

EVALUATION OF EDUCATION SYSTEM DESIGN USING THE SOCIO-CONSTRUCTIVIST AND SOFTWARE HEURISTIC APPROACHES

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by

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TABLE OF CONTENTS

ACKNOWL	EDGMENT	II
TABLE OF O	CONTENTS	IV
LIST OF TA	BLES	IX
LIST OF GR	APHS	X
LIST OF FIG	JURES	XII
ABSTRACT		
CHAPTER	R 1 INTRODUCTION	1
	luction	
	tives	
	em statement	
1.5 Signif	icance of research	2
	odology	
	t Summary	
i., icepoi	· oannary	
CHAPTER	2 LITERATURE REVIEW	7
	se	
	ach	
pp.	sis	
2.3 Analy 2.3.1	Pedagogical Issues in Learning	
2.3.1	2.2.1.1 Leter destination	7
	2.3.1.1 Introduction	7
	2.3.1.2 Behaviorist learning theory	8
	2.3.1.3 Constructivist learning theory	10
	2.3.1.3.1 Characteristics of Constructivist Learning	18
	2.3.1.4 Socio-constructivist view of learning	22
	2.3.1.4.1 Characteristics of socio-constructivism	
	2.3.1.4.1.1 Multiple Perspectives	
	2.3.1.4.1.2 Goals and Objectives	
	2.3.1.4.1.3 Teacher's role	
	2.3.1.4.1.4 Metacognition	
	2.3.1.4.1.5 Learner Control	
	2.3.1.4.1.6 Authentic activities and	
	contexts/Primary sources of data	
	2.3.1.4.1.7 Knowledge Construction	
	2.3.1.4.1.8 Knowledge Collaboration	
	2.3.1.4.1.9 Previous knowledge construction	
	2.3.1.4.1.10 Problem solving	
	2.3.1.4.1.11 Consideration of errors	
	2.3.1.4.1.12 Exploration	
	2.3.1.4.1.13 Apprenticeship learning	
	2.3.1.4.1.14 Authentic Assessment	29
2.3.2	Evaluation Methods In Human Computer Interaction.	
	2.3.2.1 Observing and Monitoring	31
	2.3.2.2 Experiments and benchmarks	
	2.3.2.3 Interpretive	33

		2.3.2.4 Predictive Evaluation—Software Heuristics	
2.4	Softw	are heuristics and socio-constructivist view of learning	39
2.5	Learn	ing theory in Malaysian schools	40
2.6	Concl	usion	41
2.0	Conci	usioit	43
~~~	APTER	R 3 DESCRIPTION OF QUESTIONNAIRES: MENTS GATHERING FOR DESIGNING	
		ONAL SYSTEMS	40
3.1	Introd	uction	49
3.2	Hear (	Characteristics	49
3.2	3.2.1	User's level of experience	51
	3.2.2	Computer skills	
	3.2.3	Proficiency in English	51
3.3		Task Characteristics	52
3.4		Acceptability	
3.5	Practic	cal Acceptability	53
5.0	3.5.1	Traditional category	54
-		3.5.1.1 Reliability	
	3.5.2	Usability category	
		3.5.2.1 Easy to learn	54
		3.5.2.2 Efficient to Use	55
		3.5.2.3 Easy to Remember	56
		3.5.2.4 Few Errors	56
		3.5.2.5 Pleasant to use	57
3.6		priateness	
3.7		od of Delivery	
3.8		ionality	
3.9		nunication	
		No onscreen instructions.	
	3.9.2		
	3.9.3		
	3.9.4		60
	3.9.5		
	3.9.6		
	3.9.7		
2.10		Help text and error messages.	
3.10		y Layout	
		Organization of screen.	
		Screen layout	
		Usage of colour.	
3.11		Menu Navigation	
3.11	Novice	ım rigidityational issues	64
3.12		n Structure	
3.14		usion	
5.14	Concil	u510I1	00

		4 STATISTICAL ANALYSIS AND DISCUSSION	
OF F	RESUL	TS OF EVALUATION	67
4.1		uction	
4.2	Descri	ptions of Educational Systems	.68
	4.2.1	Educational System (1): University Malaya Online	
		Course-C programming	.68
		Educational System (2): CosToc-Relational Database Courseware .	
