# Researching on the Strategy of Improving the Integration Efficiency of teaching Resources in Colleges and Universities under the Background of Information Age

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**Abstract:** Firstly, this paper analyses the characteristics of teaching resources in colleges and universities under the background of information age, and probes into the factors affecting the efficiency of integration of teaching resources in depth combined with the problems existing in the process of application of teaching resources in colleges and universities. Secondly, this paper focuses on the effective strategies of integration and efficiency improvement of university teaching resources under the background of informationization, which lays a good foundation for the development of various education and teaching plans, and can also serve as a theoretical reference for the reform of integration of university teaching resources.

# 1. Summary and Characteristics of Teaching Resources in Colleges and Universities under the Background of Information Age

Chen Lingqi and Chen Ting (2017) put forward the idea of building university management resources based on information technology, and the characteristics of university management under the background of informationization are discussed in detail. Liu Li, Zhang Honghong and Chen Rong (2017) put forward the background of information age, effective measures to improve the comprehensive quality of educators, as well as information resources available to improve the level of education. In this study, the above literature is fully used for reference to conduct in-depth research on the integration of teaching resources.

Based on the background of information age, colleges and universities carry out optimization of teaching resources, and access to teaching resources is more abundant. With the continuous development of college teaching to the practical application level, the forms of educational resources needed during the teaching period are more diversified. Under the background of information age, the renewal speed of university educational resources is faster, and the real-time downloading and application of teaching resources can be realized in the classroom. Under the background of information age, the selectivity of educational resources in Colleges and universities is also stronger. Teachers can integrate educational resources in different directions according to the different problems they encounter during the teaching period. Educational resources are not only more effective in strengthening the foundation, but also more expansive. They can continuously

strengthen the problems existing in students' learning according to the knowledge acquired during the teaching period. In the information age, the guiding role of university education resources is also more ideal. Through the innovative application of education resources, students can set up correct learning direction, correctly understand the problems existing in their own learning and strengthen the orientation. The university education resources will continue to integrate and innovate in the context of the information age.

# 2. Current Situation of the Application of Teaching Resources in Colleges and Universities under the Background of Information Age

## 2.1. The unclear direction of application of diversified growth

Based on the information age, colleges and universities carry out the integration and application of teaching resources. Although the teaching resources are very diversified, this advantage has not been fully brought into play in the specific teaching. During the period of education and teaching, the students' ideological subject is not clear, which leads to the confusion of the application of teaching resources. It is not only difficult to give full play to the expected teaching effect, but also has a negative impact on the normal learning plan of students. The diversified growth of forms leads to the development of teaching resources in the period of education and teaching is too messy, and various teaching resources do not play the best role in the application, which also affects the improvement of students' learning efficiency during the use of ultimate educational resources. The application direction is not clear, mainly in the lack of integration direction in the development of higher education resources, the lack of normative principles in the innovation and development of education resources, and the various teaching plans carried out on this basis are also affected.

# 2.2. Insufficient efficiency in the application of teaching resources

The insufficient application efficiency of teaching resources is also the main factor that seriously affects the improvement of teaching quality in Colleges and Universities under the background of information age. There is still a conflict between the innovative integration and application of teaching resources and the traditional classroom teaching tasks, which cannot be fully integrated. In the development of education and teaching plan, the information network teaching resources have not become a supplement to the traditional classroom. Under such a premise environment, the application efficiency of teaching resources declines, and it is difficult for students to quickly integrate the traditional teaching mode and network teaching resources in the process of carrying out various learning plans. In the face of various problems during the development of education and teaching plan, the efficiency of resource application needs to be guaranteed first. In the information age, the development of teaching tasks in Colleges and universities is also seriously impacted by network resources. If the network resources cannot be used correctly, the development of students' learning tasks will be disturbed, which will have a negative impact. The development of education and teaching plan needs to determine a unified direction. Only when resources are fully utilized can we judge whether there are problems in the teaching mode. In the current teaching situation, such problems still need to be optimized and solved.

# 2.3. The limited way of resource development

The development of teaching resources should be combined with the network platform in the background of information age. There are obvious limitations in the development of educational resources in the current teaching tasks of colleges and universities. The development of teaching

resources should be combined with the network platform in the background of information age. There are obvious limitations in the development of educational resources in the current teaching tasks of colleges and universities. The limitations of the development of teaching resources have an impact on students' learning process, and teachers' acquisition habits of teaching resources will directly affect students' learning concepts. If we can't use open access to resources to help students build learning ideas, students will enter the society and work posts in the future, and the acceptance of new knowledge content will be difficult to meet the employer's standard. Therefore, under the background of information age, universities need to integrate teaching resources and optimize the ways of resource development.

