

The Reasonable Use of Multimedia in Teaching

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Abstract. Along with the development of science and technology, modern information technologies must be appropriately used in teaching, so as to improve teaching and learning methods and the quality of teaching. Multimedia instruction, relying on flexible and varied expressive forms such as sound-image, text-graphics, and static-dynamic combination, and many features such as large capacity and excellent visual effect, are widely popular among the masses of teachers and students, and therefore, it has been increasingly extensively applied to teaching.

Keywords: Teaching; Multimedia; Reform; Innovation

1. Introduction

What kind of teaching methods can promote classroom teaching to become vivid, rich in information, and interactive between teachers and students? Of course, multimedia teaching means should always be applied and the advantage of all kinds of teaching methods should be integrated according to the actual circumstances, but chalks can't be blindly, simply applied in classroom, aiming to achieve a good teaching effect. Walter Lewin, Professor of physics at the Massachusetts institute of technology, possesses a high lecturing level, and his classroom videos were posted online and immediately caused a great sensation all over the

world. In his class, a single teaching method was never only used, while all sorts of teaching methods were combined together, including slide projector, PowerPoint presentation, demonstration experiment, traditional chalk blackboard writing, audio-video data and so on. Anyway, multimedia instruction was fully applied by Lewin to promote the attention of students to concentrate all the time, and thus, students were unconsciously influenced in vivid explanations.

Each teaching method owns its advantages and disadvantages. Teachers should make full use of multimedia teaching methods and give full play to the advantages of multimedia instruction methods, aiming to promote students to profoundly master what they learn in the wonderful classroom.

2. What is multimedia instruction?

Multimedia instruction means that the modern teaching media tools are reasonably chosen and applied through teaching design according to the characteristics of teaching objectives and objects, and then play an effect on students using a variety of media information and also are dynamically combined with the traditional teaching methods to generate a reasonable teaching process and achieve the optimized teaching effect.

3. Arousing students' interest in teaching through multimedia instruction

Diesterweg, a famous educator, used to say, "The teaching art lies in the competence in motivation, waking up, and encouraging, but not in impartation. Special sound, light, color, and shape are created using multimedia technology, and the teaching situations can be set up through image rolling, flickering, frames, color change and sound effect, so as to provide students with a visual, colorful, and vivid image that can make many sense organs of students stimulated at the same time and arouse the enthusiasm of students for learning.

4. Flexibly using multimedia technology and realizing teacher's care about students

As an old saying goes, a good compliment warms a person in three winters. Therefore, a harmonious teaching atmosphere for students to learn can be created using multimedia technology. Humans are sentient beings though machines are ruthless. In the interestingness of multimedia courseware design, teacher's care about students and the student-centered idea are embodied everywhere.

For example, in designing evaluation and test questions, incentive frames and sounds such as "you are great!" and "it's too bad. Try again!" can be designed for complimenting students in the test-taking process. These enable students to experience success in encouraging. This teaching can be known as real appreciative education, which can always forgive the failure of students and promote them to experience success, and also will teach them how to cope with setbacks. Ultimately, students' enthusiasm for learning is protected by it. Computer isn't like people and can become more patient than ordinary people because it will not feel boring about too says, but its program is designed by teachers.

5. The objectives of multimedia instruction are necessarily understood by teachers

In the practical teaching, many teachers do not clearly know the objectives of multimedia instructions, and often think that their teaching is advanced, teaching means are modernized, and students can learn better once multimedia instructions are applied. In fact, the feature of multimedia instruction as an aided teaching method to serve for teaching is ignored. Therefore, the objectives of multimedia instruction are necessarily known well, and no consideration is given to the practical teaching—courseware color is too bright and changeful so that people feel dizzy; a variety of sounds take turns to play so that students' attention and thinking continuity are greatly affected. All these are in violation of the original purpose of the multimedia use.

6. Paying attention to the frequency of the multimedia use in teaching and preventing too fast glance of students at teaching contents

In the use of multimedia courseware, multimedia courseware must be reasonably used according to the needs of classes. When multimedia instruction is applied by teachers in classroom, too large classroom information capacity, too fast teaching progress, and playing frames hurriedly have forced students to rapidly receive information and not to know well what to be taught in the learning process. As a result, multimedia instruction turns into watching movies. Multimedia instruction, therefore, must be used at the right moment to prevent teachers not to hurriedly show their own superb production skills to students. In other words, the contents in courseware are demonstrated by teachers from beginning to end within a very short time and dumped to students very fast, and finally students only admire teachers, but do not learn the real knowledge after class.

