

Research on Information Literacy Teaching based on PAD

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Keywords: PAD Class, Information Literacy, Teaching Mode

Abstract: The paper researches on the advantages of PAD of information literacy course. It can promote students' knowledge of how to learn deeply. The teaching mode fits the framework of information literacy in higher education and intuitive demonstration of students' information literacy differences. It can urge students to solve information needs independently, developing students' initiative thinking.

1. Introduction

Since the Ministry of Education issued the "Opinions on the Establishment of Document Search and Utilization Courses in Colleges and Universities" and the "Basic Requirements for the Teaching of Document Retrieval Courses", the Document Retrieval Course has become the only course offered by university libraries. However, in the long-term work practice, peer exchanges, and interviews, the author found that there are not many libraries that are incapable or even no longer open to information literacy courses that include literature retrieval courses. The PAD class is divided into three parts: Presentation, Assimilation, and Discussion. Its core concept is to allocate about half of the class time to the teacher, half to the students to discuss, the teacher and student "divide" the class time, so it is often called the dichotomy class. This paper studies the teaching advantages of information literacy courses based on PAD mode in university libraries, and provides targeted and easy-to-operate teaching strategies for university libraries that are looking forward to information literacy education.

2. The Teaching Advantages of Information Literacy Based on PAD

Information literacy courses provide students with the best methods and tools for learning knowledge, and are the key to students' knowledge of how to learn. Higher education in developed countries and regions ranks the development of students' information literacy level as one of the core contents of higher education. When carrying out knowledge teaching in this aspect, most of them are embedded into professional curriculum education, and teachers play more in the teaching process. It is to encourage, guide and inspire students to obtain the role of information utilization information production information evaluation information, rather than simply uploading various information literacy related knowledge in the classroom. They are student-centered in the teaching process, encourage students to explore, have critical thinking and independent thinking skills, and students use the information they find to create new information in professional course learning. Historically, knowledge transfer on how to use library science knowledge has been carried out on the basis of information literacy courses. The Chinese social tradition has formed the habit of authorizing the information authority and following the teacher's thinking. The knowledge of each subject in the higher education curriculum system is separated, and the students lack the motivation to learn the information literacy class knowledge. The learning of this kind of course knowledge is easy to flow on the surface. The PAD classroom is based on the Chinese people's information-based habits. In the classroom, the traditional "teaching-centered" can be effectively changed to "study-centered", which can promote students' deep learning curriculum knowledge. Therefore, the PAD classroom of the information literacy course is conducive to students' deep learning how to learn knowledge.

Now the information environment has changed from one-way to the past, and information

acquisition and information creation, information exchange and communication have become one. According to the 2015 US Higher Education Information Literacy Framework, information literacy education needs to highlight the two characteristics of participatory interactivity. The information literacy course carried out in China is a course of skill learning. The teaching of this knowledge belongs to the teaching of operational knowledge. Like the courses of clinical nursing and aerobics, it emphasizes the practical practice of students and requires students to learn in the process of participation. After learning the knowledge of the information literacy course, the result is to generate new information, and the teaching process emphasizes the information exchange and communication of the students.

In the PAD classroom teaching form of information literacy courses, there are three stages of teaching, internalization absorption and discussion. First of all, the teacher will give an outline and outline instruction to the knowledge of information literacy education courses, and then ask students to master internships after class or in class. First, current students can use the smart phone to retrieve and understand the information literacy curriculum knowledge, participate in the actual operation of the classroom teaching objectives, and the students participate in the middle school practice process is the internalization absorption process, highlighting the students' participation in the course learning. Second, the stage of the group discussion process in the PAD classroom broke through the problem of insufficient communication of students' information due to the limited communication between teachers and students in large class teaching. Every student will speak and be noticed, and each team member needs to read and understand the expression and communicate with his own comprehensive literature. When each student expresses his or her opinions in a group discussion, he or she conducts information exchange and communication with others on a problem, highlighting the interactivity in the requirements of the higher education information literacy framework. Therefore, the PAD classroom of information literacy courses emphasizes the participation interactivity in information literacy education.

