Blog As a Learning Tool: UTP Perspective

by

Muhammad Hanif bin Mokhtar

6776

Dissertation submitted in partial fulfilment of
the requirements for the
Bachelor of Technology (Hons)
(Business Information System)

JULY 2008

Universiti Teknologi PETRONAS

Bandar Seri Iskandar

31750 Tronoh

Perak Darul Ridzuan

CERTIFICATION OF APPROVAL

Blog As a Learning Tool: UTP Perspective

by

Muhammad Hanif bin Mokhtar

A project dissertation submitted to the
Computer Information Sciences Programme
Universiti Teknologi PETRONAS
in partial fulfilment of the requirement for the
BACHELOR OF TECHNOLOGY (Hons)
(BUSINESS INFORMATION SYSTEMS)

Approved by,

(Savita K. Sugathan)
UNIVERSITI TEKNOLOGI PETRONAS
TRONOH, PERAK

July 2008

CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.

MUHAMMAD HANIF BIN MOKHTAR

ABSTRACT

These are shifting era in higher learning. The employment of ICTs and Higher Education System internationally will involve changes in the approach students be trained and also the way professors educate. The fresh professor's responsibility will stipulate an dynamic contribution and the use of extra possessions and latest strategies to focus to the emerging needs. They will also need a lot of support to succeed in this process.

Previous studies have revealed the lack of support in the resources' area for professors. Institutions will have to acquire a further energetic task giving amenities to them, so it will be very vital to work in the path of setting up recent resources database and facilitating the educators' admission to these properties.

To completely accomplish the combination of tools, well-organized guidance is essential. Professors have to be acquainted with how to put these new resources to good use, what constitutes good pedagogical applications of ICTs, etc. Preparation must answer to the actual requirements of professors, flexible and well promoted. To fully be aware of the current usage of resources in higher education, let's reassess several sources, produced by other professors or by university's excellence centres.

In this study I have decided to spotlight in the make use of of weblogs. I would like to evaluate this instrument, which was not primarily considered to be applied in educational environments, and discover its prospective for higher education. As a mutual learning tool, it allows scholar to network with other scholars or with educators, so it offers lots of possibilities. For example, students can utilize it as a bibliography as well as quotes manager or as a private research log, professors can make use of weblogs to provide complementary information and promote online conversation outside the class, and also to carve reflections regarding their personal education practice along with split them among others.

TABLE OF CONTENT

CERTIFI	CATION OF APPROVAL	i
CERTIFI	CATION OF ORIGINALITY	ii
ABSTRA	CT i	iii
TABLE O	OF CONTENTi	iv
TABLE O	F ILLUSTRATION	v
CHAPTE	R 1 INTRODUCTION	
1.1	Background Study	1
1.2	Problem Statement	1
1.3	Project Objectives	2
1.4	Scope of Study	2
СНАРТЕ	R 2 LITERATURE REVIEW	
2.1	Pedagogy in ICT Era	4
2.2	New Method In Teaching	5
2.3	Blogs for Education	6
CHAPTE	R 3 METHODOLOGY	
3.1	Research Methodology and Project Activities	7
3.2	Tools	2
CHAPTE	R 4 RESULTS AND DISCUSSION	
4.1	Questionnaire1	.3
CHAPTE	R 5 CONCLUSION	
41	Conclusion and Recommendation	Q

APPENDICIES

Gantt Chart	23
References	24

TABLE OF ILLUSTRATION

LIST OF FIGURES

Figure 3.1: Classical SDLC methodology	7
Figure 3.2: Enhanced Relationship Diagram (ERD) for blog	8
Figure 3.3: The blog front page	9
Figure 3.4: User's control panel	9
Figure 3.5: Sample of post – written by users	10
Figure 3.6: Interface to allow users write post	10
Figure 3.7: Database of blog	11
Figure 4.1: Q1 Results	14
Figure 4.2: Q2 Results	15
Figure 4.3: Q3 Results	16
Figure 4.4: Q4 Results	17
Figure 4.5: Q5 Results	18
Figure 5.1: 5 stages blogging process	19

CHAPTER 1 INTRODUCTION

1.1 Background Study

There is no suspicion that educational practices are being flooded with innovative technology options. The Internet has fashioned latest road and rail network modalities for individuals and companies. People can place their judgment on a Web site and request others to attach clarification. While user-friendliness to these new technologies and cautious uptake may be slowing integration into teaching strategies, learners in the present market might be, it is good to judge the following issue prior to taking on the choices offered to them: How will this up-to-the-minute tools boost education in my perspective?

