
Original Research Article

Research on the path of improving undergraduate students' learning adaptability by empowering college archives resources from the perspective of new media

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Abstract: Improving students' learning adaptability is the key to promote students' all-round development. Students from junior college are facing difficulties in learning adaptation due to changes in learning methods and knowledge systems. Although the high-quality content contained in university archives resources can provide support for them, the traditional utilization mode has limitations such as fragmentation of resources, homogenization of push and simplification of communication. With the characteristics of thematic aggregation, data-driven and interactive visualization, new media provides a key path to break through these bottlenecks. By expounding the connotation of undergraduate students' learning adaptability, this paper deeply analyzes the present situation and predicament of college archives resources empowerment, and points out the core advantages of new media to solve the dilemma of college archives resources empowerment. Then, from three aspects: integrating archives resources, building accurate material database, building differentiated new media communication matrix, and promoting scene embedding and personalized adaptation of archives resources, this paper puts forward specific paths to improve the learning adaptability of college students from the perspective of new media, aiming at activating the educational value of archives resources and helping them adapt to undergraduate studies efficiently.

Keywords: new media; university archives; learning adaptability; undergraduate student

1. Introduction

With the development of new media technology, new media forms such as WeChat public and short video platform provide carriers for the activation and utilization of archives resources in colleges and universities with their characteristics of immediacy, interactivity and visualization. With the help of new media, university archives resources can break through the limitations of time and space, thus providing students with diverse learning carriers and opening up new paths for empowering undergraduate students to improve their learning adaptability. As higher education enters a new stage of connotative development, the learning adaptability of college students has become a key issue affecting their academic achievements, mental health and future development. Freshmen who have just transitioned from junior college education to undergraduate education are facing the change of learning style from skill-oriented to inquiry learning with equal emphasis on theoretical depth and systematic thinking. Some students have problems such as lack of learning motivation, confusion of goals and increased psychological pressure because they are difficult to adapt to these changes. As a precious wealth deposited in the development of colleges and universities, college archives contain a lot of high-quality content related to students' learning, which can provide students with learning examples, reference knowledge and perceptual learning situations^[1]. However, there are many limitations in the traditional mode of using archives resources in colleges and universities, especially the traditional mode of spreading archives resources relying on paper materials, which makes it difficult for students to get in touch with relevant knowledge in time.

2. An overview of undergraduate students' learning adaptability

Undergraduate students' learning adaptability refers to the dynamic adaptation process in which students actively adjust their learning cognition, behavior pattern and psychological state to meet the learning requirements and environmental changes of higher education after entering the undergraduate stage, so as to

achieve their learning goals and integrate into the learning environment. It mainly includes four aspects: first, the adaptation of learning methods, and the transformation of college students from "skill-oriented practical learning" to "inquiry learning with equal emphasis on theoretical depth and systematic thinking" Second, to adapt to the knowledge-based system, it is necessary to cope with the upgrading of undergraduate knowledge from "simplification and fragmentation" to "systematization and interdisciplinary", not only to connect the basic knowledge of previous study, but also to understand the theoretical framework of disciplines and grasp the logical relationship between knowledge. Third, self-management adaptation. Different from junior college education, undergraduate education places more emphasis on students' self-management ability, requiring students to reasonably allocate time for course study, after-class review and scientific research practice. Fourth, mental state adaptation. Facing the situation of increasing learning difficulty and competitive pressure, college students need to be able to cope with learning setbacks and avoid negative emotions such as self-denial and anxiety due to maladjustment.

