

**A FRAMEWORK FOR GOOD PRACTICE FOR
DEVELOPING AN EDUCATION PORTAL
FOR PRIMARY EDUCATION**

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ABSTRACT

Rapid development and increasing convergence of ICT has stimulated the use of these technologies in education. An online portal which generally represents a resource gateway has been designed in such a way that it selectively filters and organizes useful, relevant information. It allows users to easily navigate towards areas of interest and thus fosters effectiveness and efficiency in Internet use. A well planned education portal allows for the aggregation of relevant educational features and facilities. This project focused on identifying a representative sample of these education portals. I have evaluated the services they offered, and tried to distil a model that can be used as an example of a good education portal. Hence the main objective of this project is to attempt to review and compare existing education portals and suggest a framework for good practice for developing an education portal for primary education that can provide a broad base of services. However, I have to admit that my area of study was restricted to only those education portals that offered free services without any subscription or registration.

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A FRAMEWORK FOR GOOD PRACTICE FOR DEVELOPING AN EDUCATION PORTAL FOR PRIMARY EDUCATION

1. Introduction

A key feature of the ongoing growth of the Worldwide Web has been a proliferation of web portals that focus on supporting school education. While many education portals require subscription and registration, there are large numbers of education portals that deliver services free of charge to anyone with Internet access.

However, it is not a general practice for a primary school in Malaysia to develop its own portal as the school administrator will have to face with budgetary constraints. Lack of technical expertise and human resources combined with the demands on its computing infrastructure will also made it very difficult for a primary school to develop its own portal. The school needs an easy-to-use, scalable, reliable and cost effective computing environment, that requires minimal training and administration that enables deployment of its functionality for student accessibility. My project is to focus on identifying a representative

sample of these sites, describing the services that they offer, and come out a model that is appropriate to primary education.

Globally, the use of ICT to enhance the efficiency and effectiveness of education systems has been very active. The reasons for the active use of ICT in education are: First, the technologies offer extraordinary potential functionality that can support and improve children's ongoing learning. Second, it has been stimulated by a series of problems that face education systems internationally such as the crisis of confidence in traditional approaches to education and the ability of traditional education to provide access to large number of students.

Inevitably, rapid development and increasing convergence of ICT has stimulated the use of these technologies in education. An online portal generally represents a resource gateway, which has been designed in such a way that it selectively filters and organizes useful, relevant information. In this way, a portal allows users to easily navigate towards areas of interest, as opposed to having to 'surf' the Internet in a random and less focused manner. In this way, portals foster effectiveness and efficiency in Internet use. A well planned educational portal should allow for the aggregation of relevant educational features and facilities.

One of the most immediately obvious strengths of Internet technologies in a converging environment is the capacity to provide immediately up-to-date resources to large numbers of learners easily and relatively cheaply. Changes

made to resources can become immediately available to students without incurring major additional distribution costs. These trends are already becoming increasingly important in a world where curriculum needs to be adapted and updated continuously.

As an extension of the above strength, Internet technologies also support use of resources that combine more than one medium. The ability to create multimedia resources - combining audio, graphics and images, and text - is a tremendous potential strength.

An additional benefit that Internet technologies can bring to designers of online learning resources is the huge resource base that resides on the Worldwide Web. This resource which may be with little or no educational value, but, if harnessed effectively by educators, it can become a very useful resource. This might happen, for example, through judicious use of links to resources on the Web or by setting learning activities that demand learners to make their own selective use of this resource base.

The increasing viability of the Internet has helped address the needs of users to access information and services via the web. With the emergence of the portal, a web site that provides organized access to the Internet through the

aggregation of content and functionality, the delivery of a set of services tailored to the needs of a particular community is realized.

The key attributes of a portal are:

- Services Driven Network.
- Universal access by anyone, anywhere, anytime on any device.
- Simplified interface for all members of the education community.
- Personalized content.
- Customizable value-added services.
- Ease of use and constant availability.
- System maintenance and administration are managed by IT specialists and are transparent to the user.
- Scalable infrastructure providing high levels of service quality.

The emergence of the portal is also changing the dynamics of the IT environment by bringing context to the Web. The portal, a Web site that helps provide organized access to the Internet through aggregation of functionality, provides a set of services tailored to the needs of a particular community. An *enterprise information portal* might assist employees of a particular company to access order scheduling information, customer databases and decision support data. A *consumer portal*, such as Yahoo! can be tailored to the needs of an individual, providing simple access to Web sites that the user frequently visits.

An *Education Portal* enables users to go immediately to information and applications tailored to their educational needs.

1.1 Benefits of an Education Portal

- The school can acquire access to web-based computer applications that are either free or by paying a monthly fee with an EduSP (Education Service Provider) who has licensed the software and arranged for the computer system to run them.
- The student can access to applications such as on-line quizzes, library catalogs and research resources to which they otherwise would not have access. With a powerful, personalized portal, students will quickly and easily be able to locate and access the resources needed to complete coursework or projects.
- Teachers are able to access to otherwise unaffordable computer applications. Easy-to-use course development software will enable the development of courses for student learning on-line; quiz programs will allow the development of end-of-term tests which can be taken anywhere; and many administrative tasks will become easy to complete, thereby saving a teacher's valuable time.
- Education Portal solutions provide a great number of applications and services to ease the burden of school administrators. Among these will

be e-mail services, financial and budgeting packages, class-scheduling applications and student enrollment systems.

Research on individual learning styles suggests that students learn better when academic material is presented in their preferred learning style (Dunn & Dunn, 1992). Teachers can use education portals to guide students in the acquisition of curriculum-related knowledge, and to promote learning in ways that are more appealing and engaging to students. For example, Web portals with textual and visual components of digital images, drawings, sketches, and movie clips, may be more appealing to visual learners who think in pictures. On the other hand, the portal resources with auditory components, such as verbal instructions and musical clips, may be more appealing to auditory learners who think in sounds and learn through verbal associations. In utilizing education portals for homework assignments, students can leverage their preferred learning style as they explore, experiment with, and learn how to learn. This approach, to the acquisition of new knowledge, builds confidence and motivates students to further engage themselves in the learning process.

Another benefit of education portals is that they promote the development of multiple literacy skills early on in a child's education. Oseas and Wood (2003) define multiple literacies as media literacy, visual literacy, and information

literacy. In using education portals for inquiry learning, students can search for answers to their own questions in the context of the curriculum themes of the specific grade level. This process of learning not only broadens students' subject-related knowledge and promotes deeper understanding of the researched topics, but facilitates the development of visual and information literacy skills. Such skills are becoming increasingly important as students transition from elementary schools into more complex and demanding learning contexts of secondary education. Finally, the knowledge gained from inquiry learning can be formalized and shared through a web portal, thus extending the learning network to a virtual community of learners all over the world.

1.2 Scope and objective of the project and its possible outcome

As the project is to focus on identifying a representative sample of these educational portals, evaluating the services that they offer, and distilling an understanding of emerging best practice, I have to access to as many of these educational portals as possible. However, I have to constraint my area of study to only those educational portals that offered free services without any subscription or registration, and also try to include as many indigenous educational portals as possible.

The main objective of this project is to attempt to review and compare existing education portals and suggest a framework for good practice for developing an education portal for primary education that can provide a broad base of services.

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