The future of college students is divided into two situations, graduation to find a job and continue to study. Two situations require different skills, work problem solving skills and academic research skills. Work skills are to solve specific problems as required. Firstly, it is necessary to investigate and understand the basic situation of the problem, collect information to determine the solution target of the problem; determine the nature of the problem to determine the search path; retrieve the information; comprehensive search results to design solutions to the problem; implement the solution to the problem and possibly adjust according to the new information Solution; summarize the problem-solving process to form a capable application. Academic research skills are first to search the literature to find meaningful questions; to propose hypotheses and design experimental protocols; to conduct experimental research; to draw conclusions to form research results. The two methods are similar, and each step requires a search skill. For example, the initial stage of work problem solving is to be able to gather relevant information to focus on the core of a work problem; the initial stage of academic research is to be able to collect relevant information to determine a research purpose. Many of the library's information literacy big6 model summarizes the procedural knowledge of the two skills, and the instructors often find differences in the different students at each stage of the program. When teaching the literature retrieval course in the PAD classroom, the instructor teaches this procedural knowledge in the teaching session. In the discussion section, the subject of teaching information retrieval has changed no longer a single teacher subject, but a student. The individual students in the big6 stage showed differences in information awareness, information knowledge, information ability and information ethics, thus presenting different information literacy of different students in a stereoscopic and intuitive way. When the differences in human information literacy are placed in front of students intuitively, students can witness the importance of information literacy to individual development, and naturally enhance their information literacy through sharing information, ideas or behavioral skills.

The group discussion learning process of the PAD class divides the whole class into zeros by grouping, and separates each student individually. Through the sense of identity and honor of the group peers, each student is stimulated to generate information needs, so that they all face the need

for independence. Solve the situation of your own information needs. In the traditional information literacy curriculum, a teacher needs to face at least 70 or 80 students. The teacher can hardly feedback the information needs of most students. He can only explain the information retrieval and utilization knowledge according to his own understanding, and the students' Information needs have a distance. In PAD classroom teaching, students are assigned to groups where individuals must generate information exchange. The natural social group identity needs encourage each student to have the motivation to learn information retrieval knowledge, so that students can solve the information needs independently.

Everyone's way of thinking and method experience are different. College students are already adults, and they have a certain way of thinking and experience in solving problems. In the PAD classroom of the information literacy course, the age and environment of the group members are similar, and the information needs have certain commonalities. Through the peer demonstration process, they learn from each other, prompting the students to involuntarily prepare the way of thinking to actively collect information to meet their information needs. . It is one of the most important goals for colleges to improve the level of information literacy education by cultivating students' active thinking ways of acquiring and using information. Students must be able to actively and consciously find and use the literature information in order to effectively improve information literacy.

3. PAD Classroom Features of Information Literacy Course

After studying the PAD classroom mode, the author practiced the PAD class for the information literacy course of the 2016 architecture major according to the civil engineering teaching plan and the educational reform project research plan; and analyzed the literature of the Guangxi University of Traditional Chinese Medicine Tu Dongping in 2017. There are at least two aspects to summarizing the PAD classroom features of the Information Literacy Curriculum.

3.1 System Design Based on PAD Information Literacy Course Teaching Content.

The content of information literacy courses is comprehensive and can be divided into information resources knowledge, document management tools, literature writing and publishing knowledge, information retrieval technology, data analysis, problem-solving procedural knowledge and so on. In the teaching design of the PAD classroom of the information literacy class, based on the student's situation and teaching objectives, based on the information literacy related knowledge categories, systematically determine the knowledge points and staged teaching content that the subject needs to master, and determine the number and classroom of the PAD class. According to the big6 thinking program, it can be divided into the initial stage, the design stage, the implementation stage, and the summary stage to design four PAD classes. It can also design ten PAD classes according to the literature publishing type. It can also design, introduce, and research according to the paper writing and publishing related knowledge. Conclusion PAD class; can also design mind map, ENDNOTE, E-study and other PAD classes from the perspective of mastering the knowledge of document management tools.

