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### The Living Classroom: A Professional Learning Session

Albert P. Buckley Jr.

*University of Massachusetts Boston*

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A final project presented to the faculty of the  
Instructional Design Master's Degree Program  
University of Massachusetts at Boston

The Living Classroom:  
A Professional Learning Session

Submitted by  
Albert P. Buckley Jr.

In partial fulfillment for the requirement of the degree  
MASTER OF EDUCATION

December 12, 2016

*Dr. Carol Ann Sharicz*

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Approved by Dr. Carol Ann Sharicz, Faculty

### **Abstract**

The American public school classroom has begun moving from the traditional furniture of education (hard plastic chairs attached to desks) to flexible mobile furniture as part of a holistic approach to creating a learning environment that enhances learning for its students. This project describes the process derived in the development and delivery of an asynchronous professional learning session aimed at helping teachers acclimate and engage new or adapted physical and psychological attributes to the learning environments in their care. The program is backed with research demonstrating why the progressive classroom improves the learning experience for both students and teachers. The project goals and evaluation will build a skill set for educators that identifies the American classroom in terms of where we are coming from and today's changes in the use of furniture in the classroom and the cultural shift that goes with it. This program is designed to then be assessed and maintained by the school districts in coordination with their accreditation goals as they pertain to the physical plant and school culture. The foundation of the Professional Learning video was taken from the original live format. The research was added to substantiate the program and additional information and videos added to enhance the visual support with classroom layouts. This was worked between several video platforms. Like watching the learners in their classroom with their furniture, they will show us how to best build a tool for their learning.

**KEYWORDS:** 21<sup>st</sup> century classroom, progressive classroom, classroom furniture, flexible classroom, learning landscapes, furniture, learning labs

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## Analysis

### Introduction

Artcobell is a manufacturer of classroom furniture with a focus on the K-12 market. As one of the oldest manufacturers of classroom furniture in the United States, they have long made traditional or “legacy” furniture. Since the 1950’s, classroom furniture has typically been desks and chairs made of hard plastic seats, backs, and surfaces that are supported by chrome tubular frames. This type of furniture has long become a price driven sale, a commodity, in the K-12 marketplace. <http://www.artcobell.com/>

Later, as ergonomics played a larger role in the education and work environment, soft plastic seating was introduced. Now “best value,” decent product for a decent price, played a role in purchasing decisions for school districts. It was sturdy furniture with a degree of comfort for the student. As technology has crept into the classroom, the way learning happens has also changed. With STEM (Science, Technology, Engineering, and Math) and STEAM (Science, Technology, Engineering, Art, and Math) driven curriculums, subjects are now integrated. With technology students are asked to research and contribute in different ways. Also, teachers are asked to call upon a wider variety of skills and teaching styles to accomplish these evolving goals.

Classroom furniture is now being seen as a tool rather than just a place to sit. As teaching methods are varied to accommodate different learning styles and curriculum goals, Artcobell has discovered that furniture can be researched, designed, and manufactured to enhance the classroom experience.

At Artcobell, we also have learned that this change in classroom environment can be a tricky transition for many educators. It is now a tool with options attached to them that can

change the physical and cultural structure of the learning environment. This “newness” has caused angst among many school administrators and teachers making the evolution into the progressive classroom.

### **Research**

It is a challenge to find scholarly or statistical articles on the effectiveness of the progressive classroom and its effect on the student learning. The studies tend to be manufacturer supported and aimed at higher education, but I believe that values discussed are transferable for learners of any age and most learning environments.

Changing the learning environment from the traditional combo (desk and chair attached made of hard plastic) world to furniture that supports project-based learning as well as individual learning styles is a novel concept that is only recently being accepted in public school design and budgeting. Technology costs are finally coming down and allowing school administrations to have the ability to evolve the learning environment to support this.

Of the three articles cited here, the Herman Miller research study seems to take the most thorough and holistic approach to evaluating the changing learning environments and how they are supporting curriculum and cultural changes in today’s schools.

The other two articles are more of a compliment to the Herman Miller paper than adding to their story. They are perhaps representative of the considerations of learning today.

*Adaptable Spaces and Their Impact on Learning* (2011) is a white paper that was done by Herman Miller, a manufacturer of office furniture, in conjunction with several higher education institutions. The mission of this research was to try different layouts for learning spaces with flexible furniture and get teacher and student observations in helping create a standards program for their school.

The perceptions of the students and faculty were gathered and evaluated as the schools worked this research/practice blended exercise. The perceptions were measured in the four areas of the student/faculty experience: Basic human needs, Teaching, Learning, and Engagement. While the study was published in 2011, I believe there is value in these considerations being worthwhile in the early stages of developing the “progressive” classroom.

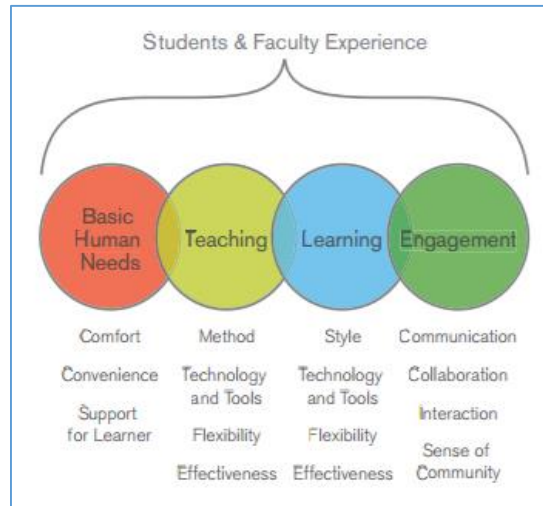


Figure 1. Four Classroom Experience Perceptions

The Herman Miller study asked students for their observations of the change of furniture from traditional “combo desks” (one-piece tablet and chair) to soft plastic chairs with movable table.

| Student observations with flexible/mobile furniture                          |
|--|
| 32% increased seating comfort  |
| 14% increase in being able to clearly understand the professor               |
| 17% better able to view materials  |
| The students more frequently moved furniture than in traditional classrooms. |

Table 1. Student observations



The faculty also made observations concerning their experience of teaching in their new learning environment.

| Faculty observations with flexible/mobile furniture |
|---|
| 26% increase in quality of lighting                 |
| 17% increase in ability to hear students            |
| 25% increase in internet connection                 |
| 9% enough white board space                         |
| 13% work surface space                              |
| 5% ability to organize materials                    |

Table 2. Faculty observations

The research also delves into suggestions for a holistic approach to bringing together a learning space with considerations for outdoor exposure, paint color, technology access, etc.