This research intends to supply a concise foreword along with general idea to the event called blogging and provide extra choices for the mixing of blogging into pedagogical practices for everyone. It will try to grant some hypothetical foundation ideology and guiding principle for put into practice and will summarize a pedagogical approach on hand to develop reflective scholarship in the course of the use of blogs.

1.2 Problem Statement

Knowledge sharing is very essential for today's world, thus encourage everybody to be starting a blog. However, this culture is hardly practice by UTPians. Why is that blogging phenomena didn't affect those students of high technology university such as UTP? Is it because they refuse to blog? Why they refuse to blog for educational

purpose? Or is it because the lack of usability in current system? How about personal blog?

1.3 Project Objectives

The research on blog as a learning tool aims to discover the importance of blogging from perspective of UTP students and find relevance solutions to cater the refusal of them to do blogging. In the end of this project, hopefully UTP students can discover how this type of communications would help in their study and take benefits from a newly developed blog which would adapt the latest technology and fulfil the criteria needs by UTP students, which can be summarized as followed:

- 1. Assess knowledge sharing level based on number of participants
- 2. To explore blogging as learning space in UTP
- 3. Trial the blog site using students in real learning situations. They were observed using the blog, and then interviewed about their blogging. The findings are included in this report.

1.4 Scope of Study

The study conducted and that will proceed for the next few months will cover:

- 1. The existence of currently available E-learning system and measuring the extent of usage and its effectiveness towards users.
- 2. The identification of suitable features to be utilized in the construction of the blog.
- 3. The identification of processes and workflows involved in the blog.
- 4. Investigation of the literature on blogs in education
- 5. Study of the use of actual blogs
- 6. Creation of a blog hosting site for students to use, and then survey these students about their own blogging experiences
- 7. Creation of a blog site for the project as an exercise in collaborative research and writing

After some research, several sites have been identified in using the similar concept of using blog for educational purpose. The next step in identifying the main content of the blog is through obtaining the user requirements from the users. For this particular project, several tools have been identified appropriate in the construction of both the front-end and the back-end of the blog. Primarily, being a database, the main tool selected was of repository software; phpMyAdmin. This software would cater as the back-end of the blog, acting as a repository storing all necessary information and content of the whole database. The language used would be Sequel Statements or SQL. For the front-end, an open-source software has been adopted; Wordpress.

Once all tools have been selected, the focus would be on the development of the proper workflow of the processes in the blog. This would include sequence diagrams, process diagrams, knowledge architecture and others. This would be the main references when the actual construction of the database is to begin.

The construction of the blog system has completed in the second part of the project. It involved the insertion of all relevant contents and the preparation of the front-end (interface) in which users will use to navigate through the system. The time frame for this process would probably take two months during semester break to finish up the design phase and another two months of real testing - depending on issues and constraints.

The implementation of testing phase has been carried out to the prototype system. This is to detect any complications occurs in the system. If needed, necessary modifications will be done.

After that, students are requested to visit the site, register themselves as users and write a post or comment on available post. This is to encourage them to communicate with other students, share their thoughts and ideas as well as to capture new and extra knowledge contributed by other users.

CHAPTER 2 LITERATURE REVIEW

2. 1 Pedagogy in ICT Era

The exercise of ICTs and the union procedure to the education system will involve changes in the technique students gain knowledge of plus the method professors educate. The new-fangled student's role will require an lively contribution and the apply of additional resources and recent strategies to concentrate to the emerging needs. They will also call for a lot of support to do well in this practice.

According to prior studies done by Boud. D. (2001) shows the lack of support in the resources' area for students. Institutions will have to seize a responsibility providing conveniences to them, so it will be very essential to work in the way of setting up novel resources database and monitoring students' admission to these capitals. To completely realize the incorporation of technology, instruction is required. Students have to be on familiar terms on how to locate these new possessions to excellent exploit. Guidance be obliged to act in response to the actual requirements of professors, flexible and well promoted. To improve my understanding in the current usage in higher education, I had researched many sources.

In my research, I have decided to focus in the use of weblogs. I want to analyse this tool, which was not initially designed for use in educational environments, and explore its potential for higher education. As a collaborative learning tool, it lets student interact with other students or with professors, so it offers many possibilities. For example, students can use it as a bibliography and quotes manager or as a individual research

journal, professors might use weblogs to prepare complementary information and encourage online dialogue outside the class, as well as to write reflections about their own learning process and share them with others.

