

Appendix A
Letter of Approval From Education Ministry To Conduct
Research in the Teacher Training Colleges



MINISTRY OF EDUCATION
EDUCATIONAL PLANNING AND RESEARCH DIVISION
LEVEL 2, 3 AND 5, BLOCK J
PUSAT BANDAR DAMANSARA
50604 KUALA LUMPUR
MALAYSIA

Telephone : 03-2586900
Fax : 03-2554960
Home page : <http://161.142.144.5>

Our Ref: KP(BPPDP)603/5(727A)
Date : 10 September 2002

Miss Ragbir Kaur a/p Jaginder Singh,
34, Jalan Temoinis 3,
Lucky Garden,
Bangsar,
59100 KUALA LUMPUR.

Madam,

*Approval To Conduct Research In Schools, Teacher's Colleges,
Departments And Divisions Under Ministry Of Education Malaysia*

With reference to the above, your application to conduct research on the following title:

"Incorporation Internet In Teachers Training College
In The Klang Valley "


has been approved.

2. The approval is based on your research proposal submitted to this Division. Approval to use the research sample need to be obtained from the respective Division Heads/State Education Directors. Please submit to this Division a copy of your final report upon the completion of your research.

Thank you.

"BERKHIDMAT UNTUK NEGARA"

Yours sincerely,


(Dr. Mohd Sahandri Gani bin Hj. Hamzah)
for Director,
Educational Planning and Research Division,
Ministry of Education Malaysia.

Appendix A1
Letter of Approval From Education Ministry To Conduct
Research in the Teacher Training Colleges
(Bahasa Malaysia Version)



KEMENTERIAN PENDIDIKAN MALAYSIA
BAHAGIAN PERANCANGAN DAN
PENYELIDIKAN DASAR PENDIDIKAN,
PARAS 2.1 DAN 3.1 BLOK 1
PUSAT BANDAR DAMANSARA
50604 KUALA LUMPUR

Telefon : 03-2536900
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Ruj. Kaml : KP(BPPDP) 13/15 Jld.49(727)
Tarikh : 25 Sept 2000

Puan Ragbir Kaur a/p Joginder Singh,
34, Jalan Tempinis 3,
Lucky Garden,
Bangsar,
59100 KUALA LUMPUR.

Puan,

*Kebenaran Untuk Menjalankan Kajian Di Sekolah-Sekolah, Maktab-
Maktab Perguruan, Jabatan-Jabatan Pendidikan Dan Bahagian-
Bahagian Di Bawah Kementerian Pendidikan Malaysia*

Adalah saya dengan hormatnya diarah memaklumkan bahawa permohonan
puan untuk menjalankan kajian bertajuk:

**"Pengintegrasian Internet Di Maktab-Maktab
Perguruan Di Lembah Klang."**

telah diluluskan.

2. Kelulusan ini adalah berdasarkan apa yang terkandung di dalam
cadangan penyelidikan yang puan kemukakan ke Bahagian ini. Kebenaran
bagi menggunakan sampel kajian perlu diperolehi daripada Ketua
Bahagian/Pengarah Pendidikan Negeri yang berkenaan. Sila
kemukakan ke Bahagian ini senaskhah laporan kajian puan setelah ia selesai
kelak.

Sekian untuk makluman dan tindakan puan selanjutnya. Terima kasih.

"BERKHIDMAT UNTUK NEGARA"

Saya yang menurut perintah,

(DR. AMIR BIN MOHD. SALLEH)
b.p. Pengarah,
Bahagian Perancangan dan Penyelidikan Dasar Pendidikan,
Kementerian Pendidikan Malaysia.

Appendix B
List of Panel of Experts

Dr. Veerinderjit Singh,
Professor,
Faculty of Economics,
University of Malaya.

Dr. Jamil bin Ahmad,
Research Officer,
Educational Planning and Research Unit,
Ministry of Education Malaysia.

Mrs. Rema Menon,
Head of Technology Unit,
Malaysian Teacher Training College
Language Institute.

Appendix C
Stages of Concern towards Internet Instrument (SOI)
(Adapted from Wells & Anderson, 1997)

Please state your present attitude towards the Internet for each question by circling one number only from the scale of 0-7. The higher the number, the better the statement reflects your present attitude.

0	1	2	3	4	5	6	7
Not true of me now			Somewhat true of me now			Very true of me now	

- | | |
|--|-----------------------|
| 1. I am concerned about my students' attitudes towards the Internet. | 0 1 2 3 4 5 6 7 |
| 2. I now know of several approaches on how I might go about using the Internet. | 0 1 2 3 4 5 6 7 |
| 3. I do not know about the Internet. | 0 1 2 3 4 5 6 7 |
| 4. I am concerned about not having enough time to learn about the Internet so as to be able to use it effectively. | 0 1 2 3 4 5 6 7 |
| 5. I would like to help other lecturers to use the Internet. | 0 1 2 3 4 5 6 7 |
| 6. I have very limited knowledge about the Internet. | 0 1 2 3 4 5 6 7 |
| 7. I would like to know how the Internet might affect me when I am trying to teach. | 0 1 2 3 4 5 6 7 |
| 8. I am concerned about what the administrators might expect me to know about the Internet. | 0 1 2 3 4 5 6 7 |
| 9. I am concerned about improving on what I already know about the Internet. | 0 1 2 3 4 5 6 7 |
| 10. I would like to work with lecturers who are presently using the Internet. | 0 1 2 3 4 5 6 7 |
| 11. I am concerned about how the Internet might affect my students. | 0 1 2 3 4 5 6 7 |
| 12. I am not concerned about the Internet. | 0 1 2 3 4 5 6 7 |
| 13. I would like to know which parties in the college are responsible for the usage of the Internet | 0 1 2 3 4 5 6 7 |
| 14. I would like to discuss the possibility of using the Internet in my teaching. | 0 1 2 3 4 5 6 7 |
| 15. I would like to know the resources available if the Internet is to be integrated in my teaching. | 0 1 2 3 4 5 6 7 |

- | | | | | | | | | | |
|-----|--|---|---|---|---|---|---|---|---|
| 16. | I am concerned about my inability to learn the various Internet applications effectively. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. | I would like to know how my teaching is supposed to change because of the Internet. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. | I would like to familiarize the administrators and my fellow lecturers about the Internet as I work with it more than they do. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. | I am concerned about the impact of teaching using the Internet on my students. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. | I would like to change how the Internet might be used as I learn more about it. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 21. | I do not have interest in the Internet; my work schedule prevents me from caring too much about the Internet. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. | I would like to modify the use of the Internet in my teaching based on my students' experiences. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. | I am concerned about any development of the Internet in my college. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. | I would like to excite my students about the various uses of the Internet. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25. | I am concerned about the time needed to learn about the Internet. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26. | I would like to know what using the Internet will require in the immediate future. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 27. | I would like to coordinate my efforts in learning about the Internet with my fellow lecturers. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 28. | I would like to have more information on the time required to learn about the Internet. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 29. | I would like to know what other educators are doing in relation to the Internet. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 30. | At this time, I am not interested in learning about the Internet. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 31. | I would like to determine ways in which to enhance the use of the Internet. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 32. | I would like to use the feedback from my students to modify the use of the Internet. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 33. | I would like to know how my job will change when I am using the Internet. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 34. | My present work schedule is preventing me from learning more about the Internet. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 35. | I would like to know how the Internet is better than the methods that I presently use in my job. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Appendix D
Gratifications Derived from Utilizing the Internet Questionnaire (GUIQ)
(Adapted from Anderson & Harris, 1997)

Please state the gratifications that you obtaining from the use of the Internet by circling only one number from scale one to five.