		Educational System (3): Learning Microsoft Word 2000	
		Educational System (4): Introduction to the Internet	
	4.2.5	Educational System (5): Hardware Systems	.70
		Educational System (6): Operating Systems Introduction	
4.3		ition of Computer Systems	.71
	4.3.1	Evaluation of University Malaya Online Course (C Programming).	
	4.3.2	Evaluation for Costoc Relational Database	.71
	4.3.3	Evaluation of Learning Microsoft Word 2000	
	4.3.4	Evaluation of Introduction to the Internet	.72
		Evaluation of Hardware Systems Courseware	
		Evaluation of Operating Systems Introduction Courseware	
4.4	Statisti 4.4.1	ical Analysis and Discussion of Survey Results	.74
	4.4.1	User Characteristics	
		4.4.1.1 Results	
		4.4.1.2 Analysis 4.4.1.2.1 User's level of experience.	
		4.4.1.2.1 User's level of experience	
		4.4.1.2.3 User's fluency in English	
		4.4.1.2.3 Oser's fluency in English	
	4.4.2	Goal/Task Characteristics	
	4.4.2	4.4.2.1 Results	
		4.4.2.2 Analysis	
		4.4.2.3 Discussion	
	4.4.3	Social Acceptability, Program Rigidity and	. 02
		Appropriateness of Navigation	
		4.4.3.1 Results	. 83
		4.4.3.2 Analysis	
		4.4.3.3 Discussion	
	4.4.4	Practical Acceptability	
		4.4.4.1 Results	
		4.4.4.2 Analysis	.87
		4.4.4.3 Discussion	.91
	4.4.5	Appropriateness	
		4.4.5.1 Results	
		4.4.5.2 Analysis	
		4.4.5.3 Discussion	
	4.4.6	Method of Delivery	
		4.4.6.1 Results	
		4.4.6.2 Analysis	
		4.4.6.3 Discussion	
	4.4.7	Functionality	
		4.4.7.1 Results	
		4.4.7.2 Analysis	04

		4.4.7.3 Discussion	
	4.4.8	Communication	
		4.4.8.1 Results	
		4.4.8.2 Analysis	
		4.4.8.3 Discussion	
	4.4.9	Display layout	
		4.4.9.1 Results	
		4.4.9.2 Analysis	
		4.4.9.3 Discussion	
	4.4.10	Lesson structure	
		4.4.10.1 Results	
		4.4.10.2 Analysis	
		4.4.10.3 Discussion.	
4.5		al Analysis of Survey Results	
	4.5.1		
		task characteristics, appropriateness of educational systems, rigid	
		educational systems and method of delivery issues	119
	4.5.2	Relationship of practical acceptability with appropriateness of	
		navigation, functionality, communication, lesson structure and la	
		issues in educational systems	
		Relationship between lesson structure and method of delivery	
4.6	Concl	usion	125
CHA	PTEF		
5.1		uction	
5.2		opment stages	
	5.2.1	Requirements Specification	129
	5.2.2	System Design	
		5.2.2.1 Conceptual Design	130
		5.2.2.2 Physical Design	
		5.2.2.2.1 System Architecture	
		5.2.2.3 Hierarchical Representation	
		5.2.2.4 Screen Sketches	
	5.2.3	System Development	.139
5.3	Concl	usion	.159
CHA	PTER	6 PROTOTYPE EVALUATION	160
6.1		uction	
6.2	Statist	ical Analysis and Discussion of Evaluation Results	
	6.2.1	User Characteristics	.161
		6.2.1.1 Results	
		6.2.1.2 Analysis	.161
		6.2.1.3 Discussion	.161
	6.2.2	Goal/Task Characteristics	.162
		6.2.2.1 Results	.162
		6.2.2.2 Analysis	.162
		6.2.2.3 Discussion	
	6.2.3		
	0.2.3	Social Acceptability, Program Rigidity and Appropriateness of	
	0.2.3	Navigation	. 163

		6.2.3.1 Results	163
		6.2.3.2 Analysis	
		6.2.3.3 Discussion	163
	6.2.4	Practical Acceptability	164
		6.2.4.1 Results	164
		6.2.4.2 Analysis	
		6.2.4.3 Discussion	165
	6.2.5	Appropriateness and Method of Delivery	166
		6.2.5.1 Results	166
		6.2.5.2 Analysis	166
		6.2.5.3 Discussion	
	6.2.6	Functionality	168