2.2. New Method In Teaching

The convergence development to educational system has countless implications at many levels. The most important one is the alteration in the learning model where students will be at the core of that practice. It definitely would give a huge impact because it implies amend in the conventional acceptance of learning process.

Benedito (2005) summarizes the way professors will have to teach as followed:

- Will get a new role as the organizer of the learning process.
- Will have to decide the students' workload
- Will be responsible for defining the common knowledge focus on order to configure the curriculum at an interdisciplinary level.
- Will need to promote tutorial activities
- Will need to set up assessment systems to evaluate students' progress in their learning process.
- Will need to use, elaborate and share materials, resources, etc.
- Will need to get students' involved and committed, both at individual and group level, in the development of their learning process.

Each and every one of these changes will involve a comprehensive redeployment of the education process: more institutional support to professors (Gibbs & Coffey, 2004), training adapted to their necessities (Berg & Hofman, 2005), and more access to resources and technological support. Keep in mind that, as Ramsden(2005) notes, the use of resources and new strategies does not imply an improvement in teaching quality. Reflection about the teaching approach is needed. Trigwell & Prosser (2004) link the professors' approach with the quality of teaching and the process of student's learning.

2.3. Blogs for Education

It may be bold, nonetheless when reviewing the enclosure of blogging strategies reported in schooling fields, the plan appears to be to supplement the education understanding and make available of an opening for students to transfer from outside to deeper levels of learning. Surface learning is characterised by the advance of the learner to comprehensive barely the lowest content required to congregate evaluation requirements, whether that is learning only what may be obtainable in a test or simply attending the completing activities (Rosie 2000). Conversely, deep learning is how learners stand back from an experience, seek out connections between concepts, and contextualise meaning (Rosie 2000).

Glenn (2003) discusses at length some of the uses of blogs by academics and scholars. He comments that some of the arguments in favour of blogging, cited by academics are the freedom of tone, opportunity to interact with diverse audiences, and the speed of feedback. Glenn's (2003) article provides numerous examples from academic blogs - the URL is cited in the references. If we outlook the blog as a compilation of short dissertation or cut up of thinking that centre on connections, we be able to begin to notice how the type of a study journal starts to brandish blow.

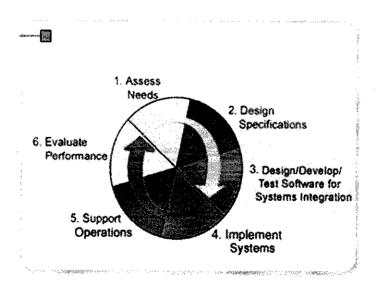
Mortensen and Walker (2002) believe the informality of the blog provided them with the opportunity to write about unformulated ideas and share them with others for comment, before proceeding with the formal publications of a academic papers. This could be described as a hybrid between journal, academic publishing, storage space for links and site for academic discourse. Both writers believe that the blog altered their online communication and influenced the wiring of their doctoral dissertations.

CHAPTER 3 METHODOLOGY

3.1 Research Methodology and Project Activities

Since there are many methodologies, the first challenge faced is to select which one to use. Choosing a methodology is not simple, because no one methodology is always best for this project. Before start selecting the methodology to use, there are six steps must be determined:

- 1. Assess the needs
- 2. Specify all the design specifications.
- 3. Design/develop/ test the blog for students' usage.
- 4. Implement the blog and invite the student to join
- 5. Support the operations of blog; actively participate as tutor
- 6. Evaluate the performance of students



(Figure 3.1: Prototyping methodology)

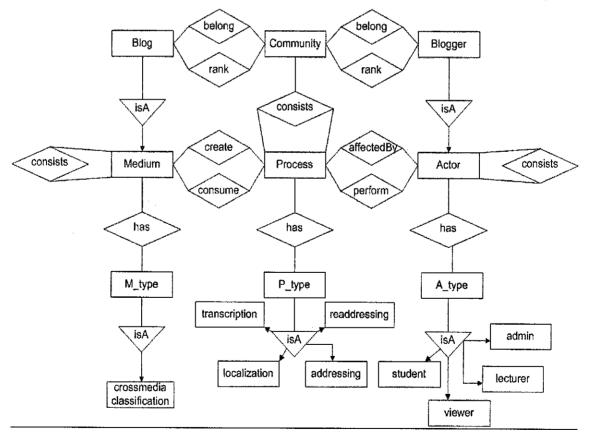
In this project, I had chosen prototyping approach to be implemented. Based on the time frame that I had, I divided this project to 4 phases as followed:

Phase 1

For this particular project, the challenges within the current E-learning in attracting students' intention to blog are examined and areas of improvement are to be identified. During this stage, a comparison with other existing E-learning on the Internet is done simultaneously. From here, the numerous attributes (mentioned in objectives) will be identified.