A very important contribution of this study towards our goal is the recommendation of the study for training for both the faculty and students on how to maximize and how to use the furniture to enhance the learning experience.

The paper also cites a need for cultural change for learning in undergraduate (and secondary) education. These goals of education continue to permeate into today's classroom almost twenty years after Arthur Chickering and Zelda Gamson's (1987) "Seven Principles for Good Practice in Undergraduate Education." Their seven practices include:

1. Interaction between faculty and student
2. Student-to-student collaboration and cooperation
3. Active learning
4. Prompt feedback from faculty

- 5. The amount of time students spend on their studies
- 6. High expectations from faculty and staff
- 7. Respect for diversity of talents and learning styles (p. 7)

The Herman Miller/SCUP (Society of College and University Planning) goes on to quantify significant increases in student and faculty interaction. “Findings accumulated as part of the Learning Spaces Research Program provide evidence that flexible and adaptive design supports the core pedagogic constructs of basic human needs, teaching, learning, and engagement. “Doing so addresses a simple yet vital equation: the sum of people, pedagogy, and place equals possibilities that can enrich teaching and learning for students, faculty, administrators, and the community” (p. 9).

| Faculty observations with Learner-Centric                      |
|--|
| Lecturing is 21% less likely to be used as a learning activity |
| Classroom demonstration is 6% more likely to take place        |
| Class discussion is 17% more likely to take place              |
| Small group work is 9% more likely to take place               |

Table 3. Faculty observations

In an article written in U.S News, Steelcase, a manufacturer of contract and higher education furniture, also did research and surveys in connection with their goal to create a progressive classroom.

A survey of 300 learners from four universities was undertaken to determine their perceptions of a progress-style classroom. This included swivel chairs, connectable tables, and alternately laid out furniture.

| Student attitude with mobile, connectable, flexible furniture     |
|---|
| 72% changes increased their motivation to attend class            |
| 72% design would increase their ability to achieve a higher grade |
| 84% reported being more engaged                                   |

Table 4. Student response to progressive classroom

Lennie Scott-Webber, director of global education environments for Steelcase Education states for this article, "If we're going to move, (curriculum) is moving towards more problem-based, inquiry-based learning... then connecting and feeling connected to others is a critical piece of student success..." (p. 5).

| Faculty attitude with mobile, connectable, flexible furniture              |
|--|
| 98% said there was moderate to exceptional increase in student interaction |
| 68% saw increases in students' ability to achieve higher grades            |
| 88% students' motivation to attend class                                   |

Table 4. Faculty response to progressive classroom

Interviewed for this article Gary Pavlecho, director of teaching technology, Office of Educational Excellence, Ball State shares, "We are seeing without a doubt that learner-centered pedagogy is at the heart and soul of seeing improvement in student learning" (Pavlecho, 2014, p. 5).

Artcobell agrees with the Herman Miller/SCUP suggestion concerning training with these new classroom elements... creating a kind of primer for flexible learning environments. We have committed to work with schools standardizing on this progressive furniture to figure out the best way to develop and share the maximum use of this teaching tool.

No one in the marketplace does this value added investment in their product with their clients. Because of this, there is no template to work from or map to follow on this journey.

### **Background Information**

Artcobell is transforming from a classroom furniture manufacturer to become a learning company that manufactures tools for learning...progressive classroom furniture. We are in the early stages of this education process in the industry as no one has taken this approach before.

The goal of this will be to produce a tool of learning for the teachers using the new progressive furniture. The initial discussion has been to develop a program that will explain the history of classroom furniture in American education, what is happening now, and introduce them to the Artcobell Professional Learning community that they can participate in online.

### **Stakeholders**

**Meegan - Learning Environment Specialist.** Meegan is the guru who develops the learning for professionals (school districts, architect and design community, and the Artcobell sales team). Over the past year, she has designed and delivered several Learning Units for the Architectural & Design community, training for our Dealer Partners, and now this Professional Learning session directed to the actual folks using the product...the teachers.

This project is being developed from scratch by Meegan. The original version was a four-hour seminar that focuses on subject matter including Learning Landscapes, Classroom Social Skills, and Space Planning. The session is held with up to fifteen educators and can be done with or without the actual classroom furniture.

Meegan is looking for an introductory learning piece that will be focused on showing her audience what they will be accomplishing over this four-hour session or a shorter abridged version of two hours, developed of a more popular two-hour professional day. This project can

be shortened to show administrators what the program is about or be used as a stand-alone teaching tool for the teachers.

It has been initially discussed that this piece can have a secondary application as to educate our own Education Managers, Distribution Partners, and the Architecture & Design community about this cultural shift in educational interiors. Finally, it will help us educate decision makers (superintendents, curriculum and technology directors, etc.) on what we can provide to help their team to maximize the effectiveness of their new investment.

**Jill - Design and Learning Manager.** Jill is a former Education Manager who has evolved into this newly developed position. She will be working with Meegan to maintain the direction of this Professional Learning program and assess with her its effectiveness and possible tweaks. As this is a newly created position within the artcobell sales/learning team, we all will be morphing this project from Meegan's initial Professional Learning session.

**Al - Education Manager.** As an Education Manager, I have several goals for this project. One is gaining a tool that I can use as an Education Manager in order to demonstrate what the Professional Learning program is about when we come in after the furniture is delivered. This will also be a great piece for teachers who cannot attend a session for whatever reason. With nine Educational Managers in the field, with this presentation, there will be with this tool one voice.

As all learning is evolutionary and all adult learning is experiential (Kolb, 1984) we will build in a community for teachers to collaborate in long after the session is over. Artcobell wants the learning to continue.

## **Interviews**

The interviews were a discussion about the project and what each stakeholder would like to see in it. The overall marching orders from Sharad (Vice-President, Sales, Marketing & Product Development) is to create a piece that will incorporate the concept for training teachers how to use the progressive furniture in their classrooms.

With that, I spoke with each of the contributors to understand their vision of what was to be accomplished and any suggestions they would have to accomplish this task.

**Meegan's Interview.** Based on the existing project, Meegan thought the following concepts were the highlight of the Professional Learning program.

