

Research on the Impact of Integrating Micro-course Teaching Resources on Students' Learning Interest

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Abstract: In today's digital era, the use of micro-course teaching resources has become a common phenomenon. The research aims to explore the impact of micro-course teaching resources on students' learning interests, and explore the specific details through questionnaire surveys and analysis. The study collected data on students' learning interests after the integration of micro-course teaching resources from 100 students in the first grade of School A. The survey results showed that features such as convenience and flexibility, diversified teaching content, interactivity and personalized learning are considered to motivate students. The main factor of interest in learning. Therefore, the integration of micro-course teaching resources can enhance students' interest in learning and make learning more proactive. Micro-course teaching resources should be actively integrated into junior high school teaching to improve teaching results.

Keywords: Micro-course Teaching Resources; Learning Interest; Influence.

1. Introduction

With the rapid development of information technology and the popularization of the Internet, education methods are gradually shifting from traditional face-to-face teaching to digital education. This trend has led to the widespread application and promotion of micro course teaching resources as an emerging teaching form. Micro course teaching resources are highly popular among students due to their convenience, flexibility, and diversity.

Micro course teaching resources present knowledge content in short and concise video formats, allowing students to freely learn at any time and anywhere. Traditional face-to-face courses usually require students to attend classes in designated classrooms, while micro courses break free from this limitation and allow students to arrange their own learning according to their own time. Whether on or off campus, students only need to prepare a device that can connect to the internet to access the necessary micro course teaching resources at any time, making it convenient and fast to obtain knowledge.

In addition to convenience, micro course teaching resources also integrate elements such as multimedia, interaction, and self-learning, providing rich learning methods. Micro course resources can include various forms of content such as text, images, audio, videos, etc., allowing students to understand and absorb knowledge through different sensory channels. This diverse teaching format can meet students' different learning styles and preferences, and stimulate their interest in learning.

However, in the widespread use of micro course teaching resources, further in-depth research is still needed on how to combine them with students' learning interests and stimulate learning motivation and enthusiasm. Although micro courses have many advantages, if students lack interest in the course content, they may lose motivation for learning and affect learning outcomes. Therefore, it is necessary to explore how to effectively utilize micro course teaching resources, stimulate students' interest and enthusiasm in learning, and improve their learning effectiveness.

Micro course teaching resources, as an innovative teaching

form, are expected to improve the limitations of traditional education by providing diverse learning resources and stimulating students' interest in learning. Traditional face-to-face teaching often has limitations in time and space, and lacks personalized teaching methods.

In contrast, micro course teaching resources have the following advantages:

One is diverse learning resources: Micro course teaching resources can present knowledge content in various forms, such as videos, audio, images, and text. Students can choose appropriate learning materials based on their own preferences, which is beneficial for improving learning outcomes.

The second is flexible learning time and location: the flexibility of micro course teaching resources allows students to learn at any time and anywhere. This flexible arrangement helps to adapt to the learning needs and schedule of different students, providing them with a more convenient learning experience.

The third is to make learning interesting and personalized: the integration of multimedia elements and interactive nature into micro course teaching resources makes the learning process more interesting and vivid. Through various forms of interaction, students can participate more actively in learning, stimulate their enthusiasm, and stimulate their interest in learning.

Therefore, studying the impact of integrating micro course teaching resources on students' learning interests is of great significance. By deeply understanding students' learning needs and interests, we can better design and develop micro course teaching resources, which can fully stimulate students' learning enthusiasm and improve their learning outcomes.

2. Data and Methods

2.1. Data Collection

This study collected data through questionnaire surveys and on-site observations among first grade students in School A, in order to comprehensively understand the impact of micro course teaching resources on students' learning interests. To ensure the reliability and effectiveness of the data, multiple measures have been taken during the data collection

phase.

Firstly, based on random sampling, the researchers selected 100 first grade students as the research subjects. They developed a survey questionnaire that synthesized research results in relevant fields and provided students with a detailed explanation of the purpose and steps for filling out the questionnaire. The questionnaire is divided into two parts: one part involves students' preference for micro course teaching resources, including their frequency of use and satisfaction with different forms of micro course teaching resources; The other part evaluates students' cognitive and subjective evaluations of their learning interests. These questions aim to gain a deeper understanding of students' attitudes towards micro course teaching resources and their level of interest in learning.

Secondly, while students filled out questionnaires, researchers also conducted on-site observations. During the observation process, they recorded the students' interest in learning when using micro course teaching resources, including active participation, focus, and knowledge mastery. Such on-site observation can provide direct observation data and effectively supplement the results of the questionnaire survey.

In order to ensure the reliability of the data, researchers have taken corresponding confidentiality measures and quality control measures. Students answer the questionnaire based on their actual situation and are told to ensure that the answers are truthful and accurate. At the same time, researchers supervised and reviewed the collection and organization of questionnaires to ensure the integrity and consistency of the data.