Phase 2

After collection of information and data is complete, the second phase of the project will begin with the development of a detailed workflow of all related gathered information and data linked to each other in an organized manner with the aid of diagrams (class diagrams, entity-relationship diagrams, enhanced ERDs and others).



(Figure 3.2: Enhanced Relationship Diagram (ERD) for blog)

Phase 3

The development of blog using open source (Wordpress) that is available for free on internet.

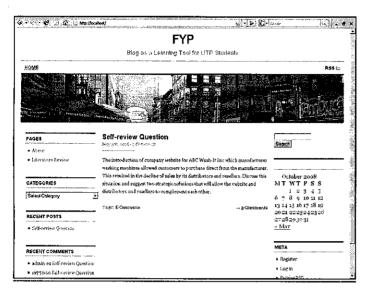


Figure 3.3: The blog front page

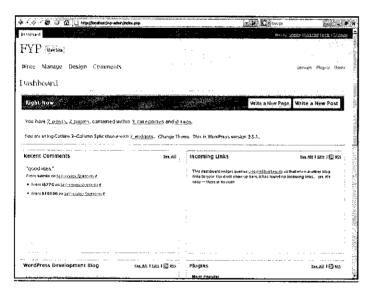
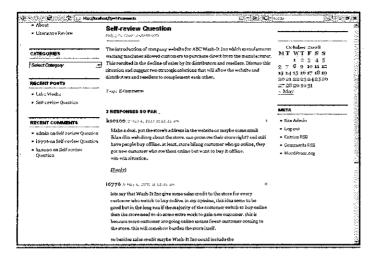
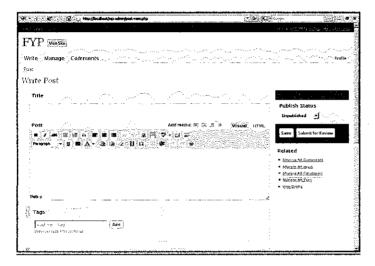


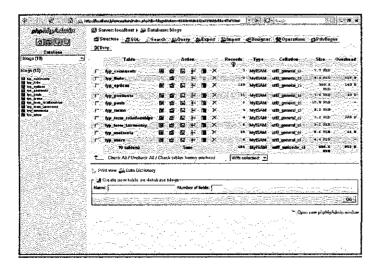
Figure 3.4: User's control panel



(Figure 3.5: Sample of post – write by users)



(Figure 3.6: Interface to allow users write post)



(Figure 3.7: Database of blog)

Phase 4

After the construction of database is completed, testing will be done on its functionalities and effectiveness. Testing phase will continue throughout this FYP 2. Once the final product is fully functional, real testing would be done to check the effectiveness of blog as a learning tool. Later, students are given few questions to find out their finding on the blog usage.

(Refer Gantt chart and Milestone in Appendix)

3.2 Tools

Phase 1:

- ✓ Mindjet Mind Manager Pro 6
 - o Development of needed knowledge/ mind maps.

Mindlet* MindManager* Pro 6

Phase 2:

- ✓ Microsoft Office Visio
 - o Development of workflow.
 - o Development of ERD, EERD and other diagrams.



Phase 3:

- ✓ Apache Server
 - o Serve as standalone server for blog development.
- ✓ Windows XP
 - o Operating system used for running database.
- √ Wordpress
 - o Serves as front-end (interface).
- ✓ phpMyAdmin
 - o Serves as back-end; central repository and DBMS.









CHAPTER 4

RESULTS AND DISCUSSION

4.1 Questionnaire

In order to fulfill certain objectives, this primarily relates to obtaining information crucial to the project, a questionnaire has been prepared as a method to do so. The following are the questionnaire objectives:

- 1. To know students' perspectives on using blog as a learning tool.
- 2. To identify the usage of available systems in UTP and its effectiveness among students.
- 3. To identify user requirements that is to be included in the blog.