Strongly Disagree 1	Disagree 2	Undecided 3	Agree 4	Strongly Agree 5
---------------------------	---------------	----------------	------------	------------------------

- | | | | | | |
|---|---|---|---|---|---|
| 1. The Internet has enabled me to participate in discussions on educational issues, problems or other current topics. | 1 | 2 | 3 | 4 | 5 |
| 2. The Internet has helped me to access curriculum materials, content area information or new about current events. | 1 | 2 | 3 | 4 | 5 |
| 3. The Internet has helped to find out about state, district or college happenings of staff development activities. | 1 | 2 | 3 | 4 | 5 |
| 4. The Internet has helped me to exchange teaching ideas, information or advice. | 1 | 2 | 3 | 4 | 5 |
| 5. The Internet has helped me to plan or schedule work-related meetings. | 1 | 2 | 3 | 4 | 5 |
| 6. The Internet had provided a nice break from work. | 1 | 2 | 3 | 4 | 5 |
| 7. The Internet had helped me plan or schedule social activities. | 1 | 2 | 3 | 4 | 5 |
| 8. The Internet has helped me keep in touch with family, friends and colleagues. | 1 | 2 | 3 | 4 | 5 |
| 9. The Internet has allowed me to participate in entertaining conversations or activities. | 1 | 2 | 3 | 4 | 5 |
| 10. The Internet has provided me with a sense of filling up my free time. | 1 | 2 | 3 | 4 | 5 |
| 11. The Internet has allowed my students to participate in online classroom exchange projects. | 1 | 2 | 3 | 4 | 5 |
| 12. The Internet has enabled my students to exchange messages with people beyond my college boundaries. | 1 | 2 | 3 | 4 | 5 |
| 13. The Internet has allowed my students to practice their writing skills. | 1 | 2 | 3 | 4 | 5 |
| 14. The Internet has provided my students with access to resources for their assignments. | 1 | 2 | 3 | 4 | 5 |
| 15. The Internet has helped me to send or receive reports on student information. | 1 | 2 | 3 | 4 | 5 |

Appendix E
Internet Integration Checklist (IIC)
(Adapted from Norris & Solloway, 1999)

Circle the number that best describes your present level of adoption of the Internet in your teaching.

Strongly Disagree 1	Disagree 2	Undecided 3	Agree 4	Strongly Agree 5
---------------------------	---------------	----------------	------------	------------------------

In my teaching, my present use of the Internet is as follows:

1. I am aware that the Internet exists. 1 2 3 4 5
2. I do not use the Internet in my teaching. 1 2 3 4 5
3. Perhaps, I am even avoiding using the Internet in my teaching. 1 2 3 4 5
4. I am currently trying to learn the basics of the Internet. 1 2 3 4 5
5. I am sometimes frustrated when using the Internet in my teaching. 1 2 3 4 5
6. I lack confidence when using the Internet in my teaching. 1 2 3 4 5
7. I am beginning to understand the process of using the Internet in my teaching. 1 2 3 4 5
8. I can think of specific tasks in which the Internet might be useful in my teaching 1 2 3 4 5
9. I am gaining a sense of confidence in using the Internet for specific tasks in my teaching. 1 2 3 4 5
10. I am starting to feel comfortable in using the Internet in my teaching. 1 2 3 4 5
11. I think about the Internet as a tool to help me in my teaching. 1 2 3 4 5
12. I am no longer concerned about the Internet as a new technology. 1 2 3 4 5
13. I can apply what I know about the Internet in many applications in my teaching. 1 2 3 4 5
14. I am able to use the Internet as an instructional aid. 1 2 3 4 5
15. I am able to integrate the Internet into the education curriculum in the teacher training college. 1 2 3 4 5

Appendix F
Self-Evaluation of Internet Competency Checklist (SICC)
(Adapted from Johnson, 1995)

a) Personal Characteristics Checklist

Instructions: Please fill in all the blanks

1. Male
Female
2. Age
3. Highest level of
schooling
 SPM
 STPM
 Diploma
 Bachelor Degree
 Masters Degree
 Ph.D. Degree
4. For how many years have you been working as a teacher-trainer?

5. How long have you been using the computer?
 Never used
 Less than one year
 12 - 18 months
 19 - 24 months
 25 - 30 months
 More than 2 1/2 years
6. How long have you been using the Internet?
 Never used
 Less than one year
 12 - 18 months
 19 - 24 months
 25- 30 months
 More than 2 1/2 years

7. Do you have access to the Internet at home?

..... Yes

..... No

8. Do you have access to the Internet at your workplace?

..... Yes

..... No

If no, please explain why?

.....

9. Are you currently using the Internet indirectly in your teaching?

..... Yes

..... No

10. Are you currently using the Internet directly in your teaching?

..... Yes

..... No

If no, please explain why?

.....

b) Self- Evaluation Internet Competency Checklist

Please state your perception about your skill in using the Internet by circling the number that best reflects your current ability for each response.

Zero. No skills.	Low. Have some basic skills.	Moderate high skills	High	Expert. Can guide others
1	2	3	4	5

Currently, I can do the following operations on the Internet:

1. I can use the World Wide Web (WWW). 1 2 3 4 5
2. I can use the WWW as a means to share information on the Internet. 1 2 3 4 5
3. I can browse the WWW for recreational purposes. 1 2 3 4 5
4. I can access schools/ colleges/ district education department /other web sites to find information. 1 2 3 4 5
5. I can follow links from schools/ colleges/ district education department /other web sites to various Internet resources. 1 2 3 4 5
6. I can use Web browsers like Explorer or Netscape/others to find information on the Internet. 1 2 3 4 5
7. I can use Web search engines like Yahoo or Alta Vista/others to locate subject-specific information. 1 2 3 4 5
8. I can create bookmarks to websites of educational value. 1 2 3 4 5
9. I can write uniform resource locators (url's) to share information location with others. 1 2 3 4 5
10. I can refer to lists of Internet resources to explore educational resources on the Net. 1 2 3 4 5
11. I contribute ideas to my college or district /other web sites. 1 2 3 4 5
12. I can teach my students how to effectively use resources that are available on the Internet. 1 2 3 4 5
13. I can create web pages as information guides on the Internet. 1 2 3 4 5
14. I can create web pages as a means to share information with others on the Internet. 1 2 3 4 5
15. I can get my students to do publishing on the Internet 1 2 3 4 5

