Investigating University Student Learning Conceptions and Approaches of Web- Searching

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Abstract: Studies have shown that learners with more learning conceptions about their learning always have better learning outcomes. Nowadays while the majority of students who acquire information via using search engines or by visiting various websites, web-searching is not just a way of gathering information, but a process of learning. This study presented an investigation about current university students' conceptions of and approaches to learning via web-searching. Through analyzing the data from the focus group and in-depth interviews, the findings revealed the following: First, almost all of the interviewed university students agreed that web-searching itself was a way of learning and it correlated to and coexisted with other learning activities. Moreover, almost all of the interviewed university students stated that the most valuable learning aspect of web-searching was the opportunity provided to do critical thinking and develop self-directed learning ability. Most of them self-declared that their web-searching skills were acquired through personal experiences toward web. It was suggested the curriculum should be designed to teach systematically to university students about how to learn from web-searching.

Keywords: Learning conception, learning approach, web-searching

Introduction

Due to the advantage of learners' control, the web-based learning environment has been increasingly provided to improve university students' learning effectiveness in recent

years. While the majority of students who acquire information via using search engines or by visiting various websites, web-searching is not just a way of gathering information, but a process of learning. Prior studies have shown that learners with learning conceptions always have better learning outcomes (Purdie, Hattie, & Douglas, 1996; Purdie & Hattie, 2002; Tsai, 2004). Therefore, the capability of building learning conceptions and approaches of web-searching may play critical roles in the web-based learning environments. However, not many studies have been conducted to examine these viewpoints.

This study is designed to explore the current university students' conceptions of and approaches to learning via web-searching. The findings derived from this study provided a conceptual framework to illustrate the university students' conceptions of and approaches to learning via web-searching in Taiwan.

The Study

The participants of this study were 24 university students from two different universities in Taiwan, one is public and research-oriented and another one is private and teaching-oriented. They majored in four different disciplines: college of liberal arts, science and engineering, management, and law. They were invited to join the research and evenly divided into four focus groups. The interview was conducted by a trained researcher and had each focus group interviewed separately. Then, several of them were invited to participate an in-depth interview in order to confirm and clarify the collected data.

The data collection of this study included document analysis of students' background information questionnaires, semi-structured interviews with focus groups, one-on-one in-depth interviews. The sample questions for semi-structured interviews are stated as follows:

- In your opinions, what is the relationship between web-searching and learning?
- What can you learn in the process of web-searching?
- What are the differences between web-searching and other learning strategies?
- What are the advantages and disadvantages of learning through web-searching?
- What kind of subject, course content and classroom environment are proper to learn from web-searching?
- Please describe your process of conducting web-searching.
- When searching the web, how do you identify, decide and modify searching keywords?
- When searching the web, how do you determine, clarify and organize the information you got?

This study utilized the following methods to analyze the data: first, transcripts were read repeatedly to identify common themes for developing qualitative categories. Then, the categories emerged from the themes noted in students' responses were discussed within the research team. The categories were modified accordingly. Finally, the redrafted categories were used to re-classify students' responses.

Findings

The findings from this study are summarized as follows:

- Most students agree that web-searching is a way of learning and it can increase one's knowledge/information and see things in a new way.
- The most valuable learning aspect of web-searching is the opportunity provided to do critical thinking and develop self-directed learning ability.
- Analyzing task contexts, determine and modify keywords, clarify and filter searched data, and organize information are the things one could learn through web-searching.
- Most of students self-declared that their web-searching skills were acquired through personal experiences toward web.
- Teachers should encourage students to learn from web-searching. However, guidelines should be provided to let students aware of the learning value of the process.
- Most students' web-searching skills are acquired through personal experiences toward web. It should be taught systematically to students how to learn from web-searching.

Further analysis and discussion about the interview results will be used as the basis to create scale items about university students' conceptions and approaches toward web-searching learning.

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