The theme of practicality also arose from interviews with South students. This theme was discussed in four ways by students who were: 1) exposed to new opportunities; 2) using it as a guide for future involvement; 3) motivated to do more; 4) maintaining updated content. A number of these aspects arose related to other themes; however, when considered related to the practicality of institutional practices, there are subtle differences.

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For example, the search capabilities of the South University co-curricular transcript were very beneficial for Jannell. "It's also exposed [me] to different involvement opportunities. When I was in [the student union front desk position] I wasn't familiar with [the job of] Student Activities Manager, but looking up the responsibilities, I became more interested because I saw [the skills from working at the front desk] were transferable." Heather too, appreciated the benefits of searching the South University co-curricular transcript, "I got curious, there are certain things you can plug into the search engine. There's just a lot of positions…Student Activities Manager, [Student Union front] desk, student ambassador." The ability to search for opportunities within the co-curricular transcript to develop additional skills and abilities was used and valued by many South students to explore and/or seek out positions.

The search feature was also helpful for Jordyn in adding to the transcript. "I'm not sure if people know that you can actually add this [activity; living in a learning community] but for fun I was searching there to see if it would pop up and it did. There's a part where you go to add an experience, there's a keyword section. So when I type in 'first year' everything that has first year in the title pops up and things that I've never seen before…it definitely helps me learn more about other clubs on campus." Although Jennifer critiqued many aspects of the CCT, the search feature was one of the attributes that she appreciated; "the most beneficial way I've used [the CCT] is…that you can search things to edit. I actually searched for different volunteer work within the co-curricular transcript and that's how I found the tutoring program [I participate in now]."

Demonstrating the value of search capabilities, and how searching the CCT can guide future involvement, Jannell added, "There's definitely skills I haven't carried

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out...so it makes me curious as to maybe I want to get that done before I graduate…Reflecting, it shows me if I could be more involved or too involved" [in a particular area]. The exposure to other activities through the co-curricular transcript was also valuable for Pia, too, "when you're searching for your actual experience that you've participated in you see other experiences that are potentially like out there that you didn't know. It gets you thinking about other things to get involved in."

Flynn agreed with the practicality of using the CCT to raise awareness among students. When asked whether to recommend the co-curricular transcript to other students, Flynn said, "I would probably recommend it to them earlier in the game...to raise awareness about this [opportunity]… like when people are incoming freshmen, that way they know these are all the clubs that are available to them." Kadeesha also saw the potential benefits of using the transcript program to use to expand your abilities, "there's definitely things on there that…I never did that with that or I never touched on that. So, it makes me think...if I join this organization I can definitely work on this…[it] can give you a wider range of what you need to work on and what you have already worked on." These students were able to use or saw the value in using the CCT as a strategic resource to further student development.

The requirement that South University established to have all students applying for leadership positions in key student service offices was another factor contributing to practicality. In order to advance, students needed to maintain timely content and keep their transcripts current. Timely documenting of the portfolio and transcript entries was a way to insure accuracy, to capture fresh reflections, and to promote on-going learning. The repetition of using the transcript became self-reinforcing for some students, as Josie

described how it helped her remembering, "because a habit of always going back and listing what I've done and what kind of skills I use throughout…was becoming more implemented in my regular routine."

As a transfer student, Jannell observed that, "before [at my previous institution]…it was important to update my resume, but here to be part of anything, this [CCT] is required. As soon as I join something, I always inform the supervisor there, 'Can you please update my co-curricular [transcript]?' I feel like it kind of makes things easier because this document certifies that I did this work because it meets the approval of that E-board….It shows me the importance of networking; that I need to maintain relationships to [advance]." Students at South, then, cited multiple ways that the co-curricular transcript was practical: as a search engine, as a motivator, as a strategic resource for planning, and as a timely requirement for advancement.

Challenges and Barriers

The theme of challenges and barriers encompasses the concerns and difficulties students shared about using the respective co-curricular document on their campus. While many students shared positive comments about the portfolio or transcript, few were without critiques, complaints, or suggestions to enhance the co-curricular tool on their campus. Different types of barriers emerged from each campus, but limitations in the respective structures of the two systems were a common thread in students' comments.

North University narratives. Two categories of barriers were voiced by students at North. These challenges included 1) taking advantage of the portfolio as intended and 2) difficulty in navigating the online system. Although many students shared affirming experiences in developing their portfolio, it remains an under-utilized tool at North. Most

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of those interviewed were sophomores who created their portfolio for an honors program class assignment. While they were largely gratified believers in the program, they did not yet know experientially whether or how the CCP may benefit them in the long run.

Will it make a difference, as these students hope and believe, when they apply for campus or career positions in the future? As a senior, Mitch summed up these general student concerns when he observed that, "I think it's great in theory...the gap lies between it being a final product and it being marketable enough to an employer or someone in the future that is going to care what you did, who will take the time to read it and look it over. The portfolio...is a phenomenal resource for students to use. There is really nothing else that could be done to persuade individuals to complete it other than this is a great tool that you could use."

Although he himself expressed doubts, critiquing the CCP as little more than a repository record, Mitch also shared a constructive suggestion to integrate the CCP more consistently into the student experience. "If the portfolio is sought out to the finish line and if there was a requirement within the major or minor to do so, to utilize those resources, build upon those resources, come senior year, you won't have to worry about remembering what you did freshman year...for an interview." He added, "The only way you're gonna get someone to pay attention is through an intense and detailed dialogue...it's great to have in your back pocket." Mitch's suggestion illustrated the under-utilized potential he saw in the program, even though he expressed in previous counter narratives that he felt that the CCP did not make him a better leader.

A second challenge which several students at North voiced were concerns about the online forms and the need to streamline the process. In using the co-curricular

portfolio, Karen found the entry forms confusing. Mason agreed and said, "I think the idea is great, but I think the way on how you go putting information on is very confusing; [you] have to click on too many things to get to right place…I would rather just have a word doc capture all. The process for the CCP is a little messy." Marcus, too, noted that, "The section on reflection doesn't attach as well."

Rita also shared this concern. "It's a little bit difficult to navigate. It's a little bit confusing when submitting forms and things like that," said Rita. "We always had to ask our honors professor...because we were always lost, but once you figured it out, it is a really good tool, because it really helps you to just remember what you've done throughout your whole college experience." In addition, Rita also observed that she and other students did not use the CCP to its full potential. "I think it would have helped me reflect more, had we been required to fill out all the components of it, because some of them, there are reflections that you could do on them, but we were never required to fill that out." Kalise even admitted that "I feel like I don't really know how to do it. I fill out the forms and I don't really know what I'm doing. I don't know how to access it in a full document."

In addition, Sam concluded, "I think the biggest issue with it is the idea that there's so many different types of ways to fill it out; there's the professional development, the service, the general involvement, and so many other things. I don't feel like filling out this form, I just want to write down the name of it and move on with my life. I'm sure there's a more efficient way to get people to really want to put stuff into it. I wish more people knew about it because outside of honors, very few know about it. I wish more people knew about it and knew how strong and how good of a resource it was."

Although they valued the ability to share personalized reflections and the program

marketability, several of these North students found the CCP difficult to navigate. Several

students struggled with online access, functional technology, and a complicated

documenting process, impairing their ability to use the program as intended. Moreover,

these challenges underscore the concerns expressed about whether the institutional design

and practices are sufficient to support the program's potential, as Mitch addressed.

North University administrators were knowledgeable about the barriers and

challenges that their students described. Although the program moved to an online

format, it was still described as a labor-intensive process for the staff managing it.

Despite strong support from the honors program faculty, staffing and sustainability of the

program was one of the primary challenges that staff at North faced. While many

students were supportive and valued the program, the time and effort needed to document

their involvement was a consistent concern voiced by student leaders. Currently, their

staff were engaged in an on-going re-launch of the program after integrating it into the

new technology platform.

South University narratives. There was one general challenge that students at

South saw as a barrier, which manifested in multiple ways. Students felt restricted by the

limitations on what content can be included in the co-curricular transcript. Although

some of these barriers were introduced through counter narratives to specific themes,

these broader concerns were illustrated through several different examples. Some

students felt constrained by the drop down menus and wanted to include more detail and

description to personalize their transcript entries. Other students were concerned that

membership in an organization could not be captured through the CCT. Finally, some

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students expressed a desire that the co-curricular transcript be designed to be more comprehensive and inclusive, citing activities they could not list in the current system.

For example, Jannell felt limited by the structure of the co-curricular transcript, "It doesn't allow the student to individually express exactly what they feel they learned from the positions because it's a plug-in kind of program where you have to choose which skills out of the 5 or 10 that are available instead of allowing us to write it in ourselves. I feel like I'm not able to emphasize the work that I've done in these positions and if I'm able to go in and write it myself...I feel like there's more to explain exactly what it took to fulfill those qualities that I took on in that club position. I feel like it's not helping me reflect because it's not descriptive. It looks very standard. It doesn't allow me to explain and emphasize whether it's specific conferences or workshops I took part in. It pretty much says, these are the skills required and she met those needs. I felt like it didn't show my potential and work ethic, like I said, it's vague. I hope that they allow us to write ourselves about the experiences we had." Jannell summed up her concerns saying, I "would like to be able to say more about what was gained, beyond the drop down menus."

Agreeing with these sentiments, Asia said, "You're only able to put down a few specific things." She wanted to say more than just the five skill choices involved in the co-curricular transcript. The limitations of the drop down menus also were a concern for Jamal, who noted that "whenever you're choosing a position, you're given a list of maybe 10 different skills, which might be...cognitive skills, communication skills, but it's not in depth. Communication skills could mean 50,000 things. It could mean written communication, interpersonal communication, [but] it's not specified here...I think having

a narrative is important, maybe one or two sentences of what you did and also more options" to specify gains.

Jennifer also agreed that more specific options for the co-curricular transcript would be beneficial. "The dropdown list of things that you click on for the [co-curricular skills], they're kind of broad and I don't think necessarily clicking on leadership skills makes you really think about what specific leadership skills that you learned. I think I get a lot more of that from putting things on my resume and trying to figure out what are two bullet points of information that I really want to get across, or just talking about it with other people."

Jordyn, too, noted their frustration with the limits of what can be added to the co-curricular transcript, but for a different reason. "I'm only allowed to add things to my co-curricular if I'm on the executive board. I'm part of the step team and I'm only a general member and it upsets me because I spend so much time in practice every week and that's not something that I'm able to put on here." As Jordyn mentioned, Kadeesha also expressed, "I've actually talked to other people about this is that you can't put on involvement. If you're in a club but don't hold an E-board [officer] position, you can't [include it on your transcript]…something they could improve on." South administrators confirmed that membership in an organization cannot be included in the CCT. Students can only list executive board, or officer, positions that they hold.

Recently, Anika was able to add some academic activities to her co-curricular transcript, including research activities through her major and attending an evolutionary studies conference. However, she noted that "I didn't know academically the things could actually get put on there. I've only known it as a student leadership thing." Flynn also felt

restricted in terms of the types of activities that could be included. "The one issue that I have with the co-curricular transcript…is that there's very limited opportunities to put down things you've done off campus," said Flynn who sought to list other involvement activities.

The South University administrators were aware of the challenges and barriers reported in students' interviews, but they have elected to maintain their current system because the student gains were verifiable and quantifiable, and the process was sustainable within current staffing. The program administrators discussed the process they have in place to allow students to add new involvement opportunities to the transcript system, yet that often required students to initiate such changes. In South's system, student transcript entries were verified by the faculty, staff or community member with oversight responsibility for the program or activity. This de-centralized verification process enabled the university to add new activities through the student activities staff. While this program feature was included in promotional materials, student interview comments revealed that some students were unaware of this opportunity to add activities to the program.

In regard to the barrier cited about documenting membership positions in addition to student officer roles, Mitchson explained, "unlike most campuses, our student organizations are not required to have [faculty or staff] advisors." Consequently, while the student activities office verified student officer positions, membership in a student organization cannot be consistently attested to by a university or community professional. As a result, the program administrators have elected to exclude this category of involvement to maintain the integrity of their verification process.

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Furthermore, while the South administrators were open to the prospect of a reflection component or considering a portfolio-style program where students can personalize their entries, questions arose about whether a centralized process would be required to manage such an open-ended system. As Mitchson related, "who's gonna look at those portfolios and who's managing that and then the time associated with that" type of system? Thus, while they recognized the educational value of student reflection, their current de-centralized, verifiable, and quantifiable system was more sustainable and manageable.

Summary of Findings

There were extensive findings reported from the nearly 30 interviews about co-curricular portfolios and transcripts. These findings spoke to the primary research question, what do students learn from using co-curricular portfolios? In addition, the second research question was also addressed: Does the process of creating co-curricular portfolios aid students in understanding and articulating the skills they may be gaining? The student narratives at each institution indicated learning and development across the five themes despite the differences between institutions and co-curricular programs. While the experiences and gains from co-curricular involvement and use of the portfolio or transcript product were at times inter-related, students consistently provided evidence of learning, described their motivations, as well as explained the boundaries and limitations of the co-curricular portfolio and transcript, respectively, in impacting their learning.

Although important differences between the co-curricular portfolio and transcript were noted, the three intrinsic themes were widely reflected across student comments at

both institutions. The most extensive findings related to the theme of self-awareness. Common sub-themes expressed across institutions were that students used the CCP or CCT to be more intentional, to guide future involvement, and to articulate their gains. Several students also shared their feelings of pride and self-confidence related to their co-curricular documents. Some reported these feelings of pride as motivation do more, while others described a sense of accomplishment at what they had achieved. In addition, a number of students provided evidence and/or described their belief in the transfer of learning related to future application of the skills and abilities they developed through their co-curricular involvement and documented in their portfolios or transcripts.

The two extrinsic themes of remembering and marketability also were well represented among student interview participants. The sub-themes related to remembering (i.e., portfolio or transcript as record; as competitive advantage; and as measuring stick) were also prevalent in student comments about each co-curricular document. Increasing their own marketability, whether on campus or off, was also a substantial motivation and/or benefit students perceived from using the co-curricular portfolio or transcript. Finally, the counter narratives provided additional insight into the related themes, as students critiqued the respective processes and suggested ways to make the documents more effective.

The final two themes related to institutional practices, practicality and challenges and barriers, addressed features of the programs that were particularly beneficial or problematic for students. These interview comments address the third research question, how do institutions of higher education develop and utilize co-curricular portfolios and transcripts? Again, interview comments provided insight into the institutional features

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and practices at North and South universities and the impact those attributes had on the

student experience, informing how institutions may develop these types of programs in

the future.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

This study demonstrated how the use of co-curricular portfolios facilitated student learning and personal development, as well as explored how two universities used these online tools. It contributes to the literature on co-curricular portfolios by describing the gains and challenges students reported from using co-curricular portfolios and transcripts. In addition, the study analyzed program design features and institutional implementation practices in describing how the two universities investigated used these co-curricular portfolios and transcripts. A multi-case study analysis was used to explore how co-curricular documents developed, how the two institutions used them, and how co-curricular portfolios or transcripts may have shaped student learning at those institutions.

There are few examples of research examining what students learn from co-curricular portfolios or how institutions develop and utilize them. In addition, what research exists on these co-curricular tools is largely specific to the individual campuses that have implemented or proposed such a program (Bresciani, 2005; Brown & Citrin, 1977; Cosgrove, 1997; Elias, 2014; Ford et al., 2009; Lumsden et al., 2007; Lumsden et al., 2009; Ragan, 2000; Reardon et al., 2005). This multi-case study analysis adds to the literature on co-curricular portfolios and transcripts regarding the student experience, the institutional focus, and related programmatic features and implementation practices.

This research also provided evidence of assessable student learning and recommendations for future practice. Through studying these co-curricular tools, colleges and universities can learn more about their effectiveness and potential fit of different models and practices to achieve varying institutional goals. Furthermore, college educators can learn how to use these co-curricular portfolios and transcripts to develop "an integrative approach to student learning [that] encourages students to take responsibility for documenting and demonstrating their own abilities over time and within a broader learning landscape that encompasses the various domains that comprise their intellectual lives" (Chen & Light, 2010, p. 3).

Efforts such as the AACRAO/NASPA Comprehensive Student Records project (Fain, 2015), initiated to re-define the university transcript; the Degree Qualifications Profile (Lumina, 2011) framework, developed to articulate expected capabilities and outcomes from college degrees; and NACA Next (National Association for Campus Activities Navigating Employability and eXperience Tool, 2017), created to enable students to rate themselves and be rated by advisors, according to skills identified by NACE; reflect significant change in higher education. College educators have been shifting their focus over time from discreet, disconnected experiences to more holistic, integrative learning opportunities; from accumulating credits and seat time to developing competencies and skills; from a classroom-centric paradigm to more expansive and inclusive models; from proscribed pathways to more self-directed options; from inputs and process to assessing outcomes and evidence (Barr & Tagg, 1995; Bass, 2012; Keeling et al., 2004; Suskie, 2014). Advocates of co-curricular documents, such as Weinhausen and Elias (2017), argue that "institutions should help students navigate and

construct their unique experience and provide innovative ways to help students both reflect on and articulate the range of experiences, knowledge, and competencies that constitute their education" (p. 14). Co-curricular portfolios and transcripts enable institutions to create and students to engage in more holistic, integrative, competency-based, inclusive, self-directed, and outcome-oriented learning opportunities.

In this chapter, similarities and differences between the two institutional models will be summarized, compared, and contrasted based on the data collected in this study. Next, a set of six conclusions from the findings will be discussed. In addition, theoretical and practical implications for student learning and administrative practice, related to these findings, will be described. Finally, recommendations for higher education institutions, and implications for future research will be discussed.

Similarities

The literature does not reflect comparative case study analyses conducted by researchers studying these programs in depth. This multi-case study analysis added to the literature on co-curricular portfolios and transcripts by comparing the goals, structure, implementation process, and outcomes of these two models, in terms of student learning and institutional practices. Yin (2009) describes the unique qualities of the case study approach as being particularly effective, "when the boundaries between phenomenon and context are not clearly evident" (p. 18).

This description aptly applies to co-curricular portfolios and transcripts in the higher education context. Brown et al. (1999) described three types of what they referred to as the "student development transcript" (p. 507). The South University co-curricular transcript served as an experiential checklist and a competency-based checklist, which are

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two of the three types described by Brown et al. (1999), while the North University document represented their third category, a portfolio. The definition of a portfolio includes the systematic gathering of evidence of learning (Palomba & Banta, 1999). Additionally, Barrett's (2006) and Bresciani's (2005) portfolio definitions emphasize the importance of the learner reflecting on the artifacts collected and presenting the work to others, too. The North University co-curricular document was consistent with Brown et al.'s (1999) categories as both a portfolio and an experiential listing of students' co-curricular activities and accomplishments. Moreover, the North University portfolio was also consistent with the systematic gathering of evidence of learning, reflected on by the learner, and presented to others. As Yin (2009) described, the cases are not always distinct, but the close study of cases, observed in their authentic settings, can yield "an invaluable and deep understanding" (p. 4). This research contributes to the literature by providing detailed analyses of two models of a co-curricular portfolio and transcript, respectively.

Several similarities emerged from the interviews about how the co-curricular documents are used on these two campuses. Chen and Light (2010) wrote that "the student portfolio is unique insofar as it captures evidence of student learning over time—in multiple formats and contexts—documents practice, and includes a student's own reflection on his or her learning" (p. 1). From the institutional perspective, administrators highly valued the verification process imbedded in the use of co-curricular documents. Verifying the experiences and the gains from co-curricular involvement served multiple purposes. First, administrators felt that it provided greater legitimacy and validity of the learning taking place through these co-curricular opportunities because the institution was

standing behind the experiences and achievements students described in their co-curricular portfolios or transcripts. Second, verification authenticated and empowered students with what some administrators described as "proof" of their learning. Third, students and administrators believed that the tangible product from creating a co-curricular portfolio or transcript gave students an edge, to make them stand out more among competitors in an interview or recruitment situation. Moreover, several students also reported that the document captured and validated additional gains and accomplishments that would not be included, or perhaps not listed as prominently, on a resume or in an academic transcript.

Both institutions marketed their co-curricular portfolio or transcript by focusing on skills students gained from being involved and how documenting these skills enhanced, or will enhance, students' marketability. The students participating in this study internalized these claims and valued the increased marketability they perceived from using the co-curricular portfolio and transcript. Almost all North University students believed in the potential for the co-curricular portfolio to enhance their marketability in the future. Since South University has begun requiring students to submit their co-curricular transcript when applying for campus leadership positions, some students have experienced the benefits of using theirs in campus interviews. Some students described how reviewing the co-curricular portfolio or transcript helped them prepare for being interviewed, others said it gave them additional positive information to share about themselves in interviews, yet others reported that it helped them get selected for additional opportunities. Consequently, most students at each institution expressed seeing

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value in the process of documenting their gains from being involved through the co-curricular portfolio and transcript.

Another similarity between student leaders at both North and South Universities was that among those who were interviewed, a few students at each institution remained skeptical and critical of the respective co-curricular document at their institution, even though they have participated in the program. These students' comments were captured in the respective counter narratives presented in chapter 5. Some students at South University, including Jannell and Jamal, lamented the lack of detail and specificity they could provide when documenting their gains from leadership opportunities. A few other students at North University, such as Mitch and Marcus, saw the co-curricular portfolio merely as a means to record their involvement with little value added through the reflection process and little educational benefit for them from completing it.

