Chapter 16
Tinkering and Makerspaces for Sustainable Library Practices

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ABSTRACT

Libraries all over the world have been tasked with the responsibility of not just providing knowledge but making users producers of knowledge. Tinkering and makerspaces provide users with serene and adequate environments for learning, innovation, tinkering ability, development, collaboration, knowledge creation, and sharing. These spaces are in two categories, which are the high-tech and the low-tech makerspaces. Both technologies offer adequate opportunities for innovation and productivity. This chapter examined tinkering and makerspaces for sustainable library practice, uses, makerspaces set up requirement in libraries, steps for development and benefit of makerspaces. The major benefit of creating makerspaces in libraries is that it fosters the development of users' interpersonal communication, teamwork, leadership, and mentoring skills. The challenges facing the use of tinkering and makerspaces were also discussed and recommendations proffered. Libraries need to embrace and take advantage of this trend which will bring about positive development in sustainable library practices.

INTRODUCTION

Library and information science profession is equipped with best practices that will bring about quality enhancement in the library system. Library practice is simply the services and activities performed in relation with the policies and objectives of the library. This practice must be of professional standards for sustainability. Some best practice includes but not limited to: user education programs, library network, electronic resource development, institution repository and membership, space management, training programs (workshops and seminars), book exhibition, user's feedback, user profile creation, resource sharing, group discussion/peer group/ brainstorming sessions as well as tinkering and makerspaces.

Tinkering and Makerspace is a very important area for innovation and learning. In this modern age it is only proper for people to be given a serene and adequate space to explore and pour out that which is hidden within. Tinkering and makerspaces has been created by most establishments including libraries for users to brainstorm and come up with new discoveries and innovative ideas. These spaces are not just empty spaces. They are conducive spaces with facilities and modern technologies that will help bring about creativities and mental transformation.

In libraries, tinkering and makerspaces can simply be seen as creativity in library development. According to Burke (2014), makerspaces in libraries bring about a broad asset in education because it makes users to be more than consumers of technology. He went further to explain that it brings collaboration in learning and creativity. In this space, materials and tools are provided for users to invent, develop, create, tinker and to explore. Some of the basic project that can be done in a tinkering and makerspace include wood working, inventing, electricity work, robotics, 3D printing, coding and so on. Most libraries organize these programs accurately. The main objective of this paper therefore is to examine tinkering and makerspaces for sustainable library practice and its benefits to libraries so as to maintain relevance in this highly competitive and evolving world.

CONCEPT OF TINKERING AND MKERSPACES

According to Colleens (2022), a makerspace is a place where things are done meaningfully. Smart (2022) also stated that it is a place where users explore their imagination. He also went further to explain that it gives users the opportunity to demonstrate their curiosity. Here productivity is the focus.

Burker (2014) defined "a makerspace is an area in a library where users can use tools and equipment to design, build, and create all sorts of different things. It may be a dedicated room or a multipurpose space in which a collection of raw materials and resources can be utilized as desired. Projects range from prototyping product designs with 3D printers, to programming robots, to creating art out of recycled items."

USES OF TINKERING AND MAKERSPACES

Tinkering and makerspaces are special locations where diverse disciplinary projects are done. Examples of what can be done here include but not limited to:

- Electrical work
- Decoding and coding
- Carpentry
- Bead making
- Cobbling/ Shoe making
- Tailoring/dressmaking
- Needle craft /needle work
- Embroidering
- Knitting
- Repair of phones and computers
- Patching

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