Google+ Community - The program would wrap up with an invitation to join the Artcobell Google+ Community for progressive classroom. On this site, teachers would be able to share ideas, successes, and “stay aways” from their experience incorporating progressive furniture into their Learning Environments.

Five Learning Landscapes - using the “five learning landscapes,” discuss how to relate to the furniture/physical space as well as the psychological/social cues that can be developed to enhance the progressive learning space experience for the students and curriculum execution.

“What’s in it for me?”- For the teachers what is the “What’s in it for me?” statement. This needs to be developed at the beginning along with the learning objectives.

**Jill's Interview.** Jill stated that she understood what the initiative was in supporting Meegan's Professional Learning program.

Her possible focus areas in the program are to touch on how Artcobell researches progressive learning in the field. We then design and manufacture the pieces based on these

field observations. Maybe more importantly, we then put the product in the field and evaluate how it is received by both the students and the teachers.

Jill would also like to see sections on the concept of Area vs. Activity ROI (Return on Investment), Makerspace Furniture, and Learning Common Areas.

To wrap up, she reminded me of several brand concepts she would like promoted... “Never Stop Learning” and “Every Space is a Learning Space.”

**Beekmantown School District Observations.** While we were going through the interview process and nailing down the focal points of the project, Meegan and I had the opportunity to visit the Beekmantown School District in New York State. They are the first school district in the northeast to develop and standardize on the Artcobell progressive furniture portfolio school wide. We were invited to visit classrooms set up totally with progressive furniture, observe students, and speak with teachers. Meegan did a two-hour professional learning session with the middle and high school teachers.

During the tour, we got to see how teachers in the middle school were using the furniture with their own innate style.

That afternoon, Meegan did a Professional Learning session with the middle and high school teachers. This was the four plus hour program whittled down to two hours and there were more than one hundred participants in the session.

**Beekmantown Administration Interview.** During the walk thru, the middle school principal shared a story about her observing a middle school French teacher with the furniture for the first time and trying to figure out how to lay out her classroom. She described how initially the furniture was put into rows, how the teacher felt frustration “getting herself out the box,” and finally had her “ah-ha” moment realizing the flexibility she now had.

The week following the Beekmantown visit I had a chance to catch up with the principal again and the school district superintendent on the phone.

The principal thought the Professional Learning Session went well and understood the mix of responses between the teachers who got something out of it and the teachers who typically reflected on the session as “been there, done that.” The former were the ones this session was aimed at and the latter usually had that response after every Professional Development day.

The Superintendent commented on while he thought the content was spot on that maybe we spent too much time on concept and not enough on the hands on “how to.” Great insights all around!

**Artcobell Research.** After this visit, we were also able to access the results of a series of surveys done by Artcobell with over one thousand K-12 teachers covering a span of issues revolving around their perceptions of furniture in learning environments and student learning.

## **Design**

### **Project Focus**

While Jill did understand the Professional Learning program in form, she may have been trying to incorporate so many marketing concepts into the program. Perhaps there are other learning units that can be developed to cover her other initiatives.

Meehan also forwarded the outline of her existing program which was originally set up to be presented in half a day. Most school settings allow for two to three hours of professional development sessions. This would be taken into consideration with both live and on-line retooling of the program.



Also, after Meegan and I had a chance to visit the Beekmantown School District, we got a better feel for what the teachers needed in terms of more hands on “how to.” The group activities were well designed and received but there was a hands-on component missing to drive home how to use the furniture. Most teachers by nature are “let me do it” learners and we need to feed that side of the group a little better in the future.

### **Program Goals**

As a culmination of discussion and experience, we decided to create an on-line variation of the Professional Learning program for teachers acclimating to flexible furniture in the progressive classroom. This would meet many of the initial goals set out by the group and would also provide support where professional learning could not happen.

This program would focus on four goals for its learners.

**History.** Investigate the development of the classroom in American education.

**Why Space Matters.** Recognize physical and psychological attributes of a learning environment that can enhance or detracts from learning.

**Learning Landscapes.** In a classroom setting be able to incorporate the five Learning Landscapes and their Instructional Supports.

**Space Planning.** Plan possible classroom furniture configurations with a strategy of how the learning environment contributes to classroom culture and behavior.

**Google Community.** Participate in a Google+ Community of Practice for teachers piloting flexible, mobile furniture in a progressive learning environment.

## **Assessment**

The Kirkpatrick (1959) Model for the assessment of training will be our guide to assess the success of the professional learning program and the acclimation to the progressive classroom in general.

**Reaction.** The teachers are able to verbalize and accept the furniture in their learning environment in a positive sense no matter how they choose to use it.

**Learning.** The teachers understand the appropriate social cues to develop their enhanced day-to-day learning culture in their classroom using the furniture as a tool to accomplish that.

**Behaviors.** The teachers adapt and use appropriate social cues to develop their enhanced day-to-day learning culture in their classroom using the furniture as a tool to accomplish that. The teachers participate in the Google Community of practice set up by Artcobell.

**Results.** The teachers demonstrate their functioning flexible learning environments that work for their audience and curriculum. The students will increase interaction in the learning process which will also translate into an increase in motivation to attend and participate in class and achieve higher grades.

## **Outcomes**

**History.** The teachers will track the classroom in American history, how it has evolved through the Agricultural Age, the Industrial Age, and into the present Digital Age. Also, we will view the classroom as a reflection of the workplace and culture of the times.

**Why Space Matters.** Identify the attributes of today's learning environment from a holistic point of view both physically and psychologically. Also review the point of view of the faculty and students and how they are affected by changes in the classroom.

**Learning Landscapes.** Classify five classroom configurations, work the layout scenarios, and script for changing classroom culture.

**Google+ Community.** Join and participate in a Google+ Community of practice for teachers piloting “progressive furniture.”

### **Instructional Strategy**

An effective delivery system for our intended audience is an easily accessible asynchronous program that can be accessed through a website or a school district’s intranet network.

A video tool will be designed and delivered which will take the learner through each goal with instruction, video support, and quizzes. Concepts will also be reinforced with additional video segments delving into areas of the discussion that are better seen or heard than can be projected with the written word. VoiceThread is also used as a “walk through” device to give the feeling of sharing strategy.

The learner will review a history of the American classroom to build on the concept that the classroom is often a reflection of the workplace and society of the times. The next step will be to explain the learning environment and its physical and psychological attributes to help the learner understand what they are working to effect. We then give them a platform for accomplishing that goal incorporating the classroom management component of creating the progressive classroom. They are given a script tool to map out their thoughts in planning how to share this with their students. Finally, the learner is walked through several classroom layouts that show possible configurations of furniture in different phases of the platform.