3. The status quo of college students' learning adaptability enhanced by college archives resources

The archive resources in colleges and universities contain rich educational elements. The essence of enabling undergraduate students' learning adaptability by archive resources in colleges and universities is that archive resources, through its four core functions of information bearing, experience transmission, emotional contact and behavior guidance, form an accurate match with the three-dimensional needs of students' learning adaptability, and help students solve their adaptation difficulties and build the internal logic of adaptability in dynamic interaction ^[2]. At a time when higher education continues to deepen reform and pay more and more attention to the cultivation of students' comprehensive quality, archives resources in colleges and universities are gradually paid attention to and explored in practice in empowering students to improve their learning adaptability, but the whole is still in the stage of "potential to be released":

3.1. Fragmentation of archival resources, lack of theme integration for learning adaptation

From the perspective of resource development, most colleges and universities have realized the educational value of archival resources and started to sort out and develop teaching files, student files and campus cultural files. For example, the Archives of Tianjin Normal University actively provides internship and management positions for students majoring in archival science and history, so that students can hone their practical ability in real work scenes ^[3]. However, from the overall perspective of improving students' learning adaptability, the development of archives resources in colleges and universities is obviously insufficient: on the one hand, the development scope of archives resources in colleges and universities is limited, and a large number of potential archives resources closely related to students' learning adaptability have not been systematically sorted out and developed. For example, the files about students' complete growth trajectory have not been effectively sorted out, which makes it difficult for counselors to fully understand students' personality characteristics and learning motives. On the other hand, the development depth is not enough, and it mostly stays in the primary stage of "digital storage", and it is difficult to form a practical "guide to learning adaptation for junior college students" without in-depth excavation and processing.

3.2. The lack of personalized resources to push, unable to meet the needs of different students

The composition of undergraduate students is complex, covering ordinary undergraduate students and college students, and there are significant differences in learning adaptation needs among students of different majors and different learning stages. However, the supply mode of archives resources in colleges and universities shows a significant trend of "homogenization": on the one hand, the archives management department of colleges and universities has not promoted accurate archives resources according to the differentiated needs of students, which leads to the "dislocation" of archives resources and students' professional needs and cannot effectively meet the individualized needs of students in the process of professional learning adaptation. On the other hand, the access channels of archives resources in colleges and universities are relatively single, and students need to obtain resources through the university pipe network and offline borrowing, which is not only limited by time and space, but also complicated because of the retrieval system (such as only supporting keyword retrieval and lacking label classification), which leads to "difficulty in finding resources" and many valuable archives resources "sleeping" for a long time. The root of this dilemma lies in the fact that the archives management department failed to conduct in-depth research among students and lacked the collection and collation of multi-dimensional information such as students' behavior data, academic performance data and psychological state data. At the same time, due to technical constraints, colleges and universities lack advanced technologies such as big data

analysis and artificial intelligence in the process of file management, and cannot realize intelligent screening and personalized push of massive file data^[4].

3.3. The dissemination channel of archival resources is single, and the content is not attractive enough

The key measure to improve students' learning adaptability with archival resources lies in expanding the coverage of archival resources and mobilizing students' enthusiasm for understanding archives. However, at present, there are some problems in the dissemination of archives resources in colleges and universities, such as single channel and insufficient attraction of content: from the perspective of communication channels, the dissemination of archives resources in colleges and universities still relies on the traditional path, which fails to effectively adapt to the information acquisition habits of local undergraduate students; From the content of communication, the presentation form and expression logic of archival resources fail to meet the cognitive preferences of college students, and it is difficult to stimulate their active interest in using them. Through investigation, the presentation form of university archives resources is still mainly pure text documents and static pictures, lacking visualization and interactive processing. For example, colleges and universities are converting excellent students' learning experience files into "text PDF", rather than "animated explanations, short videos of interviews with seniors" which are more acceptable to students. In addition, the content expression of archives in colleges and universities is based on the resources themselves, but not on the adaptation of students' learning to the needs of the scene. The content language is mostly "official and academic expression", lacking of "colloquial interpretation" and "case description" close to students, which leads students to give up in-depth use because they can't understand and use the resources. This phenomenon directly leads to the low dissemination efficiency and low use frequency of university archives resources^[5].

4. The core advantage of new media in overcoming the enablement challenges of university archive resources

The difficulties in leveraging university archive resources to enhance undergraduate students' learning adaptability make it hard to fully realize their potential. The emergence of new media, however, provides a key breakthrough and innovative path to address these challenges.