Similarities also are evident between the two respective categories of involvement opportunities at each institution (see Table 7).

Table 7

Categories of Involvement Opportunities at North University and South University

North University	South University
Leadership Activities	Leadership Activities
Honors, Awards, and Recognition	Honors and Awards
Participation in a Student Organization or Activity	Student Government and Organizations
Community Service	Community Service
Professional or Educational Development	Academic Related Experiences
Paraprofessional Work Experience	Campus Committee Membership
	Performance and Shows

Four of the six categories above were identical, while 'professional or educational development' and 'academic related experiences' shared some overlap, as recorded by students. Only the last few categories, including 'paraprofessional work experience' at North and 'campus committee membership' and 'performance and shows' at South were substantially different, as each institution elected to create a unique category for those particular involvement opportunities. In reviewing co-curricular portfolios from students at North, campus committee membership and performance and shows were listed under 'professional or educational development,' while 'paraprofessional work experience' at South appeared under the category of 'leadership activities.' The consistency between categories indicated commonalities between the types of co-curricular offerings at each institution, as well as reflected similar conceptual thinking about how best to organize them.

At a more basic level, students on both campuses reported valuing the portfolio or transcript as a resource; an on-going record of their involvement and something they can refer to as needed to tailor resumes or applications for specific needs. Finally, from a procedural standpoint, both institutions evolved from a paper to online process and both have now situated their online system within OrgSync, the platform that each institution uses to manage student organization memberships on their respective campuses.

Differences

There were four strengths of the North University co-curricular portfolio that distinguished it from South's co-curricular transcript. First, North had been able to build and maintain support from alumni in sponsoring their program, as well as faculty in the Honors College. These connections were instrumental in supporting and re-launching the program, providing a level of commitment to sustaining the program from areas that South University had not yet achieved.

Second, students at North were encouraged to document all of their involvement opportunities. They were not restricted regarding the types of activities or roles they included. North students listed activities they participated in as members, as well as officers on their co-curricular portfolio. Whereas new opportunities needed to be added to the South system, when new activities were identified and documented at North, their staff charged with verifying student entries confirmed students' participation directly with the activity or organization. This more individualized verification process allowed students to include more activities on their portfolios.

In addition, the portfolio platform was largely open-ended at North University, where students could personalize their entries. However, among student leaders involved

in student organizations at South, only positions as an officer may be included on the co-curricular transcript; membership alone is not sufficient. Some South students expressed disappointment during interviews that although they devoted many hours to a student organization as a member, they were not able to list those experiences on their transcript until they became an officer. However, South University did not allocate staff to individually follow up to verify participation. Instead, their administrators valued the ability to validate student participation from within their system rather than allowing students to list activities outside of it that were not verifiable.

Unlike most institutions, South University student organizations were not required to have a faculty or staff advisor. The Student Activities Office maintained records of the officers of student organizations, but not individual members for all of the over 200 student organizations. Consequently, they were able to verify participation in an officer role, but not to the membership level. They also did not have faculty or staff overseeing all student organizations as advisors, who could also assist in verifying participation. North University used its faculty and staff advisors, as well as its online management system, and graduate assistant staff member in the central Student Activities Office to verify participation to the membership level.

Third, the co-curricular portfolio offered greater opportunities for students to personalize their entries. In addition to listing membership roles, students provided their own descriptions for the involvement opportunities they recorded. This open-ended approach enabled them to describe their involvement as they wish, providing details about their role, the organization, how much time they devoted to the activity, etc. By contrast, South University opted for a more consistent approach in documenting student

experiences, using drop down menu choices to document learning rather than open-ended response options. The benefits of the open-ended option were that students are able to personalize and describe specifically what they have done or what they have accomplished through their involvement. Some South students, particularly among the juniors and seniors, longed for this flexibility, critiquing their program's rigidity.

As a result, North students needed to reflect more on what they have learned in order to articulate their experiences, but most enjoyed the freedom to do so. However, as Charles noted when he described his students at North University, "This generation today does not write well, they write in emojis and in Instagram," which may have resulted in some inconsistency among portfolios and an inability to extract much summative data from the individualized responses. Yet, North University's open-response approach did provide substantial qualitative data, which could be analyzed for assessment for learning purposes.

At South University, the entries students made on their co-curricular transcript were more consistent between activities and less individualized in their content. The benefits to a more structured approach with drop-down menus were that there was greater consistency across entries and there were greater opportunities for automation in the process, but it also did limit individual creativity and interpretation. Their system, thus, allowed for greater ability to extract quantitative data in support of assessment of learning outcomes.

Fourth, the co-curricular portfolio contained a required reflection statement. Several North students used their reflection statement to summarize their experience and describe what they learned. This component was another opportunity for students to

personalize their co-curricular experiences, potentially deepening their learning as they documented their gains. The reflection statement not only represented a cumulative statement of their involvement journeys, but was also one that could be edited over time by the student as they discovered new insights. North University's co-curricular portfolio represented an investment in open-ended responses and reflection as a means to deepen student learning, and documentation and verification as a way to promote student advancement.

South administrators voiced support for the importance of reflection to support student learning. Yet, staffing and resources were primary considerations in their decision not to build in a more elaborate reflection activity into their system. When making an entry in their co-curricular transcript, South students did need to reflect on their experience to identify the top five skills they gained through that activity. Students selected those skills through the drop-down menus, but South did not have a reflection statement.

Administrators at South decided to focus their resources on maintaining the listing of involvement opportunities, adding new ones as students asked, or when new activities or organizations formed. Their system allowed students to be largely self-service in creating their transcripts and the limited number of drop-down options enabled summative tracking of skills that students used in their involvement. Moreover, as they described the differences between adding greater flexibility and maintaining consistency in the structure, they recognized the implications for reporting, student participation, and ease of self-service, if they required an additional reflection component. More open-ended reflections would not only mean that someone would need to monitor those

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responses, but reporting out skill accomplishments would become more complex, and students would spend more time and may need more direction in completing their transcripts. The South University staff were not convinced that more structured reflection was worth the trade-offs for staffing, resources, consistency, sustainability, and ease of access to the co-curricular transcript.

There are also four strengths of the South University co-curricular transcript program that differentiated it from the North University program. First, the CCT document listed only those involvement categories (e.g., Academic Related Experiences, Campus Committee Memberships, Honors and Awards, Leadership Activities, etc.) in which a student has participated. In the North University program, the default portfolio document produced displayed each of the involvement categories (e.g., Leadership Activities, Paraprofessional Work Experience, Honors, Awards, and Recognition, Community Service, etc.), regardless of whether or not a student made an entry in that category.

While the North University approach had some value to encourage students to be more balanced and well-rounded in their co-curricular involvement, it also seemed to inadvertently highlight non-participation by category. North University program administrators were able to edit the program to remove involvement categories where there was no participation when producing an official transcript for a student. However, by placing an emphasis on involvement across areas, the co-curricular portfolio formatting seemed to de-value depth of involvement in a few areas. Mitch observed, "People think the longer your list is the better, which has some validity to it. However, being determined to stay put and have an investment in certain organization also has a

great element of fruition to it, which I think is the beauty of the portfolio itself...[it] has shown me where else I can dig into…you come to your own conclusions on what else you should be doing to diversify."

Students at both institutions commented in their interviews on the tension some students described between breadth and depth of participation in their involvement choices, as Mitch described. As a result, the presence of the category headers as a default setting in the co-curricular portfolio, the desire to be more well-rounded in their involvement seemed to be more of a concern for North University students. Thus, the tailoring of involvement category headers to an individual student's participation made this feature a design strength of the South University co-curricular transcript.

Second, the South University transcript had the ability to be used as a search engine, which enabled students to explore co-curricular opportunities. Several South students discussed the benefits of the search engine capabilities in helping them identify additional involvement opportunities and even using the knowledge gained from the system to be more strategic in pursuing their co-curricular activities, building upon experiences toward specific positions. North University students also used the drop-down menus in their online program to explore additional opportunities within different involvement categories, but an overall search feature was not part of the North portfolio program.

Third, another strength of the co-curricular transcript at South University was that there were more students engaged with the program and there was broader participation across the student body than at North. Several university departments required students to submit their co-curricular transcript when applying for leadership opportunities, which

encouraged more broad-based participation. Historically, the North University program enjoyed widespread participation among students, but during the most recent re-launch of the program, Honors College students were the primary group using the co-curricular portfolio.

Fourth, another relative strength of the South University program was that it was grounded in the higher education literature. The South University program used drop-down menus for students to identify the top five skills they had gained from each involvement activity. Initially, the university identified 19 skill options, based on outcomes identified through a local employer survey conducted by the university's career resource center. After reviewing which skills students were using most often, and consulting the literature, the South staff members reduced the number of skills to ten and based them on the LEAP outcomes and the learning outcomes identified by the South student affairs division. These ten skill options included such attributes as 'ethical reasoning,' 'teamwork,' and 'social responsibility.'

These similarities and differences between the two programs describe respective strengths and weaknesses, as well as philosophical differences. North University administrators placed a priority on the reflective components of their portfolio. Their program focused more directly on the benefits of formative assessment for the development of students. The support of faculty and alumni buoyed their program. South University, on the other hand, balanced reflection with structure and limits to make the transcript more manageable, sustainable, and quantitatively assessable for administrators. The search engine feature and the widespread requirement for student leaders to complete the transcript led to its broad-based acceptance and usage. Yet, both institutions valued

verification, overlapping categories, marketability, and a focus on skills and skill development. One of the challenges at each institution was how to maintain these systems, given current resource constraints, and to keep them scalable and manageable for broad-based use.

Co-curricular documents that are remarkably similar to the North University portfolio and the South University transcript have also emerged in other countries (Elias, 2014). In Canada, the co-curricular record (CCR) developed with greater consistency across several higher education institutions (Elias, 2014). Presant (2016) acknowledged the value of fostering employable skills among students and documenting experiential co-curricular activities.

However, Presant (2016) also critiqued these co-curricular documents, offering several suggestions to enhance these products. Among the changes Presant (2016) recommended to improve CCR's were to include more academic learning and research activities; and to include more activities external to the campus, such as employment and community service. Further, Presant advocated that all such documents invest in robust reflection components, as some CCR's lack a reflection statement similar to South University. Moreover, he urged that learning should be assessed based on institutionally-defined learning competencies. Finally, Presant (2016) called for the co-curricular record to be more portable and transferrable electronically. Although these co-curricular documents exist in another country's higher education system, both the existing products and the process recommendations described mirror the challenges faced by North and South University in using their co-curricular portfolio and transcript, respectively.

Conclusions Contributing to the Literature on Co-Curricular Portfolios and

Transcripts

Based on the findings presented in Chapters 4 and 5, six conclusions were drawn

from this research. The first three conclusions address these co-curricular tools, student

learning and observations about student participants. The next three conclusions concern

the value of these programs to students and institutions, the process the institutions

studied used to develop them, and those features that were identified as particularly

beneficial. These conclusions reflect contributions to the literature on co-curricular

portfolios and transcripts. The two cases added to our knowledge of specific institutional

examples; the cases documented the student experience when using these co-curricular

documents; they described the goals, audiences, features of these programs; and they

chronicled how students and institutions use them. Each conclusion will be discussed in

relation to findings from this study and the relevant literature. These conclusions are:

1. The co-curricular portfolio and transcript were effective institutional tools to
   enhance and support student learning and personal development.

2. Co-curricular portfolios and transcripts facilitated learning and personal
   development among students.

3. The current generation of traditional-age students were generally well-suited
   to the process of creating a portfolio or transcript.

4. These types of documents are valued as credentials to meet both student and
   institutional needs.

5. Identifying the audience and goals for the program were important to
   developing a successful product.

6. Respective features of the co-curricular portfolio and/or transcript played a significant role in fostering programmatic success.

These conclusions generally apply to both the co-curricular portfolio and transcript. Where there are more pronounced differences between the two documents that were observed related to one of the conclusions, these observations will be explained in the discussion of each conclusion.

The Co-Curricular Portfolio and Transcript Were Effective Institutional Tools to Enhance and Support Student Learning and Personal Development

Barrett (2006) defined a portfolio as "a collection of work that a learner has collected, selected, organized, reflected upon, and presented to show understanding and growth over time. Additionally, a critical component of a portfolio is the combination of a learner's reflection on the individual pieces of work (often called artifacts), as well as an overall reflection on the story that the portfolio tells" (p. 4). The co-curricular portfolio and transcript at North and South Universities, respectively, share many of these characteristics, as defined by Barrett, but with some important differences. Unlike other portfolios, much of the 'work' reflected on was experiential rather than tangible products. Rather than producing physical samples of artwork or writing, as may be the case in other portfolios, the 'work' presented by students consisted of the co-curricular document produced from their involvement experiences. Consequently, artifacts were described by the student through their reflections and must be understood through subjective experience, instead of independent pieces of work that could be assessed apart from the student's interpretation. In addition, reflection was open-ended and more deeply integrated throughout the process of creating the North University portfolio, while the

reflection aspect of the South University transcript was limited to identifying the skills students gained and lacked a summative quality.

Consequently, the CCP and CCT are more process than product. The structured documentation of their gains was valued by most students and deemed by them to have contributed to their learning. As Chen and Light (2010) wrote, "in environments where students have diverse learning experiences both inside and outside the classroom…this diversity can result in a lack of curricular coherence and a fragmented student experience" (p. 1). Instead of moving from activity to activity without making many deliberate connections, the structure of completing the co-curricular portfolio or transcript imposed an intentional pause, a time of reflection, and an opportunity to learn from their experience.

Engaging learners through such structured reflection has been described as, "folio thinking," which benefits students by enabling them to organize and give meaning to experiences, while also creating personal ownership for their portfolios (Chen & Mazow, 2002; Chen et al., 2005). Student narratives from this study provided extensive evidence of students engaging in this type of "folio thinking," as they described their CCP or CCT. Chen and Light (2010) assert that "E-portfolios – as both process and product—can promote deep learning and knowledge transfer by fostering the student's ability to make connections between his or her learning experiences in a variety of classroom, workplace, and community settings" (p. 3). Although the CCP and CCT have minimal exposure to the classroom setting, students demonstrated the ability to make connections in significant ways between their experiential learning and creating their co-curricular portfolio or transcript, applying the same principle to the benefit of their learning.

These types of connections are significant to the learning process (Bransford & Schwartz, 1999). "Learning that helps develop integrative capacities is important because it builds habits of mind that prepare students to make informed judgements in the conduct of personal, professional, and civic life" (Huber & Hutchings, 2004, p. 1). Similarly, the theory of Preparation for Future Learning (PFL), the conceptual framework for the study, explores the interconnectedness of the learning process as experiences build upon one another, enhancing future learning (Bransford & Schwartz, 1999). There were some examples of this type of learning from the student narratives. However, the evidence was not always clear from the interviews, even though PFL theory was consistent with the literature on the potential of e-portfolios to foster the student's ability to make connections, to integrate their learning, and transfer knowledge to different settings and contexts (Chen & Light, 2010).

While some students interviewed felt that the co-curricular portfolio or transcript did not contribute to their learning, most agreed that they were beneficial tools. Some students also critiqued aspects of these programs and described ways that they may be more effective, such as allowing more personalized entries, expanding the type of content allowed, streamlining the process, and requiring participation. These critiques, however, were also consistent with "folio thinking" (Chen & Mazow, 2002; Chen et al., 2005) as students demonstrated ownership and the importance of their portfolio or transcript experiences through their appraisals. Moreover, these analyses also demonstrated the learning and development potential of these tools, as implementing the program reforms that students advocated for would theoretically lead to increased educational gains for students.

Co-Curricular Portfolios and Transcripts Facilitated Learning and Personal

Development among Students

This study explored metacognitive questions related to co-curricular portfolios and transcripts, including what and how do students learn using these tools. Bransford and Schwartz (1999) proposed the theory Preparation for Future Learning (PFL) as a new model for the transfer of learning, which was used as the conceptual framework for this research. The transfer of learning was one of five themes that emerged from student interviews. "The difference between transfer and PFL is whether a student has the ability to use their existing knowledge in new situations or new fashions (transfer), or whether a student acquires new knowledge more quickly or effectively, using their existing knowledge (PFL)" (Baker, Gowda, & Corbett, 2011, pp. 1-2).

Future learning, while not articulated as such, was clearly a goal of both institutions in offering co-curricular programs. North and South University administrators sought to support their students' co-curricular and career advancement through the development of their respective portfolio and transcript programs. While the use of co-curricular portfolios provided ample opportunities for educators to employ methods to enhance student learning, the findings from the student narratives provided mixed results related to evidence of PFL at work.

When students shared evidence of their experience or expectation of the transfer of learning in their interviews, a theoretical approach to understanding the learning process taking place for students can be found in the PFL theory. As experiences build upon one another, future learning can be informed through the interconnectedness of the learning process. In the few cases in which the students interviewed explained that the

transcript or portfolio did not contribute to their learning, PFL was not applicable. Yet, while several students did not describe a specific contribution from the portfolio or transcript to facilitating the transfer of learning, their experiences also did not contradict the potential benefit to future learning from using these co-curricular programs, as theorized by Bransford and Schwartz (1999) through PFL. In these cases, there was insufficient information established during interviews to assess the prospect of the transfer of learning among most of these students. The elusive nature of learning transfer is one of the challenges Bransford and Schwartz (1999) describe in assessing the transfer of learning.

Almost all students interviewed were able to give examples, or describe their expectations, of being able to transfer learning to different contexts. However, students more often shared examples of learning transfer related to their co-curricular involvement rather than their experience using the portfolio or transcript. Yet, many students expressed confidence that the skills and abilities they learned through co-curricular involvement were or had been transferrable to other contexts.

Baker et al. (2011) argue "that the most important form of robust learning is the ability to apply learned skills and concepts to support future learning outside of the context where those skills and concepts were learned" (p. 2). The CCT and CCP, thus, displayed the potential to facilitate such learning but may do so best if applied under the specific conditions that facilitate PFL (Bransford & Schwartz, 1999). For example, in some cases, students let go of previous ideas to learn something new; in other cases students could cite applying learning from one setting to another; other times they described how their experiences helped them differentiate their existing knowledge

structure further. Therefore, practices, such as timely reflection and recording of experiential activities in using the transcript or portfolio, may have contributed to PFL.

As the student narratives in chapter 5 illustrated, students were able to identify four ways in which they used the CCP or CCT to enhance the transfer of learning, some of which were experientially based, while other examples were grounded in the students' beliefs that the skills and abilities they gained would, in fact, transfer. The other four themes described in chapter 5 from the student narratives are also relevant to PFL. Themes, such as gaining self-awareness, feeling pride and self-confidence, remembering, and marketability relate to the theory, as they reflect additional learning experiences for the students that could be the subject of learning transfer or PFL.

Based on the narratives that student participants shared about their experiences using a co-curricular portfolio or transcript, the themes that emerged seem intuitively to contribute to the conditions that support preparation for future learning. For example, students may be better able to let go of previously held assumptions after gaining greater self-awareness, or expressing self-confidence. Similarly, students who were more self-aware or felt a greater sense of pride may be more receptive to learning from experiences building upon their existing knowledge. Students who were motivated to become more marketable, or those who used the co-curricular portfolio or transcript to help them better remember, may also be better able to differentiate their knowledge structure further to facilitate PFL. "Ideally, interactive learning environments should promote 'robust' learning (Roll, Aleven, McLaren, & Koedinger, 2011) that is retained (better remembered) over time (Pavlik & Anderson, 2008), transfers to new situations (Singley & Anderson, 1989), and prepares students for future learning" (Bransford & Schwartz,

1999; Baker, et al., 2011, p. 1). However, an interview context was not the type of dynamic assessment needed to produce consistent evidence of PFL, as Bransford and Schwartz (1999) argue is necessary.

This study, however, demonstrated that the co-curricular portfolio and transcript captured substantial evidence of student learning and development, although not for all students who participated. Learning is defined in Learning Reconsidered as "a comprehensive, holistic, transformative activity that integrates academic learning and student development processes that have often been considered separate, and even independent of each other" (Keeling, 2004, p. 2). As demonstrated during most interviews, students learned and developed greater self-awareness in a variety of ways from documenting and reflecting on their co-curricular experiences. Students identified skills and abilities they developed through their involvement opportunities and learned how to articulate and express them. They felt pride and expressed greater self-confidence when reviewing their documented participation and accomplishments. Whether they needed to write a reflection statement for the CCP or to think back to determine what skills they developed for the CCT, students reported learning through those metacognitive processes. Students also described the experience of benefitting from the transfer of learning, or they expressed confidence that they will be able to apply the learning they gained in the future. The realization and articulation of learning transfer was shown in some cases to arise from the reflective experience of documenting activities and/or reviewing entries in their co-curricular portfolios or transcripts.

Some researchers consider electronic portfolios as a means of transferring the balance of power in the classroom from teachers to learners, thereby developing social

capital for students (Acosta & Liu, 2006; Kimball, 2005). Bransford et al. (2000), in writing more broadly about this potential to transform traditional roles within the classroom through technology, observe that,

> Often both teachers and students are novices, and the creation of knowledge is a genuinely cooperative endeavor. Epistemological authority—teachers possessing knowledge and students receiving knowledge—is redefined, which in turn redefines social authority and personal responsibility. [As a result]…this devolution of authority and move toward cooperative participation results directly from, and contributes to, an intense cognitive motivation. This transformation of roles complements the nature of co-curricular activities, which are often more collaborative, experiential, and self-directed. (Mackinnon-Slaney, 1993)

While co-curricular involvement was the object of many of the students' reflections, their gains as recorded through the portfolio or transcript extended more broadly across their experiences. As Baxter Magolda (1992) wrote, "Situating learning in the students' own experience legitimizes their knowledge as a foundation for constructing new knowledge" (p. 378). Student learning and development in self-awareness, pride and self-confidence and learning transfer, may come through the co-curricular document that students created to record them, but these gains have a wider reach than the co-curricular environment. As the university administrators from both programs argued, the learning and development that students identified through their co-curricular portfolios and transcripts will transfer to other settings and provide students with a competitive advantage as future applicants.