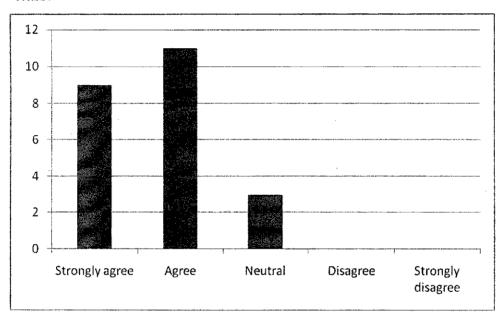
The questionnaires were distributed to the 113 students of the UTP, acting as potential users for the new E-learning system which is to be developed. After four days of distribution and collection of the questionnaires, out of 113 students, 23 (20.35%) have responded successfully (Figure 1); following are the results plotted in a graph.

The questionnaire prepared contains few simple questions which pertaining to the gathering information relating to current systems and tools being used, its effectiveness in fulfilling student's needs, and querying information preferred as k-sharing space.

Results

Out of 113 students, 23 (20.35%) have responded accordingly; requires at least. The following are the results compiled according to question.

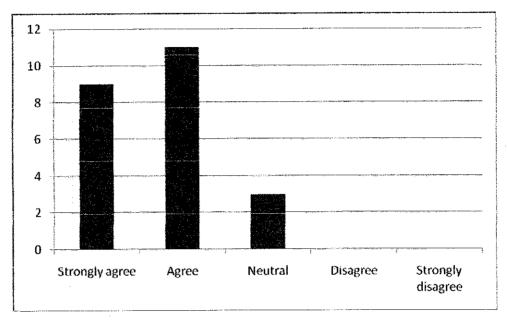
1. Do you agree that blog helps interactions among students enrolled in the same class?



(Figure 4.1: Q1 Results)

Out of the 23 respondents, 9 strongly agree that the blog helps interactions among students enrolled in the same class, 11 agree while 3 have no opinions. Majority believes that, students will intend to response for every issue, discussions and announcements made by their friends. Indirectly, they will build relationship by communicating with each other.

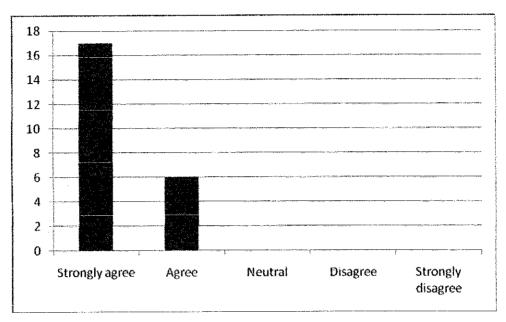
2. Do you think that the use of in-class blogs helps keep the students interested and motivated in learning?



(Figure 4.2: Q2 Results)

Out of the 23 respondents, 9 strongly agree that the use of in-class blogs helps keep the students interested and motivated in learning and 11 students agree, while 3 have no opinion. This is because; blog allows students to response to their lecturers in less formal way. A class with lots of participations will build a health environment thus encourages everyone to be more interested and motivated.

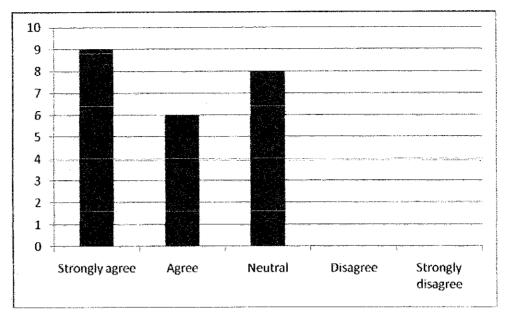
3. How do you think in-class blogging would give positive impact on learning effectiveness?



(Figure 4.3: Q3 Results)

As to the impact of in-class blogging on learning effectiveness, 17 respondent strongly agree and 6 agree that it is positive. According to previous questions, a positive environment with lots of participations and a strong relationship among students allows students to be more productive. Therefore, we could say that blog would positively improve the learning process.

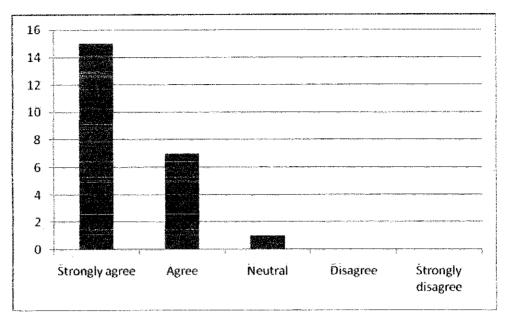
4. Would you read classmates' blogs if you are given a take-home assignment which is hard?