## **Develop**

### **Professional Learning Outline**

This asynchronous program will be an adaptation of content and activity from the original face-to-face presentation that is presented being worked on in the field. There are already components of this presentation that are being worked into the live share of this presentation that are being worked into the live share.

|  |
|--|
| <p>Introduction</p> <p>The classroom in American History</p> <ul style="list-style-type: none"><li>▪ Agricultural Age</li><li>▪ Industrial Age</li><li>▪ Digital Age</li><li>▪ Educational Funnel</li><li>▪ Teacher Centric vs. Learner Centric tendencies</li></ul> <p>Why Space Matters - holistic approach</p> <ul style="list-style-type: none"><li>▪ Physical Attributes<ul style="list-style-type: none"><li>▫ Color</li><li>▫ Lighting</li><li>▫ Acoustics</li></ul></li><li>▪ Psychological Attributes<ul style="list-style-type: none"><li>▫ Creativity</li><li>▫ Design vs. User Experience</li><li>▫ Environmental psychology</li><li>▫ Student/ Faculty Impressions</li></ul></li></ul> <p>Quiz</p> <p>Learning Landscapes &amp; Instructional Support</p> <ul style="list-style-type: none"><li>▪ Learning Landscapes<ul style="list-style-type: none"><li>▫ Individual</li><li>▫ Pairs</li><li>▫ Small Group</li><li>▫ Large group</li><li>▫ Coffee Shop</li></ul></li><li>▪ Instructional Supports<ul style="list-style-type: none"><li>▫ Norms</li><li>▫ Relationships</li><li>▫ Expectations</li><li>▫ Prompts</li></ul></li></ul> <p>Quiz</p> <ul style="list-style-type: none"><li>▪ Layouts<ul style="list-style-type: none"><li>▫ Rendering sample layouts for each Learning Landscape Script</li><li>▫ Script Instructional Supports for each Learning Landscape</li></ul></li></ul> <p>Google+ Community</p> <p>Wrap up</p> |
|--|

Figure 3. Professional Learning Session Outline

## **Instructional Materials**

This professional learning session is developed for a real-world teaching environment. For many, participation will be independent. The program needs to be accessible and easy to engage. For those reasons, this project is being done as an asynchronous program with slides, narration, embedded video, quizzes, and a written exercise. Samples of these taking you through a broadbrush of the presentation are shared as Appendices.

The project was originally laid out in Microsoft PowerPoint. First the slides were developed, stacked, and then accessorized (graphics, etc.). Then the animation was sequenced and the initial script was written. Also added were videos embedded and set up from YouTube. A VoiceThread walk thru of sample furniture layouts was narrated as a non-scripted sharing of ideas. The narration and quizzes were created through the iSpring platform.

A Google Community of practice has also been created for teachers to share among the school district and with teachers from across the county.

Materials Created - all seen in The Living Classroom asynchronous presentation

Quizzes

Renderings of layouts for each learning landscape

Video embeds

Note Catcher worksheet for Learning Landscape Script

Furniture rendering created from KiSP software program

VoiceThread for walk through of layouts

Google+ Community of Practice

**Implementation**

The live version of this program is offered to school districts standardizing on Artcobell progressive products for the learning environments. This program will be housed on the company's password secured website. Guests will be given access via relationships with the Artcobell Education Managers across the country. It will also be available to house on school district servers if they want to add it to their intranet.

With that, it can now be offered to schools just starting out small or in peripheral areas like learning commons, makerspaces, special needs, etc. This will also bridge the gap in rural areas where representation might have difficulty getting to (Alaska, Hawaii, rural areas).

Also, this program can be shared with new members of the school community once the program has started off in a school district. It will also be available to those who cannot get to the initial presentation.

**Improvement Plan**

It will be up to the school district administration to support the initiative as they see fit providing backing and encouragement to share among the staff and with other school districts across the country in the Google+ Community. As the program evolves, the school districts will have access to any changes in the program via the website or the Google+ Community.

### References

Bidwell, A., (2014). A swivel chair: the most important classroom technology? U.S. News, <http://www.usnews.com/news/articles/2014/07/21/chairs-and-tables-the-classroom-technology-that-could-help-students>

Herman Miller Inc., (2011). Adaptable spaces and their impact on learning, *Herman Miller Adaptable Spaces and Their Impact on Learning Research*, <http://www.hermanmiller.com/research/research-summaries/adaptable-spaces-and-their-impact-on-learning.html>

Michael, J., (2013). The changing classroom environment, *American School and University*, <http://asumag.com/furniture-amp-furnishings/changing-classroom-environment?page=1>

Robinson, K. (2013-03-11). *Changing School Paradigms*. Retrieved from URL. <https://www.youtube.com/watch?v=LSGU4x2NFgs>

Robinson, K. (2013-05-10). *How to escape education's death valley*. Retrieved from URL. <https://www.youtube.com/watch?v=wX78iKhInsc>

V/S Furniture Middle East. (2012-10-11). *flexible classroom*. Retrieved from URL. <https://www.youtube.com/watch?v=RZOVoy4IlyE>