Appendix G
Internet Use Questionnaire (IUQ)
(Adapted from Becker, 1998)

Instructions: Please answer all the questions

1.(i) Group of teacher-trainees you were teaching last semester:

Group: _____ Semester: _____

(ii) Group of teacher-trainees you are teaching this semester:

Group: _____ Semester: _____

2. Presently, the Internet applications that I am using are: (Please tick the ones that you are using)

World Wide Web: _____

E-Mail: _____

Newsgroups: _____

Listserves: _____

File Transfer Protocol: _____

Others: _____

3. Presently, the Internet applications that I am asking my students to use are: (Please tick the ones that you are asking them to use)

World Wide Web: _____

E-Mail: _____

Newsgroups: _____

Listserves: _____

File Transfer Protocol: _____

Others: _____

4. During a typical week, how often do you use the following Internet services?

	E-Mail	World Wide Web	Newsgroups	Listservs	Others
More than once a day					
Once a day					
Once a week					
Few times a week					
Seldom Use					
Never Use					

5. About how many times, have you used the following Internet services directly with your students in the last academic semester?

	E-Mail	World Wide Web	Newsgroups	Listservs	Others
Once a semester					
More than once a semester					
Few times a semester					
Many times a semester					
Seldom Use					
Never Use					

6. About how many times, have you asked your students to use the following Internet services in the last academic semester?

	E-Mail	World Wide Web	Newsgroups	Listservs	Others
Once a semester					
More than once a semester					
Few times a semester					
Many times a semester					
Seldom Use					
Never Use					

7. Has the Internet been beneficial to you so far? If yes, please elaborate.

8. Are you using the Internet for the preparations of you lessons? If yes, please elaborate.

9. Are you asking your students to use the Internet to gather information to do research for their assignments? If yes, please elaborate.

10. Are you asking your students to use the e-mail to contact you or other individuals for their assignments/projects? If yes, please elaborate.

11. Are you asking to collaborate with other colleges or schools on a joint project? If yes, please elaborate.

12. Are you developing materials to be posted on the WWW? If yes, please elaborate.

13. Are you contributing ideas/materials to your college home page? If yes, please elaborate.

14. Do you think the incorporation of the Internet is important for the “Ilmu Pendidikan Syllabus” (Education Syllabus) in the teacher-training curriculum? If yes, why.

15. What are the main problems that you face in the use of the Internet as an instructional tool in your college?

16. With regard to instructional use of the Internet, what are your needs as an education lecturer in the teacher training college?

Appendix H
Semi-structured Interview Schedule (SIS)
(Adapted from Becker, 1998)

Interview Questions.

- 1) Have you attended any Internet courses?
- 2) How are you using Internet access in the college /home?
- 3) How are you using the WWW for the preparation of your lessons?
- 4) How are you directing your students to use the WWW application for research?
- 5) How are you directing your students to use the e-mail application for assignments?
- 5) How are you personally using the e-mail application?
- 6) How are you personally using the newsgroup and listserv applications?
- 7) How are you using the Internet for non-academic activities in the teacher training college?
- 8) How important do you think the Internet is for the teaching of the education syllabus?
- 9) Can you explain more about the problems you face in using the Internet for the teaching of the education syllabus ?
- 10) Can you explain more about your needs for teaching with the Internet in the near future?

Appendix I

Detailed Case Studies of an Early and a Late Adopter

The detailed cases, which are presented below, are based on a selection of the data obtained from the face-to-face interviews and open-ended questionnaires. The cases are also illustrated with condensed excerpts from source transcripts. Individual data obtained from the quantitative section of the study are also added to strengthen the analysis of the cases. The cases are presented in no particular order, and pseudonyms are used to provide anonymity for the participants. Basically, the purpose of the case studies is to highlight the main discrepancies that exist between the two detailed case studies. It also aims to show the differences that exist between the early and late adopters in relation to the five categories of innovation decision process by Rogers (1995).

Case Study of Early Adopter

The following teacher trainer, Miss X who holds a Masters degree and has one and a half decades of teaching experience, has integrated various Internet applications into her classroom teaching in the past two years. The subject is also the highest user of the Internet for instructional purposes from the sample of twenty-eight teacher trainers who were interviewed. What follows is an abridged version of the interview sessions and analyses from the open-ended questionnaires as well as quantitative data, which are organized according to the categories in Rogers' (1995) innovation decision process theory.

Knowledge

According to Wallace (1998), the knowledge stage reflects the amount of exposure an individual has towards an innovation. Before Miss X went to pursue her studies in the United States (U.S.) in 1997, she had acquired some basic knowledge in

computers. Presently, she claims that she has been using both the computer and the Internet for more than two and a half years. It was while studying abroad that this teacher trainer was exposed to the Internet, especially the e-mail application. She learned how to use the e-mail when she had to send her thesis in to be evaluated by her supervisor who was away in Hawaii on sabbatical leave.

At the same time, she also used the e-mail to contact other Malaysian students who were pursuing the same course as herself but who were studying in Australia and the United Kingdom. She also started to search for articles and journals on the World Wide Web (WWW) for her studies. Thus, she had acquired the experience and necessary skills to utilize the Internet and its applications from her stay abroad. This experience helped her to adopt Internet innovation more confidently in her teaching programs.

Armed with her overseas experience, she continued to keep in touch with her professors in the U.S. via the e-mail after the completion of her studies.

"Yes, everyday, once, I use the e-mail to contact my professor in the U.S. ever since I came home. She is very cooperative. She gives me titles of books and we discuss the topics that I teach and the problems that I face in the teaching and learning process. If I want materials or books, she will send them to me. She also sends to me a lot of materials by attachment."

Besides communicating with lecturers overseas by e-mail to keep abreast with the latest development in the area of special education, she is also involved in professional communication with local lecturers. Currently, she is collaborating with key pals/colleagues from a teacher training college outside of the Klang Valley on a special education program.

Thus, Miss X and the local teacher trainers are already liaising and coordinating on aspects such as coursework and examination format for similar teacher education programmes. They are also exchanging teaching ideas and materials via the Internet.

"I find materials from the Internet, and then I make two copies in the diskette and send one copy of the material to my friend in IPDA (a teacher training college in Northern Malaysia) who teaches the same course via the attachment application on the e-mail. She also does likewise. These materials complement the teaching materials that I have."

According to Hadley and Shengold (1993), one of the characteristics of the early adopters is that they are excellent teachers whose use of technology appears to be a natural extension of their area of expertise. Thus, as an early adopter she is actively involved in communications with other lecturers via the Internet for the professional enhancement in her area of expertise.