(Figure 4.4: Q4 Results)

When asked whether you will read classmates' blogs when a take-home assignment problem is hard, 9 respondents answer strongly agree while 6 agree and 8 have no answer. We found that most students will try to get some ideas from classmates when there are no sufficient clues to a problem. This is not limited to take-home assignment only. It also could be the test, revision and project discussion. As blog allows students to access it from everywhere and at anytime, blog will allows students to have discussion frequently.

5. Do you uphold the principles of respecting intellectual property and refuse to duplicate?



(Figure 4.5: Q5 Results)

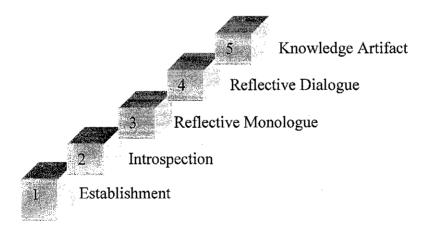
From previous question, the main concern among everyone is plagiarism However, when asked whether you uphold the principles of respecting intellectual property and refuse to duplicate, 22 responds positively (15 strongly agree and 7 agree) while 1 have no opinion. This shows good attitude of UTP students that they do not duplicate others' idea that are posted on their classmates' blogs.

CHAPTER 5 CONCLUSION

5.1 Conclusion and Recommendation

This document has offered the enclosure of blogs as a academic tactic for educators. The breakdown of data composed in the research proves students to be generally in favor of the continuous make use of of blogs as an efficient support to learning. It is understandable, though, that outcome would likely have been more optimistic had there been better path at the establishment of the task as to how one went about blogging. Even though reporting on practice, relatives to present theories have been attempted and questions for additional consideration made.

92 students had been exposed to the usage of blog as a learning tool. Basically, this process had occurred as shown by figure 5.1.



(Figure 5.1: 5 stage blogging process)

Stage 1 - Establishment

Students set up a blog and initiate the practice of recalling and recording learning events, paying attention to and expressing their feelings. To encourage participation through the early phases of blogging, structured questions will be provided, first and foremost as a guide for contributions based on recollection after an event, but secondly to permit the learners to become familiar with the technology and the process of writing in this new genre. All students are encouraged to share their blog URL with their colleagues.

Stage 2 - Introspection

Students are encouraged to continue recording learning events, while starting to pay attention to their emotions and to start evaluating the experience.

Stage 3 - Reflective Monologues

Students start to become consciously aware of the full range of reflective process, from simply answering structured questions to considering the experience and extracting some meaning for further evaluation

Stage 4 - Reflective Dialogue

Further encouragement towards a deeper reflective process requires the students to consider their style of expression, intended audience and publication of their thoughts. No classroom time is allocated for blogging; however, each class discusses topics and issues that could be incorporated into its blogs. An intentional push towards self-directed blogging is made and responsibility for the contents is moved to the student.

Stage 5 – Knowledge Artifacts

Students move from personal knowledge publishing to reflecting on the knowledge learned and providing guidance to readers, who may use the knowledge to enhance their own experience and learning, as knowledge artifacts. At this stage the students may start to read each others' blogs and make comments in contrast or agreement -

intentionally providing their experience and opinions as an opportunity for others to learn, so creating knowledge artifacts.

APPENDICES

MUHAMMAD HANIF BIN MOKHTAR (6776) FINAL YEAR PROJECT II TAB 4012

FYP 2 GANTT CHART

Month 2008	July		Υğ	August		Ιğ	텵	September	一		Ö	October		┢	ğ	November	ĕ
Week	1 2	3	4	2	9	7	8	6	10	11	12	13	14	12 13 14 15 16 17 18 19	6 1	7 1	8 1
Project Work continue						1.				H				-			
Submission of Progress Report 1		X		:													
Project Work continue				Euwar.													
Submission of Progress Report 2			:		:		X										
Seminar								X									
Project Work continue																	
Exhibition/PreEdx																	
Submit Final Report (to be graded as dissertation)								<u>. </u>	<u>'</u>								
Oral Presentation									-			¥					
Submission of Project Dissertation (Hard Bound)																\blacksquare	

