The Need for Collaboration in the Production of CAL Materials

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Isn't IT Over Advertised?

The other day a colleague of mine asked "aren't IT based courses over advertised?" The question made me think and here are some possible answers. First, I think there exist some really good examples of good use of IT in teaching and learning. The problem is that you have to know a subject very well to appreciate the new ways of explaining it. If you don't know the subject you will probably be looking at superficial aspects like nice pictures, sound and the rest. Too many programs have been developed by computer fans who want to demonstrate all the possibilities that are there. Too few programs have been written by teachers who have started by asking themselves "What are the most difficult parts for my students to understand? Can I use IT to overcome the barriers?"

Like Chinese - You Have to Learn the Language

In a way IT is like Chinese - if you want to make your own judgments you have to learn the language so you can talk with the natives and get their views. This takes time and effort. Some programs and courses have been developed that merely consist of putting a textbook on the computer and providing it with hyperlinks. Most of us prefer to read a text in a book and therefore these attempts are a step backward. On the other hand I think it is natural that we start by using the new medium in the traditional forms. If you want a good example of how a text can be enhanced by computer look at Microsoft's Encarta.

The Road Is the Goal

Most teachers have very ambitious goals for their applications. They want the finished product to be shared by the rest of the world. But when it comes to the development they are not that keen on looking to what others have already done; it seems to be that other work disturbs the project. There are two well-known phrases that illustrate the situation: "Not invented here - not used here" and "Reinventing the wheel". Why does IT seem to happen over and over again? I think one explanation is that the road to the goal is more important than the goal itself. We are interested in learning new techniques, and so it does not help that others have already written an application which is suitable for our goal. When we know how to do it the goal loses its glory and we do not finish the product by developing the finishing touch - e.g. making sure the product runs on other computers; and the manual is very often forgotten. When these are forgotten the marketing value is fairly low. There are alternatives: if we understand the reasons behind the present situation it is possible to find other ways for the development of new teaching material. Very often the development of a whole course is too much for one individual - there is simply not enough time and money. However, a piecemeal approach to courseware development leads to pieces which are often not interesting enough for others to take up. To make all our small

puzzle bits interesting they have to fit in the same puzzle and we have to cooperate about the overall landscape and set common rules for the user interface. Through cooperation we can put value in all the different pieces. It is only through cooperation of a kind that occurs all too rarely that the individual contributions can be made reusable and valuable.

To this picture we have to add two bits of information. Most teachers want to add something of their own to their teaching. Is that possible with the new IT material? If not I am afraid only a few will use it. Therefore the metaphor with the puzzle perhaps should be with Lego bits: parts that can be reused in many different combinations, some of which the original author has never thought of.

Why Do So Many Teachers Like to Write their Own Teaching Material?

There are many answers to this but here I only want to point to two: to have full control of the teaching situation and to be able to add a line to their CV. By using Lego bits we can preserve some of the control. To tackle the second we have to realize that a tiny Lego bit used by many others could be as good a line in the CV as lecture notes used only by the author. For this to happen we have to honour the copyright of our colleagues better, and the funding bodies have to change their views when asking for something new and original for handing out money. They have to look at the effectiveness of the products when they are in use rather than to the originality of the application.

A better understanding of the conditions necessary for producing effective IT materials could contribute to a better situation tomorrow. The money is there, the staffpower is there, and the tools do exist.

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