"Besides this professor, I also do a lot of discussions (with other professionals) on the Internet. Last night, I came back from a Special Education course. There are only two teacher-training colleges, which are carrying out this course (Special Education). I always discuss with the lecturers and always contact them (via e-mail) to get materials in remedial education."

Consequently, with increased usage, she perceives herself to be competent in various computer and Internet applications. Currently, this faculty member claims that she can already use the PowerPoint and Excel computer applications. She is also able to utilise various Internet applications and is quite competent in making an effective search on the Internet.

"Yeah, I can use the WWW, e-mail, newsgroups and listservs. I can look for materials rather quickly. However, it does depend on the speed of the computer that I am using."

Thus, Miss X indicates that her awareness-knowledge level of using computers and Internet applications is high. She further advances this awareness-knowledge level by regularly attending computer and Internet courses in the college. In the past two

years, she has attended in-house computer courses on "Windows" and "PowerPoint" which were organized by the IT (Information Technology) unit in her college.

So far, in the academic year of 2001, she has attended an 'Adobe Photoshop' course that was organized by the staff development committee in the college.

"I just attended a course on Adobe Photoshop that was organized by LKS (Staff Development Unit). But it was not effective; it's only for two hours, and there's no follow up. I have to practice. If I do not practice, it is no point,"

The analysis of the open-ended questionnaire that Miss X responded to revealed that one of the characteristics of Miss X is that she is a regular user of the Internet. In the frequency of personal usage of the Internet, she admits that she uses the e-mail once in a day and the WWW a few times a week. She also e-mails her students a few times a week but does not use the WWW directly with her students in the classroom due to the lack of Internet access in the college classrooms.

She has also started integrating computer and Internet applications into the education syllabus in the teacher-training curriculum. This is evident from the delivery of her lectures via PowerPoint, which she does on a weekly basis.

Besides that, she also encourages her students to use the Internet for their assignments and projects. She has also directed her students to integrate the e-mail and WWW applications into their assignments many times in an academic semester.

Thus, it is not surprising to note her degree of innovativeness in the adoption of the Internet for instructional purposes. This faculty member is in the creative applications to new contexts stage, which is the highest stage of integration as identified in the IIC. According to Norris and Solloway (1998) at this stage, teachers can apply what they know about technology in the classroom and are able to use technology as an instructional tool and are able to integrate it into the school curriculum.

Being at this stage, Miss X is aware of the current institutional incentives and expectations for teacher trainers to use IT in their lessons. However, she feels that there are a lot of institutional impediments that faculty members and students alike face in trying to acquire IT-related knowledge. In the interview session, the faculty member commented on these setbacks:

" Internet access is limited. We have to go so far to use the Internet (the library). And there are hardware problems as well; we have two computers (both are not working currently), so we had all those problems. So, I brought my printer from the house. I also bring my laptop every day. Right now the computer that I am using does not belong to the education department but to the practicum unit. "

Thus, the problem that she faces so far is the lack of Internet access at the workplace. As an early adopter, she does not regard this as a serious problem as she is able to overcome it via her own initiatives and resources. Another impediment, which Miss X feels strongly about, is the lack of knowledge among the teacher trainees and teacher trainers alike in utilizing Internet applications.

" The main problem is that the skills of the teacher trainees are still inadequate. The teacher trainees do not have the skills although they have followed the information Technology Courses. They have no chance to put their skills to use. They only know how to use the e-mail, but the e-mail is more of Hotmail and LoveMail. Another thing is they do not know how to look for materials. Take Yahoo! as an example. They do not know how to use it to find materials; they do not know how to do a search".

Hence, she takes the concerted effort to show her students techniques in searching for subject-specific information on the WWW, as they need to use these materials for their special education assignments. She does this by taking them to the

library on her own initiative and demonstrates the search skills while her students watch.

When I took them to the library, the first hour they spent standing behind me, I showed them how to find materials on Yahoo and Hotbot. This is because when they have to do an assignment and need to look for materials on special education. There is not much materials (from books and magazines)."

Thus, this early adopter has high intrinsic motivation in using Internet innovation because she not only teaches it to her students but also to her colleagues in the education department who lack computer and Internet skills. She is really perturbed by the lack of basic knowledge of computers among her colleagues,

"They still do not know how to type on the keyboard. They are lecturers from the education department, but do not have the skills to use the computer. They only know how to type on a typewriter, we will know, right, which lecturer uses the computers and who does not. Sometimes when we want to do work, it becomes a big problem. When I give them some exam questions to set, they return it in handwritten form. Actually they should give us the diskette, so that our work will become easier."

Miss X is irritated by the fact that colleagues are still handing in handwritten work and she finds this cumbersome as it is making her work difficult.

Some of the late adopters who were interviewed mentioned that they wished that they had the skills of Miss X especially in using Power Point presentations.

"So far, I feel that lecturers who are preparing contents of their lessons via the PowerPoint, the one I remember is...(the EA's name). I feel that she is the only one. She does a lot of special education courses outside. She is doing the organizing, so she uses the materials. She is the one that I follow for the courses and I see her doing it. She also has a wired notebook with her and she carries it wherever she goes."

Thus, it can be seen that the efforts of this early adopter are noted and observed by the colleagues in her department. Similarly, Lee (1998) found that the early adopters reported that their colleagues thought they accepted computer technology relatively easy and fast.

Persuasion

Persuasion occurs when an individual forms a favorable or unfavorable attitude towards an innovation based upon the perceived characteristics of the innovation such as relative advantage, complexity and so on. Persuasion is also influenced by information sought from near-peers whose subjective opinion of the innovation is most convincing (Rogers, 1995).

According to Rogers (1995), when an early adopter who is just like any other faculty member shares a positive evaluation of an innovation, mainstream and late faculty members will be more motivated to adopt it. Faculty members usually seek out the opinions of peers who have integrated the technology into their teaching. They enquire about its expected outcomes and benefits, as well as form attitudes and beliefs based upon their peers' experiences in using the technology.

Thus, this early adopter was influenced to use the Internet when she saw her fellow students in the U.S. using the WWW for research and the e-mail, for collaboration and evaluation. From these initial exposures and experiences, this early adopter had formed a favorable attitude towards the Internet. This can also be seen in the home environment of this early adopter,

" I use the Internet more at home. My son always upgrades my computers so I can find materials quickly unlike the computers in the college. It takes a long time to download materials. My monthly Internet bill is about RM 250.00 because the whole family uses it. There are three computers in the house, but only one is linked to the Internet. My son is also very good at using the Internet.

He got the first prize in a homepage competition in (Multi-Media University).

My son can use the computer because he always sees me using the computer."

The quantitative analysis in the SOCI further provides evidence of this early adopter's attitude towards the adoption of the Internet. According to Anderson (1997) early adopters usually have low or medium internal concerns, which consist of awareness, informational, personal, and management concerns.