Through the comprehensive application of the above methods, this study will collect comprehensive and accurate data, providing strong support for subsequent data analysis, and further exploring the relationship between micro course teaching resources and students' learning interests.

2.2. Data Analysis Methods

In order to provide comprehensive statistical data on students' learning interests, this study used descriptive statistical analysis methods to process the questionnaire survey results. Through in-depth analysis of the collected data, it is possible to reveal students' preference for micro course teaching resources and their evaluation of learning interest.

In the process of data analysis, the focus will be on presenting the data in the form of charts, in order to present the statistical results more intuitively and easily. This visualization method not only helps to quickly understand students' preferences for micro course teaching resources, but also demonstrates their subjective evaluation of learning interests.

By using descriptive statistical analysis and presenting data in the form of charts, it is possible to gain a more comprehensive understanding of the characteristics and trends of students' learning interests. These statistical data will provide important references for educators to optimize micro course teaching resources and design more attractive learning activities to better meet students' needs and interests. At the same time, for decision-makers in schools and educational institutions, these statistical results will also provide valuable information for better education policy formulation and resource allocation.

In the data analysis stage, the questionnaire survey results will be organized and cleaned, and then descriptive statistical

analysis methods will be used to calculate the frequency, percentage, and other statistical indicators of each question. This will determine the overall attitude of students towards micro course teaching resources and further analyze the differences and correlations between different characteristic groups.

In addition, cross analysis will be conducted to explore the relationship between different factors (such as age, gender, academic performance, etc.) and students' preferences for micro course teaching resources and evaluation of learning interests. This will help to better understand students' needs, adjust teaching strategies, and provide reference for decision-makers who provide personalized learning support in educational practice.

By using appropriate data analysis methods and effective visualization tools, this study will be able to gain a deeper understanding of students' attitudes and learning interests towards micro course teaching resources, and provide useful suggestions and guidance for educational practice and policy formulation.

2.3. Survey Results

According to the purpose of the research, a total of 100 questionnaires were distributed to the first-grade students of School A. Random sampling was used to exclude questionnaires whose answers did not meet the requirements. A total of 99 valid questionnaires were obtained, with an effective rate of 99%.

Table 1. Survey results of "Preference for micro-course teaching resources"

Findings	Number of people	Proportion
Like very much	62	62.63%
Like	21	21.21%
Neutral	12	12.12%
Dislike	4	4.04%

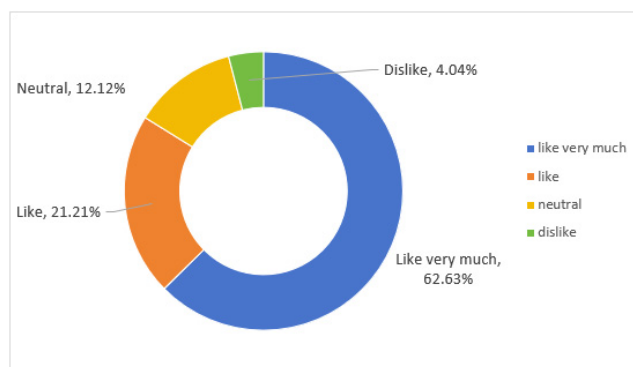


Figure 1. Survey results on "Preference for micro-course teaching resources"

According to the data analysis results of the questionnaire survey, students in the first grade of junior high school have a high degree of preference for micro course teaching resources. Specifically, 62.63% of students expressed a strong interest in micro course teaching resources, indicating their positive attitude towards this new teaching tool. In addition, 21.21% of students expressed a preference for using micro course teaching resources and recognized their value and role in learning. Only 12.12% of students hold a neutral attitude, which may be due to their limited experience in micro course teaching resources or insufficient understanding of their

advantages. Only 4.04% of students expressed dissatisfaction with micro course teaching resources, which is relatively low.

The reasons why students express a positive attitude towards micro course teaching resources mainly include the following aspects. Firstly, it is a convenient and flexible learning method. Students generally reflect that micro course teaching resources enable them to learn at their own pace and time, without being limited by traditional fixed class times and locations, thus providing greater learning flexibility. They can freely choose the time and place of learning, adapt to various learning situations, and this flexibility is considered a major advantage of micro course teaching resources.

Secondly, students recognize the diverse teaching content provided by micro course teaching resources. Micro courses are presented in various forms, such as videos, audio, charts, etc., which can meet students' different learning styles and preferences. Through this diversity, students can have more interesting access to rich educational resources, thereby enhancing their interest and motivation in learning.

In addition, students also value the interactivity and personalized learning characteristics of micro course teaching resources. They believe that micro course teaching resources can help them communicate and interact with teachers and other classmates, promoting a more positive learning experience. Through online discussions or instant Q&A, students can receive timely feedback and answer questions, enhancing the effectiveness and efficiency of their learning. In addition, micro course teaching resources can also provide personalized learning support based on students' needs and progress, helping them to engage in in-depth and comprehensive learning at their own pace.