The holistic, interdependent nature of learning is illustrated by the transformative

learning model (Athas, Oaks, & Kennedy-Phillips, 2013). In the model depicted in Figure

2, learning occurs at the intersection of students' pre-existing beliefs, knowledge and

experiences; curricular learning opportunities; and co-curricular involvement (Athas,

Oaks, & Kennedy-Phillips, 2013). This model provides a more concrete way to describe

the learning students reported from using co-curricular portfolios and transcripts than the

conceptual framework, Preparation for Future Learning (Bransford & Schwartz, 1999).
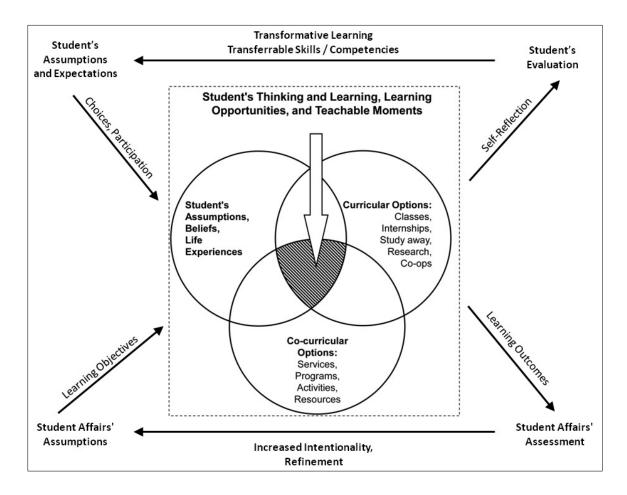

Figure 2. Transformative learning model (Athas, Oaks, & Kennedy-Phillips, 2013).

As Oaks (2015) describes, "learning is a result of the synergy of learning opportunities and students' thinking, curricular options, and co-curricular programming" (p. 53). The Transformative Learning Model depicts the interaction between the student, the curriculum and the co-curriculum. Students' prior experiences and assumptions, as well as the institutional assumptions, are described as inputs impacting the learning process, while student reflections and university assessment practices are among the outcomes. The interaction between the student and the two experiential realms described represent the students' involvement experiences. The use of the co-curricular transcript or portfolio is represented by the reflection and assessment components of the model.

Although the model does display the co-curricular and curricular options as more distinct than overlapping, conceptualizing of learning in terms of "the curricular/co-curricular dichotomy" in higher education has given way to more integrative approaches to development, such as the Transformative Learning Model (Oaks, 2015, p. 51). For example, as administrators involved in this study reported, the co-curricular portfolio and transcript fostered positive connections with faculty who supported learning outside the classroom. There was also a greater willingness among some faculty to use tools such as the co-curricular portfolio or transcript to document students' curricular learning, too.

Across both institutions though, learning was not confined to the curricular or the co-curricular. Consistent with the Transformative Learning model, the student interviews demonstrated that learning was widespread across student experiences, a result of many interactions, and supported by the co-curricular portfolio and transcript processes. North University students were able to directly connect their co-curricular and curricular experiences, completing their portfolios as an honors class assignment. In addition, South

University students were able to connect their learning to outcomes linked to higher education literature through the LEAP initiative (AAC&U, 2006). South University administrators also reported broadening the activities available in their database to include more curricular learning opportunities for students.

The Current Generation of Traditional-Age Students Are Generally Well-Suited to the Process of Creating a Portfolio or Transcript

While this conclusion is rather broad, this observation was based on both my experience conducting this research, as well as my role as an administrator on a college campus. Beyond the obvious need to be an involved student leader on a college campus, there are two somewhat contradictory qualities that seem to lend themselves to creating a co-curricular portfolio or transcript. One of these characteristics has a more private, internal focus, while the other is more externally-directed and public in nature. In order to create a co-curricular portfolio or transcript, one needs 1) an ability to be introspective and 2) a willingness to publicly share their experiences. Today's college students seem uniquely capable of meeting these two criteria.

Some describe today's students as a curious contradiction; connected and isolated, at the same time, and both perhaps more than ever before. As Charles described the students at North University, he said, "This is the generation of busy-ness. Every hour of everyday, these young people have been programmed from kindergarten through high school, so why should there be any surprise that they're the same way here?" Students may be more connected and savvy through the reach of the internet, but in person, can appear sheltered, or perhaps less experienced socially, as the reliance on technology may make interpersonal contact less common and more challenging for some. "For a lot of

them, spending time even reflecting on who they've become is something that they've never done before, and that's where I've seen a lot of personal growth with them thinking through, 'Who am I now?'…Sometimes you have to force them to sit down and go, 'OK, let's talk about how you were when you came here to how you are now,'" Charles explained, touting the contribution made by the co-curricular portfolio.

Although estimates vary in marking the boundaries between generational cohorts, Millennials, are defined as students born after 1982 (Shoup, Gonyea, & Kuh, 2009). Compared to prior generations, the Millennial generation is characterized as growing up in a more sheltered, highly structured environment; closely supervised by their parents, even as they went to college (Howe & Strauss, 2003; Lum, 2006; Shoup et al., 2009; Taylor, 2006). Coming of age with technology, this group is described as open to change, savvy with technology, and effective at multi-tasking (NAS, 2006). Their frequent use of social media helps them build social capital, but they rely heavily on it to interact and for emotional regulation (Berthon et al., 2011; Berry et al., 2010; Ellison et al., 2007; Palfrey & Gasser, 2008; Valenzuela et al., 2009). Millennials have been called "the Peter Pan Generation" because they tend to delay entering adulthood by postponing living independently from their parents, marrying, and starting a family—partly from a desire to avoid perceived mistakes by their parents and to make the right decisions about family and career" (Bolton et al., 2013, p. 252; see also Carroll et al., 2009).

However, a generational shift among college student cohorts is underway. "Millennials are being replaced by the next generation…They are heavy users of YouTube and learn through videos and visuals. They are activists, want purpose, and want to create their own experiences" (AACRAO, 2016, p. 5). The development of

programs such as the CCP and CCT match well with the needs and interests of this next generation of students, too. These programs offer them opportunities to choose their own path and achieve their goals.

Following the Millenials to college, this next cohort of students are Generation Z, who were born between 1995 and 2010 (Hope, 2016; Seemiller & Grace, 2016). As the first generation in the age of smartphones, these students grew up using the Internet and social media from an early age (Williams, 2015). Determined to follow in the footsteps or learn from their elders' mistakes, they are either "opposites or extreme versions of Millennials" (Williams, 2015). More sober and in control as teenagers than their older siblings, they have demonstrated lower teen birth rates; reduced alcohol, tobacco and drugs use; and they resort to physical violence less often (CDC, 2014; Sparks & Honey, 2014). Not only digital natives, but "Generation Z takes in information instantaneously, and loses interest just as fast," said Hannah Payne, an 18-year-old U.C.L.A. student and lifestyle blogger (Williams, 2015).

Another quality that college students appear to be exhibiting is a frankness and lack of personal boundaries that technology seems to have opened up for some. For example, a recent Facebook post from my institution illustrates students' openness to sharing their personal experience. In a Facebook group comprised of over 1,000 members of the incoming first year class, a student posted, "Random question but has anyone had anyone stay overnight yet? If so did they sleep in the bed with you? I want my boyfriend over but idk how it will be with both of us in a twin size bed (smiley face)" (personal communication, Facebook post, September 19, 2017). Following this post, several

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students eagerly responded with supportive opinions and advice, without any reservations or critique about the personal nature of the student's initial query.

Bransford, Brown, and Cocking (2000) describe one of the benefits of the use of "technologies for communication is that they help make thinking visible" (p. 220). For example, co-curricular portfolios offer a technological method of broadening, deepening, integrating, connecting, expanding, and visualizing student learning and the development of transferable skills (Cosgrove & Marino, 1997; Gutowski, 2006). Bass (2011) characterizes portfolios as a "social pedagogy," due to their interactive nature, while Yancey (1998) describes the enhanced learning opportunities that arise from "the social nature of reflection" (p. 13). Portfolios, as an educational tool, appear to be well-suited for less inhibited students, such as student leaders, who may be willing to share information and opinions; students who are knowledgeable and comfortable with technology; and who are experienced with the process of being introspective and reflective, too.

Several current developments also shaped this conclusion about why today's college students may be considered, "the portfolio generation." Among these societal trends are the increasing pace of change and knowledge production, the immediacy the internet provides, the expansion and reliance on technology, the growth of social media and reality TV, and the rise of "helicopter parents;" who recorded every experience, and validated each achievement, while they hovered over the millennial generation (Colavecchio-Van Sickler, 2006; Lipka, 2005; Shoup et al., 2009; Taylor, 2006). These societal factors contribute to an environment in which students expect to share

experiences widely, publicly, as well as to reflect and define what an experience means for them.

Moreover, the focus on skills and career advancement among these two co-curricular documents is also consistent with another societal trend, the commodification of higher education (Nobel, 2002; Shumar, 1997; Slaughter & Rhoades, 2004). The shift in the perception of higher education from being a public good to being perceived as a private gain, is reflected in this focus on developing skills, gaining a competitive edge, and seeking career advancement as a primary outcome of college (Boyer, 1990). As Charles described the CCP, he shared that "it is ultimately to benefit [students] post-West Chester…Students live in the here and now, and so yeah, they're thinking about getting that dream job, absolutely."

"Steve Johnson, the author of the book *Where Good Ideas Come From,* closes his TED Talk of the same title with the tagline: "Chance favors the connected mind." By "connected," Johnson means two things, both of which bear on the problem of learning in higher education today. First, he means connected in the sense of being integrative, of making connections between things that seem dissimilar. And second, he means connected in the sense of being socially networked" (Bass, 2012, p. 12; see also Johnson, 2011). Bass (2012) concludes that "the connection between integrative thinking, or experiential learning, and the social network, or participatory culture, is no longer peripheral to our enterprise but is the nexus that should guide and reshape our curricula in the current disruptive moment in higher education learning" (p.12). Generation Z seems well-suited to adapt to such educational changes and challenges.

Co-Curricular Portfolios and Transcripts Are Valued as Credentials to Meet Both

Student and Institutional Needs

The results of this study indicate that most of the students, administrators, and

faculty appreciated and valued the portfolio and transcript as tools and credentials that

promote career or co-curricular advancement and make students more competitive in

recruitment settings. Administrators from both institutions articulated these goals for

students using their programs. "Higher education today is more focused than ever on the

need to demonstrate how and what students are learning" (Chen & Light, 2010, p. 1).

These programs enable students and institutions to make student learning and

development more demonstrably visible through the reflection and documentation

process.

The CCP and CCT provided the means to enable students to document and

describe their learning. Among those students who have used their co-curricular

document as a credential, most of them encountered success or at least received positive

feedback. Almost all of the students who have yet to use their portfolio or transcript in a

recruiting situation, reported that they believed the document would improve their

marketability.

The joint effort to create a comprehensive student record, between AACRAO

(American Association of College Registrars and Admissions Officers) and NASPA

(National Association of Student Affairs Professionals), is evidence of the growing need

to document student learning holistically (AACRAO, 2016). "While the transcript has

been static, the environment for education and work, as well as the needs and

expectations of students, employers, and educational institutions has changed greatly"

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(AACRAO, 2016, p. 2). This project seeks to develop new models to integrate learning outcomes and competencies from multiple environments with the traditional transcript, which has been used to document seat time, grades, and credits (AACRAO, 2016).

The co-curricular portfolio and transcript are consistent with this effort to create new, comprehensive ways to show student learning. "Already, the demand for experiential and online learning is increasing rapidly, and the environment for instructional delivery is expected to rapidly evolve" (AACRAO, 2016, p. 2). Each document in this study provided a means to describe student learning that would be more inclusive than the traditional transcript model. The portfolio allowed students to be more descriptive and personalize their entries within broad categories, while the co-curricular transcript used the institutionally defined learning outcomes to allow students to express their gains. This study demonstrates that models like the co-curricular portfolio and transcript are sufficiently adaptable and flexible to capture learning more broadly. As one of the participants in the AACRAO and NASPA project commented, "Campuses are saying, 'We need something that will give students an opportunity to marry what they have been doing inside and outside the classroom" (AACRAO, 2016, p. 5). Moreover, this project between two professional associations, AACRAO and NASPA, bringing different perspectives to the evolving need institutions face to demonstrate student learning, is compatible and consistent with the type of efforts that North and South University undertook to accomplish the same outcome.

Identifying the Audience and Goals for the Program Were Important to Developing a Successful Product

Both universities in this study focused their attention on future employers in designing their products. "Employers are saying it is less important where you went to college and what your major is. What's more important are your soft skills" (AACRAO, 2016, p. 5). North and South University administrators intended to create a tool that made their students more competitive in the job market.

Administrators at each institution articulated the gap in content that they saw between students' resumes and their academic transcripts. "It is important to have a framework that provides sufficient flexibility in a rapidly changing environment" (AACRAO, 2016, p. 2). The universities sought to fill this gap between what students learn and the typical documents used in recruitment or selection processes, with the respective co-curricular documents they created on their campuses. As Charles stated, "Employers are looking for skill sets. Resumes don't necessarily provide the ability for you to talk about the skill sets that you're learning both in as well as out of class…with a portfolio...it gives them a vehicle to talk about how they have changed and grown and developed personally, interpersonally."

These documents, however, were more than summative listings of skills gained. Through the use of reflection, whether by writing a statement or identifying skills learned, the co-curricular portfolio and transcript also served as formative experiences for students creating them. As Mitchson stated, "It's really important for students to articulate what they've learned, so that's why we ask folks to identify those skill sets as they go, knowing that someday…they might get a question, tell me how you've learned.

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So practicing them and encouraging them to start practicing interviewing skills and demonstrating those practical hands-on experiences in the future." As comments from many students in the study demonstrated, the universities' goal of creating a competitive advantage for students was enhanced through students articulating what they learned through reflection and/or interview experiences. To the degree that students are able to design their own portfolio, Yancey (2009) argues that the more control students have, the greater the likelihood of success in learning.

Other audiences for North and South University administrators included university faculty and staff, as well as the external community. Administrators at each institution also discussed the important role other faculty and staff contributed to these programs. In addition to supporting the two programs in different ways at each institution, the evidence from the portfolios and transcripts also served to underscore the value and validity of student learning through co-curricular experiences.

For example, when Charles described the gains in leadership and teamwork that students described in their CCP reflection statements, he referenced the work of the professional association, National Association of Colleges and Employers (NACE). Charles explained that these two skills are among the more highly sought after by employers. And indeed, the most recent survey of employers by NACE indicated that, "More than 80 percent of responding employers said they look for evidence of leadership skills on the candidate's resume, and nearly as many seek out indications that the candidate is able to work in a team" (www.naceweb.org, 2017). Similarly, South University used the LEAP outcomes as the foundation for their transcript, linking student learning from their program to this national initiative.

While employers and students were the primary audience, campus and community members also played a role in shaping the portfolio and transcript. In order to support their students' success with future recruiters or employers, these two institutions sought to bridge the learning gap that they perceived between the skills shown on a resume and the knowledge conveyed by an academic transcript. Through grounding their programs in relevant literature, they sought to substantiate these new tools and the learning they demonstrated for all of these audiences.

Respective Features of the Co-Curricular Portfolio and/or Transcript Played a Significant Role in Fostering Programmatic Success

There are several key features in the co-curricular portfolio and transcript. Some of these qualities apply to both documents while others are specific to either the portfolio or transcript. The characteristics highlighted refer to specific aspects of the programs, as well as to institutional or situational factors that contributed to the portfolio or transcript programs. Features that applied to both programs included 1) the online nature of the program; 2) the involvement categories; and 3) the validation process.

First, housing the CCP and CCT in their university's OrgSync platform made the programs easily accessible online to students who were involved in co-curricular activities. This system was the primary platform that both institutions used to manage their student organizations. While South University students appreciated the convenient, online availability of their program, a number of North University described their online process as cumbersome and challenging. North students articulated the need for a more streamlined, clearer process in using the CCP. However, when compared to the prior hard

copy process, administrators described the online feature at North as much more efficient, convenient and accessible for both students and administrators.

Second, this study showed that the involvement categories at both North and South University displayed consistency, with multiple overlapping items, but were also tailored to the interests and needs identified on each campus by the program developers. One of the findings from a survey of institutions participating in the AACRAO and NASPA project was that "the process of categorizing activities and assessing outcomes is organic and iterative" (AACRAO, 2016, p. 5). Administrators from each campus in this study described the iterative process they experienced, as demonstrated by phases of development, evaluation and re-launching of their programs. At North, the next generation of the CCP moved the program to an online format, housed in OrgSync. While at South, their re-development process included assessing the benefits and challenges of using 19 learning outcomes, which led them to reduce to ten before re-introducing the program to students.

Third, staff from both institutions strongly supported their respective verification processes. This feature was touted as an integral aspect of the programs. Each institution depended on a network of faculty and staff to confirm a student's involvement and validate their self-reported learning. Verification was believed to establish greater credibility among students, employers, and university faculty and staff. Multiple interview participants noted that resumes can be inflated or fabricated, while the approval of items listed in the co-curricular portfolio and transcript by university personnel, were considered authentic and certified.

The main features that applied specifically to the co-curricular portfolio included 1) the open-ended response capabilities; 2) the reflection statement; and 3) the relationship with the North University Honors College faculty. Several interview subjects described each of these features as important aspects of the CCP. Most North students valued the ability to create open-ended entries, to personalize their content, as well as the requirement to complete a reflection statement, which helped them identify and articulate their learning and development. The support of the Honors faculty was also described as a significant feature because it gave the program increased importance and visibility among students. Additionally, the class assignments by faculty to create a portfolio insured that students continued creating them.

Key features particular to the co-curricular transcript included 1) the search capabilities and 2) the requirement by many campus offices for students to create a transcript as a condition of applying for leadership positions. Each of these aspects of the transcript were described as strong contributors to the success of the program. Some students took advantage of the search option to explore other involvement opportunities, while many students reported that the transcript requirement motivated them to maintain and actively use their transcript with applications or in interview settings. Collectively, these features and factors contributed positively to the on-going use of the co-curricular portfolio and transcript on their respective campuses.

Recommendations

Based on the findings presented in this study, a series of recommendations were identified. These recommendations were organized for individual students, for institutional design and implementation, and for areas of future research. While these

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recommendations overlap to some degree, each area of recommendation will be discussed as well as relevant questions posed to promote future inquiry.

Recommendations for Individual Practice

Based on the student narratives, there are four recommendations for individual practice by students to maximize their learning through using the co-curricular portfolio or transcript model. Faculty and administrators considering these types of programs should consider these factors in the design and implementation of their co-curricular documents. First, students need to stay engaged with the process of creating the portfolio or transcript over time. Students described timeliness in entering data and reflecting on experience as important contributors and facilitators to student learning. Spending time on task and receiving prompt, timely feedback have long been identified as an important principle to facilitate student learning (Chickering & Gamson, 1987). A number of students, particularly at North University, commented on their own lack of commitment to the process, particularly once they had completed the class assignment. While most could speak to the value of learning from reflecting on their co-curricular experiences, some also expressed regret that they had not continued to add to their portfolio in as timely a manner. The requirement that students at South University needed to use their co-curricular transcript in applications and interviews provided a built-in incentive and consequence for maintaining the document.

Second, students who used their program to explore other opportunities felt that time invested was well spent in advancing their co-curricular plans. The search feature of the South University program was most cited for this recommendation. Students who

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explored opportunities available to them seemed able to articulate clearer plans and goals for their involvement and to be able to be strategic in pursuing opportunities they sought.

Third, based on the Transformative Learning model (Athas, Oaks, & Kennedy-Phillips, 2013), students should seek to use these co-curricular tools to further their learning and development holistically and comprehensively. As both institutions were doing, including more learning experiences (such as student/faculty research, study abroad, or internships) into the portfolio or transcript process creates more opportunities for students to make connections. As the model describes, bringing together student knowledge and experiences with learning opportunities from the curricular and co-curricular realms reinforces the interdependence of student learning across different environments (Oaks, 2015). Moreover, to the degree that students can incorporate their reflections and experiences across different learning opportunities in curricular and co-curricular settings, that effort facilitates a more intentional, coherent, integrative learning and development opportunity, rather than a haphazard, disconnected set of activities (AACARAO, 2015; Chen & Light, 2010). The co-curricular portfolio and/or transcript can provide a platform for unifying these otherwise disparate student learning experiences. In addition, the type of structured reflection included in the North portfolio provides a mechanism to promote greater depth of student introspection and articulation of learning than the type of reflection used by students at South.

Finally, reflection is one of the key features that these programs offer. Students need to engage in timely reflection, consistently, to describe and synthesize their learning and development. With the ability to personalize portfolio entries and to provide a reflection statement, the North model was best situated to capitalize on the deeper

learning that can come from such engagement. In addition to these recommendations for individual students using co-curricular portfolios or transcripts, the next section offers a series of overlapping institutional considerations.

