SWOT Analysis of Flipped Classroom Model Applied to Information Literacy Education in Colleges and Universities

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Abstract: The rise of the flipped classroom model has brought good news to the teaching reform of colleges and universities, and it has also been applied to the practice of information literacy teaching by domestic and foreign colleges and universities. This paper uses the SWOT analysis method to analyze the internal advantages, disadvantages and the application of the flipped classroom model to information literacy education. The existing external opportunities and threats are analyzed to provide reference for the improvement of the teaching quality of information literacy in colleges and universities.

Keywords: Flipped Classroom; Information Literacy; Literature Retrieval Course; SWOT Analysis

1. Preamble

The term flipped classroom was first proposed by J.W. Baker; in 2007, American high school teacher Jonathan Bergmann first used the flipped classroom model for teaching; in 2011, Salman Khan's speech report made the flipped classroom a teaching model that has become widely concerned in the education community. The flipped classroom model means that students complete knowledge learning outside the classroom, and the classroom becomes a place for interaction between teachers and students and between students and students, including answering questions and using knowledge, so as to achieve better teaching effects.

2. SWOT analysis of flipped classroom model applied to information literacy education

SWOT analysis is widely used in the field of strategic management, and some scholars apply this method to personal self-analysis and development strategy formulation. The author believes that a comprehensive analysis of the internal advantages, disadvantages, and existing external opportunities and threats of the flipped classroom model applied to information literacy teaching through SWOT analysis can provide an important reference for colleges and universities to adopt the flipped classroom model in information literacy education.

2.1 Advantage(s) of applying the flipped classroom model

2.1.1 Course features that emphasize practical operation and practicality

Information literacy education is a kind of special education that transforms learned knowledge into ability. Its characteristics of focusing on practical operation are suitable for adopting the flipped classroom model, which is conducive to the internalization and absorption of learned knowledge. Combined with specific situations such as opening reports, scientific research project applications, or designated scientific research topics for literature research, it can highlight the practical characteristics of information literacy education. Students realize that course study can solve problems encountered in scientific research such as graduation thesis writing, more actively complete pre-class autonomous learning, and use class time to conduct discussions to promote the internalization and absorption of the knowledge they have learned.

2.1.2 The need to improve learning efficiency

Under the traditional teaching mode, teachers usually first introduce theoretical knowledge and then guide students to carry out practical operations. The limited classroom time is mainly used for the teaching of theoretical knowledge, and students are not interested in learning because of abstract theoretical knowledge. At the stage of practical operation, because of forgetting the theoretical knowledge, the effect of practical operation is not ideal, and the learning efficiency is not high. The flipped classroom model can enable students to participate in the teaching process extensively, concentrate their attention, and better discover their own shortcomings. At the same time, classroom discussions and Q&A sessions can effectively stimulate students' in-depth thinking, exercise their comprehensive abilities such as collaboration and language expression, help internalize and consolidate the knowledge they have learned, and promote mutual learning, mutual assistance and mutual evaluation among students.

2.1.3 Utilization of Fragmented Time

The course resources used in the flipped classroom are usually in the form of short videos, which support students to watch and learn through mobile devices such as mobile phones, and students can effectively use the fragmented time for independent learning.

2.1.4 High acceptance of students

College students are more aware of the way of self-learning through mobile devices such as mobile phones. The level of information literacy of students has been improved year by year, and they are more familiar with the operation of computers and search engines, which can meet the needs of self-learning in the flipped classroom mode.

2.2 Disadvantages of applying the flipped classroom model (W)

2.2.1 High requirements for teachers' comprehensive ability

The flipped classroom model requires teachers not only to have professional knowledge of information literacy, but also to master video production and editing, course platform management, etc. It also requires teachers' comprehensive abilities such as classroom organization and flexibility.

2.2.2 High requirements for students' autonomous learning ability

Although the flipped classroom model can mobilize students' enthusiasm for learning, for some students with poor self-control ability, there is laziness in watching teaching videos before class for self-learning, and they do not seriously self-study and master the key points of knowledge.

2.3 Opportunities to apply the flipped classroom model (O)

2.3.1 Rich theoretical and practical results

Domestic scholars have contributed many theoretical and practical achievements to the application of the flipped classroom model to information literacy education from the aspects of case teaching, teaching design, and teaching evaluation.

2.3.2 Favorable policy support

From the national to the university level, relevant policies and measures have been actively introduced to encourage teachers to carry out curriculum teaching reforms by means of information technology. The flipped classroom model meets the development requirements of higher education teaching in the information and digital age, and a strong policy environment provides an opportunity for the development of the flipped classroom teaching model.