REFERENCES

- 1. Gibbs, G., & Coffey, M. (2004). The Impact of Training of University Teachers on their Teaching Skills, their Approach to Teaching and the Approach to Learning of their Students. Active Learning in Higher Education, vol. 5(No. 1), 87-100
- 2. Benchmarking knowledge management in a public organization in Malaysia (Rowland F., Sharifuddin S. O., 2004)

 http://www.intanbk.intan.my/cda/m_online/JUSA_FILES/kmbij.pdf
- Knowledge Sharing Culture in Malaysian Public Institution of Higher Education:
 An Overview (Sirajuddin Suhaimeea, Ahmad Zaki Abu Bakarb, Rose Alinda Alias, 2006)

 http://eprints.utm.my/3367/1/Knowledge_Sharing_Culture in Malaysian Public I
 nstitution_of_Higher.pdf
- Online Survey Response Rates and Times Background and Guidance for Industry (Micheal Braun Hamilton, 2003)
 http://www.supersurvey.com/papers/supersurvey_white_paper_response_rates.pdf
- 5. Berners-Lee, Tim (November 1990). Proposal for a HyperText Project http://www.w3.org/Proposal.html
- 6. Jenna Wortham. After 10 Years of Blogs, the Future's Brighter Than Ever http://www.wired.com/entertainment/theweb/news/2007/12/blog_anniversary
- 7. Mallory Jensen. A Brief History of Weblogs
 http://cjrarchives.org/issues/2003/5/blog-jensen.asp?printerfriendly=yes
- 8. The Contributions of Public-listed Organizations to Knowledge-based Development in Malaysia (Dr. Raja Suzana Raja Kasim, 2007)

 http://m08.cgpublisher.com/proposals/195/index http://m08.cgpublisher

- 9. Irma Becerra-Fernandez, Avelino Gonzalez, Rajiv Sabherwal (2004). *Knowledge Management: Challenges, Solutions, and Technologies*, pp. 37 40.
- Berg, M., & Hofman, W. (2005). Student Success in University Education: A
 Multi-measurement Study of the Impact of Student and Faculty Factors on Study
 Progress. Higher Education, 50(3), 413-446.
- 11. Trigwell, K., & Prosser, M. (2004). Development and use of the approaches to teaching inventory. Educational Psychology Review, 16(4), 409-424
- 12. Ramsden, P. (2005). Learning to teach in higher education (2n edition ed.). London: RoutledgeFalmer
- 13. http://www.takesurvey.com/responserate.htm
- 14. Brockbank, A. McGill, I. & Beech, N. (eds) 2002, Reflective Learning in Practice, Gower, UK.
- 15. Boud, D. (2001), 'Using journal writing to enhance reflective practice' in English, L.M. and Gillen, M. A. (eds) *Promoting Journal Writing in Adult Education*, New Directions in Adult and Continuing Education. No. 90. Jossey-Bass, San Francisco pp. 9-18.
- 16. Glenn, D. (2003), 'Scholars Who Blog', *The Chronicle of Higher Education*, June 6, Retrieved 30 September from http://www.chronicle.com
- 17. Kennedy, K. 2003, 'Writing with Web Logs', *Technology and Learning*, February, Retrieved 30 April, 2003 from http://www.techlearning.com
- 18. Moon, J. 1999, Reflection in Learning and Professional Development, Kogan Page, UK.
- 19. Mortensen, T. & Walker, J. 2002, *Researching ICTs in Context*, in ed. Andrew Morrison, InterMedia Report, 3/2002, Oslo 2002
- 20. Paquet, S. 2003, 'Personal knowledge publishing and its uses in research', *Knowledge Board*, 10 January, Retrieved 29 May, 2003 from http://www.knowledgeboard.com/cgi-bin/item.cgi?id=96934&d=744&h=746&f=745

- 21. Rosie, A. 2000, 'Online pedagogies and the promotion of "deep learning", *Information Services & Use 2000*, vol. 20, no. 2/3, pp.109-116.
- 22. Salmon, G. 2000, e-Moderating: The Key to Teaching and Learning Online, Kogan Page, London.
- 23. Stonehouse, D. (2003) 'Icon Supplement' in *Sydney Morning Herald*, Retrieved 27 September, 2003 from http://www.smh.com.au.
- 24. Walker, D. 1985, 'Writing and Reflection', in *Reflection: Turning Experience into Learning*, eds D. Boud, R. Keogh & D. Walker, Kogan Page, UK.