Recommendations for Institutional Design and Implementation

There is a corresponding recommendation for institutions engaged in designing or implementing a co-curricular portfolio or transcript program for each of the recommendations for individual practice by students. Several recommendations arise for institutions that develop programs that allow for student exploration of involvement opportunities, while incorporating timely, holistic, integrated experiences with structured reflection activities that receive prompt feedback and support. In addition, there are other recommendations that faculty and administrators should consider in designing and implementing programs.

A first essential task that is recommended is the resource allocation proposition. Institutions must consider the purpose and goals of portfolio programs, the opportunities to maximize and deepen student learning through the use of co-curricular portfolios and transcripts, compared to the resources needed to make such a program scalable and sustainable. The experiences of North and South University offer two contrasting cases in this decision-making process, the former investing in reflection activities, while the latter opting for a more limited introspective process specifically for the goal of maintaining a program that is both beneficial for students and manageable for the university. The finding that neither institution has yet found a way to consistently report qualitative or quantitative outcomes in a systematic fashion from their respective programs illustrates the resource challenges in maintaining these systems.

Inherent in this resource allocation discussion, consideration of different goals, audiences, structures, functions, and features must be included to inform the decision-making process. A broad analysis should consider factors such as costs, staffing, and resources, as well as benefits to student learning and development, assessment reporting, accreditation efforts, institutional marketing strategy, and using economies of scale by building upon existing technology and/or student involvement infrastructure, in addition to any perceived opportunity costs. Furthermore, institutional history, structures, priorities, and relationships should be considered and leveraged where possible to inform the fit and viability of the program.

Second, grounding the program design and implementation in the literature on student learning is another important recommendation. For example, the LEAP initiative (2006) established a common set of learning outcomes, while the VALUE rubrics (2009, 2013) provide related assessment resources. The NACE competencies (NACE, 2017) address preparation to meet the needs of employers. Additional recommended literature that could inform the design of a co-curricular portfolio or transcript include, *High-Impact Practices* (Kuh, 2008), which addresses effective learning practices across institutional activities; *Learning Reconsidered* (2004), which provides a philosophical framework for designing holistic learning opportunities; while Barrett's (2004) portfolio model describes how portfolios can be used for learning and accountability.

Bresciani (2005) identified 20 questions as principles to consider when selecting a student electronic portfolio. Among these criteria, five focused on technical and support questions (i.e., training, server, browser, and security requirements). Another five of these questions focused on the user's interface with the product (i.e., ease of use, ability to link

to other university systems and import content into other university platforms). An additional five questions focused on technical capabilities of the program, including what kind of feedback options are available; can the student evaluate their own artifact; can the student respond to the evaluator's feedback; and can an external evaluator comment on the learning artifact. Finally, five items were foundational, directly related to the purpose of the e-portfolio. These questions included, does the e-portfolio allow for the documentation of individual student learning; is that learning linked to program outcomes, and institutional learning principles, in the e-portfolio; can the evidence of student learning be shared across discipline and division program outcomes; and can the criteria for evaluation of student learning be incorporated within the e-portfolio? These criteria provide a broad overview from the literature of the philosophical, process, technical, and experiential factors to consider when developing a co-curricular portfolio or transcript program.

In addition to building upon existing knowledge, using the literature as a foundation for the program design establishes greater credibility for the effort and may provide prospects to support or link to other institutional initiatives. An effort to understand and incorporate the literature also creates opportunities to solicit faculty expertise and potentially enlist broader institutional support. Finally, building upon the literature insures that the program will have a broader focus on student learning and development.

Third, identifying program features to design a product that will be scalable and sustainable is a critical recommendation. Findings from this study described benefits from features such as search capability, participation requirements, verification, and

reflection components used by the respective universities. Moreover, the student experience with the technology in using the online program is also a critical factor to examine. For example, at North University, students were challenged by the online forms and technical reporting process, while at South University, students found their system more accessible, but the limits on the content they were able to report was a constraint and barrier for some students. Exploring opportunities for partnerships with faculty, alumni, and across offices or institutional units is recommended for consideration to institutional actors as well. In addition to these recommendations for institutional considerations, there are also recommendations for further research that arose from this study.

Recommendations for Further Research

This study suggests at least five areas of future research. First, researchers should address how co-curricular portfolios or transcripts are being used to address institutional needs. Making effective resource allocation decisions is critical for institutional efficiency and student learning. Furthermore, the potential benefit of using documentation from co-curricular portfolio learning could be an asset for assessment efforts and/or accreditation purposes. Important questions to explore include: Are the data from portfolio programs being reported? Are such results being used to for summative, assessment of learning purposes to benefit the institution? Are there marketing and recruiting benefits to be derived from highlighting these programs to prospective students or employers? Understanding the gains from and the opportunity costs of implementing and participating in such development efforts would inform institutional and student decision-making and efforts.

A second area to explore relates to how co-curricular portfolios or transcripts can best be used to maximize student learning and development. Specific questions to address include: What types of practices and processes are most effective in engaging students, in streamlining systems, in helping students succeed in acquiring beneficial skills and abilities? How can these programs best be used to facilitate student development, knowledge acquisition, and/or demonstrating competencies, in addition to developing abilities and skills? How can these programs best be tailored to students at different stages of their college careers and educational development?

Exploring these questions is important to understand the impact of these educational tools on students and institutions. If institutions need to better prepare students for the global society and economy (AAC&U, 2007; Business-Higher Education Forum, 1999; U.S. Department of Education, 2006), then they will need to identify approaches to enable students to learn and develop the skills, abilities, knowledge, and competencies needed to become active, engaged community members and dynamic assets to the rapidly changing workforce (AAC&U, 2007). Co-curricular portfolios provide the means to structure, increase, and deepen the learning already taking place on college campuses through co-curricular activities.

Third, how do the core characteristics and related aspects of co-curricular portfolios and transcripts contribute to student learning? What models or practices to enhance reflective thinking, scaffolding, self-assessment, or metacognition contribute best to student learning and quality portfolio development? Applying and testing knowledge about learning from other portfolio formats to co-curricular ones, or experimenting with new models for co-curricular portfolios or transcripts would increase

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our understanding of these educational tools. The utility of this knowledge would be extremely valuable in designing effective learning environments and activities for students to use in creating their co-curricular portfolios or transcripts.

Fourth, what is the perspective of employers about co-curricular portfolios or transcripts? Do they review them when provided? How do they view the product produced? Is there any difference in student preparedness in the interview process between those students who use co-curricular documents and those who do not? Are students who used co-curricular portfolios able to describe or articulate their experiences any better? Understanding the impact that these tools have on employers would test an inherent assumption that these tools are of benefit in the recruitment process. Feedback from employers could also guide the development process, to the degree that institutional leaders view prospective employers as a key audience.

Finally, the theoretical implications from the conceptual framework, Preparation for Future Learning (PFL) are another area of potential research. Bransford and Schwartz (1999) called for dynamic tests to demonstrate learning transfer as a means to make PFL evident. The primary goal for the co-curricular portfolio and transcript, as articulated by administrators at both institutions, was to prepare students to be more competitive and successful in advancing their co-curricular and career opportunities. In this area, further research should explore the following questions: What types of dynamic assessments could be conducted to look for evidence of PFL? How could the experiences of students who used a co-curricular portfolio or transcript be compared to those students who did not? How could any benefits in terms of PFL be identified from using a co-curricular portfolio or transcript? And more broadly, how does using a co-curricular portfolio or

transcript inform our theoretical understandings of student learning and development? These types of questions are additional ways that PFL could be applied to the study of co-curricular portfolios and transcripts.

INTERVIEW PROTOCOL FOR STUDENTS

Date: _____   Time: _____   Code: _____
                                                                [first letter of site and
                                                                # of interview at that
                                                                site]

Fictional participant name:_____

Introductory comments:

My name is Bruce Perry, and, as you know, I am a doctoral student at UMASS Boston, in the Higher Education Administration program. Thank you for agreeing to participate in my study on co-curricular portfolios. Your name will not be identified with the responses that you provide. I need your consent to audio-tape this interview, to transcribe your interview, and to take notes during the interview, so would you please sign this consent form? Here is a copy of the consent form for your records. This interview will last for one hour. You do not have to answer any question you do not wish to answer. Do you have any questions for me about our interview, before we begin?

Background Questions	Prompts
1. How long have you been using a co-curricular portfolio?	How long ago did you begin your portfolio?
2. How have you created your portfolio?	Did you create it all at once or add to it over time?
3. Please review and describe your co-curricular portfolio for me?	Tell me about what you've done; your co-curricular involvement and with your portfolio?
4. Which co-curricular activities have you been involved in on this campus?	Tell me about what was most important to you about your involvement and about your portfolio?
5. How long have you been involved in these co-curricular activities on this campus?	What were your expectations? Have you changed during this time? If so, how?
Co-curricular Learning and Involvement Questions	**Prompts**
6. What have you learned from your involvement in co-curricular activities?	What skills or abilities have you learned or developed?

Are there things you've learned that you wish you knew when you started?	If so, how have you been able to incorporate those lessons?
Are there new skills or abilities you learned?	If so, what are they and how have you learned them?
Are there skills or abilities you've developed?	If so, what are they and how have you learned them?
7. What role, if any, did the co-curricular portfolio play in helping you identify skills or abilities you've developed?	Was the co-curricular portfolio helpful in identifying skills or abilities?
Role of Prior Assumptions, Attitudes and Feedback Questions	**Prompts**
8. Were there attitudes or assumptions you might have held initially about being involved or how to get things done?	If so, what were some of those initial attitudes or assumptions?
9. Were those initial attitudes or assumptions helpful in achieving your goals?	How or how not?
10. Were there attitudes or assumptions about being involved that you needed to adjust or to let go of?	If so, how did you make adjustments to your attitudes and assumptions?
11. Have you gotten much feedback from others about your involvement in co-curricular activities? From peers? From advisors? From others?	Have you been able to apply this feedback? If so, how? Did it lead you to make any changes?
12. What role, if any, did the co-curricular portfolio play in helping you learn from your experiences?	Was the co-curricular portfolio helpful in learning from your experiences?
Co-curricular Portfolio Experience Questions	**Prompts**
13. Why did you create a co-curricular portfolio?	Did it meet your expectations?
14. What, if anything, did you hope to gain from creating a co-curricular portfolio?	What feedback have you gotten about your portfolio?
15. Do you think that creating a co-curricular portfolio… …helped you remember what co-curricular activities you've been involved in?	
…helped you reflect on what you learned through co-curricular activities?	If so, how?

…improved your ability to reflect on what you learned through co-curricular activities?	If so, how?
…helped you identify lessons you have learned from being involved in co-curricular activities?	Why or why not?
…raised your awareness of the prospect of developing skills and abilities through co-curricular involvement?	If so, how?
…helped you identify skills and abilities you developed through co-curricular activities?	If so, which ones? How?
…exposed you to additional involvement opportunities available to students?	If so, which ones? How?
…enabled you to be more intentional in your future involvement decisions?	If so, how?
…deepened your understanding of the skills and abilities you have developed?	If so, how?
…enhanced your ability to reflect on your experiences?	If so, how?
…enhanced your ability to articulate the skills and abilities you may have gained through being involved?	Is so, how?
16. Do you feel that you'll be able to transfer the skills and abilities you've learned to future situations?	Why or why not? If so, how?
17. How do you feel the portfolio experience prepares you for the future?	What would you tell another student about the portfolio process?
Applications of the Co-Curricular Portfolio	**Prompts**
18. How have you used your co-curricular portfolio?	Have you shared it with anyone? Used it as a supplement to an application? Used it in other capacities?
19. Did creating the co-curricular portfolio impact your own self-confidence?	If so, how? How else did it impact you?
20. Do you feel that having the co-curricular portfolio make you more marketable for opportunities such as internships, graduate schools, jobs?	What feedback have you gotten on your portfolio from others?
21. Is there anything else you'd like to tell me about your experience with the co-curricular portfolio before I end this interview?	

Closing Comments:

Thank you very much. I enjoyed meeting you. I will be sending your transcribed responses to you, so that you can confirm with me that the transcription is accurate. My contact information is listed on the consent form I gave you at the beginning of the interview. Please email me at bperry@salemstate.edu to let me know if there are any corrections needed.

Finally, I would also like to gather some information about each participant in the study. May I ask you to complete this brief form before you leave? Included on this form is a space where you can give me an email address where I can send the transcribed interview?

Thank you again for your time and participation.

APPENDIX B

STUDENT PARTICIPANT INFORMATION FORM

1. Your Name:

   _____

2. What email address may I send a transcription of your interview?

   _____

3. What is your class year?
___ First Year   ___ Sophomore   ___ Junior   ___ Senior   ___ Prefer not to answer

4. What is your major? _____

                        ___ Prefer not to answer

5. How many semesters have you lived on campus? _____   ___ Prefer not to answer

6. Do you live on campus now? ___ Yes   ___ No   ___ Prefer not to answer

7. How do you identify your race/ethnicity (choose all that apply)

       ___ African-American/Black   ___ Asian/Pacific Islander   ___ Caucasian/White

       ___ Hispanic/Latino/a   ___ Native American   ___ Prefer not to answer

8. How do you identify your gender (choose all that apply)

___ Female   ___ Gender Non-Conforming/Transgendered   ___ Male   ___ Self-Identify

       ___ Prefer not to answer

Thank you for your time and participation.

INTERVIEW PROTOCOL FOR ADMINISTRATORS/FACULTY

Date: _____   Time: _____   Code: _____
                                                    [first letter of site and # of
                                                    interview at that site]

Fictional participant name:_____

Introductory comments:

My name is Bruce Perry, and, as you know, I am a doctoral student at UMASS Boston, in the Higher Education Administration program. Thank you for agreeing to participate in my study on co-curricular portfolios. Your name will not be identified with the responses that you provide. I need your consent to audio-tape this interview, to transcribe your interview, and to take notes during the interview, so would you please sign this consent form? Here is a copy of the consent form for your records. This interview will last for one hour. You do not have to answer any question you do not wish to answer. Do you have any questions for me about our interview, before we begin?

Background Questions	Prompts
1. What is your position at the institution?	How long have you been an administrator at this campus?
2. How long have you been working with the co-curricular portfolio program? What is your role with the program?	Do you supervise any staff working on this program? Whom do you report to regarding this program?
3.Tell me about the co-curricular portfolio program on your campus? How did it begin?	What are the goals and desired outcomes for this program?
4. How long has your campus been using a co-curricular portfolio program?	How does it function? How do students engage with it?
5. What types of activities are included?	How are entries made?
6.What are the primary features of the program? What types of activities are included in the portfolio?	Is the program required of any students?

7. How is the program made available to students? How is it marketed to students? How many students actively participate?	Are there incentives or consequences for participating or not participating?
8.Who creates a co-curricular portfolio on your campus?	Can you categorize the students involved (describing types of involvement, demographics, etc.)?
9.How do students respond to the program?	What do students think about it?
Co-curricular Learning and Involvement Questions	**Prompts**
10. What do you hope students learn from creating a co-curricular portfolio?	What do you think they get out of it?
11. Is the portfolio intended to be a formative or a summative assessment process?	
Role of Prior Assumptions, Attitudes and Feedback Questions	**Prompts**
12. How do students get feedback from others about their involvement in co-curricular activities? From peers? From advisors? From others?	How are they able to apply this feedback? Does it lead students to make any changes? Does the portfolio aid students in adjusting their approach?
13. Do you notice attitudes or assumptions students have about being involved or how to get things done that students initially have or bring with them?	If so, what are some of those initial attitudes or assumptions?
14. Do you notice attitudes or assumptions students have about being involved that students need to adjust or to let go of?	If so, how do they make adjustments to their attitudes and assumptions?
15. Does the portfolio process impact students approach?	Are they able to incorporate what they may learn into their leadership roles from the portfolio process?
Co-curricular Portfolio Experience Questions	**Prompts**
16. Why do you think students create a co-curricular portfolio?	Does it meet their expectations?

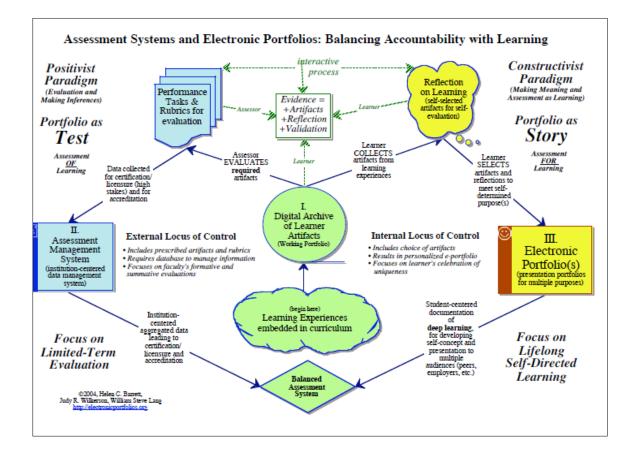|	
17. Do you think that creating a co-curricular portfolio… …helps students remember what co-curricular activities they've been involved in?	
…helps students reflect on what they learned through co-curricular activities?	If so, how?
…improved their ability to reflect on what they learned through co-curricular activities?	If so, how?
…helped them identify lessons they have learned from being involved in co-curricular activities?	Why or why not?
…raised their awareness of the prospect of developing skills and abilities through co-curricular involvement?	If so, how?
…helped them identify skills and abilities they developed through co-curricular activities?	If so, which ones? How?
…exposed them to additional involvement opportunities available to students?	If so, which ones? How?
…enabled them to be more intentional in their future involvement decisions?	If so, how?
…deepened their understanding of the skills and abilities they have developed?	If so, how?
…enhanced their ability to reflect on their experiences?	If so, how?
…enhanced their ability to articulate the skills and abilities they may have gained through being involved?	Is so, how?
18. Do you feel that they'll be able to transfer the skills and abilities they've learned to future situations?	Why or why not? If so, how?
19. How do you feel the portfolio experience prepares students for the future?	What would you tell a student about the portfolio process?

Applications of the Co-Curricular Portfolio	Prompts
20. How do students use the co-curricular portfolio on campus?	Do they share it with others? Use it as a supplement to an application? Use it in other capacities?
21. Does creating the co-curricular portfolio impact their self-confidence?	If so, how? How else does it impact students?
22. Do you feel that having the co-curricular portfolio makes students more marketable for opportunities such as internships, graduate schools, jobs, etc.?	What feedback have you gotten on the portfolio from others?
23. Is there anything else you'd like to tell me about the co-curricular portfolio before I end this interview?	

Closing Comments:

Thank you very much. I enjoyed meeting you. I will be sending your transcribed responses to you, so that you can confirm with me that the transcription is accurate. At what email address may I send your transcribed interview? Please email me at bperry@salemstate.edu to let me know if there are any corrections needed. Thank you again for your time and participation.

APPENDIX D

ASSESSMENT SYSTEMS AND ELECTRONIC PORTFOLIOS (BARRETT, 2004)

Assessment Systems and Electronic Portfolios: Balancing Accountability with Learning

interactive process

Positivist Paradigm
(Evaluation and Making Inferences)

Constructivist Paradigm
(Making Meaning and Assessment as Learning)

Performance Tasks & Rubrics for evaluation

Evidence =
+Artifacts
+Reflection
+Validation

Assessor — *Learner*

Reflection on Learning (self-selected artifacts for self-evaluation)

Portfolio as **Test**

Portfolio as **Story**

Assessment OF Learning

Assessment FOR Learning

Data collected for certification/licensure (high stakes) and for accreditation

Assessor EVALUATES **required** artifacts

Learner

Learner COLLECTS artifacts from learning experiences

Learner SELECTS artifacts and reflections to meet self-determined purpose(s)

I. Digital Archive of Learner Artifacts (Working Portfolio)

II. Assessment Management System (institution-centered data management system)

External Locus of Control
- *Includes prescribed artifacts and rubrics*
- *Requires database to manage information*
- *Focuses on faculty's formative and summative evaluations*

Internal Locus of Control
- *Includes choice of artifacts*
- *Results in personalized e-portfolio*
- *Focuses on learner's celebration of uniqueness*

III. Electronic Portfolio(s) (presentation portfolios for multiple purposes)

(begin here) **Learning Experiences embedded in curriculum**

Institution-centered aggregated data leading to certification/licensure and accreditation

Student-centered documentation of **deep learning**, for developing self-concept and presentation to multiple audiences (peers, employers, etc.)

Focus on Limited-Term Evaluation

Focus on Lifelong Self-Directed Learning

©2004, Helen C. Barrett, Judy R. Wilkerson, William Steve Lang
http://electronicportfolios.org

Balanced Assessment System

APPENDIX E

VALUE RUBRICS

CIVIC ENGAGEMENT VALUE RUBRIC

for more information, please contact value@aacu.org

The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can by shared nationally through a common dialog and understanding of student success.

Definition

Civic engagement is "working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes." (Excerpted from *Civic Responsibility and Higher Education*, edited by Thomas Ehrlich, published by Oryx Press, 2000, Preface, page vi.) In addition, civic engagement encompasses actions wherein individuals participate in activities of personal and public concern that are both individually life enriching and socially beneficial to the community.