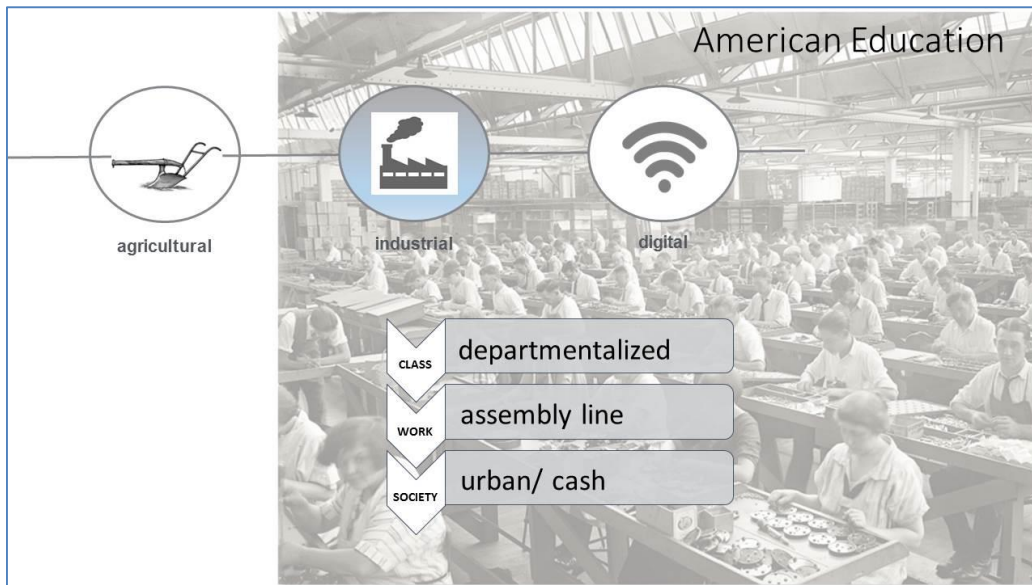
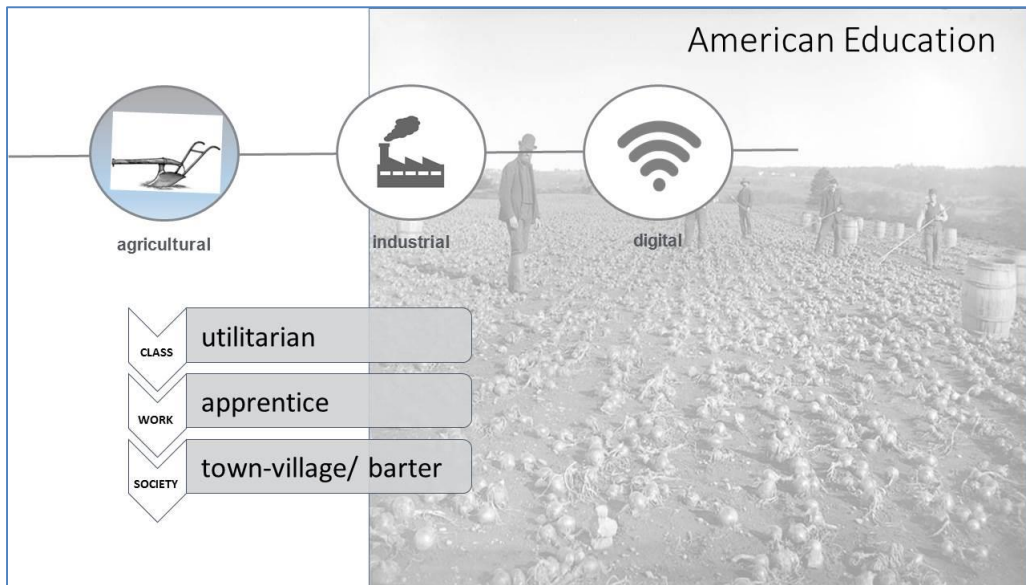


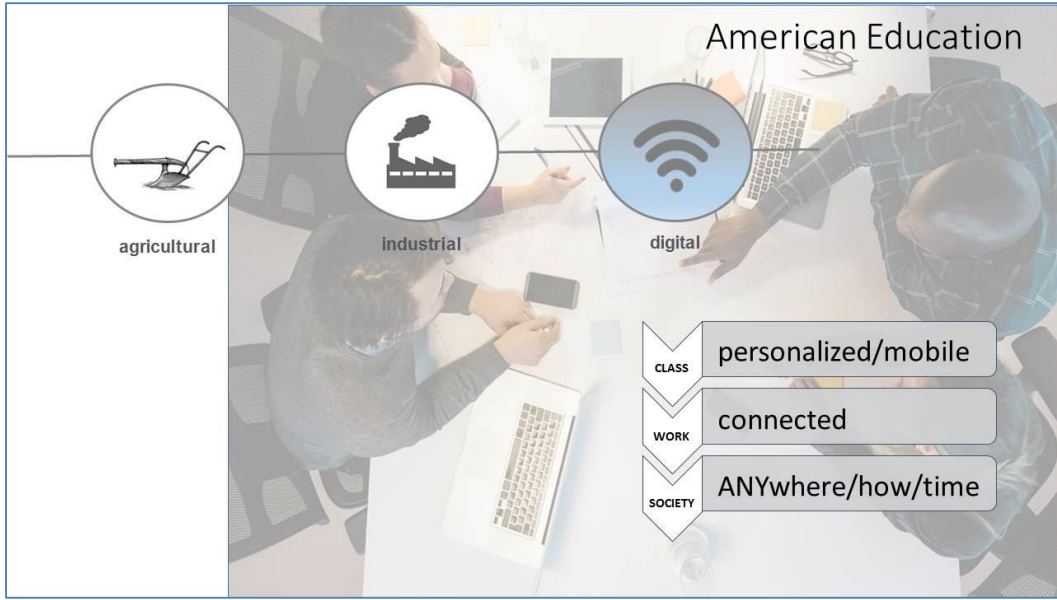
# Appendixes

## Appendix A

### Objective one- History

Investigate the development of the classroom in American Education.






## Appendix B

### Objective two- Why Space Matters


Recognize physical and psychological attributes of a learning environment that can enhance or detracts from learning.



### Color

“The presence of too much bright color in an environment can have negative effects – making children hyperactive, agitated, and exhausted, causing them to shut down their senses in order to block the intensity of the stimuli.”

Consider the importance of white space



### Effects of Lighting

*CRITERIA TO EVALUATE LIGHTING*

- Uniform vs. non-uniform distribution of light
- Bright vs. dim levels of illumination
- Location of overhead and peripheral (wall) lighting

