

Students' Patterns of Library Use: Cognitive Differences in Information Searching

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Background of the Study

It is difficult to comprehend how students could gain experience in the proper use of a library without analyzing their cognitive context (knowledge and skill). This study aims to identify students' use of the library for information searching and to understand their efforts towards various patterns from the cognitive point of view.

There are three objectives that elaborate the relationship between the cognitive context and patterns of library use:

1. How the cognitive context is related to the use of library
2. Whether there is an existence of a cluster of students who have different cognitive contexts
3. To discuss the cognitive context that may affect the different patterns of library use in the two countries selected for the study.

Methodology

For this purpose, two data collecting tools which are classified into five observable search stages such as starting a search, resources/tools selections, locating the information and materials, use of library service and system and self evaluation were designed. Two surveys were conducted in two universities: first in Sri Lanka and the second in Japan. The collected data was analyzed through factor analysis to reveal the affective factors. Based on the factor scores, a cluster analysis was conducted for identifying the different patterns of library use.

Outcomes of the Study

According to the results, it was found that the students use libraries in different ways for their own information needs and requirements due to different cognitive contexts. In fact, students' basic knowledge and skill traits in library use are not identical. Applying the factor analysis to information incidents in the first survey, most students appeared to be affected by four factors in using library services. They are "Method of Locating & Searching", "Use of Materials & Services", "Searching Needs", and "Own Competence". The knowledge and skill of students can be plotted on cognitive space with the four factors which explain the cognitive context. The cluster analysis also revealed that the four different groups of students: "Users with Technical Concern," "Positive-Active Users," "Users in the Beginning Stage," and "Users Demanding Results" in library use show different concerns on the factors.

The research exploring the students' patterns in library use in Sri Lanka was implemented again in Japan to find out more evidence of user patterns from a different student community. However, the questionnaire was modified for the second survey within the five basic observable search stages. The extent of knowledge and skill relation to library use was illuminated by core

six factors in Japan such as Proficient Search Capability, Reliability on Library Services, Acknowledgement of Digital Resources, Usage of Assistance, Way of Finding the Materials, and Prior Knowledge. Simultaneously, four segments of user groups such as Unsettled Users, Positive Active Users, Users Seeking Assistance, and Self-Dependent Users were identified through cluster analysis.

The obvious patterns of library use and group of students were indicated by the two surveys. Among them, a group of users who can be referred to as Positive-Active Users was commonly seen between the two communities. But they were represented only one fourth and one fifth of student communities in Sri Lanka and Japan respectively. Rather characteristic patterns of library use were indicated by other groups which show the combination of affecting factors on students' behavior. There are several implications for universities and library specialists to learn from the derived results. This paper identifies the users' context which implies the constructive concept or factors affecting the library use while the group of students generated by these concepts reflects the patterns of library use. These findings could be used as criteria for understanding students' cognitive contexts as well as the organizing information search process in libraries. The constructive concept materialized the ways of approaching and accessing of information through libraries. It also disclosed that the highlighted factors were consistent in library use among the students.

Conclusion

Analyzing the cognitive context of university students is vital to understanding how academic libraries are being used and what kinds of patterns the students constitute. This paper generates library use patterns with regard to students' cognitive context. Since different cognitive contexts are the basic causes for the different patterns of library use, upgrading of cognitive context by university level, library level and individual level is required and appropriated. Teachers being the major partners of students' learning process have a vital role to play in educating the students about the importance of a library and its use. Library personnel as practical partners should have better rapport with their students in library use. In fact, as library users, students should be self-reliant and need to cope with teachers and library personnel when encountering any problems in accessing information. In designing library educational programs, every effort must be taken to upgrade the users' information skill in relation to the constructive concepts found by these surveys. Some of the differences between the two communities shown here could be caused by those cultural contexts. Identification of such patterns is a prerequisite for the development of libraries and is of practical importance in designing library services.

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