Framing Language

Preparing graduates for their public lives as citizens, members of communities, and professionals in society has historically been a responsibility of higher education. Yet the outcome of a civic-minded graduate is a complex concept. Civic learning outcomes are framed by personal identity and commitments, disciplinary frameworks and traditions, pre-professional norms and practice, and the mission and values of colleges and universities. This rubric is designed to make the civic learning outcomes more explicit. Civic engagement can take many forms, from individual volunteerism to organizational involvement to electoral participation. For students this could include community-based learning through service-learning classes, community-based research, or service within the community. Multiple types of work samples or collections of work may be utilized to assess this, such as:

❶ The student creates and manages a service program that engages others (such as youth or members of a neighborhood) in learning about and taking action on an issue they care about. In the process, the student also teaches and models processes that engage others in deliberative democracy, in having a voice, participating in democratic processes, and taking specific actions to affect an issue.

❷ The student researches, organizes, and carries out a deliberative democracy forum on a particular issue, one that includes multiple perspectives on that issue and how best to make positive change through various courses of public action. As a result, other students, faculty, and community members are engaged to take action on an issue.

❸ The student works on and takes a leadership role in a complex campaign to bring about tangible changes in the public's awareness or education on a particular issue, or even a change in public policy. Through this process, the student demonstrates multiple types of civic action and skills.

❹ The student integrates their academic work with community engagement, producing a tangible product (piece of legislation or policy, a business, building or civic infrastructure, water quality or scientific assessment, needs survey, research paper, service program, or organization) that has engaged community constituents and responded to community needs and assets through the process.

In addition, the nature of this work lends itself to opening up the review process to include community constituents that may be a part of the work, such as teammates, colleagues, community/agency members, and those served or collaborating in the process.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only:

- Civic identity: When one sees her or himself as an active participant in society with a strong commitment and responsibility to work with others towards public purposes.
- Service-learning class: A course-based educational experience in which students participate in an organized service activity and reflect on the experience in such a way as to gain further understanding of course content, a broader application of the discipline, and an enhanced sense of personal values and civic responsibility.
- Communication skills: Listening, deliberation, negotiation, consensus building, and productive use of conflict.
- Civic life: The public life of the citizen concerned with the affairs of the community and nation as contrasted with private or personal life, which is devoted to the pursuit of private and personal interests.
- Politics: A process by which a group of people, whose opinions or interests might be divergent, reach collective decisions that are generally regarded as binding on the group and enforced as common policy. Political life enables people to accomplish goals they could not realize as individuals. Politics necessarily arises whenever groups of people live together, since they must always reach collective decisions of one kind or another.
- Government: "The formal institutions of a society with the authority to make and implement binding decisions about such matters as the distribution of resources, allocation of benefits and burdens, and the management of conflicts." (Retrieved from the Center for Civic Engagement Web site, May 5, 2009.)
- Civic/community contexts: Organizations, movements, campaigns; a place or locus where people and/or living creatures inhabit, which may be defined by a locality (school, national park, non-profit organization, town, state, nation) or defined by shared identity (i.e. African-Americans, North Carolinians, Americans, the Republican or Democratic Party, refugees, etc.) In addition, contexts for civic engagement may be defined by a variety of approaches intended to benefit a person, group, or community, including community service or volunteer work, academic work.

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CIVIC ENGAGEMENT VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Civic engagement is "working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values, and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes." (Excerpted from *Civic Responsibility and Higher Education*, edited by Thomas Ehrlich, published by Oryx Press, 2000, Preface, page vi.) In addition, civic engagement encompasses actions wherein individuals participate in activities of personal and public concern that are both individually life enriching and socially beneficial to the community.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Diversity of Communities and Cultures	Demonstrates evidence of adjustment in own attitudes and beliefs because of working within and learning from diversity of communities and cultures. Promotes others' engagement with diversity.	Reflects on how own attitudes and beliefs are different from those of other cultures and communities. Exhibits curiosity about what can be learned from diversity of communities and cultures.	Has awareness that own attitudes and beliefs are different from those of other cultures and communities. Exhibits little curiosity about what can be learned from diversity of communities and cultures.	Expresses attitudes and beliefs as an individual, from a one-sided view. Is indifferent or resistant to what can be learned from diversity of communities and cultures.
Analysis of Knowledge	Connects and extends knowledge (facts, theories, etc.) from one's own academic study/field/discipline to civic engagement and to one's own participation in civic life, politics, and government.	Analyzes knowledge (facts, theories, etc.) from one's own academic study/field/discipline making relevant connections to civic engagement and to one's own participation in civic life, politics, and government.	Begins to connect knowledge (facts, theories, etc.) from one's own academic study/field/discipline to civic engagement and to one's own participation in civic life, politics, and government.	Begins to identify knowledge (facts, theories, etc.) from one's own academic study/field/discipline that is relevant to civic engagement and to one's own participation in civic life, politics, and government.
Civic Identity and Commitment	Provides evidence of experience in civic-engagement activities and describes what she/he has learned about her or himself as it relates to a reinforced and clarified sense of civic identity and continued commitment to public action.	Provides evidence of experience in civic-engagement activities and describes what she/he has learned about her or himself as it relates to a growing sense of civic identity and commitment.	Evidence suggests involvement in civic-engagement activities is generated from expectations or course requirements rather than from a sense of civic identity.	Provides little evidence of her/his experience in civic-engagement activities and does not connect experiences to civic identity.
Civic Communication	Tailors communication strategies to effectively express, listen, and adapt to others to establish relationships to further civic action	Effectively communicates in civic context, showing ability to do all of the following: express, listen, and adapt ideas and messages based on others' perspectives.	Communicates in civic context, showing ability to do more than one of the following: express, listen, and adapt ideas and messages based on others' perspectives.	Communicates in civic context, showing ability to do one of the following: express, listen, and adapt ideas and messages based on others' perspectives.
Civic Action and Reflection	Demonstrates independent experience and *shows initiative in team leadership* of complex or multiple civic engagement activities, accompanied by reflective insights or analysis about the aims and accomplishments of one's actions.	Demonstrates independent experience and *team leadership of* civic action, with reflective insights or analysis about the aims and accomplishments of one's actions.	Has clearly *participated* in civically focused actions and begins to reflect or describe how these actions may benefit individual(s) or communities.	Has *experimented* with some civic activities but shows little internalized understanding of their aims or effects and little commitment to future action.
Civic Contexts/Structures	Demonstrates ability and commitment to *collaboratively work across and within community* contexts and structures *to achieve a civic aim*.	Demonstrates ability and commitment to work actively *within* community contexts and structures *to achieve a civic aim*.	Demonstrates experience identifying intentional ways to *participate in* civic contexts and structures.	Experiments with civic contexts and structures, *tries out a few to see what fits*.

CREATIVE THINKING VALUE RUBRIC

for more information, please contact value@aacu.org

Association of American Colleges and Universities

The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can by shared nationally through a common dialog and understanding of student success.

Definition

Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking

Framing Language

Creative thinking, as it is fostered within higher education, must be distinguished from less focused types of creativity such as, for example, the creativity exhibited by a small child's drawing, which stems not from an understanding of connections, but from an ignorance of boundaries. Creative thinking in higher education can only be expressed productively within a particular domain. The student must have a strong foundation in the strategies and skills of the domain in order to make connections and synthesize. While demonstrating solid knowledge of the domain's parameters, the creative thinker, at the highest levels of performance, pushes beyond those boundaries in new, unique, or atypical recombinations, uncovering or critically perceiving new syntheses and using or recognizing creative risk-taking to achieve a solution.

The Creative Thinking VALUE Rubric is intended to help faculty assess creative thinking in a broad range of transdisciplinary or interdisciplinary work samples or collections of work. The rubric is made up of a set of attributes that are common to creative thinking across disciplines. Examples of work samples or collections of work that could be assessed for creative thinking may include research papers, lab reports, musical compositions, a mathematical equation that solves a problem, a prototype design, a reflective piece about the final product of an assignment, or other academic works. The work samples or collections of work may be completed by an individual student or a group of students.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- Exemplar: A model or pattern to be copied or imitated (quoted from www.dictionaryreference.com/browse/exemplar).
- Domain: Field of study or activity and a sphere of knowledge and influence.

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CREATIVE THINKING VALUE RUBRIC

Definition

Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Acquiring Competencies *This step refers to acquiring strategies and skills within a particular domain.*	Reflect: Evaluates creative process and product using domain-appropriate criteria.	Create: Creates an entirely new object, solution or idea that is appropriate to the domain.	Adapt: Successfully adapts an appropriate exemplar to his/her own specifications.	Model: Successfully reproduces an appropriate exemplar.
Taking Risks *May include personal risk (fear of embarrassment or rejection) or risk of failure in successfully completing assignment, i.e. going beyond original parameters of assignment, introducing new materials and forms, tackling controversial topics, advocating unpopular ideas or solutions.*	Actively seeks out and follows through on untested and potentially risky directions or approaches to the assignment in the final product.	Incorporates new directions or approaches to the assignment in the final product.	Considers new directions or approaches without going beyond the guidelines of the assignment.	Stays strictly within the guidelines of the assignment.
Solving Problems	Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.	Having selected from among alternatives, develops a logical, consistent plan to solve the problem.	Considers and rejects less acceptable approaches to solving problem.	Only a single approach is considered and is used to solve the problem.
Embracing Contradictions	Integrates alternate, divergent, or contradictory perspectives or ideas fully.	Incorporates alternate, divergent, or contradictory perspectives or ideas in a exploratory way.	Includes (recognizes the value of) alternate, divergent, or contradictory perspectives or ideas in a small way.	Acknowledges (mentions in passing) alternate, divergent, or contradictory perspectives or ideas.
Innovative Thinking *Novelty or uniqueness (of idea, claim, question, form, etc.)*	Extends a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries.	Creates a novel or unique idea, question, format, or product.	Experiments with creating a novel or unique idea, question, format, or product.	Reformulates a collection of available ideas.
Connecting, Synthesizing, Transforming	Transforms ideas or solutions into entirely new forms.	Synthesizes ideas or solutions into a coherent whole.	Connects ideas or solutions in novel ways.	Recognizes existing connections among ideas or solutions.

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CRITICAL THINKING VALUE RUBRIC

for more information, please contact value@aacu.org

The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can by shared nationally through a common dialog and understanding of student success.

Definition

Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.

Framing Language

This rubric is designed to be transdisciplinary, reflecting the recognition that success in all disciplines requires habits of inquiry and analysis that share common attributes. Further, research suggests that successful critical thinkers from all disciplines increasingly need to be able to apply those habits in various and changing situations encountered in all walks of life.

This rubric is designed for use with many different types of assignments and the suggestions here are not an exhaustive list of possibilities. Critical thinking can be demonstrated in assignments that require students to complete analyses of text, data, or issues. Assignments that cut across presentation mode might be especially useful in some fields. If insight into the process components of critical thinking (e.g., how information sources were evaluated regardless of whether they were included in the product) is important, assignments focused on student reflection might be especially illuminating.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

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- Ambiguity: Information that may be interpreted in more than one way.
- Assumptions: Ideas, conditions, or beliefs (often implicit or unstated) that are "taken for granted or accepted as true without proof." (quoted from wwwdictionaryreference.com/browse/assumptions)
- Context: The historical, ethical, political, cultural, environmental, or circumstantial settings or conditions that influence and complicate the consideration of any issues, ideas, artifacts, and events.
- Literal meaning: Interpretation of information exactly as stated. For example, "she was green with envy" would be interpreted to mean that her skin was green.
- Metaphor: Information that is (intended to be) interpreted in a non-literal way. For example, "she was green with envy" is intended to convey an intensity of emotion, not a skin color.

CRITICAL THINKING VALUE RUBRIC

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Definition

Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Explanation of issues	Issue/ problem to be considered critically is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding.	Issue/ problem to be considered critically is stated, described, and clarified so that understanding is not seriously impeded by omissions.	Issue/ problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/ or backgrounds unknown.	Issue/ problem to be considered critically is stated without clarification or description.
Evidence *Selecting and using information to investigate a point of view or conclusion*	Information is taken from source(s) with enough interpretation/ evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly.	Information is taken from source(s) with enough interpretation/ evaluation to develop a coherent analysis or synthesis. Viewpoints of experts are subject to questioning.	Information is taken from source(s) with some interpretation/ evaluation, but not enough to develop a coherent analysis or synthesis. Viewpoints of experts are taken as mostly fact, with little questioning.	Information is taken from source(s) without any interpretation/ evaluation. Viewpoints of experts are taken as fact, without question.
Influence of context and assumptions	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.	Identifies own and others' assumptions and several relevant contexts when presenting a position.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.
Student's position (perspective, thesis/hypothesis)	Specific position (perspective, thesis/ hypothesis) is imaginative, taking into account the complexities of an issue. Limits of position (perspective, thesis/ hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/ hypothesis).	Specific position (perspective, thesis/ hypothesis) takes into account the complexities of an issue. Others' points of view are acknowledged within position (perspective, thesis/ hypothesis).	Specific position (perspective, thesis/ hypothesis) acknowledges different sides of an issue.	Specific position (perspective, thesis/ hypothesis) is stated, but is simplistic and obvious.
Conclusions and related outcomes (implications and consequences)	Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order.	Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly.	Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are identified clearly.	Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified.

ETHICAL REASONING VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Ethical Reasoning is reasoning about right and wrong human conduct. It requires students to be able to assess their own ethical values and the social context of problems, recognize ethical issues in a variety of settings, think about how different ethical perspectives might be applied to ethical dilemmas and consider the ramifications of alternative actions. Students' ethical self identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues.

Framing Language

This rubric is intended to help faculty evaluate work samples and collections of work that demonstrate student learning about ethics. Although the goal of a liberal education should be to help students turn what they've learned in the classroom into action, pragmatically it would be difficult, if not impossible, to judge whether or not students would act ethically when faced with real ethical situations. What can be evaluated using a rubric is whether students have the intellectual tools to make ethical choices.

The rubric focuses on five elements: Ethical Self Awareness, Ethical Issue Recognition, Understanding Different Ethical Perspectives/Concepts, Application of Ethical Principles, and Evaluation of Different Ethical Perspectives/Concepts. Students' Ethical Self Identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues. Presumably, they will choose ethical actions when faced with ethical issues.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- Core Beliefs: Those fundamental principles that consciously or unconsciously influence one's ethical conduct and ethical thinking. Even when unacknowledged, core beliefs shape one's responses. Core beliefs can reflect one's environment, religion, culture or training. A person may or may not choose to act on their core beliefs.
- Ethical Perspectives/concepts: The different theoretical means through which ethical issues are analyzed, such as ethical theories (e.g. utilitarian, natural law, virtue) or ethical concepts (e.g. rights, justice, duty).
- Complex, multi-layered (gray) context: The sub-parts or situational conditions of a scenario that bring two or more ethical dilemmas (issues) into the mix/ problem/ context/ for student's identification.
- Cross-relationships among the issues: Obvious or subtle connections between/ among the sub-parts or situational conditions of the issues present in a scenario (e.g. relationship of production of corn as part of climate change issue).

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ETHICAL REASONING VALUE RUBRIC

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Definition

Ethical Reasoning is reasoning about right and wrong human conduct. It requires students to be able to assess their own ethical values and the social context of problems, recognize ethical issues in a variety of settings, think about how different ethical perspectives might be applied to ethical dilemmas, and consider the ramifications of alternative actions. Students' ethical self identity evolves as they practice ethical decision making skills and learn how to describe and analyze positions on ethical issues.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone	Milestones		Benchmark
	4	3	2	1
Ethical Self-Awareness	Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs and discussion has greater depth and clarity.	Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs.	Student states both core beliefs and the origins of the core beliefs.	Student states either their core beliefs or articulates the origins of the core beliefs but not both.
Understanding Different Ethical Perspectives/Concepts	Student names the theory or theories, can present the gist of said theory or theories, and accurately explains the details of the theory or theories used.	Student can name the major theory or theories she/he uses, can present the gist of said theory or theories, and attempts to explain the details of the theory or theories used, but has some inaccuracies.	Student can name the major theory she/he uses, and is only able to present the gist of the named theory.	Student only names the major theory she/he uses.
Ethical Issue Recognition	Student can recognize ethical issues when presented in a complex, multilayered (gray) context AND can recognize cross relationships among the issues.	Student can recognize ethical issues when issues are presented in a complex, multilayered (gray) context OR can grasp cross relationships among the issues.	Student can recognize basic and obvious ethical issues and grasp (incompletely) the complexities or interrelationships among the issues.	Student can recognize basic and obvious ethical issues but fails to grasp complexity or interrelationships.
Application of Ethical Perspectives/Concepts	Student can independently apply ethical perspectives/concepts to an ethical question, accurately, and is able to consider full implications of the application.	Student can independently (to a new example) apply ethical perspectives/concepts to an ethical question, accurately, but does not consider the specific implications of the application.	Student can apply ethical perspectives/concepts to an ethical question, independently (to a new example) and the application is inaccurate.	Student can apply ethical perspectives/concepts to an ethical question with support (using examples, in a class, in a group, or a fixed-choice setting) but is unable to apply ethical perspectives/concepts independently (to a new example).
Evaluation of Different Ethical Perspectives/Concepts	Student states a position and can state the objections to, assumptions and implications of and can reasonably defend against the objections to, assumptions and implications of different ethical perspectives/concepts, and the student's defense is adequate and effective.	Student states a position and can state the objections to, assumptions and implications of, and respond to the objections to, assumptions and implications of different ethical perspectives/concepts, but the student's response is inadequate.	Student states a position and can state the objections to, assumptions and implications of different ethical perspectives/concepts but does not respond to them (and ultimately objections, assumptions, and implications are compartmentalized by student and do not affect student's position.)	Student states a position but cannot state the objections to and assumptions and limitations of the different perspectives/concepts.

GLOBAL LEARNING VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Global learning is a critical analysis of and an engagement with complex, interdependent global systems and legacies (such as natural, physical, social, cultural, economic, and political) and their implications for people's lives and the earth's sustainability. Through global learning, students should 1) become informed, open-minded, and responsible people who are attentive to diversity across the spectrum of differences, 2) seek to understand how their actions affect both local and global communities, and 3) address the world's most pressing and enduring issues collaboratively and equitably.

Framing Language

Effective and transformative global learning offers students meaningful opportunities to analyze and explore complex global challenges, collaborate respectfully with diverse others, apply learning to take responsible action in contemporary global contexts, and evaluate the goals, methods, and consequences of that action. Global learning should enhance students' sense of identity, community, ethics, and perspective-taking. Global learning is based on the principle that the world is a collection of interdependent yet inequitable systems and that higher education has a vital role in expanding knowledge of human and natural systems, privilege and stratification, and sustainability and development to foster individuals' ability to advance equity and justice at home and abroad. Global learning cannot be achieved in a single course or a single experience but is acquired cumulatively across students' entire college career through an institution's curricular and co-curricular programming. As this rubric is designed to assess global learning on a programmatic level across time, the benchmarks (levels 1-4) may not be directly applicable to a singular experience, course, or assignment. Depending on the context, there may be development within one level rather than growth from level to level.

We encourage users of the Global Learning Rubric to also consult three other closely related VALUE Rubrics: Civic Engagement, Intercultural Knowledge and Competence, and Ethical Reasoning.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

Global Self-Awareness: in the context of global learning, the continuum through which students develop a mature, integrated identity with a systemic understanding of the interrelationships among the self, local and global communities, and the natural and physical world.

Perspective Taking: the ability to engage and learn from perspectives and experiences different from one's own and to understand how one's place in the world both informs and limits one's knowledge. The goal is to develop the capacity to understand the interrelationships between multiple perspectives, such as personal, social, cultural, disciplinary, environmental, local, and global.

Cultural Diversity: the ability to recognize the origins and influences of one's own cultural heritage along with its limitations in providing all that one needs to know in the world. This includes the curiosity to learn respectfully about the cultural diversity of other people and on an individual level to traverse cultural boundaries to bridge differences and collaboratively reach common goals. On a systems level, the important skill of comparatively analyzing how cultures can be marked and assigned a place within power structures that determine hierarchies, inequalities, and opportunities and which can vary over time and place. This can include, but is not limited to, understanding race, ethnicity, gender, nationhood, religion, and class.

Personal and Social Responsibility: the ability to recognize one's responsibilities to society—locally, nationally, and globally—and to develop a perspective on ethical and power relations both across the globe and within individual societies. This requires developing competence in ethical and moral reasoning and action.

Global Systems: the complex and overlapping worldwide systems, including natural systems (those systems associated with the natural world including biological, chemical, and physical sciences) and human systems (those systems developed by humans such as cultural, economic, political, and built), which operate in observable patterns and often are affected by or are the result of human design or disruption. These systems influence how life is lived and what options are open to whom. Students need to understand how these systems 1) are influenced and/or constructed, 2) operate with differential consequences, 3) affect the human and natural world, and 4) can be altered.

Knowledge Application: in the context of global learning, the application of an integrated and systemic understanding of the interrelationships between contemporary and past challenges facing cultures, societies, and the natural world (i.e., contexts) on the local and global levels. An ability to apply knowledge and skills gained through higher learning to real-life problem-solving both alone and with others.