# 3. Strategies for Improving the Integration Efficiency of Teaching Resources in Colleges and Universities in the Information Age

#### 3.1. Optimizing the way to obtain resources

Under the background of information age, the efficiency of integration of teaching resources in Colleges and universities can be improved by optimizing the access to resources and expanding the scope of educational resources. It can establish a platform for sharing teaching resources among colleges and universities, and make use of the existing network platform to realize the mutual transmission and sharing of teaching resources among colleges and universities. In the process of integration and utilization of teaching resources, resources in the network platform can be combined with textbook resources, especially the integration of classroom teaching resources. More importantly, we should consider whether it is close to the subject of the curriculum and the acceptance of students in the process of integration of resources. Regularly optimize and innovate the access to resources, obtain more innovative education resources, and apply them in the teaching system. For the problems that may arise during the current teaching period, make full use of the existing carrier platform to further optimize innovation. Optimizing the access to teaching resources, making overall planning for the source and scope of teaching resources, emphasizing the application of teaching resources in different directions in teaching subjects, furthermore, it improves the efficiency of resource optimization and integration in the teaching process, and takes students' learning needs as the basis of measuring the effectiveness of teaching resources.

# 3.2. Systematic teaching and resource integration

The integration of teaching resources should embody the characteristics of systematization and standardization, as well as the phased objectives in the integration of teaching resources. Under the background of information age, the main purpose of improving the efficiency of integration of teaching resources in Colleges and universities is to help enhance the overall teaching ability and create an efficient learning environment for students. Therefore, in the process of resource integration, we should carry out systematically and normatively. Systematic integration of teaching resources can be carried out by using constantly updated information and data in the network environment, and the renewal cycle of teaching resources can be formulated. According to the feedback of students' achievements in the teaching process, the direction of integration of teaching resources in the next stage can be adjusted. Systematic integration of teaching resources can avoid the influence of too many teaching resources on the application effect during the teaching period. It can also integrate the chaotic teaching resources into a whole and apply them together in the students' learning stage. The teaching resources and the teaching system are interrelated. According to the source direction of different teaching resources, the teaching system is divided as a whole to form a standardized integrated application system of teaching resources. On this basis, to carry out

various educational and teaching plans, we can fully consider the existing situation during the learning period and the incomplete grasp of knowledge points, and then carry out the innovation of teaching modes in a targeted manner, so as to give full play to the greatest role of the integration of educational resources in the teaching process.

## 3.3. Application of Teaching Resource sharing

The application of teaching resources sharing can also help to further improve the efficiency of educational resources integration under the background of informatization. As for the sharing and application of teaching resources, we should fully consider the establishment of a platform for sharing and mutual assistance between different universities. Colleges and universities belong to an open teaching environment. They should not only be good at mining teaching resources from the network, but also enhance the scope of application of teaching resources. Through the construction of resource sharing system, it can help to improve the scientific research level of teachers in different universities. Therefore, educators should first improve their personal teaching level, in order to influence students in the classroom and constantly improve their comprehensive ability. The construction and application of teaching resources sharing platform can help to expand the scope of integration of educational resources in Colleges and universities, and help students establish a learning environment more in line with the needs of social development for talents. In the application of teaching resources sharing, we should consider the effectiveness of sharing content. After constructing the sharing platform, we should regularly update the data information in the integration platform and strengthen the application more efficiently. Teaching resources sharing platform also needs to continue to strengthen and expand, introduce social practice links into it, to achieve the all-round development of students in the information age.

## 3.4. Strengthening the implementation of education information

The implementation of educational informationization is also an effective way to enhance the efficiency of integration of educational resources. The acquired teaching resources are applied in traditional classroom to realize the supplement of network data resources to traditional classroom under the background of information age. Students have adapted to this environment for a long time in the traditional classroom mode. If the integrated teaching resources are applied and the traditional teaching environment is broken, students' acceptance may be unsatisfactory and affect their academic performance. Through the implementation of educational informationization, the integration of educational resources is carried out on the premise of retaining the characteristics of traditional classroom teaching, so as to realize the further reform and optimization of traditional classroom. It enables students to adapt to the learning environment, and at the same time to access innovative learning resources. Under the background of information age, we should highlight the advanced integration of teaching resources, conform to the characteristics of the times, constantly innovate the teaching mode, enhance the efficiency of resource application in teaching links, and help to improve students' comprehensive quality in an all-round way.

