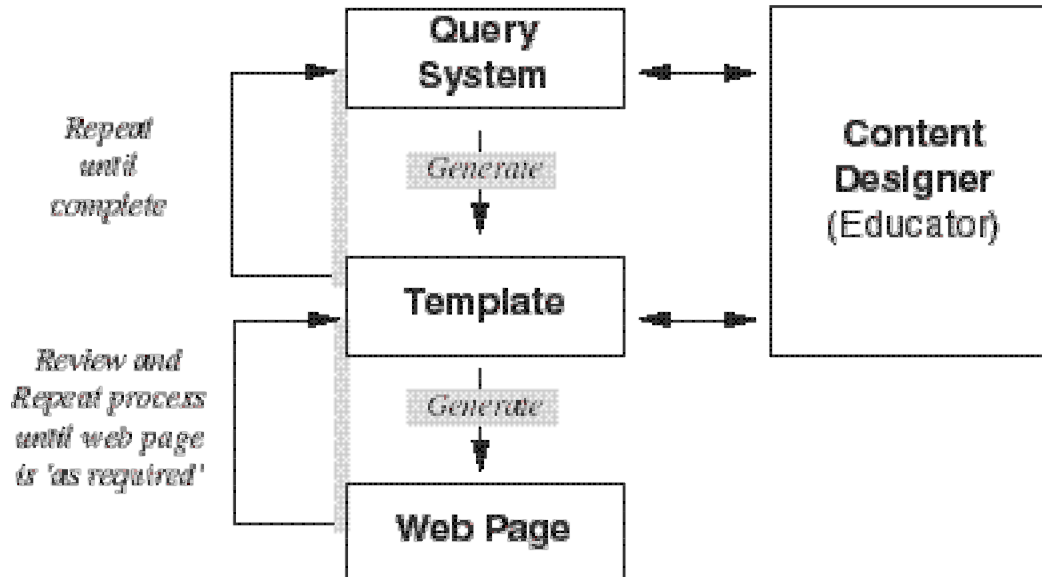


Many universities are now offering their distance learning programs through electronic media, and the application of online education in tertiary institutions is a reality. The relevance of today's technical resources such as interactive multimedia, computer-based instruction and the Internet and World Wide Web has emerged, offering flexibility, adaptability and student self-management (Jones and Jo, 1998). Tertiary education is now far more accessible, convenient and achievable than it has ever been in the past. Online education has the potential to become one of the most accepted forms of education for today's student population.



**Figure 1: Initial stage – Web page design using the template generating system**

With past reports of either reluctance to accept new technologies, or new systems being implemented using old conceptions (Snyder, 1996) the use of good quality instructional material is all the more relevant. Interactive multimedia can be enhanced by the use of easy-to-use, flexible design programs or systems that put the content designer in control. In general, university lecturers and schoolteachers have good practical experience on teaching methods. The concept of using an interactive template generating system (see figure 1) for web page design, harnesses their knowledge and experience. The content designer is actively involved in the production of his/her own course program, bringing the wisdom of years of experience that cannot be accurately dispensed by a pre-designed WBL program which may or may not fit the requirements. This personalised approach can ultimately provide a better sense of belonging and acceptance of the new technology.

### 3. CONCEPTUAL MODEL OF DYNAMIC WEB-PAGE DESIGN

The basic structure of the initial design stage is represented in Figure 1, which shows the interaction between the content designer and the query system leading to template generation. It is possible for this procedure to be repeated many times. Once the template is produced, all that is required from the content designer is the input of information. However a two-way arrow has been used as the content designer has the opportunity to change data during the 'preview and repeat' process. A Web page is generated for 'preview' from the information gathered and again this procedure can be repeated many times until the final Web page is approved and produced, see Figure 2.