7. How to reasonably, better use multimedia instruction and improve the quality of teaching

First, it is necessary to update teachers' educational ideas and improve teachers' skills in many aspects. With the development of information-based instruction, people gradually realize that education technology is not only a new teaching method, but more importantly it requires teachers to have a new concept of students, and new teaching and learning theories. Teachers are the direct users and beneficiaries of multimedia instruction, and the final teaching result and effect are directly affected by their attitude towards the multimedia aided teaching.

Second, some new teaching technology should never be used for only chasing after new technologies or under the impact of the new technologies applied by other schools. Good results are difficult to obtain if teachers only fear of lagging behind others and scramble for new technologies. Actually, that a complex technology is used in teaching does not necessarily mean that the teaching quality and effect can be improved.

Third, the key problem in teaching lies in whether the complex relationship between educational technology and teaching process and the use of educational technology is in accordance with characteristics of subjects is really understood by educators. At present, multimedia aided teaching in classroom have not been really understood and accepted by most teachers, and many teachers are forced to use multimedia aided teaching or think the use of multimedia instruction saves more time and energy. The courseware, which is made with great efforts, can be used repeatedly, so as to play an effect of "once for all". Under the effect of this mentality, multimedia tools are not fully played in teaching. Education practice has proved that the fundamental changes of education can't happen only with the intervention of tangible technologies (i.e. multimedia means). The improvement of the effect of multimedia instruction in classroom needs the close

cooperation and careful design of the technologies in two senses. Emphasis must be laid on the combination of the improvement of technology and teaching skills with the change of educational ideas, rather than just raising the level of technology. Multimedia for aided teaching in classroom must be understood as not only a new communication tool to be used in education, but also a new wisdom tool and idea to be added, and simultaneously teachers come to realize a new learning revolution is contained in it. Today, the application of multimedia instruction is strongly advocated, but the development toward extremes is necessary to prevent, and otherwise an opposite effect may be produced. Theoretically, multimedia instruction can be used in almost all the courses. However, its application is unnecessary for every course and class in terms of the actual situation, and some teaching contents seem to be more practical and effective if multimedia instruction is not applied.

Fourth, strengthening the multimedia skills of teachers is the premise to improve the level of multimedia classroom teaching. Teachers are required in the use of multimedia technology to possess some skills for controlling a good classroom atmosphere. Once there is a technical failure to occur in the process of teaching, teachers will be admired by students if the failure is proficiently handled, and then the classroom learning atmosphere will rise.

Fifth, it is necessary to change the outdated and backward teaching ideas, and the student-oriented idea is always maintained in the process of courseware making. A teaching idea will promote teachers to correspondingly conduct, and the most advanced teaching means will mutate and become "old" educational tools once they are used by teachers with backward ideas. Therefore, in the process of promoting the modern teaching means, the old teaching ideas of teachers must be changed first, and teach must be always centered at students no matter whatever teaching methods are applied. Specifically, the principle guided by teachers and centered at

students is necessary to follow in practice; teachers must control multimedia tools and integrate their own advanced teaching ideas, experience, and methods into multimedia means, thus giving full play to the advantages of advanced means. Only in this way, multimedia means are likely not to become decorations and the new weapons of the "old" education.

The superiority of the modern technology can be felt by most teachers through observation, so that teachers are full of curiosity and have the enthusiasm for the use of the teaching means. On this basis, teachers can be trained in the use of these tools in good time, they can discuss related problems in courseware and will make questions instructed and explained by masters. Thus, the actual problem of teachers to feel unable to use multimedia instruction can be solved, and also an important way to improve the faculty is available.

8. Conclusion

From the current situation, multimedia instruction is a major trend of teaching reform, but also an important reflection to the application of computer to the field of education. A lot of money and manpower have been spent by many institutions of higher learning in China to improve the teaching environment, for the

purpose of boosting the level and quality of teaching. The function of multimedia instruction can't be truly understood and the expected effect will not be achieved, if emphasis is only laid on the external conditions and superficial understanding. Therefore, the shortcomings of multimedia instruction must be constantly improved, to carry forward merits and make due contributions to the educational reform of the information age.

References

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