

**A FRAMEWORK FOR SECONDARY SCHOOL
EDUCATION PORTAL**

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**UNIVERSITI UTARA MALAYSIA
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A FRAMEWORK FOR SECONDARY SCHOOL EDUCATION PORTAL

**A thesis submitted to the Faculty of Information Technology
in full fulfillment of the requirements
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ABSTRACT

The purpose of this research is to utilize Information Technology (IT) facilities and infrastructure to facilitate the teaching and learning system in Malaysia. This research aims to introduce an education portal framework as an online learning platform for secondary schools in Malaysia. The methodology applied in this research is Action Research method that includes data gathering process using case study and Expert Review technique. The framework developed from this research was established based on the identification of the key features and functions of an education portal system as put forward by previous researches and added features and functions as recommended by IT and educational experts. The framework was transformed into prototype system and tested among selected respondents to assess the perceptions of pupils and teachers on the prototype being developed. The study found that education portal framework is crucial to the Malaysian teaching and learning system in order to implement an online learning environment in schools. Pupils and teachers also agreed that the education portal is important to assist the teaching and learning system. Furthermore, in line with the reigning wired teaching and learning environment in the Malaysian education system, the education portal framework is crucial in achieving the goal of online education in Malaysia. Thus, it is hoped that the framework established from this research can be used as a guide in planning and developing education portal solution.

ABSTRAK

Penyelidikan ini dilaksanakan bertujuan untuk menggunakan sepenuhnya kemudahan dan infrastruktur Teknologi Maklumat untuk membantu meningkatkan prestasi sistem pengajaran dan pembelajaran di Malaysia. Objektif utama penyelidikan ini adalah untuk memperkenalkan rangkakerja portal pendidikan yang boleh dijadikan sebagai platform untuk melaksanakan pembelajaran dalam talian di sekolah-sekolah menengah di Malaysia. Metodologi yang digunakan di dalam penyelidikan ini ialah *Action Research* yang turut melibatkan proses pengumpulan data menggunakan pendekatan kajian kes dan ulasan pakar (*Expert Review*). Rangkakerja portal pendidikan yang dihasilkan adalah berdasarkan kepada ciri-ciri dan fungsi-fungsi penting portal pendidikan yang dikemukakan oleh penyelidikan terdahulu serta yang dicadangkan oleh pakar dalam bidang Teknologi Maklumat dan pendidikan. Rangkakerja ini diterjemahkan ke dalam bentuk sistem prototaip dan diuji terhadap sekumpulan responden yang terdiri daripada pelajar-pelajar dan guru-guru sekolah menengah di mana kajian kes ini dilaksanakan. Ujian ini dijalankan bertujuan untuk mengetahui persepsi pelajar-pelajar dan guru-guru terhadap prototaip yang dibangunkan. Penyelidikan ini mendapati bahawa rangkakerja portal pendidikan ini adalah penting dalam membantu kaedah pengajaran dan pembelajaran di Malaysia sejajar dengan perkembangan pesat persekitaran elektronik. Justeru, adalah diharapkan rangkakerja portal pendidikan yang dihasilkan melalui penyelidikan ini dapat digunakan sebagai panduan di dalam perancangan dan pembangunan pendidikan dalam talian di Malaysia.

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LIST OF ABBREVIATIONS

ACL	:	Access Control List
AR	:	Action Research
CAI	:	Computer Aided Instruction
CEI	:	Computer in Education
CEIPP	:	Computer in Education Pilot Project
DHTML	:	Dynamic Hypertext Markup Language
HTML	:	Hypertext Markup Language
HTTP	:	Hypertext Transfer Protocol
ICT	:	Information Communication Technology
IS	:	Information System
ISP	:	Information Strategic Planning
IT	:	Information Technology
MOE	:	Ministry of Education
PDF	:	Portable Document Format
NITA	:	National Information Technology Agenda
XML	:	eXtensible Markup Language

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CHAPTER 1:

INTRODUCTION

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internal user
only

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