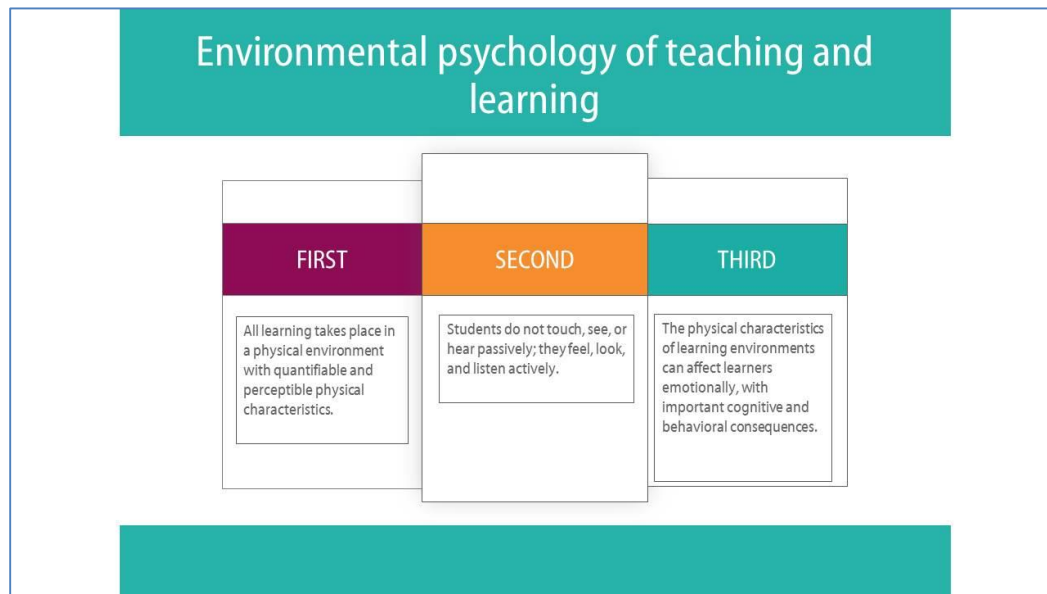
## Effects of Acoustics

*LISTENING AND LEARNING GO TOGETHER*

- ❑ Hearing drives learning.
- ❑ Students spend 75% of their school day involved in listening activities.
- ❑ Independent studies validate that classroom audio solutions can overcome adverse acoustic conditions, providing students with enhanced speech recognition and a better opportunity to learn.

**“Creativity follows context...  
If I want an organization to behave in a certain way, I need to design for that.”**

*-d.school Executive Director,  
George Kembel*



## Appendix C

### Objective three- Learning Landscapes

Incorporate the five Learning Landscapes and their Instructional Supports



Appendix D

Learning Landscapes- Note Catcher

Script for instructional supports

### LEARNING LANDSCAPES with instructional supports

|   |  |   |
|---|--|---|
| <p><b>Whole Group</b></p> <p>Norms: All eyes are tracking the speaker, one person speaks at a time.</p> <p>Expectations: Add on to ideas in constructive ways; positive feedback only.</p> <p>Relationships: Teacher highlights student successes/positives for others to hear.</p> <p>Prompts: When I say go, please reset the room the way you found it/clean up supplies faster than you found it taking it.</p>   | <p><b>Coffee Shop (individual, sm group, pairs)</b></p> <p>Norms: Choose 1 spot and stay there throughout the activity.</p> <p>Expectations: Complete activity/instructions in the time given; level 1 or 2 voice.</p> <p>Relationships: Teacher checks in w/ different groups, listening before speaking.</p> <p>Prompts: When I say Go, move to your coffee shop location/group. When I say go, reset the room to whole group configuration.</p> | <p><b>Individual</b></p> <p>Norms: Honor and respect the silent processing time of your peers.</p> <p>Expectations: Complete activities without talking/disrupting others; level 0 voice.</p> <p>Relationships: Getting to know you activities as individuals in group setting/share out.</p> <p>Prompts: You have 10 minutes to silently read the text and answer questions or</p> |
| <p><b>Small Group (3+) Teams</b></p> <p>Norms: Communicate with protocols and tools, everyone's opinion counts.</p> <p>Expectations: Use sentence stems and turn-taking dialogue; level 2 voice.</p> <p>Relationships: Use 'we' instead of 'I' and 'we' statements; create a team name in 60s or less.</p> <p>Prompts: When I say Go, find your group members after we count off in sets of 6 and arrange your tables/desks so everyone can see each other.</p> | <div style="text-align: center;"> <p><b>NOTE CATCHER</b></p> </div>  |   |
| <p><b>Pairs</b></p> <p>Norms: Add on to each other's ideas vs. copying work.</p> <p>Expectations: Use 'I noticed', 'I appreciated' statements about each other's work or ideas; level 2 voice.</p> <p>Relationships: Ask your partner to share 1 fun fact about themselves, find a partner you haven't worked with yet.</p> <p>Prompts: When I say go, turn to a shoulder partner...</p>  |  |   |

Appendix E

V/S “Flexible Classroom” video

What just happened here?



This is what we are aiming for...

