

Assessment of Students' Learning Interests and Learning Outcomes of a Hybrid Information Literacy Education Course in Taipei Medical University, Taiwan



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Objectives

Due to the COVID-19 pandemic, the digital teaching and learning has been promoted actively in the campus of many universities since the beginning of 2020. As the result, the author decided to redesign the teaching methods of one of her information literacy education courses named “Introduction to information behaviors” for the 1st- and 2nd-year undergraduates in Fall, 2020, integrating more asynchronous digital sessions and interactive learning activities into this course. This study tries to investigate the learning interests and outcome of 60 students registered in this hybrid course in the semester of Fall, 2021.

Methods

The research methods of online questionnaire survey, focus group interview, and usage log analysis of the digital platform will be adopted to collect data of students' learning behaviors, feelings, and performance systematically. The online questionnaire was delivered to all students in the end of the semester, and two focus groups with 12 volunteer students were hold in Dec. 20, 2021 and Jan. 21, 2022. The author then analyzed the data and present the research findings. By doing this, the author hopes to assess whether the optimized hybrid “Introduction to information behaviors” course would really increase the learning interest and learning outcome of students to meet the objective of this course.

Results

1. Among 7 teaching methods of this class, the “Asynchronous digital courses (pre-recorded teaching video + online learning activities)” was rated the highest score of learning interests, and the “Database demonstration and searching practices in computer lab” was given the highest score of learning outcome. (Table 1)
2. For the 3 pre-recorded asynchronous digital courses, students spent 1.79-2.25x their time watching the video and watched per video 4.2-4.7 times to finish the course. (Table 2)
3. The author utilized ACRL's Information Literacy Competency Standards to evaluate learning outcome of students. In general, after the semester, students feel that their information literacy competencies of 5 standards are improved. (Table 3)
4. During the focus group, the participants explained that they prefer asynchronous distance courses mainly because of time autonomy, can view videos repeatedly, and no need to commute to schools.

Conclusions

To sum up, students in this hybrid course prefer to take asynchronous digital courses and then in-person ones. The synchronous online sessions are less popular. After redesign the teaching methods, the overall satisfaction of students raised from 4.38 (2019) to 4.51 (2020) and 4.54 (2021), presenting the preliminary results of curriculum reform.

Table 1

N=51 (5-point Likert scale)

Teaching methods	Expressed learning interests	Self-evaluated learning outcome
1. Asynchronous digital courses (pre-recorded teaching video + online learning activities)	4.46	3.88
2. Asynchronous digital courses (text materials + reflection log submission)	3.56	3.62
3. Synchronous digital courses (Google Meets online session)	3.56	3.68
4. 2-hour classroom one-way lecture	3.62	3.78
5. 1-hour classroom lecture followed by group IR exercise and discussion	4.06	4.14
6. Database demonstration and searching practices in computer lab	4.36	4.36
7. Library visits in groups	4.06	4.12

Table 2

Asynchronous digital courses (pre-recorded teaching video)	Length of video (mits)	Length of views (in average)	Number of views (in average)
W6: General reference resources	112	200 (1.79)	4.7
W13: Classification scheme & subject headings	84	155 (1.86)	4.2
W14: Structure and citation of academic information	53	119 (2.25)	4.4

Table 3

Information Literacy Competency Standards for Higher Education. (ACRL,2000)	Importance (recognized)	Pre-test (self-evaluated)	Post-test (self-evaluated)
1. Could determine the nature and extent of the information needed.	4.5	4.1	4.26
2. Could access needed information effectively and efficiently.	4.7	4.0	4.34
3. Could evaluate information and its sources critically and incorporates selected information into his knowledge base and value system.	4.6	4.1	4.32
4. Could use information effectively to accomplish a specific purpose.	4.7	4.2	4.34
5. Could understand many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.	4.6	3.4	4.06