Research Study Proposal: The Role of Librarians in Maker Education

Assignment 3

Martha Osei-Yaw

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New Jersey City University

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**Description of Study**

A review of the literature indicates that limited research is available on makerspaces in libraries. This statement is evident especially in terms of professional development and research on training (Moorefield-Lang, H., 2015). The purpose of this study is twofold. The first phase of the study will identify the number of makerspaces in both public libraries and within public high schools in a specific county in the state of New Jersey. These findings will indicate the accessibility of makerspaces within the county being researched. Once the number of libraries with makerspaces has been identified, a study will be conducted to determine the level of training and expertise held by the librarian/library media specialist.

As a result of this study, the researcher hopes to gain greater insights on the successful implementation of the makerspace model in their library. In doing so, best practices and resources can be identified for future implementation in libraries nationwide.

**Participants**

The participants in this study represent communities that are ethnically diverse within a given county in the state of New Jersey. A total of 12 cities will be represented in the study, all of which are located not far from the New York City area. The study will include 17 public high schools from within the county, as well as, 13 public libraries. Only librarians with makerspaces will be asked to participate.

**Selection Process**

The selection process for the participants was nonrandom. The researcher selected naturally formed groups based on organizations including public high schools and public libraries within a given county in the state of New Jersey.

Initially, the participants for this study will be contacted via phone to determine whether or not the organization has an existing makerspace. Once contact has been made with the librarian or library media specialist, the researcher will request an email address. An email will then be sent to the participant along with the details of the study and a survey link.

**Potential Issues**

* The potential issues that may arise with this study could include a low response rate.
* Since the interview will be conducted via email, the researcher may not be able to observe first hand if the information that is being reported is accurate.
* The information may not be reported articulately.

**Research Questions**

* How long have you had a makerspace in your library?
* Describe the type of training that you have received that has prepared you to facilitate a makerspace.
* What is your level of expertise in terms of implementing a makerspace program?
* Describe the types of activities or classes offered as part of the makerspace in your library.
* Describe the staffing model used to implement the makerspace. How many librarians facilitate the makerspace? Do volunteers and/or community members support with the staffing of the makerspace? If so, please describe.
* Are 3D printers used in your makerspace? If so, what type of training have you received?
* What led you to implement a makerspace?
* What has been the overall reaction to the makerspace?
* Describe some of the challenges that you have experienced in the implementation of the makerspace in your library?
* How are students benefiting from the makerspace?
* How is your program funded?

**Need of the Study**

As the maker movement continues to gain momentum, numerous libraries are exposing students to maker education. Along with the sense of excitement that arises from the movement, there is also an existing need to train and prepare librarians with the necessary skills set to meet the demands of 21st century learners.

In an era of high-stakes testing, more and more schools are placing greater emphasis on teaching core content areas such as reading, writing, mathematics and science. As of result of the increased demands of standardized testing, libraries are filling a gap left by public schools due to the demands of a packed curriculum (Pugliese, 2015).

**Methodology**

A qualitative approach will be taken to conduct the research. Participants will complete an interview via email. This approach is being used since the participants cannot be directly observed. It will also allow the researcher to control the line of questioning (Creswell, p. 191).

**Description of Research Questions**

The research questions that will be used in the study will be limited to the implementation of the makerspace within the confines of the library; the librarian and patron training; the staffing models and the overall reactions of the makerspace.

References

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