It also reveals that this teacher trainer has medium awareness, informational, personal and management concerns. The awareness concern relates to the adopter's knowledge about Internet innovation. The awareness concern of Miss X is very low as she is no longer concerned about finding out the basics in utilizing Internet innovation as she uses it on a regular basis.

On the other hand, personal concerns relate to how competently a potential adopter feels in meeting the demands of the innovation, and whether or not she would be able to meet those demands. Miss X has medium personal concerns as she is already using many different Internet applications. Meanwhile, informational concerns encompass the adopter's desire to know more about how an innovation is used. Miss X is not too concerned with informational concerns as she is currently attending computer and Internet courses as well as is involved in professional communications that allow her access to the latest developments in her area of specialization.

In management concerns, which are associated with the adopter's organization and efficiency in using the innovation, Miss X is not too concerned as she is already applying the Internet in many different ways in the teacher-training curriculum.

On the other hand, she is having high consequence, collaboration and refocusing concerns. This is in line with the theory of diffusion of innovations by Rogers (1995), which advocates that initial adopters usually have more external concerns than internal concerns in the adoption of an innovation.

The quantitative analysis in the SOCI indicates that Miss X has high consequence concerns. This implies that she is very concerned about the relevance the Internet has had in her teaching situations and on her students. The fact that she is willing to spend time and energy on her own initiative to enhance the basic Internet knowledge of her students reflects her high consequence concerns.

Besides that, she also has high collaboration concerns. Currently, she is already collaborating with colleagues locally and with professionals from abroad. From the analysis of the interview data, it can be seen that she is contemplating to collaborate with more individuals on the Internet.

Miss X also has the highest refocusing concerns among all the respondents in the study. These concerns deal with the adopter's desire to explore further uses of the Internet for instructional purposes. It also deals with the adopter's aims to become more cognizant of the impacts of Internet innovation on fellow teachers. The analysis of the interview data indicates that Miss X is worried about the lack of computer and Internet competencies among fellow colleagues. She is also concerned about her lack of knowledge in exploring new ways of adopting the Internet for instructional purposes.

Interviews with Miss X's colleagues also indicate that they are aware of Miss X's involvement with the Internet and they always seek her expertise in matters regarding the professional and instructional use of the Internet.

Thus, the quantitative analysis of the SOCI indicates that on the whole, Miss X has favorable attitudes towards the adoption of Internet innovation as currently she has high consequence, refocusing and medium collaboration concerns in her external concerns.

Besides having positive attitudes towards the Internet, she is also deriving many types of gratification from her use of the Internet. According to Rogers (1995), the perceived benefits that are derived from utilizing an innovation will be an important factor in the persuasion stage for an individual to accept an innovation. The quantitative

analysis from the GUIQ indicates that Miss X is deriving high personal, professional and instructional gratification from her utilization of the Internet. Personally, she finds the Internet a useful tool to communicate with her children who are studying overseas and to keep in touch with local and overseas colleagues.

The quantitative analysis also indicates that she is getting high instructional gratification from using the Internet. She is able to source the latest materials on remedial education for the preparation of her classes and finds that her students are more motivated when she delivers her lectures via the PowerPoint application.

"Yes, I use the Internet a lot at home to get Internet articles to teach the KPSK (Teaching Course on Special Education). I give better and more up to date materials to my students, I cannot give them the usual materials because they are mostly in-service teachers."

With regards to professional gratification, she is currently collaborating with various individuals in and out of the country. Thus, Miss X finds these kinds of exchanges beneficial, as she is able to get the latest materials and publications in the area of remedial education. According to Rogers (1995), if one has positive evaluation of the innovation, an individual will be more motivated in his decision to adopt the innovation. The persuasion stage is important because it influences a potential adopter's decision to accept or reject an innovation.

Decision

Decision occurs when an individual engages in activities that lead to a choice either to adopt or reject a certain innovation. According to Rogers (1995), adoption is a decision to make use of an innovation as the best course of action available. Active rejection means considering and trying the innovation out on a limited basis, and then deciding not to adopt it. Passive rejection, also called non-adoption, consists of never really considering the use of the innovation.

When asked about the factors that may influence the decision of Miss X to adopt Internet innovation for instruction, she described personal Internet access at home and skills in utilizing the Internet as crucial factors. The quantitative analysis from the SICC indicates that Miss X perceives herself to be in the mastery level of competency in the utilization of the Internet. According to Johnson (1995) at the mastery level of Internet competency, an individual perceives his ability to use the Internet as quite high.

In the case of Miss X, she is already using computer applications such as the PowerPoint and Excel. She can also use various Internet applications such as WWW, newsgroups, listservs and e-mail. Recently, she also acquired some web-building skills after attending a course on the Adobe Photoshop.

Thus, the integration of the Internet requires some level of personal skill among the teacher trainers as the level of confidence and ability to utilize different Internet applications will influence their decision to adopt Internet innovation.

Miss X also considers increased personal access to computers as having a powerful influence on faculty decisions of adopting the Internet for instructional purposes. Currently, she is having high access to the Internet at home. In the analysis of the quantitative survey, Miss X claims that she has access to the Internet at the workplace, which is located in the library of her teacher training college. Currently there are ten computers with Internet access in the library.

However, the qualitative analyses from the interviews indicate that she hardly accesses the Internet from the library. According to this teacher trainer, this is because the library is too far away from the education department where she is attached. It takes a good fifteen-minute walk to reach the library from the education department.

Despite this limitation, she has taken her students to the library a few times to show them how to use the WWW and e-mail applications.

"Yeah, up till now, they can differentiate between both of these applications and they can also send e-mail, but they have to practice more. I try to show them how to use the e-mail. I have to show them one by one, they can do it."

However, she has yet to use the Internet directly with her students, as there is no Internet line in the computer laboratory in the old block where she is using PowerPoint to deliver her classroom presentations.

Thus, currently, the strongest barrier to the adoption of the Internet for instructional purposes for Miss X is the lack of Internet access in the education department where she is based. Not only do the two computers in the education department lack Internet access, they are obsolete and often break down. Consequently, Miss X had brought her own notebook and printer to the college for her personal use.

Similarly, Jacobsen (2000) reported that another problem that early adopters faced is they had to purchase software using personal resources because they believe that these applications were important for instructional goals and students' learning processes.

Thus, it can be seen that despite the lack of access to the Internet, this early adopter has made the decision to make use of the innovation in the best way possible and has gone ahead with the implementation of the Internet and its applications.

Implementation

Implementation occurs when an individual puts a certain innovation to use. According to Rogers (1995) up to this stage, the innovation process has been a mental exercise. Implementation involves an overt behavior change as the new ideas about the innovation are actually put into practice. This stage may continue for a lengthy period of time until the innovation finally loses its distinctive and noticeable quality as a new idea. Re-invention, the degree to which an innovation is changed or modified by the user, can also occur at this stage.