#### 4. Strengthen the implementation of education information

#### 4.1. Open teaching environment

In the information age, the future integration of university teaching resources will gradually build an open teaching environment. In the open teaching environment, more attention should be paid to the guidance of learning ideas, and more attention should be paid to the leading position of

students in the classroom. While maintaining classroom discipline, teachers should guide students correctly, encouraging students to make full use of the network platform to search and organize the required learning resources. Social development needs high-quality talents with innovative ability and creative thinking. Students' thinking mode in traditional classroom learning environment is imprisoned, which is not conducive to the formation of lifelong learning ideas. Social development needs high-quality talents with innovative ability and creative thinking. Students' thinking mode in traditional classroom learning environment is imprisoned, which is not conducive to the formation of lifelong learning ideas. On this premise, university graduates will enter the job in the future, they can also continue to learn, strengthen their professional skills, in line with the definition of high-quality comprehensive talents in social development, so that teaching resources can play their own energy efficiency. Therefore, we need to make use of modern information technology to optimize teaching resources, to optimize the dissemination channels and contents of teaching resources, and to find the way of integration between resources and classrooms with the support of modern information technology, so as to make the application of teaching resources more reasonable. Teachers should be able to choose school-based textbooks, paper resources and information resources according to the content of teaching.

#### 4.2. Students' autonomous learning guidance

Through the continuous integration and excavation of teaching resources in the information age, the future university education and teaching plan will focus on the guidance of students' autonomous learning ability. Classroom teaching only helps students to build their ideological framework. Problem inquiry also needs students to complete independently. Autonomous learning can only be carried out on the premise that students have sufficient theoretical knowledge. Re-planning of teaching resources, rational integration, cross-linking of online resources and textbook content, expanding textbook content, but at the same time, the knowledge points of university teaching should not be omitted to ensure all-round coverage. Teachers should choose teaching resources according to students' actual learning situation and the teaching progress of University courses. Secondly, in the application of teaching resources, the selected resources should be applied to the University classroom. We should not only ensure the comprehensiveness of knowledge points, but also ensure quality and quantity. At the same time, it can quickly arouse students' interest and enable students to use teaching resources independently. Based on the background of informationization, colleges and universities carry out the integration of educational resources. In the initial stage, they will improve various educational resources and teaching platforms. By constantly strengthening the application efficiency of the integration of teaching resources platforms, they can help students improve their basic knowledge mastery level. On this basis, enter a more efficient learning state, through the reinforcement of comprehensive learning ability, encourage students to enhance their autonomous learning ability, after encountering problems through collaborative solutions among students, enhance students' ability to solve problems independently. For the future integration of higher education resources under the background of information age, we should focus on the comprehensive ability level of students during their study. Through the reform of teaching methods and innovative teaching environment, we can enhance the application efficiency of teaching resources in learning, and create a better basic environment for the development of various management plans.

#### 5. Conclusion

To sum up, there are also some problems in the application of teaching resources, such as low application rate, low application efficiency, poor sharing and decentralized distribution. In order to

improve the teaching level of universities, it is necessary to optimize the access to resources, optimize the integration of teaching resources, share applications and improve the level of teaching informatization. Because in the information age, the future development direction of the integration of teaching resources in Colleges and universities will gradually build an open teaching environment, with more emphasis on the guidance of students' independent learning.

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#### References

- [1] Chen Lingqi, Chen Ting. A preliminary study on the Management of Digital Education Resources in Colleges and Universities under the background of Internet [J]. Manager, 2017 (15): 251.
- [2] Feng Lijuan. A study on the Application Strategies of College English Teaching Resources Optimization under the background of Informatization [J]. Modern Vocational Education, 2016 (13): 045 / 046.
- [3] Liu Li, Zhang Honghong, Chen Rong, et al. Research on the Strategies of improving the Teaching ability of College Teachers under the background of Informatization [J]. Agricultural Development and equipment, 2017 (11): 51 / 51.
- [4] Lu Xiaohui. A Study on the Strategies of the Improvement of the Teaching Efficiency of Higher Education in the Background of the Information Education[J]. Education Modernization, 2017, 4 (15):87-88 + 91.
- [5] Du Lin. How to effectively improve the historical teaching efficiency of junior high school under the background of information era[J]. New Curriculum(middle), 2017(12):117117.