Article

Exploration of Practical Teaching: Impact of Internet Era on Teachers and Students and Corresponding Strategies

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Abstract: With the rapid advancement of technology, the development of the Internet has entered a new era evolutionizing traditional media to new media. Multimedia has become an inevitable trend, directly changing traditional teaching to digital teaching. In recent years, with the popularization of electronic classroom teaching materials, traditional teaching has experienced a digital transformation, which impacts teachers and students. How to combine traditional thinking with digital teaching materials with ancient and modern wisdom colliding with new vitality cannot be ignored in the academic community. In this article, the current situation of teachers using multimedia textbooks in the classroom was explored in terms of the digital transformation of paper textbooks. The impact of the Internet on students' learning and teachers' response strategies was also explored. The impact on students' learning was explored for advantages and disadvantages; the corresponding strategies of teachers were proposed for "cultivating interest", "helping understanding", "inspiring reflection", and "applying what is learned".

1. Introduction

The 21st century is an era of advanced information technology. With the rapid pace of modern public life and the arrival of the multimedia era, there are more channels for people to obtain information such as newspapers, radio, television, the internet, and various new media in people's lives (Yan, 1994). In addition, various intelligent terminal products are also seamlessly attached to people's daily lives. In the current multimedia era, user interests and preferences are shifting towards mobile devices, providing the public with a new and comprehensive experience and enjoyment (Zhang, 1994). The advent of the Internet era has facilitated convenient and rapid development in daily life. The application of information technology in today's society is becoming increasingly widespread and has also become a new posture for teachers' teaching, directly affecting the digital transformation of traditional textbooks to digital textbooks. With the advent of the Internet era, traditional textbooks have been gradually digitized in recent years. Teachers have faced a digital transformation which in turn changes students' learning patterns and impacts traditional teaching methods. Education is a process of "dissemination". In addition to the gradual evolution of the "media" of dissemination (from traditional oral, written, printed, and book forms to emerging digital, dynamic, and interactive media) (He, 2009), the consumers (students) of information also shift from passive acceptance of knowledge to active learning of knowledge (Wang, 2001). How can traditional teaching be combined with information technology-based textbooks and collide with each other to create new vitality? How can traditional teaching and digital teaching for students be balanced? How do teachers have to respond to the changes in multimedia textbooks? Those are questions in the current education and academic circles. Thus, it is necessary to explore the practical use of multimedia teaching materials in the classroom and the electronic use of paper textbooks for the development of teaching. It is also required to investigate the impact of digitalization of teaching materials on students' learning and teachers' strategies.

2. Impact on Student Learning

Teachers can use digital textbooks as teaching materials in classrooms to observe students' learning reactions and effects. At the same time, they can compare the differences between using digital and traditional materials by collecting feedback and suggestions from students and summarizing the impact of digital teaching materials on students' learning.

2.1. Advantages

2.1.1 High Efficiency

Teachers use digital textbooks in the classroom which are more convenient and efficient compared to traditional textbooks. Due to the need for page flipping and searching actions in traditional textbooks, they have fonts that are too small or unclear. However, digital textbooks can freely be adjusted for fonts and brightness and key points or annotated information can be captured easily. It facilitates students to read well in class and improves the efficiency of students' reviews, greatly improving the effectiveness of students' learning.

2.1.2. Portability

Traditional textbooks are heavy and thick, which is inconvenient to carry. Compared to digital textbooks, they are relatively lightweight. With mobile phones, tablets, and laptops, the information and content are acquired without having to carry them, reducing the burden on students

2.1.3. Unlimited Classroom

Digital textbooks are convenient to carry and easy to read, allowing students to use them anytime and anywhere. Unlike traditional textbooks, students are unlikely to keep them at all times except for class. If problems are discovered, they cannot be solved in real-time, so their use is mostly limited to classroom or home use. However, digital textbooks are unlimitedly used in the classroom or at home. With a mobile device, students can access and use it anytime and anywhere, cultivating the good habit of defining and solving problems.

2.1.4. Saving Resources

Teachers can use multimedia in the classroom to save costs and time. From the perspective of environmental protection, digital textbooks reduce the use of trees and save the cost of textbooks for students.

2.1.5. Diversified Innovation

Textbooks contain wisdom but need to be applied in diversified forms. Although traditional textbooks are still commonly used, teaching methods lack innovation, resulting in a simple teaching process that often fails to stimulate students' interest in learning. On the contrary, the digitization of classroom textbooks provides diverse textbooks, innovates teaching methods, enhances students' interest in active learning, and inspires them to think independently.

2.2. Disadvantages

2.2.1. Errors

Teachers use digital textbooks that may have typographical errors or missing words. Even after photocopying or scanning textbooks, there are also misplaced page numbers or missing scanned content. The higher the probability of such errors, the greater the negative impact on students' learning.

2.2.2. Overdependence

With the advent of the multimedia era, electronic products are gradually indispensable in daily life. As digital textbooks in teaching classrooms have advantages and convenience for teachers and students, we need to use digital textbooks more frequently. Over time, there is an excessive reliance on digital textbooks.

2.2.3. Energy Consumption

Digital textbooks are convenient for teachers to use in teaching and encourage students to review after class. However, long-term staring at the screen easily makes the eyes feel tired. If not rested properly, negative impacts affect student's health. In addition, devices such as mobile phones, tablets, and laptops deliver unnecessary information, distracting students not to focusing on learning.