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GLOBAL LEARNING VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Global learning is a critical analysis of and an engagement with complex, interdependent global systems and legacies (such as natural, physical, social, cultural, economic, and political) and their implications for people's lives and the earth's sustainability. Through global learning, students should 1) become informed, open-minded, and responsible people who are attentive to diversity across the spectrum of differences, 2) seek to understand how their actions affect both local and global communities, and 3) address the world's most pressing and enduring issues collaboratively and equitably.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Global Self-Awareness	Effectively addresses significant issues in the natural and human world based on articulating one's identity in a global context.	Evaluates the global impact of one's own and others' specific local actions on the natural and human world.	Analyzes ways that human actions influence the natural and human world.	Identifies some connections between an individual's personal decision-making and certain local and global issues.
Perspective Taking	Evaluates and applies diverse perspectives to complex subjects within natural and human systems in the face of multiple and even conflicting positions (i.e. cultural, disciplinary, and ethical).	Synthesizes other perspectives (such as cultural, disciplinary, and ethical) when investigating subjects within natural and human systems.	Identifies and explains multiple perspectives (such as cultural, disciplinary, and ethical) when exploring subjects within natural and human systems.	Identifies multiple perspectives while maintaining a value preference for own positioning (such as cultural, disciplinary, and ethical).
Cultural Diversity	Adapts and applies a deep understanding of multiple worldviews, experiences, and power structures while initiating meaningful interaction with other cultures to address significant global problems.	Analyzes substantial connections between the worldviews, power structures, and experiences of multiple cultures historically or in contemporary contexts, incorporating respectful interactions with other cultures.	Explains and connects two or more cultures historically or in contemporary contexts with some acknowledgement of power structures, demonstrating respectful interaction with varied cultures and worldviews.	Describes the experiences of others historically or in contemporary contexts primarily through one cultural perspective, demonstrating some openness to varied cultures and worldviews.
Personal and Social Responsibility	Takes informed and responsible action to address ethical, social, and environmental challenges in global systems and evaluates the local and broader consequences of individual and collective interventions.	Analyzes the ethical, social, and environmental consequences of global systems and identifies a range of actions informed by one's sense of personal and civic responsibility.	Explains the ethical, social, and environmental consequences of local and national decisions on global systems.	Identifies basic ethical dimensions of some local or national decisions that have global impact.
Understanding Global Systems	Uses deep knowledge of the historic and contemporary role and differential effects of human organizations and actions on global systems to develop and advocate for informed, appropriate action to solve complex problems in the human and natural worlds.	Analyzes major elements of global systems, including their historic and contemporary interconnections and the differential effects of human organizations and actions, to pose elementary solutions to complex problems in the human and natural worlds.	Examines the historical and contemporary roles, interconnections, and differential effects of human organizations and actions on global systems within the human and the natural worlds.	Identifies the basic role of some global and local institutions, ideas, and processes in the human and natural worlds.
Applying Knowledge to Contemporary Global Contexts	Applies knowledge and skills to implement sophisticated, appropriate, and workable solutions to address complex global problems using interdisciplinary perspectives independently or with others.	Plans and evaluates more complex solutions to global challenges that are appropriate to their contexts using multiple disciplinary perspectives (such as cultural, historical, and scientific).	Formulates practical yet elementary solutions to global challenges that use at least two disciplinary perspectives (such as cultural, historical, and scientific).	Defines global challenges in basic ways, including a limited number of perspectives and solutions.

INFORMATION LITERACY VALUE RUBRIC

for more information, please contact value@aacu.org

The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can by shared nationally through a common dialog and understanding of student success. In July 2013, there was a correction to Dimension 3: Evaluate Information and its Sources Critically.

Definition

The ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand.
Adapted from the National Forum on Information Literacy

Framing Language

This rubric is recommended for use evaluating a collection of work, rather than a single work sample in order to fully gauge students' information skills. Ideally, a collection of work would contain a wide variety of different types of work and might include: research papers, editorials, speeches, grant proposals, marketing or business plans, PowerPoint presentations, posters, literature reviews, position papers, and argument critiques to name a few. In addition, a description of the assignments with the instructions that initiated the student work would be vital in providing the complete context for the work. Although a student's final work must stand on its own, evidence of a student's research and information gathering processes, such as a research journal/diary, could provide further demonstration of a student's information proficiency and for some criteria on this rubric would be required.

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Definition

The ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand. The National Forum on Information Literacy

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Determine the Extent of Information Needed	Effectively defines the scope of the research question or thesis. Effectively determines key concepts. Types of information (sources) selected directly relate to concepts or answer research question.	Defines the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) selected relate to concepts or answer research question.	Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad or too narrow, etc.). Can determine key concepts. Types of information (sources) selected partially relate to concepts or answer research question.	Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Types of information (sources) selected do not relate to concepts or answer research question.
Access the Needed Information	Accesses information using effective, well-designed search strategies and most appropriate information sources.	Accesses information using variety of search strategies and some relevant information sources. Demonstrates ability to refine search.	Accesses information using simple search strategies, retrieves information from limited and similar sources.	Accesses information randomly, retrieves information that lacks relevance and quality.
Evaluate Information and its Sources Critically.*	Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources after considering the importance (to the researched topic) of the multiple criteria used (such as relevance to the research question, currency, authority, audience, and bias or point of view).	Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources using multiple criteria (such as relevance to the research question, currency, and authority).	Chooses a variety of information sources. Selects sources using basic criteria (such as relevance to the research question and currency).	Chooses a few information sources. Selects sources using limited criteria (such as relevance to the research question).
Use Information Effectively to Accomplish a Specific Purpose	Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth.	Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.	Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.	Communicates information from sources. The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.
Access and Use Information Ethically and Legally	Students use correctly all of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly three of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly two of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly one of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.

*Corrected Dimension 3: Evaluate Information and its Sources Critically in July 2013

INQUIRY AND ANALYSIS VALUE RUBRIC

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Definition

The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can by shared nationally through a common dialog and understanding of student success.

Inquiry is a systematic process of exploring issues, objects or works through the collection and analysis of evidence that results in informed conclusions or judgments. Analysis is the process of breaking complex topics or issues into parts to gain a better understanding of them.

Framing Language

This rubric is designed for use in a wide variety of disciplines. Since the terminology and process of inquiry are discipline-specific, an effort has been made to use broad language which reflects multiple approaches and assignments while addressing the fundamental elements of sound inquiry and analysis (including topic selection, existing, knowledge, design, analysis, etc.) The rubric language assumes that the inquiry and analysis process carried out by the student is appropriate for the discipline required. For example, if analysis using statistical methods is appropriate for the discipline then a student would be expected to use an appropriate statistical methodology for that analysis. If a student does not use a discipline-appropriate process for any criterion, that work should receive a performance rating of "1" or "0" for that criterion.

In addition, this rubric addresses the **products** of analysis and inquiry, not the **processes** themselves. The complexity of inquiry and analysis tasks is determined in part by how much information or guidance is provided to a student and how much the student constructs. The more the student constructs, the more complex the inquiry process. For this reason, while the rubric can be used if the assignments or purposes for work are unknown, it will work most effectively when those are known. Finally, faculty are encouraged to adapt the essence and language of each rubric criterion to the disciplinary or interdisciplinary context to which it is applied.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- Conclusions: A synthesis of key findings drawn from research/evidence.
- Limitations: Critique of the process or evidence.
- Implications: How inquiry results apply to a larger context or the real world

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Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Topic selection	Identifies a creative, focused, and manageable topic that addresses potentially significant yet previously less-explored aspects of the topic.	Identifies a focused and manageable/doable topic that appropriately addresses relevant aspects of the topic.	Identifies a topic that while manageable/doable, is too narrowly focused and leaves out relevant aspects of the topic.	Identifies a topic that is far too general and wide-ranging as to be manageable and doable.
Existing Knowledge, Research, and/or Views	Synthesizes in-depth information from relevant sources representing various points of view/approaches.	Presents in-depth information from relevant sources representing various points of view/approaches.	Presents information from relevant sources representing limited points of view/approaches.	Presents information from irrelevant sources representing limited points of view/approaches.
Design Process	All elements of the methodology or theoretical framework are skillfully developed. Appropriate methodology or theoretical frameworks may be synthesized from across disciplines or from relevant subdisciplines.	Critical elements of the methodology or theoretical framework are appropriately developed, however, more subtle elements are ignored or unaccounted for.	Critical elements of the methodology or theoretical framework are missing, incorrectly developed, or unfocused.	Inquiry design demonstrates a misunderstanding of the methodology or theoretical framework.
Analysis	Organizes and synthesizes evidence to reveal insightful patterns, differences, or similarities related to focus.	Organizes evidence to reveal important patterns, differences, or similarities related to focus.	Organizes evidence, but the organization is not effective in revealing important patterns, differences, or similarities.	Lists evidence, but it is not organized and/or is unrelated to focus.
Conclusions	States a conclusion that is a logical extrapolation from the inquiry findings.	States a conclusion focused solely on the inquiry findings. The conclusion arises specifically from and responds specifically to the inquiry findings.	States a general conclusion that, because it is so general, also applies beyond the scope of the inquiry findings.	States an ambiguous, illogical, or unsupportable conclusion from inquiry findings.
Limitations and Implications	Insightfully discusses in detail relevant and supported limitations and implications.	Discusses relevant and supported limitations and implications.	Presents relevant and supported limitations and implications.	Presents limitations and implications, but they are possibly irrelevant and unsupported.

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INTEGRATIVE LEARNING VALUE RUBRIC

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Definition

Integrative learning is an understanding and a disposition that a student builds across the curriculum and co-curriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus.

Framing Language

Fostering students' abilities to integrate learning—across courses, over time, and between campus and community life—is one of the most important goals and challenges for higher education. Initially, students connect previous learning to new classroom learning. Later, significant knowledge within individual disciplines serves as the foundation, but integrative learning goes beyond academic boundaries. Indeed integrative experiences often occur as learners address real world problems, unscripted and sufficiently broad, to require multiple areas of knowledge and multiple modes of inquiry; offering multiple solutions and benefiting from multiple perspectives. Integrative learning also involves internal changes in the learner. These internal changes, which indicate growth as a confident, lifelong learner, include the ability to adapt one's intellectual skills, to contribute in a wide variety of situations, and to understand and develop individual purpose, values and ethics. Developing students' capacities for integrative learning is central to personal success, social responsibility, and civic engagement in today's global society. Students face a rapidly changing and increasingly connected world where integrative learning becomes not just a benefit...but a necessity.

Because integrative learning is about making connections, this learning may not be as evident in traditional academic artifacts such as research papers and academic projects unless the student, for example, is prompted to draw implications for practice. These connections often surface; however, in reflective work, self assessment, or creative endeavors of all kinds. Integrative assignments foster learning between courses or by connecting courses to experientially based work. Work samples or collections of work that include such artifacts give evidence of integrative learning. Faculty are encouraged to look for evidence that the student connects the learning gained in classroom study to learning gained in real life situations that are related to other learning experiences, extra-curricular activities, or work. Through integrative learning, students pull together their entire experience inside and outside of the formal classroom; thus, artificial barriers between formal study and informal or tacit learning become permeable. Integrative learning, whatever the context or source, builds upon connecting both theory and practice toward a deepened understanding.

Assignments to foster such connections and understanding could include, for example, composition papers that focus on topics from biology, economics, or history; mathematics assignments that apply mathematical tools to important issues and require written analysis to explain the implications and limitations of the mathematical treatment, or art history presentations that demonstrate aesthetic connections between selected paintings and novels. In this regard, some majors (e.g., interdisciplinary majors or problem based field studies) seem to inherently evoke characteristics of integrative learning and result in work samples or collections of work that significantly demonstrate this outcome. However, fields of study that require accumulation of extensive and high-consensus content knowledge (such as accounting, engineering, or chemistry) also involve the kinds of complex and integrative constructions (e.g., ethical dilemmas and social consciousness) that seem to be highlighted so extensively in self reflection in arts and humanities, but they may be embedded in individual performances and less evident. The key in the development of such work samples or collections of work will be in designing structures that include artifacts and reflective writing or feedback that support students' examination of their learning and give evidence that, as graduates, they will extend their integrative abilities into the challenges of personal, professional, and civic life.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- **Academic knowledge:** Disciplinary learning; learning from academic study, teams, etc.
- **Content:** The information conveyed in the work samples or collections of work.
- **Contexts:** Actual or simulated situations in which a student demonstrates learning outcomes. New and challenging contexts encourage students to stretch beyond their current frames of reference.
- **Co-curriculum:** A parallel component of the academic curriculum that is in addition to formal classroom (student government, community service, residence hall activities, student organizations, etc.).
- **Experience:** Learning that takes place in a setting outside of the formal classroom, such as workplace, service learning site, internship site or another.
- **Form:** The external frameworks in which information and evidence are presented, ranging from choices for particular work sample or collection of works (such as a research paper, PowerPoint, video recording, etc.) to choices in make-up of the portfolio.
- **Performance:** A dynamic and sustained act that brings together knowing and doing (creating a painting, solving an experimental design problem, developing a public relations strategy for a business, etc.); performance makes learning observable.
- **Reflection:** A meta-cognitive act of examining a performance in order to explore its significance and consequences.
- **Self Assessment:** Describing, interpreting, and judging a performance based on stated or implied expectations followed by planning for further learning.

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	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Connections to Experience *Connects relevant experience and academic knowledge*	Meaningfully **synthesizes connections** among experiences outside of the formal classroom (including life experiences and academic experiences such as internships and travel abroad) to **deepen understanding** of fields of study and to broaden own points of view.	Effectively **selects and develops** examples of life experiences, drawn from a variety of contexts (e.g., family life, artistic participation, civic involvement, work experience), to **illuminate** concepts/theories/frameworks of fields of study.	**Compares** life experiences and academic knowledge to infer differences, as well as similarities, and **acknowledge perspectives** other than own.	**Identifies** connections between life experiences and those academic texts and ideas **perceived as similar and related** to own interests.
Connections to Discipline *Sees (makes) connections across disciplines, perspectives*	Independently creates wholes out of multiple parts (synthesizes) or draws conclusions by combining examples, facts, or theories from more than one field of study or perspective.	Independently connects examples, facts, or theories from more than one field of study or perspective.	When prompted, connects examples, facts, or theories from more than one field of study or perspective.	When prompted, presents examples, facts, or theories from more than one field of study or perspective.
Transfer *Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations*	Adapts and applies, independently, skills, abilities, theories, or methodologies gained in one situation to new situations to solve **difficult problems or explore complex issues in original ways.**	Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations **to solve problems or explore issues.**	Uses skills, abilities, theories, or methodologies gained in one situation in a new situation **to contribute to understanding of problems or issues.**	Uses, in a basic way, skills, abilities, theories, or methodologies gained in one situation **in a new situation.**
Integrated Communication	Fulfills the assignment(s) by choosing a format, language, or graph (or other visual representation) **in ways that enhance meaning**, making clear the interdependence of language and meaning, thought, and expression.	Fulfills the assignment(s) by choosing a format, language, or graph (or other visual representation) **to explicitly connect content and form**, demonstrating awareness of purpose and audience.	Fulfills the assignment(s) by choosing a format, language, or graph (or other visual representation) that **connects in a basic way** what is being communicated (content) with how it is said (form).	Fulfills the assignment(s) (i.e. to produce an essay, a poster, a video, a PowerPoint presentation, etc.) **in an appropriate form.**
Reflection and Self-Assessment *Demonstrates a developing sense of self as a learner, building on prior experiences to respond to new and challenging contexts (may be evident in self-assessment, reflective, or creative work)*	Envisions a future self (and possibly makes plans that build on past experiences) that have occurred across multiple and diverse contexts.	Evaluates changes in own learning over time, recognizing complex contextual factors (e.g., works with ambiguity and risk, deals with frustration, considers ethical frameworks).	Articulates strengths and challenges (within specific performances or events) to increase effectiveness in different contexts (through increased self-awareness).	Describes own performances with general descriptors of success and failure.

INTERCULTURAL KNOWLEDGE AND COMPETENCE VALUE RUBRIC

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Definition

Intercultural Knowledge and Competence is "a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts." (Bennett, J. M. 2008. Transformative training: Designing programs for culture learning. In *Contemporary leadership and intercultural competence: Understanding and utilizing cultural diversity to build successful organizations*, ed. M. A. Moodian, 95-110. Thousand Oaks, CA: Sage.)

Framing Language

The call to integrate intercultural knowledge and competence into the heart of education is an imperative born of seeing ourselves as members of a world community, knowing that we share the future with others. Beyond mere exposure to culturally different others, the campus community requires the capacity to: meaningfully engage those others, place social justice in historical and political context, and put culture at the core of transformative learning. The intercultural knowledge and competence rubric suggests a systematic way to measure our capacity to identify our own cultural patterns, compare and contrast them with others, and adapt empathically and flexibly to unfamiliar ways of being.

The levels of this rubric are informed in part by M. Bennett's Developmental Model of Intercultural Sensitivity (Bennett, M.J. 1993. Towards ethnorelativism: A developmental model of intercultural sensitivity. In *Education for the intercultural experience*, ed. R. M. Paige, 22-71. Yarmouth, ME: Intercultural Press). In addition, the criteria in this rubric are informed in part by D.K. Deardorff's intercultural framework which is the first research-based consensus model of intercultural competence (Deardorff, D.K. 2006. The identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education* 10(3): 241-266). It is also important to understand that intercultural knowledge and competence is more complex than what is reflected in this rubric. This rubric identifies six of the key components of intercultural knowledge and competence, but there are other components as identified in the Deardorff model and in other research.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- Culture: All knowledge and values shared by a group.
- Cultural rules and biases: Boundaries within which an individual operates in order to feel a sense of belonging to a society or group, based on the values shared by that society or group.
- Empathy: "Empathy is the imaginary participation in another person's experience, including emotional and intellectual dimensions, by imagining his or her perspective (not by assuming the person's position)". Bennett, J. 1998. Transition shock: Putting culture shock in perspective. In *Basic concepts of intercultural communication*, ed. M. Bennett, 215-224. Yarmouth, ME: Intercultural Press.
- Intercultural experience: The experience of an interaction with an individual or groups of people whose culture is different from your own.
- Intercultural/cultural differences: The differences in rules, behaviors, communication and biases, based on cultural values that are different from one's own culture.
- Suspends judgment in valuing their interactions with culturally different others: Postpones assessment or evaluation (positive or negative) of interactions with people culturally different from one self. Disconnecting from the process of automatic judgment and taking time to reflect on possibly multiple meanings.
- Worldview: Worldview is the cognitive and affective lens through which people construe their experiences and make sense of the world around them.

INTERCULTURAL KNOWLEDGE AND COMPETENCE VALUE RUBRIC

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	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Knowledge *Cultural self-awareness*	Articulates insights into own cultural rules and biases (e.g. seeking complexity; aware of how her/his experiences have shaped these rules, and how to recognize and respond to cultural biases, resulting in a shift in self-description.)	Recognizes new perspectives about own cultural rules and biases (e.g. not looking for sameness; comfortable with the complexities that new perspectives offer.)	Identifies own cultural rules and biases (e.g. with a strong preference for those rules shared with own cultural group and seeks the same in others.)	Shows minimal awareness of own cultural rules and biases (even those shared with own cultural group(s)) (e.g. uncomfortable with identifying possible cultural differences with others.)
Knowledge *Knowledge of cultural worldview frameworks*	Demonstrates sophisticated understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates adequate understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates partial understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates surface understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.
Skills *Empathy*	Interprets intercultural experience from the perspectives of own and more than one worldview and demonstrates ability to act in a supportive manner that recognizes the feelings of another cultural group.	Recognizes intellectual and emotional dimensions of more than one worldview and sometimes uses more than one worldview in interactions.	Identifies components of other cultural perspectives but responds in all situations with own worldview.	Views the experience of others but does so through own cultural worldview.
Skills *Verbal and nonverbal communication*	Articulates a complex understanding of cultural differences in verbal and nonverbal communication (e.g. demonstrates understanding of the degree to which people use physical contact while communicating in different cultures or use direct/indirect and explicit/implicit meanings) and is able to skillfully negotiate a shared understanding based on those differences.	Recognizes and participates in cultural differences in verbal and nonverbal communication and begins to negotiate a shared understanding based on those differences.	Identifies some cultural differences in verbal and nonverbal communication and is aware that misunderstandings can occur based on those differences but is still unable to negotiate a shared understanding.	Has a minimal level of understanding of cultural differences in verbal and nonverbal communication; is unable to negotiate a shared understanding.
Attitudes *Curiosity*	Asks complex questions about other cultures, seeks out and articulates answers to these questions that reflect multiple cultural perspectives.	Asks deeper questions about other cultures and seeks out answers to these questions.	Asks simple or surface questions about other cultures.	States minimal interest in learning more about other cultures.
Attitudes *Openness*	Initiates and develops interactions with culturally different others. Suspends judgment in valuing her/his interactions with culturally different others.	Begins to initiate and develop interactions with culturally different others. Begins to suspend judgment in valuing her/his interactions with culturally different others.	Expresses openness to most, if not all, interactions with culturally different others. Has difficulty suspending any judgment in her/his interactions with culturally different others, and is aware of own judgment and expresses a willingness to change.	Receptive to interacting with culturally different others. Has difficulty suspending any judgment in her/his interactions with culturally different others, but is unaware of own judgment.