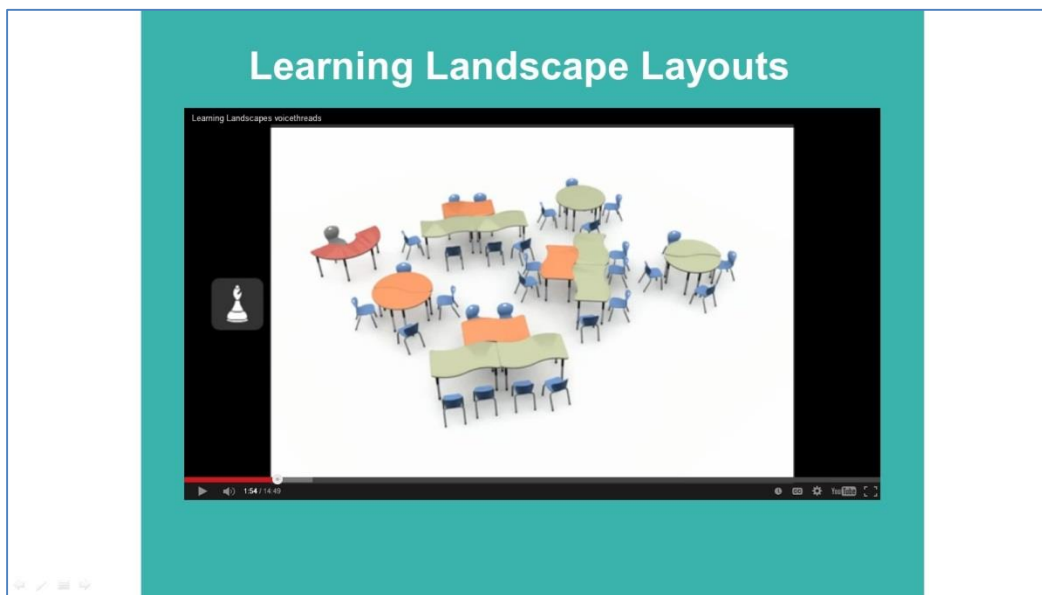
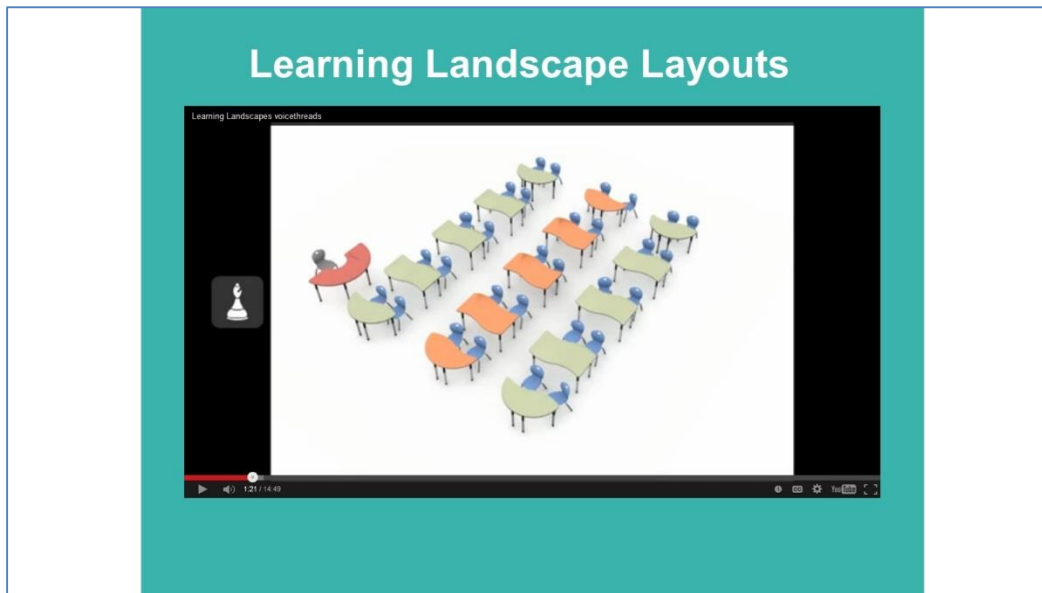
The image shows a video player interface with a pink background. At the top, the text "What just happened here?" is written in white. Below this is a video player showing a classroom scene. The video title "flexible classroom" is visible in the top left corner of the player. The video content shows a woman in a red cardigan moving a blue chair in a classroom. Other students and a sign that says "Montessori" are also visible. At the bottom of the video player, the text "This is what we are aiming for..." is written in white. The video player controls show a play button, a progress bar at 0:38 / 1:50, and a volume icon.



Appendix F

Space Planning

Plan possible classroom furniture configurations

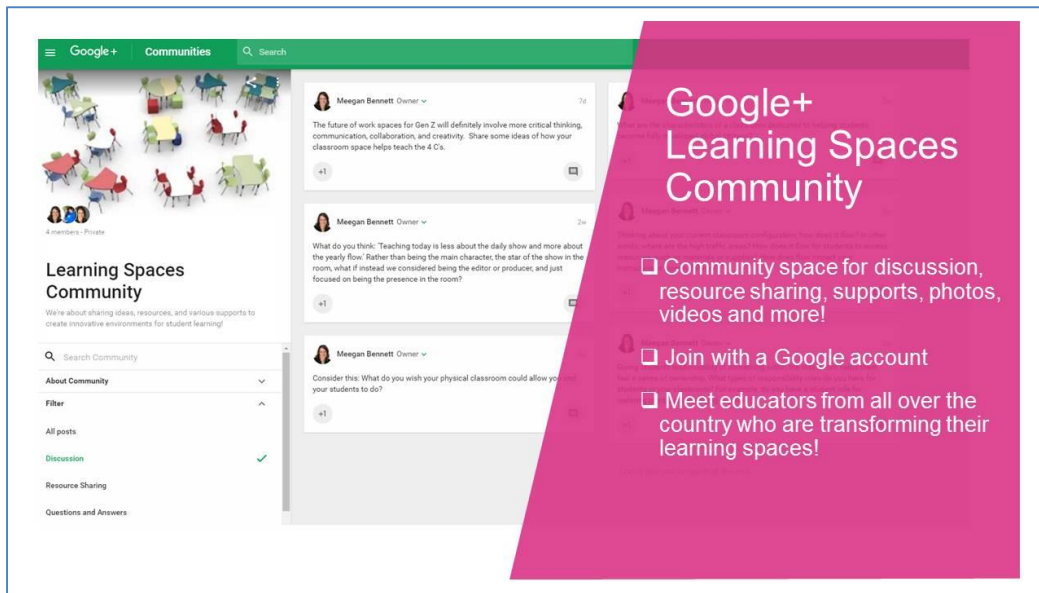




## Appendix G

### Google+ Community

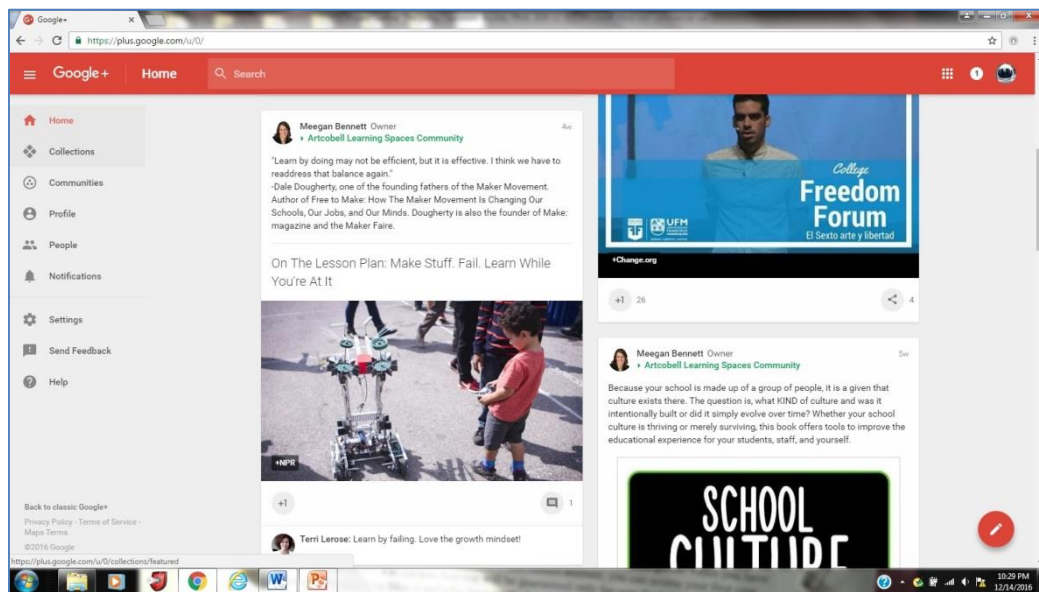
Participate in a Google+ Community of Practice for teachers progressive learning environments.