Looking at the challenge of integrating fragmented resources, the "thematic aggregation" capability of new media can break down the barriers of scattered archive resources. By relying on formats such as themed short videos and WeChat public accounts, and focusing on topics like "knowledge transition for upgrading from junior college to undergraduate" and "independent learning," fragmented teaching archives, student experience records, and course transition documents can be integrated into systematic resource packages. This allows students to quickly access organized, suitable content and avoids the usage difficulties caused by fragmented resources.

To address the issue of the lack of personalized recommendations, the "data-driven" feature of new media can achieve precise matching. New media technology uses data from students' activity on platforms such as WeChat and short video apps, including traffic records, search keywords, and interaction feedback, to construct profiles of students' learning adaptability. This allows for the accurate identification of the learning needs of students from different majors and at different learning stages, and subsequently provides them with precisely targeted archival resources, solving the problems of "resource mismatch" and "difficulty in finding resources" under traditional models. For example, the archives department, by leveraging big data analysis functions, can push undergraduate computer course archives and learning case studies to students who frequently search for 'core courses in computer science,' and provide past graduate entrance exam notes and school selection archives to students interested in "postgraduate entrance exams"^[6].

In terms of optimizing communication channels and enhancing content appeal, the advantages of new media in "interactivity and visualization" are more prominent, enabling the expansion of the reach of archival resources and increasing their attractiveness. On one hand, new media can cover information channels frequently used by students, synchronizing archival resources to platforms such as WeChat, TikTok, and Xuexitong, breaking the limits of time and space. Students can watch "3-Minute Learning Tips Archives" while scrolling through short videos during breaks, and check 'In-Depth Adaptation Experiences from Senior Students' through the official WeChat account after class, aligning with their fragmented learning habits. On the other hand, new media can transform traditional dull text-based archives into visual forms such as animated explanations, VR scenes, and short interviews with senior students. For example, excellent students' study notes can be made into "animated note-taking techniques," and archives bridging vocational to undergraduate knowledge can be converted into "contrast animations," using language and forms that match students' cognitive preferences to interpret archival content, fundamentally addressing the problem of "not understanding or being unable to use" the resources.

5. The specific path to enhance the learning adaptability of college students by empowering them with archival resources from the perspective of new media

5.1. Integration of university archives resources to provide accurate material library for learning adaptation

In order to give full play to the value of archives resources in colleges and universities, colleges and universities need to break the traditional "document stacking" mode, combine the demand of new media for "fragmented and scene-based content", complete resource reconstruction, and turn archives from historical records into learning tools. First, colleges and universities should digitally translate basic archives to form archives resource pool. There are many kinds of archives resources in colleges and universities. In order to enhance the application value of archives resources, colleges and universities need to transform core resources such as student status archives, teaching archives and practice archives into new media-adapted materials, and clip freshmen's entrance education videos, psychological counseling cases and other files into short videos or animated explanations, so as to facilitate students to quickly understand the professional learning framework by using fragmentation time and alleviate the problem of not knowing what to learn and how to learn when they first enter school. After the digital translation of basic archives is completed, colleges and universities need to set up thematic resource packages and dynamic content updates, so that the archive material database can be closer to the needs of students at different stages of learning and truly achieve "accurate empowerment". Secondly, around the full-cycle pain points of college students' learning adaptation, we will create a "hierarchical classification" theme file resource package. The theme resource package collects students' feedback on a regular basis-through the comment area of the new media platform, questionnaire survey, class community and other channels, we can understand the new adaptation problems that students are currently facing (such as the learning difficulties of new courses in a certain semester and the job-seeking needs of emerging industries), and timely supplement the corresponding files (such as teaching cases of new courses and enterprise internship files of emerging industries) to enhance the appeal and education of the file resources [7].