Thus, Miss X has put Internet innovation into practice in the teaching and learning process in classroom preparation, teacher-directed student use and e-practicum.

a) Classroom Preparation

One of the ways Miss X has put Internet innovation to practice in the instructional process is by utilizing it heavily for the preparation of her classes for the Special Education program that she is in charge of in the education department. She does this by sourcing information under the area of Special Education, which is her area of specialization.

Since it is the personal conviction of Miss X to present more up-to-date materials to her students, she reads these articles to get main ideas for a particular topic that she intends to teach. At the same time, she also gets materials on 'Special Education' via her e-mail collaborations with local colleagues and former professors who are located overseas.

Miss X then takes the trouble of translating important points from the articles and materials into the National Language, after which she makes a concerted effort to put these notes into a Power Point presentation.

"I just use the Internet to look for materials, after which, I translate and put into PowerPoint, and then I present it in the Computer Block, which is situated at the top floor of the Education Department."

The data analyses from the interviews indicate that Miss X is very much aware of her students' problems such as inadequate access to the Internet, lack of proficiency in the English Language as well as lack of Internet materials in the National Language.

b) Teacher-Directed Student Use

Another mode of adoption of Internet innovation by Miss X is that she is directing her students to make use of e-mail and WWW applications on a regular basis. She initiates this effort by giving her students web addresses of articles on Behavior

Modification. She also directs her students to find these articles and present key points from these articles in the form of mind maps in their assignments.

Another creative way she has adopted Internet innovation in the education syllabus is by using evaluation as a tool for her students to utilize e-mail and computer applications. She is currently directing her students to send in their PowerPoint Presentations via the attachment application on the e-mail and she awards them 10% of the total coursework marks for this endeavor. However, Miss X is not making this initiative compulsory for her students, as she is aware that there is limited Internet access for students in the teacher training college.

(c) E- Practicum

Another creative way that Miss X utilizes Internet innovation is by engaging in professional communication with students through the e-mail to enhance the quality of practicum supervision. Currently, she is involved in the e-practicum pilot project and is presently supervising two teacher-trainees who have to e-mail their lesson plans via attachment files to Miss X on a regular basis.

The role of Miss X is to check and evaluate the lesson plans that are submitted by giving her comments and highlighting major mistakes, after which, she will e-mail the corrected version of the lesson plans back to her students.

The teacher-trainees take cognizance of the corrections and comments made by Miss X and send back the corrected version, which she prints out and refers to it while she is observing her students in actual teaching situations.

"My students send their lesson plans via the attachment, but do not know how to use the attachment application on the e-mail. So, I told them to type in Word and later paste it in the e-mail. Because, sometimes I also cannot open the attachments because of virus. The students have to go outside to send the e-mail because the computer lab is not open at night. If it is open, it is only for typing

purposes. I take care of my students. When I want to go and see them, I ask them to send in their lesson plans. I correct it and I send it back via e-mail."

Thus, Miss X is already conducting online supervision and mentoring via the e-practicum program. So far, this early adopter can see the relative advantages of carrying out e-practicum as checking the lesson plans of students prior to the final observation makes the practicum process more effective. It also saves her time as she does not have to waste time checking lesson plans in school settings and can instead begin observing them immediately.

" After I check their work, I will print out one copy, and when I go to school, I no longer check their lesson plans. I go straight in to observe their teaching. The only problem is that I have to wait for the teacher trainees to do their corrections. I will check my computer twice that is once in the morning and once at night. I have to make a lot of preparations but from the aspect of traveling time, I save time because I can observe them at once. After observing them, I send an e- mail on the progress of their teaching on the very same night. My students then write a reflection report based on the contents of my e-mail and I will respond to their reflective writing via the e-mail."

Consequently, this makes the practicum experience a more beneficial and meaningful one for both parties. Miss X has also further made creative use of Internet innovation in the e-practicum by getting her students to send in their reflections about their post teaching experiences. She then reads the reflections about the practicum experience and makes the necessary comments and e-mails it back to her students, which she does on a regular basis.

This is a new development in the practicum experience in the teacher training colleges in the Klang Valley. Although the e-practicum is in the initial stage, Miss X has used the reflective activity to conduct on-going evaluation on student satisfaction with the integration of the Internet in the practicum experience. So far, Miss X finds

that supervision via the Internet has enhanced the quality of the practicum experience. However, based on further online interactions between Miss X and her students, she found that the main concern of the students about e-practicum is the lack of personal rapport with the supervisor.

Confirmation

According to Rogers (1995), confirmation occurs when an individual seeks reinforcement of an innovation-decision already made, or reverses a previous decision to adopt or reject the innovation if exposed to conflicting messages about the innovation.

In order to justify the investment of time and effort, teacher trainers including Miss X herself must be convinced that her Internet integration efforts are having the desired effects on student learning. Miss X described some of the responses on Internet-integrated activities that seem to appeal to her students.

"I think there were a lot of features in the Power Point presentation and getting students to send in their assignments via the e-mail, that they really liked"

In addition to her own observations about student reaction to Internet-integrated methodologies, Miss X drew upon anecdotal comments by her students about the relative benefits of this style of instruction.

" Yes, I can see that the teacher-trainees want to study, like they have some kind of motivation, they are quite excited."

Miss X's positive confirmation of accepting Internet innovation is due to her own belief that its potential in instruction is that it is far superior than traditional teaching methods,

"Yes, because I feel, these students are older (in-service teachers). Therefore there must be differences; they want to enhance their knowledge. So if we give it to them in the traditional way, it might not be so effective."

Responses such as this indicate that this early adopter is personally convinced of the need for Internet innovation in the teaching and learning process. However, she is convinced that this can only happen if there is direct Internet access and if the Internet skills of teacher trainers and trainees are enhanced coupled with proper planning by the relevant authorities.

In the confirmation process, it can be seen that after the process of gaining awareness of innovation in the knowledge stage, Miss X has made the decision to adopt and adapt the Internet in a variety of ways in the teacher-training curriculum.

However, there are also faculty members who are much slower in adopting an innovation. They are referred to as mainstream and late adopters. Thus, a case study of a late adopter who has just started utilizing Internet innovation is presented to facilitate a comparison with the early adopter.

Case Study of a Late Adopter

The following teacher trainer (Miss Y) who has a diploma in education has been teaching in teacher training colleges for fourteen years. The subject is also the lowest user of the Internet for instructional purposes in the sample of twenty-eight teacher trainers who were interviewed. What follows is an abridged version of the interview sessions and analysis from the open-ended questionnaires as well as quantitative data, all of which are organized according to the categories outlined in Roger's (1995) innovation decision seeking process theory.

Knowledge

One of the characteristics of this faculty member has been her late introduction to the Internet and computers. She has been using computers for the last one and a half to two years and the Internet for about the same time. Thus, this late adopter has less Internet experience than the early adopter who has two and a half years of Internet experience.