2.2.4. Inconvenient Noting

Due to unfamiliarity with digital books, reading is easily distracted, and retention time becomes relatively shorter. Gradually, thoughts become dull and fragmented, often causing wandering around during class. In addition, students are unable to immediately annotate key points in the classroom, making it inconvenient to organize notes, making it difficult to deepen memory.

2.2.5. External Obstacles

Although digital textbooks have the convenience of time and space, poor reception of Wi-Fi signals, and unfavorable conditions such as insufficient mobile phone storage and device power in remote areas hinder digital textbooks from being used efficiently.

2.2.6. Psychological Limitations

At present, electronic teaching is in its early stages, and students generally find it difficult to adapt to the changes in learning methods and dissemination methods. They feel that digital textbooks lack a real sense of reading, learning, and experience, and digital textbooks are not as emotional as teachers. Without the guidance of teachers, it is impossible to fully explain the essence and connotation of course content. Most students believe that digital textbooks are only for entertainment, while traditional textbooks are the orthodox form of learning. Faced with the transition period between traditional and digital textbooks, students' inherent psychological habits and conceptual limitations are challenges in the development of multimedia textbooks.

3. Teacher's Strategies

As disseminators of the education industry, teachers, in the multimedia era need to integrate their advantages into innovations for better teaching using digital textbooks. Students can balance and combine text-based teaching and multimedia teaching. It is important to enable students to accept knowledge in active learning. Therefore, the following four strategies are proposed for teachers.

3.1. Increasing Interest

In the information explosion and media development, the vast amount of digital data including digital books often is overwhelming. Regardless that student can judge whether the information is correct or not, digital transformation of teaching impacts learning and related opportunities considerably. Therefore, teachers need to choose appropriate digital textbooks and correct information, at the same time, teaching materials suitable for the region must be selected to incorporate real life into the curriculum and increase students' curiosity in knowledge. This cultivates students' autonomy in learning with interest by understanding the purpose of teaching.

3.2. Helping Understand

After selecting digital materials suitable for students, teachers need to combine traditional and digital textbooks, guide students to use digital textbooks, and use traditional texts for reading and comparative analysis. The conditions in rural areas may be inappropriate, and the interpretation of the content can be incomplete. With the teacher's explanation of simple terms and key prompts of teaching, students can understand what they are learning.

3.3. Inspiring Reflection

Through guided reading and teaching methods, teachers present relevant topics for students to discuss in groups. Through guided teaching methods, students are trained to independently think about problems. By discovering and solving problems, students' problem awareness is cultivated. Through the sharing of experiences with each group, students understand the meaning of the teaching content with a comprehensive effect. Teachers teach students according to their aptitude and by example. They provide students with role models and templates promptly for the correct target audience. It is required to provide students with moral concepts guide and inspire them to reflect on themselves and find practical solutions based on the teacher's teaching inspiration. They must encourage students to explore problems through dialogue, communication, and debate, alternatively, group discussions, reflection, and internalization can be encouraged to provide students with correct concepts, insights, and experiences. Not only can they clearly understand the differences between their and others' ideas, but they find solutions through reflection.

3.4. Applying What Is Learned

By teaching with digital textbooks, teachers combine knowledge and guide students to "understand first, then practice" to cope with the various difficulties faced by today's society and cultivate a humanistic way of thinking (Zhang et al.,1995). In understanding and analyzing teaching methods, reasonable solutions can be found by students through problem awareness, integrating classic connotations, discussion, and reflection. Their morality can be cultivated through reflection. Moreover, teachers need to encourage

students to practice what they have learned. Long-term learning can be internalized with proper habits and practical actions, and feedback is given to the results of classroom thinking. To achieve a virtuous cycle of applying concepts to daily life, students are required to implement and apply learning methods, maintain a correct attitude and values, cultivate humanistic literacy, and integrate traditional teaching into digital teaching in practical teaching.

4. Conclusions

In the Internet era, traditional textbooks have been gradually digitally transformed. Faced with the transition from old cultures to new ones, the integration of new and old methods is important for teachers. This impacts teachers and students considerably. In this study, the current situation of using multimedia digital textbooks in the classroom was explored focusing on the development of teaching. The impact of the digitization of traditional textbooks on students' learning was also explored. Its advantages include high efficiency, portability, unlimited use, resource conservation, and diversified innovation. Errors occur in using digital textbooks and, excessive dependence, energy consumption, inconvenience in taking notes, distraction, and psychological limitations also need to be pointed out. The corresponding strategies need to be established by teachers to cultivate students' interest in learning by selecting appropriate textbooks and data to meet various students' autonomy in learning. Students can be guided to use digital textbooks but traditional textbooks are required for reading and retrieval practice. This integration deepens students' memory and teachers' in-depth and concise explanations and prompts. Teachers guide students to read and explain for students to discuss. Through guided teaching, students are encouraged to engage in discussions in the classroom. Through reflection and internalization, dialogue, communication, debate, and other methods, students can think independently, discover and solve problems, and reflect on themselves. Students are required to apply what they are learning with a correct attitude and value and become citizens with humanistic literacy. It is necessary to adopt an attitude of "integrity and innovation" in response to the multimedia era. The "integrity" is required to maintain the advantages of traditional and digital textbooks, and the "innovation" is necessary to develop teaching methods by integrating traditional and digital textbooks.

Conflicts of Interest: The author declare no conflict of interest..

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