Communities of Practice and Connected Learning: Breaking Down Walls through the Use of Information and Communication Technologies

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Abstract

Valuable Initiatives in Early Learning that Work Successfully (Project VIEWS2), is an Institution for Museum and Library Services (IMLS) National Leadership Research Grant with the objective of providing evidence-based methods for planning and evaluating the outcomes of public library early literacy programs. This study, unusual within Library and Information Science (LIS) research, consisted of a two-year experimental design with an online intervention. Forty libraries throughout the U.S. State of Washington were randomly assigned in the two-condition study: control (20) and treatment (20). The focus of this poster is to look at how the design of an intervention, administered during Year Two of the study broke down walls among the experimental librarians through the use of Information and Communication Technologies (ICTs). The existence of an ongoing community of practice across geographic boundaries will be verified by post-intervention surveys and in-depth phone interviews.

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1 Introduction

Valuable Initiatives in Early Learning that Work Successfully (Project VIEWS2), is a study funded by an Institution for Museum and Library Services (IMLS) National Leadership Research Grant. The Project VIEWS2 study, unusual within Library and Information Science (LIS) research, consisted of a two-year experimental design with an online intervention. The overall objective of the research was to provide evidence-based methods for planning and evaluating the outcomes of public library early literacy programs. Forty randomly assigned libraries (13 large, 13 medium, and 14 small) throughout the U.S. State of Washington were included in the two-condition study: control (20) and treatment (20). The focus of this poster, rather than on the overall objective of the research, is to look at how the design of an intervention, administered to the experimental librarians during Year Two of the study, broke down walls among the librarians widely separated geographically, through the use of Information and Communication Technologies (ICTs). Methodologically, two pre-intervention surveys provided knowledge of the librarians’ context and led to the design of a connected learning experience. The existence of an ongoing community of practice across geographic boundaries will be verified by post-intervention surveys and in-depth phone interviews prior to submission of the final poster draft. Findings of this research can be applied to designing other ICT educational situations.
2 Theoretical Basis for Intervention Design

EL-Capstone\(^1\), a research-based survey instrument administered before the intervention, revealed to us that though librarians indicated a reasonable comfort level with the early literacy core knowledge to be presented in the intervention, they did not feel comfortable implementing the knowledge in their practice. We wanted to create an intervention that would build confidence through peer support and shared learning opportunities, thereby breaking down the geographical barriers among the participating librarians.

Therefore, a social constructivist approach to communities of practice and the principles of connected learning incorporated in webinars were chosen as appropriate theoretical bases for an intervention designed for librarians who were too widely distributed to meet in person.

Communities of practice have long been considered a successful mode for adult learning and as a method for building confidence. As noted by Yukawa, “communities of practice stress that learning is not merely knowledge acquisition but more fundamentally a process of identity formation and empowerment through participation in learning communities” (2010, para 7). While much has been written on communities of practice as a whole, we chose to explore this particular community of youth services librarians, in the context of using planning and evaluation tools developed by the research team, aimed to measure and inform early literacy learning in storytimes.

Connected learning is a recently introduced concept, originating from the work of Mizuko Ito and others with the learning of youth in a networked society (Ito et al, 2013). However, several of the principles of connected learning as readily apply to adult learners in an ICT learning situation. In our design of the meeting, we chose to incorporate two aspects of the Connected Learning principles and values: “Peer-supported,” i.e., contributing, sharing and giving feedback in inclusive social experiences that are fluid and highly engaging (para 17) and “Social Connection,” i.e., learning becomes meaningful through relationships (para 15), believing that these would help facilitate a community of practice and a cohort of experts.

3 Context Informs Design

Two surveys of the librarians gave us needed information about the context of the intervention. In addition to El-Capstone, we conducted a survey to assess each librarian’s current technological capabilities and work obligations and provided assistance in preparing their environments. As a result, we created an intervention design that offered maximum flexibility and consistency with respect to meeting dates and times, as well as provided hardware and software support wherever possible to facilitate community and participation.

The final design consisted of two initial training webinars, offered at specific times, that were intended to be interactive, collaborative spaces between trainers and trainees. Periods of independent discovery and exploration in-between webinars enabled librarians to incorporate the learned strategies into their storytimes and build their own levels of expertise. Additionally, we provided seven weekly emails to the participating librarians with storyline tips and related indicators for the age ranges; these were also posted on the website along with recordings of the webinars for their review. A third and final webinar gave the librarians an opportunity to come together once more and share their experiences as they continued to grow in their professional practice.

At the conclusion of the training, the librarians were asked to complete EL-Capstone once again as well as a follow up survey in which they were asked about:

- the usefulness and ease of the Webinars
- the usefulness and ease of the weekly emails
- the training website
- what they took away from the training
- creating a sense of community among the librarians
4 Data Analysis

The second administration of EL-Capstone showed that the treatment-condition librarians gained confidence in their ability to incorporate their early literacy knowledge into storytimes while the control group did not. In general, the responses of the experimental librarians to the survey questions were positive and will be shared; suggestions for improvement, such as providing agendas ahead of time, will also be shared. In reviewing the results of the survey, we found several common themes that demonstrated a shared positive experience through the webinars and a varied perspective at the same time. Word clouds constructed from the post-intervention surveys enabled us to convey the responses in a meaningful way to the librarians.

Figure 3: Visual Cloud of recurring themes relevant to usefulness of weekly emails
Moving Forward
Telephone interviews will be conducted with librarians to gauge long-term effects of the connected-learning experience. Full results will be available soon. Our intent is to learn more in-depth information regarding peer learning, continued collaboration, whether a sense of community has been gained through the study, whether geographical barriers have been broken, and how to sustain a community beyond the scope of the study.

Significance of the Study
The component of this research study surrounding the design of an intervention using ICTs provides both a theoretical and methodological model for breaking down geographic barriers when participants in educational experiences are too widely dispersed to meet in person. The pre- and post-test experimental design is largely unique in LIS research literature. The study assesses a long-term theoretical principle, i.e., communities of practice, in a virtual environment as well as applying principles from a newer concept, connected learning. It reinforces the idea that it is not only knowledge but also context that are important in the design of education using ICTs.

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