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FOUNDATIONS AND SKILLS FOR LIFELONG LEARNING VALUE RUBRIC

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Definition

Lifelong learning is "all purposeful learning activity, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence". An endeavor of higher education is to prepare students to be this type of learner by developing specific dispositions and skills described in this rubric while in school. (From The European Commission. 2000. Commission staff working paper: A memorandum on lifelong learning. Retrieved September 3, 2003, www.see-educoop.net/education_in/pdf/lifelong-oth-enl-t02.pdf)

Framing Language

This rubric is designed to assess the skills and dispositions involved in lifelong learning, which are curiosity, transfer, independence, initiative, and reflection. Assignments that encourage students to reflect on how they incorporated their lifelong learning skills into their work samples or collections of work by applying above skills and dispositions will provide the means for assessing those criteria. Work samples or collections of work tell what is known or can be done by students, while reflections tell what students think or feel or perceive. Reflection provides the evaluator with a much better understanding of who students are because through reflection students share how they feel about or make sense of their learning experiences. Reflection allows analysis and interpretation of the work samples or collections of work for the reader. Reflection also allows exploration of alternatives, the consideration of future plans, and provides evidence related to students' growth and development. Perhaps the best fit for this rubric are those assignments that prompt the integration of experience beyond the classroom.

FOUNDATIONS AND SKILLS FOR LIFELONG LEARNING VALUE RUBRIC

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	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Curiosity	Explores a topic in depth, yielding a rich awareness and/or little-known information indicating intense interest in the subject.	Explores a topic in depth, yielding insight and/or information indicating interest in the subject.	Explores a topic with some evidence of depth, providing occasional insight and/or information indicating mild interest in the subject.	Explores a topic at a surface level, providing little insight and/or information beyond the very basic facts indicating low interest in the subject.
Initiative	Completes required work, generates and pursues opportunities to expand knowledge, skills, and abilities.	Completes required work, identifies and pursues opportunities to expand knowledge, skills, and abilities.	Completes required work and identifies opportunities to expand knowledge, skills, and abilities.	Completes required work.
Independence	Educational interests and pursuits exist and flourish outside classroom requirements. Knowledge and/or experiences are pursued independently.	Beyond classroom requirements, pursues substantial, additional knowledge and/or actively pursues independent educational experiences.	Beyond classroom requirements, pursues additional knowledge and/or shows interest in pursuing independent educational experiences.	Begins to look beyond classroom requirements, showing interest in pursuing knowledge independently.
Transfer	Makes explicit references to previous learning and applies in an innovative (new and creative) way that knowledge and those skills to demonstrate comprehension and performance in novel situations.	Makes references to previous learning and shows evidence of applying that knowledge and those skills to demonstrate comprehension and performance in novel situations.	Makes references to previous learning and attempts to apply that knowledge and those skills to demonstrate comprehension and performance in novel situations.	Makes vague references to previous learning but does not apply knowledge and skills to demonstrate comprehension and performance in novel situations.
Reflection	Reviews prior learning (past experiences inside and outside of the classroom) in depth to reveal significantly changed perspectives about educational and life experiences, which provide foundation for expanded knowledge, growth, and maturity over time.	Reviews prior learning (past experiences inside and outside of the classroom) in depth, revealing fully clarified meanings or indicating broader perspectives about educational or life events.	Reviews prior learning (past experiences inside and outside of the classroom) with some depth, revealing slightly clarified meanings or indicating a somewhat broader perspectives about educational or life events.	Reviews prior learning (past experiences inside and outside of the classroom) at a surface level, without revealing clarified meaning or indicating a broader perspective about educational or life events.

ORAL COMMUNICATION VALUE RUBRIC

for more information, please contact value@aacu.org

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The type of oral communication most likely to be included in a collection of student work is an oral presentation and therefore is the focus for the application of this rubric.

Definition

Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.

Framing Language

Oral communication takes many forms. This rubric is specifically designed to evaluate oral presentations of a single speaker at a time and is best applied to live or video-recorded presentations. For panel presentations or group presentations, it is recommended that each speaker be evaluated separately. This rubric best applies to presentations of sufficient length such that a central message is conveyed, supported by one or more forms of supporting materials and includes a purposeful organization. An oral answer to a single question not designed to be structured into a presentation does not readily apply to this rubric.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- **Central message:** The main point/thesis/"bottom line"/"take-away" of a presentation. A clear central message is easy to identify; a compelling central message is also vivid and memorable.
- **Delivery techniques:** Posture, gestures, eye contact, and use of the voice. Delivery techniques enhance the effectiveness of the presentation when the speaker stands and moves with authority, looks more often at the audience than at his/her speaking materials/notes, uses the voice expressively, and uses few vocal fillers ("um," "uh," "like," "you know," etc.).
- **Language:** Vocabulary, terminology, and sentence structure. Language that supports the effectiveness of a presentation is appropriate to the topic and audience, grammatical, clear, and free from bias. Language that enhances the effectiveness of a presentation is also vivid, imaginative, and expressive.
- **Organization:** The grouping and sequencing of ideas and supporting material in a presentation. An organizational pattern that supports the effectiveness of a presentation typically includes an introduction, one or more identifiable sections in the body of the speech, and a conclusion. An organizational pattern that enhances the effectiveness of the presentation reflects a purposeful choice among possible alternatives, such as a chronological pattern, a problem-solution pattern, an analysis-of-parts pattern, etc., that makes the content of the presentation easier to follow and more likely to accomplish its purpose.
- **Supporting material:** Explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities, and other kinds of information or analysis that supports the principal ideas of the presentation. Supporting material is generally credible when it is relevant and derived from reliable and appropriate sources. Supporting material may serve the purpose of establishing the speakers credibility when it is also vivid and varied across the types listed above (e.g., a mix of examples, statistics, and references to authorities). Supporting evidence may not advance the ideas of Shakespeare, but rather serve to establish the speaker as a credible Shakespearean actor.

ORAL COMMUNICATION VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Organization	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation cohesive.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is not observable within the presentation.
Language	Language choices are imaginative, memorable, and compelling, and enhance the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are unclear and minimally support the effectiveness of the presentation. Language in presentation is not appropriate to audience.
Delivery	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable.
Supporting Material	A variety of types of supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that significantly supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that generally supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that partially supports the presentation or establishes the presenter's credibility/authority on the topic.	Insufficient supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make reference to information or analysis that minimally supports the presentation or establishes the presenter's credibility/authority on the topic.
Central Message	Central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported.)	Central message is clear and consistent with the supporting material.	Central message is basically understandable but is not often repeated and is not memorable.	Central message can be deduced, but is not explicitly stated in the presentation.

PROBLEM SOLVING VALUE RUBRIC

for more information, please contact value@aacu.org

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Definition

Problem solving is the process of designing, evaluating and implementing a strategy to answer an open-ended question or achieve a desired goal.

Framing Language

Problem-solving covers a wide range of activities that may vary significantly across disciplines. Activities that encompass problem-solving by students may involve problems that range from well-defined to ambiguous in a simulated or laboratory context, or in real-world settings. This rubric distills the common elements of most problem-solving contexts and is designed to function across all disciplines. It is broad-based enough to allow for individual differences among learners, yet is concise and descriptive in its scope to determine how well students have maximized their respective abilities to practice thinking through problems in order to reach solutions.

This rubric is designed to measure the quality of a **process**, rather than the quality of an **end-product**. As a result, work samples or collections of work will need to include some evidence of the individual's thinking about a problem-solving task (e.g., reflections on the process from problem to proposed solution; steps in a problem-based learning assignment; record of think-aloud protocol while solving a problem). The final product of an assignment that required problem resolution is insufficient without insight into the student's problem-solving process. Because the focus is on institutional level assessment, scoring team projects, such as those developed in capstone courses, may be appropriate as well.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- Contextual Factors: Constraints (such as limits on cost), resources, attitudes (such as biases) and desired additional knowledge which affect how the problem can be best solved in the real world or simulated setting.
- Critique: Involves analysis and synthesis of a full range of perspectives.
- Feasible: Workable, in consideration of time-frame, functionality, available resources, necessary buy-in, and limits of the assignment or task.
- "Off the shelf" solution: A simplistic option that is familiar from everyday experience but not tailored to the problem at hand (e.g. holding a bake sale to "save" an underfunded public library).
- Solution: An appropriate response to a challenge or a problem.
- Strategy: A plan of action or an approach designed to arrive at a solution. (If the problem is a river that needs to be crossed, there could be a construction-oriented, cooperative (build a bridge with your community) approach and a personally oriented, physical (swim across alone) approach. An approach that partially applies would be a personal, physical approach for someone who doesn't know how to swim.
- Support: Specific rationale, evidence, etc. for solution or selection of solution.

PROBLEM SOLVING VALUE RUBRIC

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Definition

Problem solving is the process of designing, evaluating, and implementing a strategy to answer an open ended question or achieve a desired goal.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Define Problem	Demonstrates the ability to construct a clear and insightful problem statement with evidence of all relevant contextual factors.	Demonstrates the ability to construct a problem statement with evidence of most relevant contextual factors, and problem statement is adequately detailed.	Begins to demonstrate the ability to construct a problem statement with evidence of most relevant contextual factors, but problem statement is superficial.	Demonstrates a limited ability in identifying a problem statement or related contextual factors.
Identify Strategies	Identifies multiple approaches for solving the problem that apply within a specific context.	Identifies multiple approaches for solving the problem, only some of which apply within a specific context.	Identifies only a single approach for solving the problem that does apply within a specific context.	Identifies one or more approaches for solving the problem that do not apply within a specific context.
Propose Solutions/Hypotheses	Proposes one or more solutions/hypotheses that indicates a deep comprehension of the problem. Solution/hypotheses are sensitive to contextual factors as well as all of the following: ethical, logical, and cultural dimensions of the problem.	Proposes one or more solutions/hypotheses that indicates comprehension of the problem. Solutions/hypotheses are sensitive to contextual factors as well as the one of the following: ethical, logical, or cultural dimensions of the problem	Proposes one solution/hypothesis that is "off the shelf" rather than individually designed to address the specific contextual factors of the problem.	Proposes a solution/hypothesis that is difficult to evaluate because it is vague or only indirectly addresses the problem statement.
Evaluate Potential Solutions	Evaluation of solutions is deep and elegant (for example, contains thorough and insightful explanation) and includes, deeply and thoroughly, all of the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.	Evaluation of solutions is adequate (for example, contains thorough explanation) and includes the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.	Evaluation of solutions is brief (for example, explanation lacks depth) and includes the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.	Evaluation of solutions is superficial (for example, contains cursory, surface level explanation) and includes the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.
Implement Solution	Implements the solution in a manner that addresses thoroughly and deeply multiple contextual factors of the problem	Implements the solution in a manner that addresses multiple contextual factors of the problem in a surface manner.	Implements the solution in a manner that addresses the problem statement but ignores relevant contextual factors.	Implements the solution in a manner that does not directly address the problem statement.
Evaluate Outcomes	Reviews results relative to the problem defined with thorough, specific considerations of need for further work.	Reviews results relative to the problem defined with some consideration of need for further work.	Reviews results in terms of the problem defined with little, if any, consideration of need for further work.	Reviews results superficially in terms of the problem defined with no consideration of need for further work

QUANTITATIVE LITERACY VALUE RUBRIC

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Definition

Quantitative Literacy (QL) – also known as Numeracy or Quantitative Reasoning (QR) – is a "habit of mind," competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).

Quantitative Literacy Across the Disciplines

Current trends in general education reform demonstrate that faculty are recognizing the steadily growing importance of Quantitative Literacy (QL) in an increasingly quantitative and data-dense world. AAC&U's recent survey showed that concerns about QL skills are shared by employers, who recognize that many of today's students will need a wide range of high level quantitative skills to complete their work responsibilities. Virtually all of today's students, regardless of career choice, will need basic QL skills such as the ability to draw information from charts, graphs, and geometric figures, and the ability to accurately complete straightforward estimations and calculations.

Preliminary efforts to find student work products which demonstrate QL skills proved a challenge in this rubric creation process. It's possible to find pages of mathematical problems, but what those problem sets don't demonstrate is whether the student was able to think about and understand the meaning of her work. It's possible to find research papers that include quantitative information, but those papers often don't provide evidence that allows the evaluator to see how much of the thinking was done by the original source (often carefully cited in the paper) and how much was done by the student herself, or whether conclusions drawn from analysis of the source material are even accurate.

Given widespread agreement about the importance of QL, it becomes incumbent on faculty to develop new kinds of assignments which give students substantive, contextualized experience in using such skills as analyzing quantitative information, representing quantitative information in appropriate forms, completing calculations to answer meaningful questions, making judgments based on quantitative data and communicating the results of that work for various purposes and audiences. As students gain experience with those skills, faculty must develop assignments that require students to create work products which reveal their thought processes and demonstrate the range of their QL skills.

This rubric provides for faculty a definition for QL and a rubric describing four levels of QL achievement which might be observed in work products within samples or collections of work. Members of AAC&U's rubric development team for QL hope that these materials will aid in the assessment of QL – but, equally important, we hope that they will help institutions and individuals in the effort to more thoroughly embed QL across the curriculum of colleges and universities.

Framing Language

This rubric has been designed for the evaluation of work that addresses quantitative literacy (QL) in a substantive way. QL is not just computation, not just the citing of someone else's data. QL is a habit of mind, a way of thinking about the world that relies on data and on the mathematical analysis of data to make connections and draw conclusions. Teaching QL requires us to design assignments that address authentic, data-based problems. Such assignments may call for the traditional written paper, but we can imagine other alternatives: a video of a PowerPoint presentation, perhaps, or a well designed series of web pages. In any case, a successful demonstration of QL will place the mathematical work in the context of a full and robust discussion of the underlying issues addressed by the assignment.

Finally, QL skills can be applied to a wide array of problems of varying difficulty, confounding the use of this rubric. For example, the same student might demonstrate high levels of QL achievement when working on a simplistic problem and low levels of QL achievement when working on a very complex problem. Thus, to accurately assess a students QL achievement it may be necessary to measure QL achievement within the context of problem complexity, much as is done in diving competitions where two scores are given, one for the difficulty of the dive, and the other for the skill in accomplishing the dive. In this context, that would mean giving one score for the complexity of the problem and another score for the QL achievement in solving the problem.

Association of American Colleges and Universities

QUANTITATIVE LITERACY VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Quantitative Literacy (QL) — also known as Numeracy or Quantitative Reasoning (QR) — is a "habit of mind," competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Interpretation *Ability to explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)*	Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information. *For example, accurately explains the trend data shown in a graph and makes reasonable predictions regarding what the data suggest about future events.*	Provides accurate explanations of information presented in mathematical forms. *For instance, accurately explains the trend data shown in a graph.*	Provides somewhat accurate explanations of information presented in mathematical forms, but occasionally makes minor errors related to computations or units. *For instance, accurately explains trend data shown in a graph, but may miscalculate the slope of the trend line.*	Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means. *For example, attempts to explain the trend data shown in a graph, but will frequently misinterpret the nature of that trend, perhaps by suggesting positive and negative trends.*
Representation *Ability to convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words)*	Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding.	Competently converts relevant information into an appropriate and desired mathematical portrayal.	Completes conversion of information but resulting mathematical portrayal is only partially appropriate or accurate.	Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate.
Calculation	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented elegantly (clearly, concisely, etc.)	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem.	Calculations attempted are either unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem.	Calculations are attempted but are both unsuccessful and are not comprehensive.
Application / Analysis *Ability to make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis*	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for workmanlike (without inspiration or nuance, ordinary) judgments, drawing plausible conclusions from this work.	Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work.
Assumptions *Ability to make and evaluate important assumptions in estimation, modeling, and data analysis*	Explicitly describes assumptions and provides compelling rationale for why each assumption is appropriate. Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions.	Explicitly describes assumptions and provides compelling rationale for why assumptions are appropriate.	Explicitly describes assumptions.	Attempts to describe assumptions.
Communication *Expressing quantitative evidence in support of the argument or purpose of the work (in terms of what evidence is used and how it is formatted, presented, and contextualized)*	Uses quantitative information in connection with the argument or purpose of the work, presents it in an effective format, and explicates it with consistently high quality.	Uses quantitative information in connection with the argument or purpose of the work, though data may be presented in a less than completely effective format or some parts of the explication may be uneven.	Uses quantitative information, but does not effectively connect it to the argument or purpose of the work.	Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support. (May use quasi-quantitative words such as "many," "few," "increasing," "small," and the like in place of actual quantities.)

READING VALUE RUBRIC

for more information, please contact value@aacu.org

The VALUE rubrics were developed by teams of faculty experts representing colleges and universities across the United States through a process that examined many existing campus rubrics and related documents for each learning outcome and incorporated additional feedback from faculty. The rubrics articulate fundamental criteria for each learning outcome, with performance descriptors demonstrating progressively more sophisticated levels of attainment. The rubrics are intended for institutional-level use in evaluating and discussing student learning, not for grading. The core expectations articulated in all 15 of the VALUE rubrics can and should be translated into the language of individual campuses, disciplines, and even courses. The utility of the VALUE rubrics is to position learning at all undergraduate levels within a basic framework of expectations such that evidence of learning can by shared nationally through a common dialog and understanding of student success.

Definition

Reading is "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (Snow et al., 2002). (From www.rand.org/pubs/research_briefs/RB8024/index.html)

Framing Language

"To paraphrase Phaedrus, texts do not explain, nor answer questions about, themselves. They must be located, approached, decoded, comprehended, analyzed, interpreted, and discussed, especially complex academic texts used in college and university classrooms for purposes of learning. Historically, college professors have not considered the teaching of reading necessary other than as a "basic skill" in which students may require "remediation." They have assumed that students come with the ability to read and have placed responsibility for its absence on teachers in elementary and secondary schools.

This absence of reading instruction in higher education must, can, and will change; and this rubric marks a direction for this change. Why the change? Even the strongest, most experienced readers making the transition from high school to college have not learned what they need to know and do to make sense of texts in the context of professional and academic scholarship—to say nothing about readers who are either not as strong or as experienced. Also, readers mature and develop their repertoire of reading performances naturally during the undergraduate years and beyond as a consequence of meeting textual challenges. This rubric provides some initial steps toward finding ways to measure undergraduate students' progress along the continuum. Our intention in creating this rubric is to support and promote the teaching of undergraduates as readers to take on increasingly higher levels of concerns with texts and to read as one of "those who comprehend".

Readers, as they move beyond their undergraduate experiences, should be motivated to approach texts and respond to them with a reflective level of curiosity and the ability to apply aspects of the texts they approach to a variety of aspects in their lives. This rubric provides the framework for evaluating both students' developing relationship to texts and their relative success with the range of texts their coursework introduces them to. It is likely that users of this rubric will detect that the coll boundaries are permeable, and the criteria of the rubric are, to a degree, interrelated.

Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only

- Analysis: The process of recognizing and using features of a text to build a more advanced understanding of the meaning of a text. (Might include evaluation of genre, language, tone, stated purpose, explicit or implicit logic (including flaws of reasoning), and historical context as they contribute to the meaning of a text.]
- Comprehension: The extent to which a reader "gets" the text, both literally and figuratively. Accomplished and sophisticated readers will have moved from being able to "get" the meaning that the language of the texts provides to being able to "get" the implications of the text, the questions it raises, and the counterarguments one might suggest in response to it. A helpful and accessible discussion of "comprehension" is found in Chapter 2 of the RAND report. Reading for Understanding www.rand.org/pubs/monograph_reports/MR1465/MR1465.ch2.pdf
- Epistemological lens: The knowledge framework a reader develops in a specific discipline as s/he moves through an academic major (e.g., essays, textbook chapters, literary works, journal articles, lab reports, grant proposals, lectures, blogs, webpages, or literature reviews, for example). The depth and breadth of this knowledge provides the foundation for independent and self-regulated responses to the range of texts in any discipline or field that students will encounter.
- Genre: A particular kind of "text" defined by a set of disciplinary conventions or agreements learned through participation in academic discourse. Genre governs what texts can be about, how they are structured, what to expect from them, what can be done with them, how to use them
- Interpretation: Determining or construing the meaning of a text or part of a text in a particular way based on textual and contextual information.
- Interpretive Strategies: Purposeful approaches from different perspectives, which include, for example, asking clarifying questions, building knowledge of the content in which a text was written, visualizing and considering counterfactuals (asking questions that challenge the assumptions or claims of the text, e.g., What might our country be like if the Civil War had not happened? How would Hamlet be different if Hamlet had simply killed the King?).
- Multiple Perspectives: Consideration of how text-based meanings might differ depending on point of view
- Parts: Titles, headings, meaning of vocabulary from context, structure of the text, important ideas and relationships among those ideas
- Relationship to text: The set of expectations and intentions a reader brings to a particular text or set of texts.
- Searches intentionally for relationships: An active and highly aware quality of thinking closely related to inquiry and research
- Takes texts apart: Discerns the level of importance or abstraction of textual elements and sees big and small pieces as parts of the whole meaning (compare to Analysis above).
- Metacognition: This is not a word that appears explicitly anywhere in the rubric, but it is implicit in a number of the descriptors, and is certainly a term that we find frequently in discussions of successful and rich learning. Metacognition, (a term typically attributed to the cognitive psychologist J.H. Flavell) applied to reading refers to the awareness, deliberateness, and reflexivity defining the activities and strategies that readers must control in order to work their ways effectively through different sorts of texts, from lab reports to sonnets, from math texts to historical narratives, or from grant applications to graphic novels, for example. Metacognition refers here as well to an accomplished reader's ability to consider the ethos reflected in any such text; to know that one is present and should be considered in any use of, or response to a text.