2.3.3 Development of Information Technology

The popularization and development of Internet, computer, and mobile terminal technologies, and the wide application of online course platforms in information literacy education have made the use of fragmented time to complete autonomous learning the norm. High-quality online educational resources such as MOOCs and short videos make it practical to adopt the flipped classroom model.

2.3.4 Impact of COVID-19

Due to the normalization of the new crown epidemic, teachers use the teaching platform to organize online teaching activities, and assign learning tasks through the teaching platform, which greatly promotes the practical application of the flipped classroom model.

2.4 Threats faced by the application of the flipped classroom model (T)

2.4.1 Uncertainty of teaching effect

The teaching effect of flipped classroom largely depends on students' knowledge acquisition and mastery degree after class. Due to differences in students' self-learning ability, the teaching effect may not meet expectations. In addition, the realization degree and depth of the role transformation of teachers and students will also have a certain impact on the teaching effect of information literacy education under the flipped classroom model.

2.4.2 Attitude and recognition of teachers

The flipped classroom model puts forward higher requirements for teachers' teaching level and teaching ability. Teachers need to constantly improve themselves and update relevant knowledge reserves. Some teachers may resist and reject the flipped classroom model because they are not up to the job requirements.

3. Suggestions on the application of the flipped classroom model to information literacy education

Through the SWOT analysis of the flipped classroom model combined with the actual situation of information literacy education, it can be seen that the use of the flipped classroom model for information literacy education in colleges and universities has both advantages and advantages, but also has certain shortcomings and disadvantages. , promote strengths and avoid weaknesses, and ensure the quality of information literacy education courses.

3.1 Strengthen the cultivation of students' autonomous learning ability

In the flipped classroom model, students are transformed from passive recipients to active learners. Teachers should adhere to the interests and needs of students, arrange course content and design course plans more targetedly, provide high-quality course resources, and arrange carefully. The content of pre-class study, the organization of in-class topic discussions, and the after-class consultation and question-and-answer and tutoring, etc., actively guide students to carry out independent learning.

3.2 Improve the comprehensive quality and ability of teachers

The flipped classroom model puts forward higher requirements for teachers in micro-video production, course platform management, classroom organization, and flexible adaptability. Teachers need to take the initiative to receive new knowledge. Teachers can be encouraged to participate in special training, go out to communicate and learn, etc. , to improve the theoretical knowledge of personal business. For some teachers who have resistance to the flipped classroom model, it is possible to eliminate the resistance and better promote the development of the flipped classroom model by assisting teachers in video production and teacher experience exchange.

3.3 Optimizing teaching evaluation methods

The course effect evaluation under the traditional education model is no longer applicable, and the flipped classroom model pays more attention to the evaluation of students' autonomous learning, teamwork, language expression and organizational ability. The evaluator of learning effect has also changed from one teacher to one involving teachers, students and collaborators. While the evaluation results are more comprehensive, the evaluation methods are correspondingly complicated.

To sum up, the flipped classroom model has irreplaceable advantages compared with the traditional teaching model. Targeted information literacy education can be carried out according to the characteristics of students' subject background and level, but in the specific implementation process, it is also necessary to consider the teaching practice. , do not blindly follow suit. By continuously summarizing experience and lessons in practice, strengthening advantages, weakening disadvantages, seizing opportunities, and reducing threats, we can better carry out information literacy education and improve the quality of courses.

References

[1] Zhang J, Wang Y, Yang X. Practical research on flipped classroom in information literacy education [J]. Library and Information Work 2014; (11): 68-72.

[2] Zhang X. Research on the current situation and countermeasures of college students' information literacy in independent colleges from the perspective of flipped classroom [J]. English Square 2021; (25):104-106.

[3] Wang Y, Huang F, Liu H. Research on the teaching mode of literature retrieval course based on flipped classroom [J]. Library Construction 2019; (S1):199-203.

[4] Wang M, Chen Y, Yang Z. A study on the motivation factors of students in the teaching effect of "information retrieval" flipped classroom in colleges and universities [J]. Journal of University Libraries 2019; 37(05):78-86.

[5] He L. The flipped classroom teaching model and its empirical research in information literacy education [J]. Library and Information Work 2018; 62(17):53-59.

[6] Guan L. Research on the model of learning engagement and learning effect in the flipped classroom of library information literacy: From the perspective of self-determination theory and learning engagement theory [J]. Library Work and Research 2021; (02):56-67+ 112.