		6.2.6.1 Results	
		6.2.6.2 Analysis	
		6.2.6.3 Discussion	
	6.2.7	Display Layout	
		6.2.7.1 Results	
		6.2.7.2 Analysis	
		6.2.7.3 Discussion	
	6.2.8	Lesson Structure	171
	01210	6.2.8.1 Results	
		6.2.8.2 Analysis	
		6.2.8.3 Discussion	
	6.2.9	Socio-constructivist learning strategy	
	0.2.	6.2.9.1 Results	
		6.2.9.2 Analysis	172
		6.2.9.3 Discussion	
	6210	Students Overall Test Results In Windows 2000 Professional	
	0.2.10	Courseware	173
		6.2.10.1 Results	
		6.2.10.2 Analysis	174
		6.2.10.3 Discussion	
6.3	Conch	ision	
0.5	Concie	31011	
CHA	PTER	7 CONCLUSION	176
7.1		iction	
7.1	Critica	l Analysis	176
1.2	7.2.1	Comparison of Social Acceptability	176
	7.2.1	Comparison of Practical Acceptability	178
		Comparison of Practical Acceptability  Comparison of Lesson Structure and Method of Delivery	170
	7.2.3	Comparison of Socio Constructivist Learning Strategy Results and	179
	7.2.4	Students' Test Results in Windows 2000 Professional	180
	706	Possibilities of why students could not accept	100
	7.2.5	Possibilities of why students could not accept	101
		socio-constructivism	101
7.3	Conclu	ision	102
REFEI	RENCE		183

		6.2.3.1 Results	
		6.2.3.2 Analysis	
		6.2.3.3 Discussion	
	6.2.4	Practical Acceptability	164
		6.2.4.1 Results	164
		6.2.4.2 Analysis	
		6.2.4.3 Discussion	
_	_6.2.5	Appropriateness and Method of Delivery	
		6.2.5.1 Results	
		6.2.5.2 Analysis	
		6.2.5.3 Discussion	
	6.2.6	Functionality	
		6.2.6.1 Results	
		6.2.6.2 Analysis	
		6.2.6.3 Discussion	
	6.2.7	Display Layout	
		6.2.7.1 Results	
		6.2.7.2 Analysis	
		6.2.7.3 Discussion	
	6.2.8	Lesson Structure	
		6.2.8.1 Results	
		6.2.8.2 Analysis	
		6.2.8.3 Discussion	
	6.2.9	Socio-constructivist learning strategy	
		6.2.9.1 Results	
		6.2.9.2 Analysis	
		6.2.9.3 Discussion	173
	6.2.10	Students Overall Test Results In Windows 2000 Professional	
		Courseware	
		6.2.10.1 Results	
		6.2.10.2 Analysis	
		6.2.10.3 Discussion.	
6.3	Conclu	sion	175
	PTER		
7.1		ction	
7.2	Critica	l Analysis	176
		Comparison of Social Acceptability	
		Comparison of Practical Acceptability	
		Comparison of Lesson Structure and Method of Delivery	1/9
	7.2.4	Comparison of Socio Constructivist Learning Strategy Results and	
7.2	C1	Students' Test Results in Windows 2000 Professional	
7.3	Conclu	sion	182
REFEI	RENCE		183

# LIST OF TABLES

Table 4.1 - Summarization of Evaluation Results	126
Table 6.1 - Questions for evaluation of prototype	160
Table 6.2 - Students Test Results	174

## LIST OF GRAPHS

Graph 4.1 - Experience level in using educational systems
Graph 4.2 - Users' Computer Skills
Graph 4.3 - Users English Proficiency
Graph 4.4 - Goal and Task Characteristics of using Educational Systems80
Graph 4.5 - Social Acceptability, Program Rigidity and Appropriateness of
navigation in Educational Systems83
Graph 4.6 - Easy to learn86
Graph 4.7 - Learning Speed faster than printed materials
Graph 4.8 - Easy to remember86
Graph 4.9 - Pleasant to use87
Graph 4.10 - Errors in educational systems87
Graph 4.11 -Ease of error recovery87
Graph 4.12 - Experiencing system failure
Graph 4.13 - Appropriateness of Educational Systems with Curriculum97
Graph 4.14 - Preference of material in computer form instead of printed form99
Graph 4.15 - Are the systems teacher-directed?
