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4-5-2012

# The Development and Use of Online Modules for Professional Development in Early Childhood Education

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### Recommended Citation

Stone-MacDonald, Angi; Douglass, Anne; Love, MaryLu; and Institute for Community Inclusion, University of Massachusetts Boston, "The Development and Use of Online Modules for Professional Development in Early Childhood Education" (2012). *Office of Community Partnerships Posters*. 17.  
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# The Development and Use of Online Modules for Professional Development in Early Childhood Education



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## PURPOSE OF THE STUDY

- To examine the role of online training modules in professional development for early childhood educators
- To understand the technological capacity of the early childhood workforce for using online professional development
- To examine the challenges/barriers to the field in using online professional development and technology-mediated learning

## BACKGROUND

This study builds upon previous work:

- access for professional development through technology (McMaken, Kauerz, DeCesare, & Hale, 2002)
- effective online instruction (Clark, 2004; Pianta, et. al, 2008)
- technology- and trainer-mediated instruction and professional development (Powell, Diamond, & Koehler, 2010)

Massachusetts has implemented an integrated professional development system to support early childhood educators. The Department of Early Education and Care is working “to align professional development, QRIS, and EEC Core Competencies, and to engage stakeholders across sectors. The goal of the new system is to support the pathways that lead educators to degree attainment and increased competency and to support providers in attaining and maintaining accreditation and upward movement on QRIS” (Douglass, Heimer, and Hagan, 2010).

Coursework is available online worldwide through OpenCourseWare. These courses are designed to be used with a trainer, director/supervisor, for CEU or college credit, or in peer groups. These courses are composed of individual modules that can stand alone or be part of a complete course. The courses are also available in Spanish. The courses are:

- Core Competencies for Early Childhood Educators
- Preschool Learning Guidelines

The trainers are early childhood professionals who work in the early childhood system as leaders. They work in family childcare, Head Start, public and private preschools and centers, public school systems, and after school programs.

## GUIDING RESEARCH QUESTIONS

1. What are the technology skills and comfort levels of early childhood educators in Massachusetts?
2. What are the strengths of the online training modules? What challenges/barriers do trainers/educators face in using these courses?

## PARTICIPANTS

- Early Childhood educators from around the state of Massachusetts participated in the online modules and trainer-mediated modules
- 60 trainers were trained to deliver the modules, 50 have facilitated the completion of modules
- 231 educators completed surveys as of December 31, 2011
- 28 trainers completed trainer surveys

