

Try to talk about the relationship between the teaching design experts and the subject teachers in the multimedia courseware

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Abstract: This paper starts with the current development pattern of multimedia courseware, and discusses about the respective roles and work of the teaching design experts and the subject teachers in the multimedia courseware, aiming at the reasonable relationship of teaching design experts and the subject teachers in the multimedia courseware carries on the thorough analysis.

Introduction

Multimedia courseware is widely applied in the teaching program. But the multimedia courseware which are made nowadays still exist some problems. The editor analyzes and induces them, finally draws the conclusion that it to a large degree of the insufficient reasonable teaching designs, especially the situational design, activity design and the interaction between teachers and students in the teaching design. All these are because of the insufficient attention and do not play the roles of the teaching design experts, the disconnection of the subjects and the courseware development, the inadequate communication between the teaching design experts and the subjects teachers. Then, the teaching design expert, as the principle part of the design and development of the multimedia courseware, in which kind of relationship between the subject teachers and assume which kind of the respective job, can they exploit high quality multimedia courseware?

A The relationship between the teaching design experts and the subject teachers in the multimedia courseware

1 The form of simple cooperation between the teaching design experts and the subject teachers.

In the making process of the multimedia courseware, according to the different subject characteristics, the producer develops the different template of multimedia courseware. The better teams are the corresponding teaching design team, the art design team and the integration team. The teachers need to write the corresponding script, after finishing the making process of the multimedia courseware, we will organize the experts to check and accept them. The concrete realization of these work are relied on the people who are the specific staff of some schools or some students who have the strong point to do the part-time job. In the making process of the courseware, the makers and the teachers will have some communication.

2 The form of shortage of teaching design, the technicians do all the work

Another type in not a few schools, the teachers just responsible for providing the teaching contents and the corresponding materials, such as the concrete contents of every chapter and section (the teaching aims, the key and difficult points, the exercises after class, the answers and so on.), the

learning resources (the expand learning materials, the relevant resources of the pictures and sounds), then hand them to the corresponding technology workers to realize them. In the process of it, all the course frames, the presentation of every knowledge point, the evaluation and so on, all these will be done by the technology workers, some will even hand them to the corresponding companies to finish. The technicians generally just responsible for the technical realization of the courses and do the simple designs according to their own understandings. Some teachers think that the more the contents and resources, the better, but take less consideration about the learning conditions, the design of learning activities, the interaction between teachers and students and the evaluation of students. Finally the courses just like the electronic books.

3 The form of the close cooperation between the teaching design experts and the subject teachers

In the design and development of the multimedia courseware, there are also some successful examples of the close cooperation between the teaching design experts and the subject teachers, they finish their work well and guarantee the quality of the multimedia courseware. The following passage will elaborate their roles and work.

And what roles do the teaching design projectors and the subject teachers pretend in the making process of the multimedia courseware?

B The roles and work of the teaching design experts during the making process of the multimedia courseware

The so-called teaching design experts, are the people who have the specialized knowledge in the field of teaching design. The teaching design experts have the in-depth knowledge of the multimedia courseware, they have the systematic and informational teaching design theories, master the study theories and teaching strategies and apply them to the real teaching. They learn how to fully use the application techniques to meet the users' requirements of all the learning environment and found a mixed learning solution. Their major work is using the advanced education theory, study theory and the spread theory, basing on some design principles of the multimedia courseware to analyze, organize and design the courses. This is the key point to determine the quality of the multimedia courseware.

The multimedia courseware has different models, typically are the personally, cooperatively and the interactively. The design point of every model is different, but whether which kind of model, we think, the teaching design experts at least pretend such roles in the making process of multimedia courseware.

1 The designer of the multimedia courseware structure

Macroscopically, the teaching design experts use the system approach to design the structure of the multimedia courseware, generally it is presented by the structure chart. The basic structure of the multimedia courseware includes the content organization, the manifestation mode design, the analysis of the learners' learning demand and the confirm of the learning style, the design of the learning content form fit different learning styles learners' cognitive interest, the design of the learning strategy, the select of the teaching and learning mode, the organization and design of the teaching activity, the design of the learning environment, the design of the evaluation mode and so on.

On the structure, people carry on the designs about the navigation, interaction, learning support system, learning control system and so on. Navigation design is the general mode taken by the construction of the multimedia courseware, and also the effective strategy to solve students' stray problem. Whether it takes page link, menu system, navigation bars or knowledge map, they all need to design; the interaction between teachers and students is a very important link, to choose which

ways to promote interaction in every subject needs to be considered; artist design mainly aims at the whole style, interface design, teaching artist of the multimedia courseware. Once determine the basic frame of the multimedia courseware, we can further determine the multimedia course is consisted by which modules and how these modules consist. From this level, the teaching design experts make a whole and systematic scheme design of every link of the multimedia courseware, it can also be said the plan for himself, the subject teachers and the technical workers.

2 The designer of the multimedia courseware

The teaching designer is not just request the students simply and mechanically recall information or do the simple principle application, but helps them show the meaningful action and solves the real problems. Microcosmically, the teaching design experts make the design aims at every knowledge point, learning situation, learning activities, learning resources, the corresponding practice feedback and the technical presentation of the learning evaluation content, choose the most proper presentation way and consider whether the designing content can realize technically. From this level, they consider how to use the most proper technique to create situations to show the knowledge and help the students to solve the problems, they are the refining design of the macroscopic multimedia courseware structure.

We hold the idea that in the teaching design of multimedia courseware, although the teaching design experts can't replace the subject teachers to design the specific learning content, they should obey the following orientations when draw up plans: as students as center and create the meaningful learning situations; the resources as foundation, the activities as orientation, design the learning activities based on the resources; the tools as support and provide the friendly learning environment for the students.