Graph 4.16 - Acceptance of functionality of educational systems
Graph 4.17 - Communication problems in educational systems
Graph 4.18 - Appropriateness of Display Layout
Graph 4.19 - Lesson structure in educational systems
Graph 4.20 - Relationship of social acceptability with user characteristics
Graph 4.21 - Relationship of social acceptability with goal/task characteristics,
method of delivery, program rigidity and appropriateness of menu
navigation120
Graph 4.22 - Relationship between practical acceptability and functional,
communication and navigation problems and the appropriateness of
display layout in the educational systems
Graph 4.23 - Relationship between lesson structure and method of delivery of
educational systems
Graph 6.1 - User Characteristics
Graph 6.2 - Goal/Task Characteristics
Graph 6.3 - Social Acceptability, Program Rigidity and Appropriateness of
Navigation
Graph 6.4a - Practical Acceptability
Graph 0.4b - Practical Acceptability
Graph 6.5 - Appropriateness and Method of Delivery
Graph 6.6 - Functionality and Communication Problems
Graph 6.7 - Display Layout
Graph 6.8 - Lesson Structure
Graph 6.9 - Acceptance of Socio-constructivist learning strategy
Graph 7.1 - Social Acceptability of Windows 2000 Professional compared to other
Educational Systems
Graph 7.2 - Social Acceptability, Goal/Task Characteristics, Method of Delivery,
Program Rigidity and Appropriateness of Menu Navigation of
Windows 2000 Professional compared to other educational systems
Windows 2000 Professional compared to other educational systems
Graph 7.3 - Practical acceptability of Windows 2000 Professional compared to other
Graph 7.3 - Practical acceptability of Windows 2000 Professional compared to other

Graph 7.4 - Lesson Structure and the Method of delivery of Windows 2000
Professional compared to other educational systems
Graph 7.5 - Acceptance of Socio-constructivist learning strategy of Windows 2000
Professional180

## LIST OF FIGURES

Figure 2.1 - Hierarchical Representation of the categories in questionnaires	43
Figure 5.1 – Development Stages	
Figure 5.2 -Data Flow Diagram	
Figure 5.3 -System Architecture	
Figure 5.4 - Hierarchical Representation of Screens	
Figure 5.5 - Mainpage	
Figure 5.6 - Notes Mainpage	
Figure 5.7 - Chapter 1	
Figure 5.8 - Topic 1	
Figure 5.9 - Test 1	
Figure 5.10 - Evaluator Login Page	
Figure 5.11 - Student Evaluation Form	137
Figure 5.12 - Student's Profile Page	
Figure 5.13 - Student's Final Results Page	
Figure 5.14 – Mainpage	139
Figure 5.15 – Notes	
Figure 5.16 - Chapter 1	
Figure 5.17 - Topic 1	
Figure 5.18 - Topic 2	
Figure 5.19 - Topic 3	
Figure 5.20 - Topic 4	144
Figure 5.21 - Exercise	145
Figure 5.22 - Exercise 1	146
Figure 5.23 - Exercise 1 Answers	147
Figure 5.24 - Test	
Figure 5.25 - Test Reply Page	149
Figure 5.26 - Evaluator login	149
Figure 5.27 - Test Selection Page	150
Figure 5.28 - Evaluate test page	150
Figure 5.29 - Student's Final Marks	151
Figure 5.30 - Student's Profile	
Figure 5.31 - Self-Assessment Quiz	
Figure 5.32 - Self-Assessment Results	154
Figure 5.33 - Student Login Page	
Figure 5.34 - Student's Final Results	
Figure 5.35 – Error Page	156

#### ABSTRACT

This thesis is focused on designing a usable educational system for tertiary level students in Selangor and Klang Valley. To achieve this, the author has come up with a set of questions for testing the usability of existing educational systems used in University of Malaya and in some of the colleges around Klang Valley and Selangor. The questions in the questionnaires are prepared based on the socio-constructivist way of learning in the social context of Malaysian students and also the software heuristics. The results of the survey was analyzed statistically and discussed to serve as requirements for the design of a usable educational system for these students. A prototype is developed to test this new design with a group of students from University of Malaya. Results of the test are also analyzed and discussed to compare this new design with the existing educational systems used by the students. The results show that the new design is more accepted by the students. It is 100% socially accepted and 50% practically accepted by the evaluators. 80% of the students could agree to the lesson structure in the courseware and 100% agree that it is not teacherdirected. However, students are still not able to accept the socio-constructivist view of learning as the results of the test attempted in the courseware (34.25%) and also the results of survey (49.5%) showed a rather low acceptance.