5.2. Build a differentiated new media communication matrix to expand the enabling coverage of archival resources

The group structure of college students is complex. In order to realize the value of archival resources, colleges and universities need to build a communication system of "platform adaptation and content stratification" in combination with students' media usage habits and adaptation pain points at different stages to ensure that archival resources are actively close to students: First, match the communication platform and content according to students' learning adaptation stages. College-upgraded students have the dual identities of "students" and "transition students", and their learning adaptation pain points focus on cross-professional knowledge connection, learning rhythm adaptation, and identity change after entering a higher school, and the media use tends to be efficient and practical. Therefore, colleges and universities can launch modules such as "Freshmen's Guide in Archives" and "College-upgraded preparation file area" on the official Tik Tok and video number of the school to facilitate students to obtain key information by using fragmented time. The second is to strengthen the coordination of media platforms, build a complementary communication network, and avoid resource dispersion. In order to improve the coverage of media communication, colleges and universities should take the official WeChat WeChat official account as a link, regularly publish a summary of archival resources at various stages, and mark the access paths of resources on other platforms [8]. At the same time, combined with the characteristics that students are keen on third-party self-media platforms, colleges and universities have released short videos such as "Learning Adaptation Stories for Senior Students" and "Learning Adaptation Skills for Undergraduate Students" on platforms such as Tik Tok and Aauto Quicker, so that more students can access the information of archival resources through different platforms.

5.3. Promote the scene embedding and personalized adaptation of archival resources, and deepen the empowerment effect of learning adaptation

The value of archival resources to empower students will eventually be implemented in "solving practical problems". Colleges and universities need to closely follow the whole learning chain of college students, embed archives resources in specific scenes, and combine new media technologies to achieve personalized matching: First, anchor the core learning scenes to realize the on-demand embedding of archives resources. For example, in order to solve the problem that freshmen don't know how to preview key knowledge, colleges and universities should link the course files with the educational administration system and the course platform. When students choose courses or check the course schedule, the system will automatically push the "preview guide file" of the course (such as "key preview chapters" and "list of basic knowledge points to be mastered in advance" based

on previous students' preview feedback, together with "preview note template file") to help students clearly preview the direction. Second, relying on new media technology to provide personalized adaptation services for archival resources. Archives management departments in colleges and universities should use big data analysis to accurately depict students' portraits, build labels for learning adaptation needs, automatically push adaptive archives resources, and push "stress adjustment case files" in psychological adaptation archives for students with learning anxiety and adaptation pressure^[9]. The third is to encourage students to participate in file management and enhance the adaptability and identity of file resources. The archives management department of colleges and universities should increase publicity, encourage students to use the new media platform to feed back the difficulties and psychological conditions encountered in study and life and self-adjustment schemes, and enrich the information of archives resources in colleges and universities. These original files from students are closer to the learning habits and thinking modes of their peers, and can provide more acceptable and valuable adaptation schemes for other students.

6. Conclusion

In the wave of connotative development of higher education, improving the learning adaptability of college students is not only the key to individual academic success, but also an important issue for colleges and universities to implement the "student-oriented" educational concept and improve the quality of personnel training. As a "living fossil" bearing the memory of school development, precipitating teaching practice experience and recording students' growth trajectory, the release of college archives resources' educational value not only needs to break through the shackles of traditional thinking of emphasizing storage but neglecting application, but also needs to realize innovative transformation with the help of new media technology. The path of "resource integration-matrix communication-scene adaptation" proposed in this paper is essentially to build a collaborative ecology of "archival resources+new media+learning adaptation": through resource integration, archives will be changed from "fragmentation" to "systematization" to provide students with accurate adaptive materials; Through mass communication, the archives will be changed from "passive waiting" to "active reaching" to expand the coverage of empowerment; Through scene adaptation and personalized adaptation, the archives will be changed from "general supply" to "on-demand service", and the practical problems of students in preview, study, practice and psychological adjustment will be effectively solved.

In the future, with the continuous iteration of new media technology and the deepening demand for education in colleges and universities, the archives management department needs to further strengthen the linkage with teaching, learning and engineering, information technology and other departments, and establish an inter-departmental resource co-construction and sharing mechanism to ensure that archives resources can accurately meet the dynamic needs of students.

Fundings

School-level education and teaching research project —— Research on the learning adaptability of freshmen in higher vocational colleges under the background of upgrading to undergraduate.

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