3 The communicator and coordinator of the course design, teachers and the technician

The teaching design experts have the deep research and abundance experience in the teaching design field, but there are many subjects in the teaching field, the corresponding experience is not enough, part of the schools' multimedia courseware designers don't have the front-line teaching experience. In addition, they probably do not have the deep research in the part of the technical realization. So, they must coordinate the relationship between themselves work, the subject teachers and the technician, make the fully communication with the subject teachers and the technician to ensure the course design implemented smoothly.

So the teaching design experts are the whole planners of the course plan, the communicator and coordinator of the course design, teachers and the technician. They have the deep research on the goal reflect, the media presentation of the content, the way of the learning evaluation, and they can put forward a lot of creative solving schemes, but for the specific teaching goals, teaching contents, learning evaluation, hand them to the subject teachers to deal with.

C The roles and work of the subject teachers during the making process of the multimedia courseware

As the subject teachers, they are the front-line teachers that making the specific teaching tasks. Most of the subject teachers know little about the multimedia courseware, they are not familiar with the application of education theory, learning theory and the teaching technique in the making process of the multimedia courseware, but they have the deep learning of the subject knowledge, they know the key and difficult points and the corresponding effective teaching styles. As the front-line teachers, they have the rich teaching experience, they have the incomparable advantage of the teaching design experts on the grasp of students situation, the organization of the subject knowledge, the presentation of the specific knowledge points. In the making process of the

multimedia courseware, they are mainly provider of the teaching content and teaching resources, the assistants of the teaching design, the powerful participants of the multimedia courseware script writing.

The provider of the teaching content and learning resources

The multimedia courseware contains what scientific and reasonable content, these contents can be divided into which teaching units, what the teaching units and the knowledge points' learning aims are, what the corresponding key and difficult points are, how to analyze every unit's knowledge, how to organize these knowledge, what the effect of the bellwether and subsequent of the knowledge, every knowledge point needs which kind of the learning resources and take which ways to do the corresponding evaluation, these are all the subject teachers' responsibility. At the same time, the teachers also need to provide the abundant and practical learning resources, it's good for the students to learn the basic resources. Abundant teaching resources and present them properly can make the effective study. The age of the multimedia has plenty of resource presentation styles, such as the version, picture, animation, video, virtual reality and so on, it based on the needing to do the reasonable choose. The resources provided by the teachers not only accurate and scientific, but also reflect the academic frontiers. Nowadays, the multimedia courseware provides better man-machine interactive environment, so we not only provide resources or design activities for students, what's more, treat the students as the collectors and interpreters of information, fully express their initiative and autonomy.

The assistants of the teaching design

Although the teaching design experts have the professional knowledge in the teaching design field, familiar with the application of teaching and learning theory, they are good at putting forward some creative solutions, they know little about the subjects' teaching characteristics and regulars. So whether the macro planning of the course structure or the level of the micro design, they all need the subjects' powerful assist. Only by this way, the designed multimedia courseware can be more targeted and fit the needs of subject teaching. Especially the teaching design experts' teaching design orientations which mentioned before, more needs the teachers' assist to achieve it better.

The grasper of the situation design and knowledge presentation

The teaching design experts make the designs of course plan on the micro and consider how to use the most proper technique to design situation and present knowledge, but whether the presentation way of the designed situation and knowledge is good for the students' knowledge construction and the ability of solving problems, the subject teachers have the more right to say.

The refiner of the teaching experience

The subject teachers do the front-line teaching job for a long time, they accumulate abundant experience on the learners analysis, materials processing, the grasp of the teaching contents, the choose of the teaching methods, the selection of the learning resources, the teaching management and so on, they can deal with these problems that appeared in the teaching process easily. Their experience refining and reflection can make the positive function for the further education and important significance for their own professional development. This class teaching experience is used for the reference of the multimedia course's design and process. So, on the basic of respecting the teaching rule, the refining, reflection and creation of the subject teachers' teaching experience, is the important guarantee of the multimedia course' meaningful design and development.

The powerful participants of the multimedia courseware script writing

The writing of the multimedia courseware script reflects the course's teaching design idea, refines the structure of the course's whole knowledge points. It can guide the material production stuff to organize the teaching contents, it is also the programming reference of the software

developers. In the processing of writing the transcript, the workers should be familiar with the teaching object, make clear of the learning goals, analyze the teaching contents, reflect the teaching design, emphasize the structure design, choose the teaching media, especially the key points presentation, supporting points setting, difficult points resolving. The multimedia courseware script better accomplished by the cooperation of the head of the multimedia courseware development, the teaching design experts and the experienced subject teachers-the teachers work on the teaching and cooperation for many years. In most cases, the subject teachers do the actual writing-they know the internal links between the subject knowledge points, and understand the development frontier of the subjects, also the knowledge accumulated by the long time teaching, so they are the powerful participants of the script writing.

D The teaching design experts fully cooperate with the subject teachers and make the high-quality multimedia courseware.

From the above analysis, in the design and development of multimedia courseware, the roles and work of the teaching design experts and subject teachers are not independent, both of them have the unique advantage, but at the same time, the part of their work mutual penetration. They are based on the cooperation between the teaching design experts and the subject teachers, the whole course's making process is also the cooperation of the teaching design experts, subject teachers, the technical stuff and so on. So during the making process of multimedia courseware, the teaching design experts and subject teachers are not independent, their function can not be replaced by each other, only when they act their roles well, do their jobs well, work together, can they make out a great course design and make the high quality multimedia courseware.

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