Currently, Miss Y is able to use the WWW, e-mail, newsgroups and listserv applications. Surprisingly, this late adopter is able to utilize the same number of applications as the early adopter. However, the interview analyses revealed she is only using these applications for personal purposes.

Currently, her knowledge in utilizing the WWW is that she is able to use the Yahoo and Excite search engines to locate materials on the Internet. Having attended only one basic Internet course that was organized by the ICT unit in the college, Miss Y has enhanced her knowledge awareness levels of the various Internet applications via her own efforts as she finds them 'user-friendly' and easy to learn.

The analysis in the open-ended questionnaires revealed that she is a regular user of the Internet as she is using the e-mail once a day and the WWW on a weekly basis. However, the data in the interview revealed that this usage is basically for personal uses

only. She has never used the e-mail and WWW with her students directly in her teaching during a typical academic semester. However, she has directed her students to use the WWW more than once in a normal semester but has seldom directed her students to use the e-mail application within the same time frame.

On the whole, the early adopter is definitely using more of these applications. She is using the e-mail once in a day and the WWW a few times in a typical week and directing her students to use the WWW many times in a normal academic semester.

However, Miss Y is only directing her students to use the Internet once in a normal academic semester. Therefore, it is not surprising to note that in her degree of innovativeness in the adoption of the Internet for instructional purposes, this faculty member is in the understanding and application stage which in the 3rd rung of integration as identified in the IIC.

According to Norris and Solloway (1998), at this stage, teachers begin to understand the process of using technology and can think of specific tasks in which it might be useful for instruction. They might also be experimenting with it for personal uses. So far, Miss Y has only embraced the Internet for enrichment exercises for the education syllabus, but has yet to use it extensively in the instructional process in the teacher- training curriculum.

Being at this stage, this late adopter should face major institutional disadvantages compared to the early adopter. However, she states that she does not face problems from the aspects of Internet access in the teacher-training college.

“Access, no problem what, I always come early morning, when the students are not here and normally when they are around, I let them take over.

Thus, the late adopter is different from the early adopter, as she is not accessing the Internet from the college library on the grounds that it is too far away and there is no privacy. However, Miss Y finds that there is of lack of access to the computer

laboratory in the college as it is always locked and even if she does gain access to it, most of the computers are infected with viruses.

However, this type of setback is not a barrier for the late adopter as she feels that the acquisition of IT knowledge must come from within the individual herself. Thus, it can be seen the although Miss Y faces no problems in accessing the Internet at the workplace and takes the trouble to learn Internet applications on her own, she lacks the intrinsic motivation to apply this knowledge for teaching and learning purposes.

In relation to this, Roger's theory (1995) advocates that some late adopters have relatively strong conservative values and resistance to change and they also lack the intrinsic motivation to use an innovation.

Therefore, her current knowledge awareness level about the Internet is quite low as she will be not easily be persuaded to try out new ideas in her teaching.

Persuasion

The likelihood that this late adopter will share the enthusiasm of the early adopter in accepting Internet innovation in various ways is very unlikely. However, from the analysis of the interview data, the late adopter reveals that she is aware of the early adopter's skills in utilizing the Internet in many creative ways in the education syllabus and her involvement in the e-practicum program.

She is also cognizant of the fact that the early adopter is bringing her own 'note book' and printer into the education department.

At the same time, she is aware of faculty members with high competencies in information communication technologies (ICT) from other departments and who are in the same age group as her.

Like Madam X, she is different, how old is she, although she is 49, she is a rare breed. Because of her degree in computers, she is well versed with IT"

Another characteristic of Miss Y is that she primarily mixes with others who hold the same views as her on the Internet. As for those who use ICT heavily, she maintains that it is because it is their area of specialization.

Although she is learning how to use the Internet from some of her colleagues who are very competent users of the Internet, it is obvious that she does not appreciate their effort as she says,

"I did learn a bit from them, not much, it is user-friendly, you learn more on your own."

The attitudes of an individual towards an innovation will influence the persuasion stage in the innovation decision process. The quantitative analysis in the SOCI further provides evidence of this late adopter's attitude towards the adoption of this innovation.

The results of the SOCI reveal that this teacher-trainer has low awareness as well as medium informational, personal and management concerns. According to Anderson (1997) late adopters usually have medium or high internal concerns, which consist of awareness, informational, personal and management concerns.

The awareness concern relates to the adopter's knowledge about Internet innovation. Although she is a late adopter and is supposed to have medium or high awareness concerns, constant use and involvement with the Internet have decreased her awareness concerns. Thus, as she is a regular user of the Internet for personal purposes, her awareness concerns are low.

On the other hand, personal concerns relate to how competent the adopter feels in meeting the demands of the innovation. Thus, this late adopter's personal concerns are in the medium range and this may be attributed to her lack of interest in meeting these demands. This lack of interest is evidenced from comments that she made in the interview.

"You always see me using the Internet, I just read but after reading I don't do anything with it, just passing time."

According to Matthew, Parker and Wilkinson (1998) faculty members indicate fear or lack of interest in adopting a new innovation even though the technology has been installed and they have been given personal instructions on its use. Meanwhile, informational concerns encompass the adopter's desire to know more about how an innovation is used. On the same note, this late adopter does not have high informational concerns because she finds the various Internet applications user-friendly and she is able to learn them on her own initiatives. However, she has indicated some interest in acquiring skills on web building and posting materials on the WWW as she is currently in charge of the college homepage for her department.

As for management concerns, which are associated with the adopter's organization and efficiency in using the innovation, this late adopter has some concerns about time management aspects in handling Internet innovation. She apparently finds that utilizing the Internet for instructional purposes is very time consuming. This is because she feels that there are more important aspects to look into such as finishing the education syllabus and preparing her students for their major examinations,

"Apart from that, because we do things not really with the Internet, we hardly have time to finish the syllabus."

On the other hand, as for external concerns, this teacher trainer has only medium consequence, collaboration and refocusing concerns. This is in line with Roger's (1995) theory of diffusion of innovations, which suggest that late adopters usually have low or medium external concerns in the adoption of an innovation.

As for the consequence concerns, the late adopter has only medium concerns about the impact the Internet has on her students as the only Internet-linked activity that she is carrying out is directing her students to source articles from the Internet for their assignments.

Similarly, as to her collaboration concerns, Miss Y is only having medium concerns, as she is hardly engaging in any kind of professional communication for work purposes. On the contrary, she engages quite intensely in personal communication via the e-mail in her specific area of interest.

Finally, this late adopter also has medium refocusing concerns compared to all the respondents in the study. These concerns deal with the adopter's desire to explore further uses of the Internet for instructional purposes.

On the whole, it can be seen that this late adopter has only average refocusing concerns, as she is not able to envision the potential of the Internet that can benefit her and her students in their teaching and learning process. At the same time, she is also not very aware of the various features and capabilities of the Internet for instructional purposes and does not seek uses for Internet innovation in the non-academic area in the teacher training college.