The image shows a screenshot of the Google+ 'Learning Spaces Community' page. The page header includes 'Google+ Communities' and a search bar. The community name 'Learning Spaces Community' is prominently displayed, along with a description: 'We're about sharing ideas, resources, and various supports to create innovative environments for student learning!'. Below this, there are filter options for 'All posts', 'Discussion', 'Resource Sharing', and 'Questions and Answers'. The main content area shows several posts by the owner, Meegan Bennett, discussing topics like work spaces for Gen Z, teaching today's challenges, and physical classroom design. A large pink overlay on the right side of the screenshot contains the following text:

### Google+ Learning Spaces Community

- Community space for discussion, resource sharing, supports, photos, videos and more!
- Join with a Google account
- Meet educators from all over the country who are transforming their learning spaces!



This screenshot shows a Google+ home feed. The top navigation bar includes 'Google+', 'Home', and a search bar. A left sidebar contains navigation links for Home, Collections, Communities, Profile, People, Notifications, Settings, Send Feedback, and Help. The main feed displays several posts:

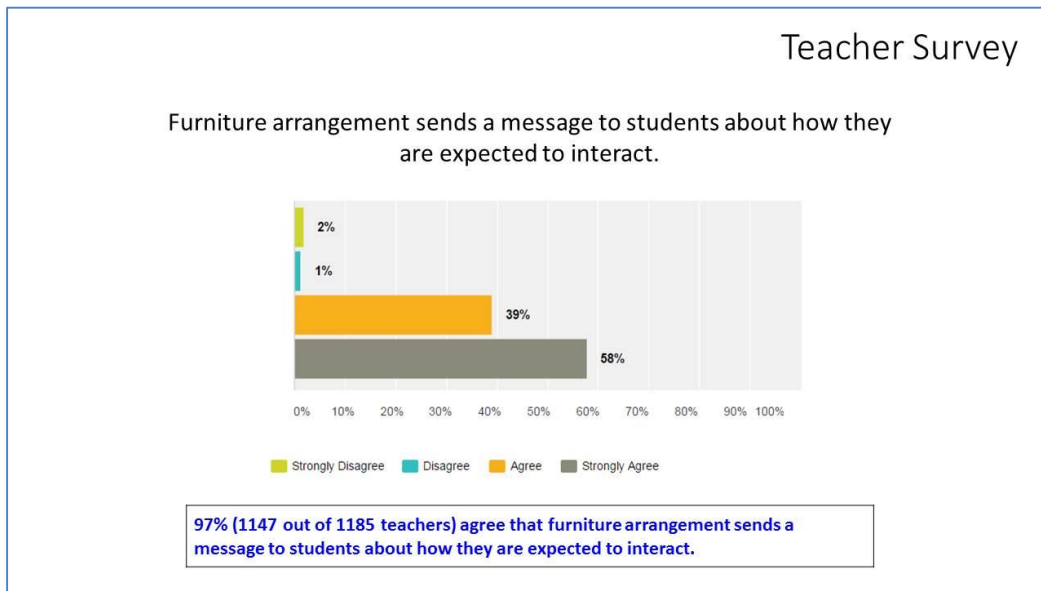
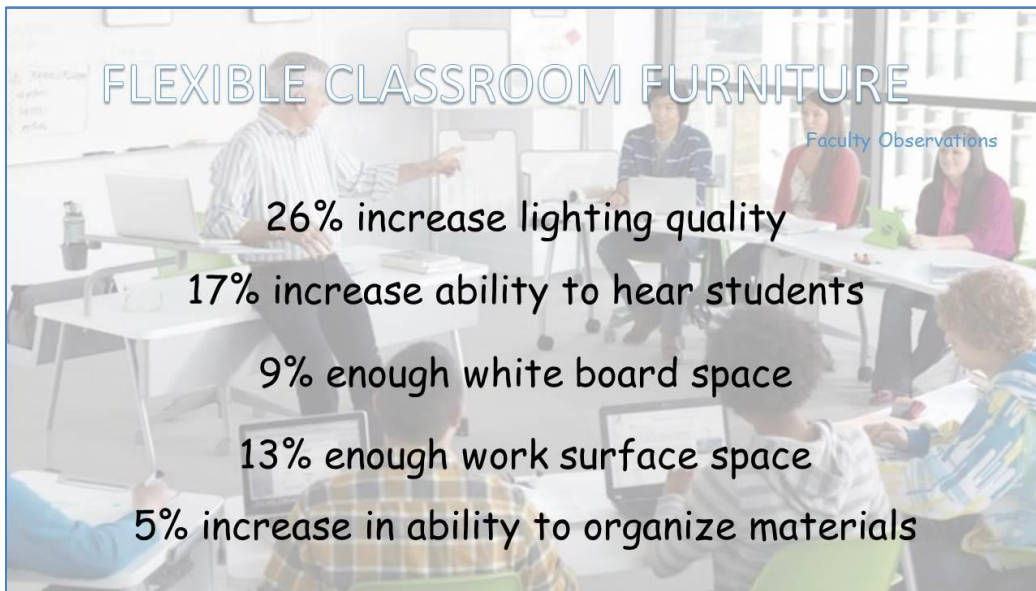
- A post by Meegan Bennett, Owner of the 'Artobell Learning Spaces Community', featuring a quote by Dale Dougherty and a photo of a child with a robot.
- A post from 'College Freedom Forum' with the text 'El Sexto arte y libertad' and a photo of a man.
- A post by Terri Leroso with the text 'Learn by failing. Love the growth mindset!' and a photo of a child with a robot.

The bottom of the screen shows a Windows taskbar with various application icons and a system tray displaying the time as 10:29 PM on 12/24/2015.

Appendix H

Research and Survey

Teachers and students increase engagement in Learning Centric learning.



## Appendix I

### Changing Education Culture

It's a vibe... easier to feel than read about

If you have time...

Ken Robinson - Changing School Paradigms

11 minutes with Sir Ken Robinson on changing education paradigms