Table 2. Survey results on “The impact of the integration of micro-course teaching resources on learning interest”

Findings	Number of people	Proportion
Significantly improved	37	37.37%
Moderate improvement	32	32.32%
No significant changes	26	26.26%
Decreased	4	4.04%

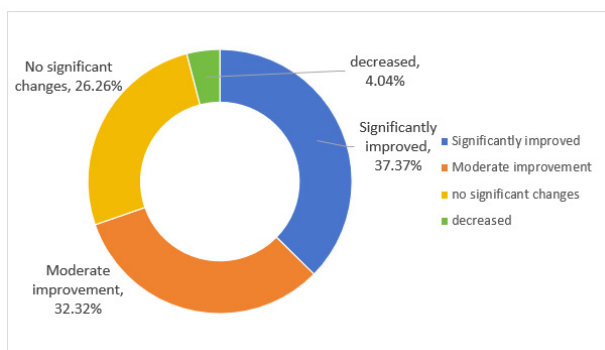


Figure 2. Survey results on “The impact of the integration of micro-course teaching resources on learning interest”

In summary, first grade students express a high degree of preference for micro course teaching resources. Their positive attitude towards this teaching tool is mainly based on convenient and flexible learning methods, diverse teaching content, and interactive and personalized learning characteristics. These results demonstrate the potential of micro course teaching resources in meeting students' needs

and enhancing learning interests, and provide important reference information for educators and decision-makers, helping them optimize teaching design and strategies to better meet students' learning needs.

According to the data analysis results of the questionnaire survey, 37.37% of students stated that micro course teaching resources have significantly improved their learning interest. This result indicates that the flexibility and diversity of micro course teaching resources create a more attractive and stimulating learning environment for students, thereby effectively promoting their interest in learning.

In addition, 32.32% of students believe that micro course teaching resources have moderately increased their learning interest, although this change has not shown significant significance. This group of students may have felt some benefits brought by micro course teaching resources, but the impact on their learning interests may be relatively small.

In the survey, 26.26% of students stated that micro course teaching resources did not show significant changes in their learning interests. This may be due to individual differences or other factors. These students may already have stable learning motivation and interests, and micro course teaching resources have not significantly changed their learning methods.

It is worth noting that only 4.04% of students reported a decrease in their interest in learning from micro course teaching resources. This proportion is relatively low, possibly due to a small number of students encountering difficulties or not fully adapting to the learning methods when using micro course teaching resources.

In summary, among first grade students, the impact of micro course teaching resources on learning interest is generally positive. Most students feel the significant improvement or moderate reinforcement they bring to their learning. However, some students also believe that micro course teaching resources have not significantly changed their learning interests. These results suggest that educators and decision-makers should consider individual differences when designing and using micro course teaching resources, and further explore how to maximize their positive impact on students' learning motivation and interest. This will help provide a more personalized and attractive learning experience, meet students' needs, and drive them to achieve better results in their learning.

3. Conclusion and Discussion

The purpose of this study is to explore the impact of micro-course teaching resources on the learning interest of first-year junior high school students. Through a survey and observation of 100 students, it was found that first-year students in School A have a high preference for micro-course teaching resources. More than 80% of students said they liked or liked using micro-course teaching resources. This shows that micro-class teaching resources have become one of the important ways for junior high school students to receive education.

The integration of micro-course teaching resources has a positive impact on students' interest in learning. Applying micro-course teaching resources to the learning process can significantly increase the learning interest of 30% of students, and moderately increase the interest of another 32% of students. Only 4% of students believe that micro-course teaching resources have reduced their interest in learning. This shows that micro-course teaching resources can

stimulate students' learning motivation and enthusiasm, making them more actively participate in learning.

When analyzing the reasons, it was found that the convenience and flexibility of micro-course teaching resources, diversified teaching content, interactivity and personalized learning have had a positive impact on students' interest in learning. Students generally believe that micro-course teaching resources enable them to study at their own pace and time, providing greater flexibility. In addition, diversified teaching content meets students' different learning styles and preferences, making learning more attractive. Interactive and personalized learning promotes students' communication and interaction with teachers and other students, increasing their participation in learning.

However, there are some limitations in this study. First, this study used a small sample survey, and the results may be limited by sample selection and cannot represent the situation of all first-year junior high school students. Secondly, since data collection is based on students' subjective evaluation and self-report, there is a certain degree of subjective bias and memory bias. In future research, the sample size can be

expanded and more factors can be considered to gain a deeper understanding of the impact of micro-course teaching resources on students' learning interests. At the same time, teachers' opinions and suggestions can be combined to further optimize the design and application of micro-course teaching resources to maximize students' learning interest and enthusiasm.

References

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