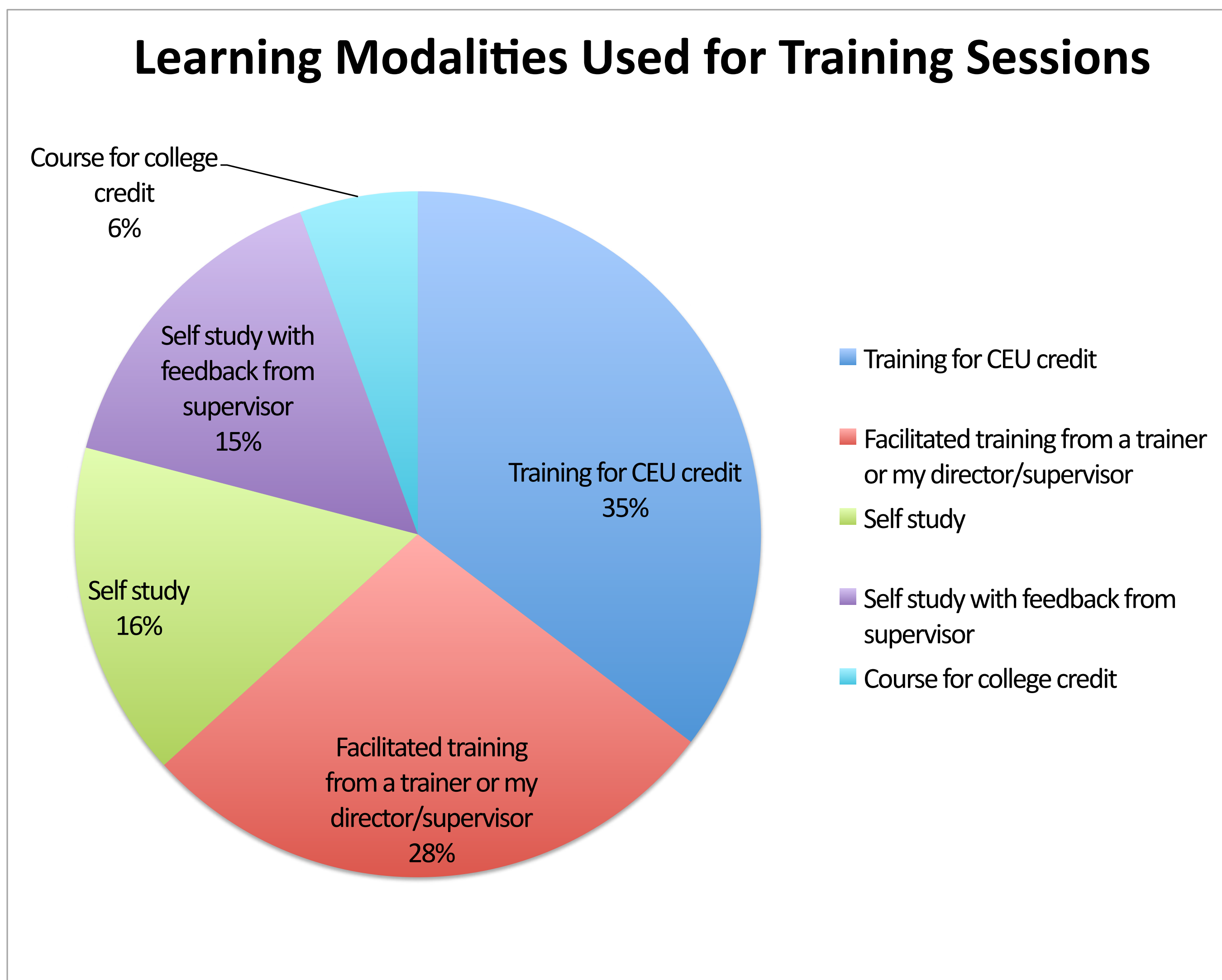
## EDUCATOR SURVEY DEMOGRAPHICS

Characteristic	Percentage %
Gender	
Male	4%
Female	96%
Race	
White/Caucasian	36.36%
Hispanic	25.91%
Black	15%
Asian	13.18%
Other	2.27%
Decline to Respond	6.36%
Native American	0.91%
Education	
High School	98.91%
Diploma/GED	1.2%
CDA	78.67%
Associate's Degree	84.93%
Bachelor's Degree	82.28%
Master's Degree	52.94%
Age	
18-30	15.5%
31-40	29.9%
41-50	32.1%
51-60	17.1%
61-75	5.3%

Characteristic	Percentage %
Work Setting	
Center-based	56.7%
Family Childcare	39%
Public School	8.6%
After School Program	2.1%
Consultant Trainer	2.5%
Age of children	
Preschool	90.13%
Toddlers	46.19%
Infants	39.01%
School age	17.49%
Adults	4.48%
Years in early childhood ed.	
1-2	6.7%
3-5	14.4%
6-10	24%
11-15	24%
16-19	7.2%
20+	23.6%
Number of children in group with special needs	
0	43.75%
1-5	40.1%
6-10	4.7%
11+	11.4%