READING VALUE RUBRIC

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Definition

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	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Comprehension	Recognizes possible implications of the text for contexts, perspectives, or issues beyond the assigned task within the classroom or beyond the author's explicit message (e.g., might recognize broader issues at play, or might pose challenges to the author's message and presentation).	Uses the text, general background knowledge, and/or specific knowledge of the author's context to draw more complex inferences about the author's message and attitude.	Evaluates how textual features (e.g., sentence and paragraph structure or tone) contribute to the author's message; draws basic inferences about context and purpose of text.	Apprehends vocabulary appropriately to paraphrase or summarize the information the text communicates.
Genres	Uses ability to identify texts within and across genres, monitoring and adjusting reading strategies and expectations based on generic nuances of particular texts.	Articulates distinctions among genres and their characteristic conventions.	Reflects on reading experiences across a variety of genres, reading both with and against the grain experimentally and intentionally.	Applies tacit genre knowledge to a variety of classroom reading assignments in productive, if unreflective, ways.
Relationship to Text *Making meanings with texts in their contexts*	Evaluates texts for scholarly significance and relevance within and across the various disciplines, evaluating them according to their contributions and consequences.	Uses texts in the context of scholarship to develop a foundation of disciplinary knowledge and to raise and explore important questions.	Engages texts with the intention and expectation of building topical and world knowledge.	Approaches texts in the context of assignments with the intention and expectation of finding right answers and learning facts and concepts to display for credit.
Analysis *Interacting with texts in parts and as wholes*	Evaluates strategies for relating ideas, text structure, or other textual features in order to build knowledge or insight within and across texts and disciplines.	Identifies relations among ideas, text structure, or other textual features, to evaluate how they support an advanced understanding of the text as a whole.	Recognizes relations among parts or aspects of a text, such as effective or ineffective arguments or literary features, in considering how these contribute to a basic understanding of the text as a whole.	Identifies aspects of a text (e.g., content, structure, or relations among ideas) as needed to respond to questions posed in assigned tasks.
Interpretation *Making sense with texts as blueprints for meaning*	Provides evidence not only that s/he can read by using an appropriate epistemological lens but that s/he can also engage in reading as part of a continuing dialogue within and beyond a discipline or a community of readers.	Articulates an understanding of the multiple ways of reading and the range of interpretive strategies particular to one's discipline(s) or in a given community of readers.	Demonstrates that s/he can read purposefully, choosing among interpretive strategies depending on the purpose of the reading.	Can identify purpose(s) for reading, relying on an external authority such as an instructor for clarification of the task.
Reader's Voice *Participating in academic discourse about texts*	Discusses texts with an independent intellectual and ethical disposition so as to further or maintain disciplinary conversations.	Elaborates on the texts (through interpretation or questioning) so as to deepen or enhance an ongoing discussion.	Discusses texts in structured conversations (such as in a classroom) in ways that contribute to a basic, shared understanding of the text.	Comments about texts in ways that preserve the author's meanings and link them to the assignment.

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Teamwork VALUE Rubric

for more information, please contact value@aacu.org

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Definition

Teamwork is behaviors under the control of individual team members (effort they put into team tasks, their manner of interacting with others on team, and the quantity and quality of contributions they make to team discussions.)

Framing Language

Students participate on many different teams, in many different settings. For example, a given student may work on separate teams to complete a lab assignment, give an oral presentation, or complete a community service project. Furthermore, the people the student works with are likely to be different in each of those different teams. As a result, it is assumed that a work sample or collection of work that demonstrates a student's teamwork skills could include a diverse range of inputs. This rubric is designed to function across all of these different settings.

Two characteristics define the the ways in which this rubric is to be used. First, the rubric is meant to assess the teamwork of an individual student, not the team as a whole. Therefore, it is possible for a student to receive high ratings, even if the team as a whole is rather flawed. Similarly, a student could receive low ratings, even if the team as a whole works fairly well. Second, this rubric is designed to measure the quality of a **process**, rather than the quality of an **end product**. As a result, work samples or collections of work will need to include some evidence of the individual's interactions within the team. The final product of the team's work (e.g., a written lab report) is insufficient, as it does not provide insight into the functioning of the team.

It is recommended that work samples or collections of work for this outcome come from one (or more) of the following three sources: (1) students' own reflections about their contribution to a team's functioning; (2) evaluation or feedback from fellow team members about students' contribution to the team's functioning; or (3) the evaluation of an outside observer regarding students' contributions to a team's functioning. These three sources differ considerably in the resource demands they place on an institution. It is recommended that institutions using this rubric consider carefully the resources they are able to allocate to the assessment of teamwork and choose a means of compiling work samples or collections of work that best suits their priorities, needs, and abilities.

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TEAMWORK VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Teamwork is behaviors under the control of individual team members (effort they put into team tasks, their manner of interacting with others on team, and the quantity and quality of contributions they make to team discussions.)

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Contributes to Team Meetings	Helps the team move forward by articulating the merits of alternative ideas or proposals.	Offers alternative solutions or courses of action that build on the ideas of others.	Offers new suggestions to advance the work of the group.	Shares ideas but does not advance the work of the group.
Facilitates the Contributions of Team Members	Engages team members in ways that facilitate their contributions to meetings by both constructively building upon or synthesizing the contributions of others as well as noticing when someone is not participating and inviting them to engage.	Engages team members in ways that facilitate their contributions to meetings by constructively building upon or synthesizing the contributions of others.	Engages team members in ways that facilitate their contributions to meetings by restating the views of other team members and/or asking questions for clarification.	Engages team members by taking turns and listening to others without interrupting.
Individual Contributions Outside of Team Meetings	Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project. Proactively helps other team members complete their assigned tasks to a similar level of excellence.	Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project.	Completes all assigned tasks by deadline; work accomplished advances the project.	Completes all assigned tasks by deadline.
Fosters Constructive Team Climate	Supports a constructive team climate by doing all of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any three of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any two of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any one of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.
Responds to Conflict	Addresses destructive conflict directly and constructively, helping to manage/resolve it in a way that strengthens overall team cohesiveness and future effectiveness.	Identifies and acknowledges conflict and stays engaged with it.	Redirecting focus toward common ground, toward task at hand (away from conflict).	Passively accepts alternate viewpoints/ideas/opinions.

WRITTEN COMMUNICATION VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Context of and Purpose for Writing *Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s).*	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned task(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).
Content Development	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.	Uses appropriate and relevant content to develop and explore ideas through most of the work.	Uses appropriate and relevant content to develop simple ideas in some parts of the work.
Genre and Disciplinary Conventions *Formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields (please see glossary).*	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices	Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices	Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation	Attempts to use a consistent system for basic organization and presentation.
Sources and Evidence	Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.	Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.	Demonstrates an attempt to use sources to support ideas in the writing.
Control of Syntax and Mechanics	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses language that sometimes impedes meaning because of errors in usage.

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WRITTEN COMMUNICATION VALUE RUBRIC

for more information, please contact value@aacu.org

Definition

Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	Capstone 4	Milestones 3	Milestones 2	Benchmark 1
Context of and Purpose for Writing *Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s).*	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned task(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	Demonstrates minimal attention to context, audience, purpose, and to the assigned task(s) (e.g., expectation of instructor or self as audience).
Content Development	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.	Uses appropriate and relevant content to develop and explore ideas through most of the work.	Uses appropriate and relevant content to develop simple ideas in some parts of the work.
Genre and Disciplinary Conventions *Formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields (please see glossary).*	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices	Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices	Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation	Attempts to use a consistent system for basic organization and presentation.
Sources and Evidence	Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.	Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.	Demonstrates an attempt to use sources to support ideas in the writing.
Control of Syntax and Mechanics	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses language that sometimes impedes meaning because of errors in usage.

APPENDIX F

ADAPTED LEAP RUBRICS (2012)

	Advanced **4**	**Competent** **3**	**Emerging** **2**	**Novice** **1**
Communication	Demonstrates detailed attention to and *successful execution* of a wide range of conventions appropriate for the discipline/task at hand; delivery techniques make for a compelling, imaginative, and engaging presentation; central message is precisely stated, appropriate repeated, and strongly supported	Demonstrates *consistent use* of important conventions particular to a discipline or task(s), including organization, content, presentation, and stylistic choices; delivery techniques are interesting, and central message is clear and consistent with the supporting material	Language choices and delivery techniques *follow expectations* appropriate to a specific discipline and/or tasks for basic organization, content, and presentation; central message is basically understandable but is not often repeated and is not memorable	Verbal and nonverbal language choices are *unclear and minimally support* the effectiveness of the assignment; delivery techniques detract from the understandability of the presentation; central message can be deduced, but it not explicitly stated
Critical Thinking	Demonstrates consistent ability to consciously and *comprehensively scrutinize* information and uses it to support reasoned decision making; a sense of open-mindedness toward ambiguity; alternative explanations, sources of evidence, points of views, and conclusions	*Comprehensively describes* the viewpoints of the issue; examines its underlying assumptions and context; conclusions and implications are logically supported by evidence.	*Describes and defines* most points of view of the issue; evaluates information taken from sources with guidance; makes conclusions and articulates implications that are tied to some evidence	*Restates issues* and identifies some important sources of information; is developing an understanding of the influence of assumptions and contexts behind viewpoints, but comes to conclusions and implications that are superficial
Group Collaboration	*Engages* individual strengths as well as the diversity and strengths of	*Integrates* individual strengths and group diversity to develop shared	*Utilizes* individual strengths and builds on the idea of others; defines and carries out	*Cooperates* with the ideas/viewpoints/opinions of fellow group members

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	Advanced 4	Competent 3	Emerging 2	Novice 1
	fellow group members in ways that encourage and facilitate the creation of shared expectations, constructive compromise and collaboration, and the accomplishment of common goals; helps resolve conflict in ways that build group cohesion	expectations, definitions of roles and tasks, and successful strategies to accomplish the group's goals; helps manage conflict by encouraging open discussion and compromise	own role within the group in ways that facilitate the accomplishment of goals and tasks in a timely manner; identifies conflict and offers some solutions	and may share ideas that reinforce common goals and tasks; a nascent understanding of own role and provides assistance to fellow members when solicited; Generally avoids direct involvement with conflict
Global Understanding	Demonstrates a *sophisticated understanding* of the complexities of world views and ways of knowing in relation to the history, values, politics, communication styles, economy, beliefs, or practices of members of one's own or another culture; ability to interpret and act upon intercultural experiences from more than one worldview	Demonstrates an *adequate understanding* of the complexity of the interconnectedness of local and global communities politically, economically, socially, and culturally; an ability to interpret intercultural experiences from multiple perspectives	Demonstrates a *general understanding* of different values, views, and ways of knowing in one's own and another's culture regarding the complexity of the interconnectedness of local and global communities politically, economically, socially, and culturally; identifies components of other cultural perspectives but responds in all situations with own worldview	Demonstrates *surface understanding* of the complexity of the interconnectedness of local and global communities politically, economically, socially, and culturally; views and responds to the experience of others through own cultural position
Civic Engagement	Demonstrates an understanding of the complex nature of community issues; is *committed to working collaboratively*	Demonstrates *ability to work collaboratively* within community contexts and structures to achieve a civic aim. Able to	Demonstrates *some experiences* with civic engagement, and some *initial reflections* on the roles and responsibilities of	Expresses *intentions to engage* in civic contexts in order to explore his/her role in contributing to the common good.

	Advanced 4	Competent 3	Emerging 2	Novice 1
	within community contexts and structures, with diverse partners, to achieve a civic aim.	articulate a personal sense of the individual's role within communities.	individual within communities.	
Digital Literacy	Demonstrates a *confident and independent ability* to find, learn about, and apply many new ICT tools; integrates new tools with those currently used, and applies them appropriately to each activity undertaken; acts in congruence with ethical standards around ICT use in everyday life	Demonstrates *ability to independently learn* a new ICT tool; can identify activities for which the tool can be appropriately applied and a few ethical issues around ICT use in everyday life.	Demonstrates the *ability to appropriately apply* an ICT tool to a designated activity, *provided instruction* on using the tool is available; nascent awareness of the ethical issues surrounding the use of ICT tools.	Demonstrates a *fear or resistance* to using ICT tools to address activities undertaken; or inappropriate uses and applies ICT tools.
Aesthetic Awareness	*Analyzes* and interprets the historical, social, political, environ-mental or gendered contexts of specific works; evaluates how aesthetic expression challenges one's view and leads to an appreciation of commonality and diversity; *effectively explains* how creative expression and the natural world enrich everyday life and can effect social change	*Describes* the historical, social, political, environment, or gendered contexts of specific created works; recognizes aesthetic expression as a stimulus for emotional and intellectual interpretation; *adequately explains* creative expression and the natural world enrich everyday life	*Identifies* some of the contexts of specific created works and see a meaning of the aesthetic expression beyond face value; describes the emotional and intellectual impacts of aesthetic expression; begins to identify how creative inquiry and the natural world enrich everyday life	Superficially *responds* to aesthetic expressions; sees aesthetic expression as irrelevant and has *difficulty recognizing* the role of creative inquiry in effecting social change and enriching everyday life
Well-Being	*Engages* in practices that lead	*Demonstrates* equanimity and	*Often demonstrates*	*Exploring* self-knowledge; can

	Advanced 4	Competent 3	Emerging 2	Novice 1
	to consistent equanimity and compassion; living meaningful life of congruence with one's purpose; resilient in face of life's struggles; flourishing; high level of awareness; part of strong and diverse social networks	kindness; can identify and proactively manage stress and adversity; develops plan for living life of meaning and purpose; offers and accepts social support	concern for others; can identify stressors and design strategies for coping; exploring meaning and purpose in life; building diverse social networks	identify stressors; searching for meaning and purpose in life; homogeneous social networks

Note. New Century College Assessment Committee (May 2012). Adapted AAC&U LEAP Rubrics. Fairfax, VA: George Mason University.

APPENDIX G

AN EMERGENT TYPOLOGY OF USE OF EVIDENCE IN E-PORTFOLIOS (2008)

	"Frames" of Evidence	ePortfolio Creator/ Facilitator	ePortfolio Evaluator/ Researcher

Characteristics of item used as evidence	**Agency**
	    Artifacts (created by the author)
	    Attestations (created by someone else)
	    Reproductions (capture of ephemeral activity)
	
	Media
	    Format of evidence (text docs, podcasts, blogs, multimedia, streaming video, photos, playlists, scanned artifacts, wikis, etc.)
		• Are some types of evidence more self-explanatory (e.g., attestations), while other types (e.g., reproductions) require more reflection and narrative to reveal their meaning?
		• How do we help ePortfolio authors become aware of the level of reflective framing required?
		• How does portfolio audience and purpose shape these decisions?
			• Does the agency characteristic in creating/using a piece of evidence reflect different levels of integrative thinking?
			• Is there a relationship between agency characteristics and persuasion across different ePortfolio purposes and audiences?
			• How do the media selected for inclusion in an ePortfolio reflect an author's learning preference/style?

Purpose of incorporating evidence	**Rhetorical Function**
	    Intended rhetorical function of the evidence
	
	Object
	    Whether evidence reflects author's knowledge, skills, or character
		• To what degree is there congruence between the intended/espoused function of a piece of evidence and what that evidence actually reveals about the portfolio creator?
		• How do we help ePortfolio authors demonstrate integration, learning, and engagement through variety of function and object?
			• Do ePortfolios that demonstrate mastery include evidence addressing multiple functions and objects?
			• How do ePortfolios represent learning holistically?
			• How does the relative object weighting change in portfolios with different purposes and audiences?

Characteristics of associated learning activity	**Sponsorship** Institution-sponsored (curricular, co-curricular, community organizations, etc.); self-sponsored; unsponsored	• How do we encourage portfolio authors to move to more self-directed learning and realistic self-appraisal?	• To what degree is sponsorship developmental? What processes facilitate self-directed learning?

| | **Participation**
Evidence reflects individual, small group, or larger community/associational learning activity | • How do we guide individuals to represent their learning across multiple dimensions of sponsorship and participation?
• How do we encourage evidence selection that reflects the participation characteristic discussed in the reflection? | • Are there differences (e.g., motivational, level of engagement, competency level, level of self-efficacy, etc.) among types of sponsorship?
• Do sponsored activities provide greater access to faculty and peer mentors, as well as enhanced feedback and evaluation, and thus result in deeper student learning? |

Note. Adapted from Blank-Godlove, J., Cambridge, D., Danner, K., Eby, K. Hare, H., Owen, J. & Smith, L. (2008, July). *An emergent typology of use of evidence in ePortfolios.* Presentation at ePortfolio Conference, St. Jerome's University, Waterloo, Canada.

NACE COMPETENCIES (2017)

CAREER READINESS
for the New College Graduate
A DEFINITION AND COMPETENCIES

NACE.

Career readiness of college graduates is of critical importance in higher education, in the labor market, and in the public arena. Yet, up until now, "career readiness" has been undefined, making it difficult for leaders in higher education, work force development, and public policy to work together effectively to ensure the career readiness of today's graduates.

In accordance with its mission to lead the community focused on the employment of the new college graduate, the National Association of Colleges and Employers (NACE), through a task force comprised of representatives from both the higher education and corporate sides, has developed a definition and identified competencies associated with career readiness for the new college graduate.

Definition:
Career readiness is the attainment and demonstration of requisite competencies that broadly prepare college graduates for a successful transition into the workplace.

COMPETENCIES:

Critical Thinking/Problem Solving: Exercise sound reasoning to analyze issues, make decisions, and overcome problems. The individual is able to obtain, interpret, and use knowledge, facts, and data in this process, and may demonstrate originality and inventiveness.

Oral/Written Communications: Articulate thoughts and ideas clearly and effectively in written and oral forms to persons inside and outside of the organization. The individual has public speaking skills; is able to express ideas to others; and can write/edit memos, letters, and complex technical reports clearly and effectively.

Teamwork/Collaboration: Build collaborative relationships with colleagues and customers representing diverse cultures, races, ages, genders, religions, lifestyles, and viewpoints. The individual is able to work within a team structure, and can negotiate and manage conflict.

Digital Technology: Leverage existing digital technologies ethically and efficiently to solve problems, complete tasks, and accomplish goals. The individual demonstrates effective adaptability to new and emerging technologies.

Leadership: Leverage the strengths of others to achieve common goals, and use interpersonal skills to coach and develop others. The individual is able to assess and manage his/her emotions and those of others; use empathetic skills to guide and motivate; and organize, prioritize, and delegate work.

Professionalism/Work Ethic: Demonstrate personal accountability and effective work habits, e.g., punctuality, working productively with others, and time workload management, and understand the impact of non-verbal communication on professional work image. The individual demonstrates integrity and ethical behavior, acts responsibly with the interests of the larger community in mind, and is able to learn from his/her mistakes.

Career Management: Identify and articulate one's skills, strengths, knowledge, and experiences relevant to the position desired and career goals, and identify areas necessary for professional growth. The individual is able to navigate and explore job options, understands and can take the steps necessary to pursue opportunities, and understands how to self-advocate for opportunities in the workplace.

Global/Intercultural Fluency: Value, respect, and learn from diverse cultures, races, ages, genders, sexual orientations, and religions. The individual demonstrates openness, inclusiveness, sensitivity, and the ability to interact respectfully with all people and understand individuals' differences.

USING THE DEFINITION AND COMPETENCIES

How do the definition and competencies help those focused on ensuring new college graduates have the skills necessary to enter and become part of a strong, productive work force?

The definition and competencies provide for development of strategies and tactics that will close the gap between higher education and the world of work. They lay the foundation for the work necessary to prepare college students for successful entry into the work force by:

- Providing a common vocabulary and framework to use when discussing career readiness metrics on campus, within employing organizations, and as part of national public policy.

- Establishing defined competencies as guidelines when educating and advising students.

- Establishing defined competencies to identify and assess when hiring the college educated.

NOW AVAILABLE: CAREER READINESS RESOURCES

NACE members have generously shared a variety of resources designed to support your efforts in integrating career readiness into your programs and services. You can access those materials and measurements at www.naceweb.org/career-readiness/competencies/career-readiness-resources.

The National Association of Colleges and Employers

Advancing college talent together

Established in 1956, the National Association of Colleges and Employers (NACE) is the leading source of information on the employment of the college educated.

In carrying out its mission — to lead the community of professionals focused on the employment of the college educated by providing access to relevant knowledge, resources, insight, and relationships — NACE connects more than 7,600 college career services professionals at nearly 2,000 colleges and universities nationwide, and more than 3,000 HR/staffing professionals focused on university relations and recruiting, and business affiliates who serve this community.

Among colleges and universities, NACE represents more than 50 percent of all four-year colleges and universities in the United States, and 98 percent of all research universities. Approximately 30 percent of two-year public institutions count themselves as NACE members.

On the employer side, NACE members include mid-size and large national and global organizations, ranging from Fortune 500 organizations to start-up companies to government agencies. NACE employer members represent a wide range of industries, including finance, energy, retail, manufacturing, pharmaceuticals, insurance, consulting services (accounting, engineering, computer), government and nonprofits, and more.

Headquartered in Bethlehem, Pennsylvania, NACE forecasts trends in the job market; tracks, analyzes, and reports on outcomes for new college graduates by discipline, degree level, and type of school through its First-Destination Survey; monitors legal issues in employment, the job search, and hiring practices; and provides college and employer professionals with professional standards as well as an ethical framework by which both groups can work together to benefit the college-educated candidate. NACE provides its members with benchmarks and metrics; research; resources, including a survey of starting salaries for new college graduates, a quarterly journal, and a biweekly newsletter; and professional development opportunities.

www.naceweb.org
62 Highland Avenue • Bethlehem, PA 18017 • Phone: 610.868.1421
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