The author has designed and implemented four PAD classes according to the type of literature publication. Each time, the type of publication of the literature resources is determined, and the subject of the search is uncertain. The first time was the PAD class for search engines. Search engines are commonly used tools for students and have a certain amount of prior knowledge. Because of the limitations of human cognition and the technical characteristics of search engines, it is difficult for average students to actively recognize the difference between different people using this tool. The discussion of the most commonly used search engines for students allows students to experience the endless learning of information retrieval knowledge and master the essentials of class discussion. The second time was the PAD class for Chinese books. Cultivate students' critical reading skills by searching and using PAD classes for paper books. The service ability of modern libraries makes it easy for students to access book resources. The difficulty is how to analyze and select students in rich book resources. This part of the PAD classroom can be shared by peers,

triggering college students to consciously find and read some books together. Each person's learning foundation and ability are different, especially those from different provinces. Some students have a better learning foundation and have been able to search and read and analyze certain books. When they read a lot, they are naturally different. Discussion and exchange of book content has a sense of acquisition of critical reading. Other students can begin to find books and read books by observing the students, so that students can witness the style of critical reading. The third time was the PAD class for Chinese journals. Through the retrieval and use of the PAD classrooms of the three Chinese journal databases, students are allowed to internalize the Boolean logic technology of information retrieval, the connection between document information retrieval methods and search terms, and the characteristics and differences of the three databases. The fourth time is the PAD class for special literature. Most students don't know the concept of special literature before giving lectures. The teacher prepares students to learn by themselves through a large amount of relevant materials prepared before class. Then, through the dissertation, standards and patent documents, the PAD class is organized through practical life examples. Self-learning ability ultimately promotes students' habit of developing lifelong learning.

3.2 Class Discussion Flexible Maneuver Grouping.

Information literacy courses have their own unique characteristics, emphasizing the ability of participants to exchange information and communicate. After 90 years, college students have outstanding personality and fresh life. They are characterized by diversification and differentiation. It is not a good score for a certain course, but the information literacy course knowledge must be mastered. The PAD classroom grouping of information literacy courses needs to be flexible and flexible. In the group discussion speech, let the students realize that there must be a teacher in the three-person line. At each discussion, the teacher observes and walks around the group to observe and listen, thinking about the grouping of the next discussion. For example, the class in the university classroom is not fixed, and the students choose at will. In the first class, the students often choose to sit in the back and sit with the well-known and familiar classmates. The personality characteristics of Guangxi people are relatively good at saying that they are not good at language expression and communication. When I first conducted the PAD class grouping, I asked the students to discuss in groups nearby and combine with the three students around me. In the second grouping, the last grouping method was changed, and the students were required to match the four people. When the third group is grouped, it is randomly assigned on the spot, and often boys are paired with strange girls. The fourth grouping is based on the random number extraction of the student number. The flexible and grouping method enables sufficient information exchange and communication between different students, thus achieving a good information literacy education teaching effect.

4. Conclusion

"When I look back, the man is in a dim light." It has been twelve years since the first lecture on literature retrieval and utilization. I have been looking for a teaching model suitable for information literacy courses until I encounter the PAD classroom model. Other PAD classroom modes, including the evaluation of teaching effectiveness of information literacy courses and the selection of teaching materials for information literacy courses, are worthy of attention and need to be further explored in future practice.

Acknowledgements

Fund Project: The Ministry of Education of Humanities and Social Science Training Project of Guangxi University of Science & Technology. 0318101417

References

- [1] Ge Jingmin. Review of the Literature Retrieval Course for 30 Years[J].Journal of Academic Libraries,2014,32(04):98-102.
- [2] Zhao Yuli, Zhang Xuexin. Divided Classroom: Local New Teaching Model to Promote Deep Learning [J]. Educational Theory and Practice, 2018, 38(20): 47-49.
- [3] Liu Caizhen, Feng Sujie. Interpretation and Enlightenment of ACRL's "Information Literacy Framework for Higher Education"[J].Library and Information Service, 2015, 59(09):143-147.
- [4] Yao Lingjie. Peer Education: A New Mode of University Library Service [J]. Library Construction, 2012 (12): 57-59.
- [5] Tu Dongping, Huang Zhiqi, Xin Ning, Wang Liuping. Experience in applying the classroom teaching mode to the teaching of pharmaceutical literature retrieval [J]. Education and Teaching Forum, 2018(18): 239-240.
- [6] Luo Guofeng. Construction and Practice of SPOC Mixed Teaching Mode in Document Retrieval Course [J]. Library Forum, 2016, 36(04): 72-78.
- [7] Zhang Changhai. Research on Information Literacy Education Model of Chinese College Students Based on Critical Thinking and Creativity[J].Journal of Library Science In China,2016,42(04):102-116.