## DATA COLLECTION METHODS

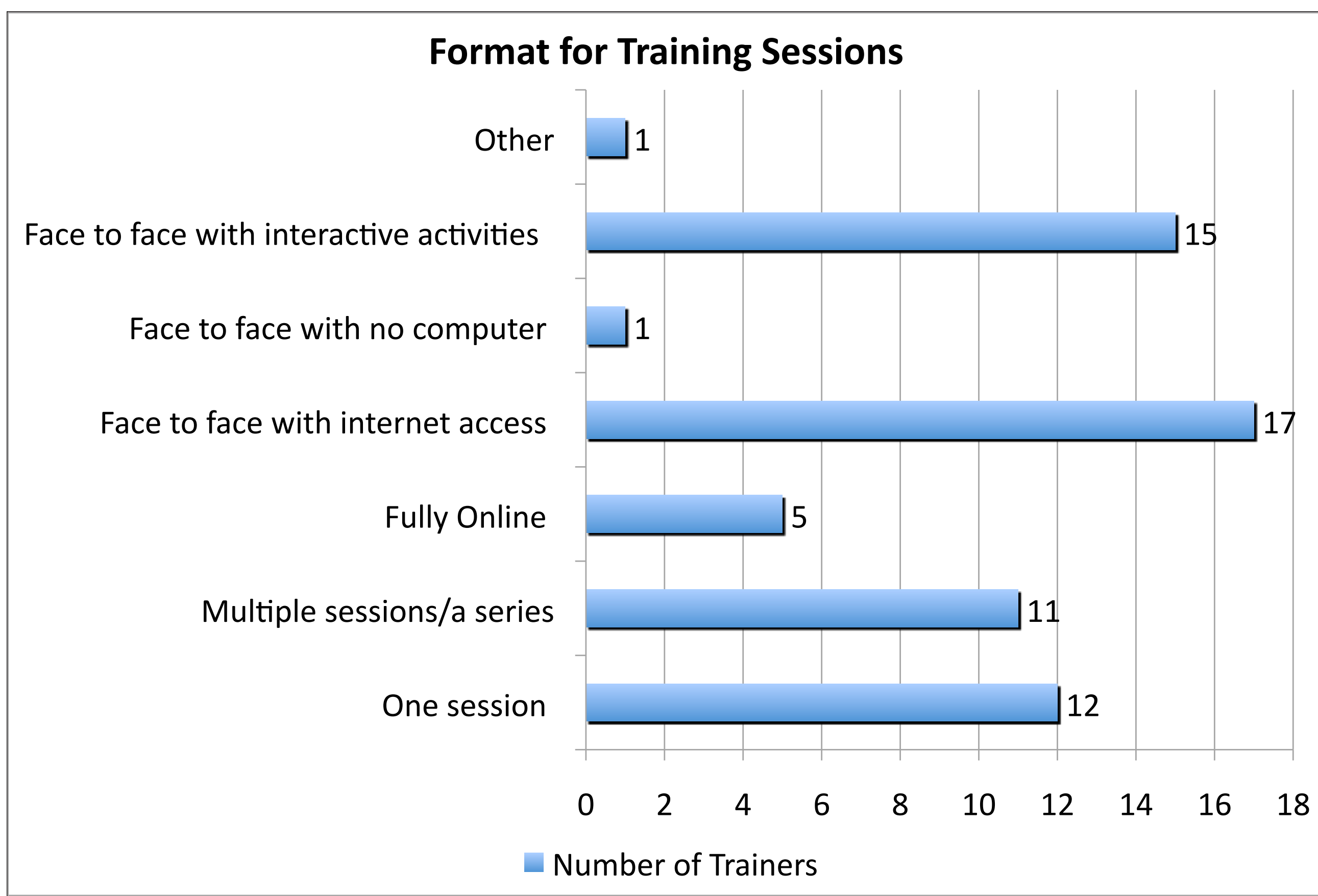
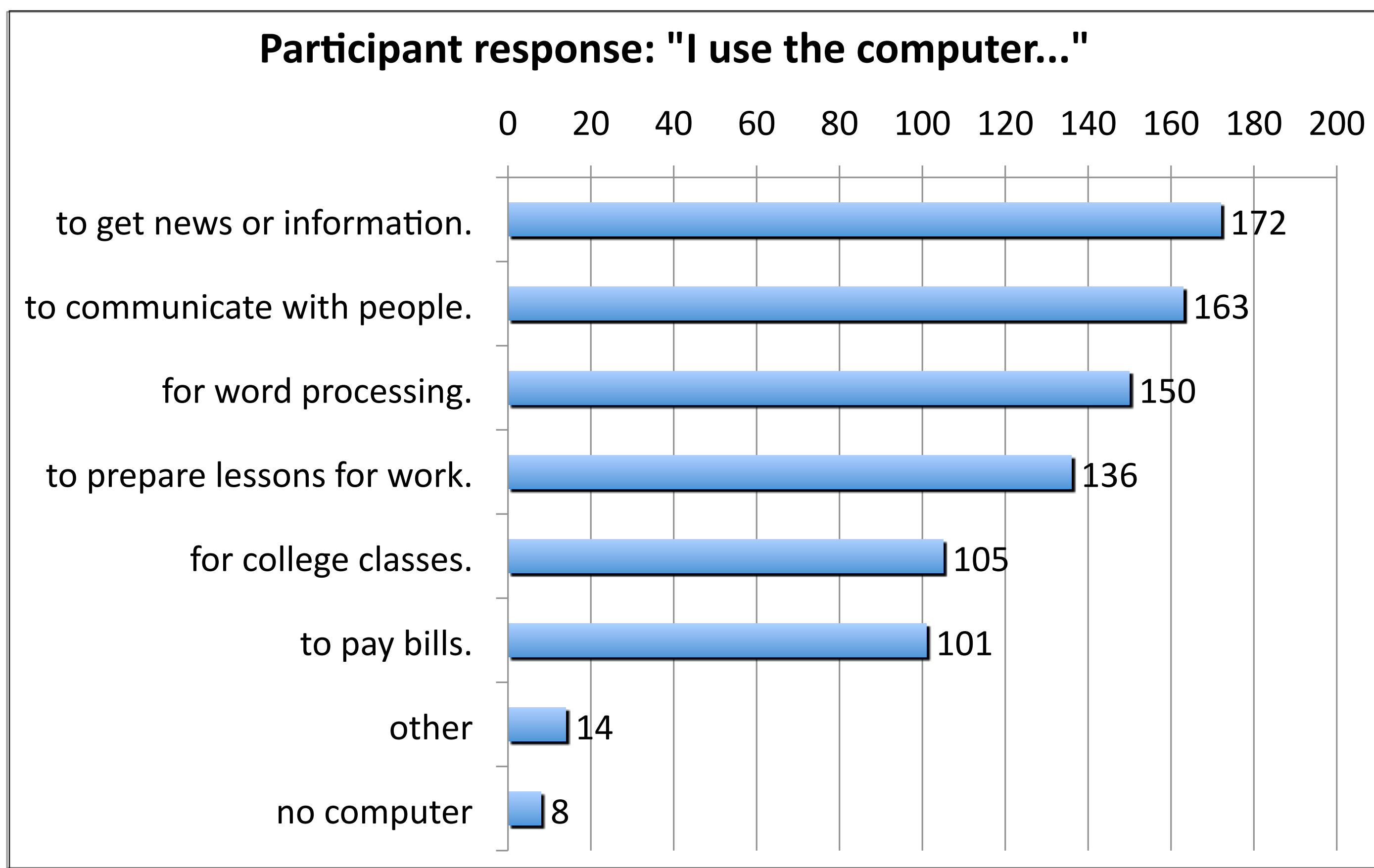
- Educator Survey: Participants were asked to complete the online or paper version of the survey given out by the trainer after completion of at least one module in the course
- Trainer Survey: Trainers completed online surveys after facilitating at least five hours of training
- Survey questions were modeled after national surveys on professional development and early childhood educator demographic surveys
- Focus groups were conducted at the training sessions to discuss how trainers could use the technology and how they would teach the course using technology-mediated practices



## RESULTS

What are the technology skills and comfort levels of early childhood educators?

- 50% of participants felt comfortable using the online modules
- More than 60% said they preferred face-to-face settings for college courses and professional development
- 77% said they were comfortable or very comfortable with computers
- 95% of participants had access to a computer at work or home and 54% had one in both places



## WHAT ARE THE STRENGTHS OF THE ONLINE TRAINING MODULES? WHAT CHALLENGES/BARRIERS DO TRAINERS/EDUCATORS FACE IN USING THESE COURSES?

### QUOTES FROM TRAINERS:

“In the core competencies, much of the content was challenging for people to understand. I had to skip the voice over and try to explain the content in simpler terms.”

“The participants ... were mostly Chinese speaking educators. I presented the training in English; I encouraged the educators to ask questions. I tried to translate the materials for them to the Chinese if the teachers had questions or they seemed confused about the content.”

“The challenges faced ... are usually time and finance related. The beauty of the online module concept is that it makes the education of early childhood providers very accessible to administration and staff. The flexibility of the presentation is great for time constraints. I also really appreciate that there were no costs involved for the center.”

“The modules were helpful in keeping the trainings focused. The resources were very helpful to give the participants more examples and explanations.”

### QUOTES FROM PARTICIPANTS:

“The trainer was very organized and helpful. Being online was a great bonus as we live in an area of Western [Massachusetts] that makes it very hard to attend evening trainings (when offered).”

“Being in the field for so many years makes a lot of this information already well known. It's a good refresher but really what we do day in and day out. We are NAEYC so a lot of this info was very familiar.”

### OTHER BARRIERS:

- Lack of technology, including issues with wifi and equipment for showing the presentations.

- Expectations for training and use of these modules were unclear to some participants and some directors.

- People do not want a degree or to further their education without a substantial raise.

## CONCLUSIONS AND IMPLICATIONS

- Participants used computers and the internet on a regular basis for many different purposes and were comfortable with this technology
- Participants still prefer face-to-face interaction and human support in processing and applying professional development training
- The online modules will support trainer and technology-mediated professional development, to support the further education and training of early childhood educators

## LESSONS LEARNED

- Participant survey was too long and many people stopped in the middle, limiting our data collection
- Participants completed the training in multiple languages or with language support (Spanish, Chinese, Portuguese) but the survey was originally written only in English
- The modules are constantly changing; updating is needed for content, current web links, links to new standards, and other errors
- Timing is everything: When the data was collected, the state Quality Rating Improvement System (QRIS) was not yet fully implemented
- Every trainer/director stated they would be using the online modules in some format for QRIS advancement
- In future data collection, we will look at differences between pre-QRIS and post-QRIS training

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RESEARCH FUNDED BY THE  
MASSACHUSETTS DEPARTMENT OF EARLY EDUCATION AND CARE