Another factor that can influence the persuasion stage is the level of gratification the subject derives from the use of the Internet. The quantitative analysis in the SOCI shows that this teacher trainer is obtaining medium professional and personal gratification as well as low instructional gratification.

The medium personal gratification that she is deriving is from the use of e-mail to contact friends and ex-colleagues. Meanwhile, she obtains medium professional gratification from the use of the Internet because she is in charge of her college homepage and has communicated with other lecturers in the college regarding this project.

"In charge of the college homepage, but so far I have only contacted lecturers to collect modules produced by the department and notes on courses conducted by the lecturers. I also collect teaching materials and seminar notes that have been attended by the lecturers."

Although this late adopter still has to contact the Teacher Training Division regarding her work via the e-mail, she does not communicate with her students via this application. This particular late adopter is also deriving low instructional gratification from her use of the Internet. This relates to the notion of the lack of use for teaching and learning purposes. So far, she is only directing her students to incorporate Internet articles into their assignments and coursework portfolios.

Decision

Although, the late adopter finds Internet technology too troublesome for the older generation, she feels that there is potential for it for the younger generation. This may be attributed to the difficulties she faces in her attempts to utilize the Internet for teaching purposes.

Though this late adopter claims that she has access to the Internet at home and at the work place and perceives herself in being in the 'aware' level of Internet competency, she still faces difficulties in utilizing the Internet for searching academic materials,

"I can't get much information because I can't find what I am looking for. I went to all the universities. I went to UM (University Malaya), but I just can't find what I am looking for. I just can't find the information that I want".

The subject has taken a very passive role in embracing the innovation and has made only feeble attempts to encourage her students to use the Internet in their assignments. Having said that, it does negate the fact that the subject has implemented Internet innovation on a preliminary level by directing her students to use the Internet in their assignments.

According to Fullan (1992), technology drives change and individuals appear ambivalent, uncertain, conflicted or frustrated in dealing with change. Thus, it may be inferred that this late adopter is facing similar frustrations in dealing with the adoption

of Internet innovation. As such, the chances of her adopting Internet innovation are very slim and she will most probably reject it.

Implementation

Although limited in its usage, this late adopter has tried to put some aspects of Internet innovation into practice. She is currently not utilizing the Internet for the preparation of her lessons as she is more textbook-oriented.

On the other hand, she is directing her pre-service teacher trainees to research materials from the Internet for their pedagogy coursework portfolios on micro-teaching. In addition, she is also directing graduate teachers to use the Internet as a part of their essay assignments.

This late adopter has directed her students to read articles from the Internet and form mind maps which they then present in their portfolios and assignments. However, she is aware of the fact that not all of her students are incorporating the Internet into their assignments.

Thus, it can be seen that this late adopter does not seem to have any vision for an Internet-integrated approach for the education syllabus in the teacher-training curriculum. According to her, Internet-integrated activities are only viable if there are adequate computer and Internet connections and if the lecturers themselves are equipped with the necessary skills to conduct such activities. Otherwise, they will just lose the respect of their students.

Confirmation

Based on the theory propounded by Rogers (1995), confirmation occurs when an individual seeks reinforcement on the potential of an innovation. Rogers (1986) believes that a faculty member's beliefs about and experiences with an innovation influences his or her acceptance and use. Only if he or she finds the innovation

personally relevant and of value will he or she use it. Thus, it can be seen that the late adopter is still not convinced about the potential of Internet innovation.

"Old people like me no point, they cannot keep up with the times. I am going to retire soon, I feel that old people cannot keep up with the changing times, it is a real effort to keep up with the IT skills especially those in my age group who are in their 50's. For old people like me, I don't think we want to tax ourselves"

This statement confirms the late adopter's decision that she is going to reject Internet innovation in the teaching and learning process. Thus, the acceptance of an innovation is highly personal and individual concerns about the innovation can hinder or even obstruct the change process. According to Matthew, Parker, and Wilkinson (1998), late adopters who resist change in technological innovations openly express their technological incompetence, or simply continue to avoid using technology.

Thus, the case studies further substantiate the quantitative findings of the study where significant differences exist between the early and late adopters. It also corroborates the qualitative findings of the study, which showed that early, and late adopter differ in their professional and instructional use of the Internet. The case studies further confirm the fact that differences exist between the two groups of teacher-trainers in each of the five stages in Roger's (1995) innovation decision process theory.

Appendix J
Sample Page of a Power Point Presentation with Notes
on Slide 5 that are Incorporated from the Internet

ECONOMY TOKENS (SLIDE 5)

A system of behavior modification where the teacher and students make an agreement about the expected behavior, which should be reinforced.

- If the behavior is displayed, the students will get a token.
- When the token is counted for an exchange of a reward =
economy tokens

Guidelines in using tokens:

- Count the points that have been obtained and gathered
- Token is exchanged for reward which is liked by the student
- Teacher prepares a reward menu for students to choose according to their interests
- A token is given as soon as the expected behavior is displayed
- Reinforced backup support is given as soon as certain points are collected
- Fix up an appropriate time to exchange the token with a reward
 - Avoid using students 'free' time
- The reward menu should be updated constantly so that students will not get bored
- Prepare a special place as a 'Reinforcement Corner'

Appendix J1
Sample Page of a Power Point Presentation with Notes
on Slide 5 that are Incorporated from the Internet
(Bahasa Malaysia Version)

Slide 1

Honour & Others Memadangkan 10 peraturan asas mengemukakan kontrak

1. Persetujuan dalam kontrak di beri semesta
2. Digunakan untuk mengemukakan TL sauran
3. Digunakan sebagai pengakuan dalam jumlah yang kecil
4. Pengakuan untuk pengikatan bukan kerana memuat penitah
5. T L digunakan perlu diberikan pengakuan setelah lama berlaku
6. Add kepada dua pihak
7. Syarat-Syarat dalam kontrak jelas
8. Kontrak dibuat secara jujur
9. Kontrak digunakan untuk penentuan TL pasaf
10. Digunakan secara identik untuk pengikatan TL murid

Slide 2

Contoh Borang kontrak

Tarikh _____

KONTRAK

Ini adalah persetujuan yang telah dicapai antara _____ dan _____, Kontrak ini bermula pada _____ dan berakhir pada _____. Akan disekat semula pada _____

Jika murid berjaya murid memenuhi persetujuan kontrak ini, beliau akan mendapat ganjaran yang telah dipersetujui daripada guru. Bagaimanapun jika murid gagal, ganjaran akan ditangguhkan.

Tandatangan Murid: _____ Tandatangan Guru: _____

Slide 3

Contoh proses Perundingan Kontrak

Senarai semak kontrak

Murid: _____ Guru: _____ Tarikh: _____

(s)	Tugasan	Catatan
()	1. Wujud dan Edukasi 'support'	
()	2. Jelaskan tujuan perijmpaan	
()	3. Jelaskan tentang kontrak	
()	4. Berikan contoh-contoh kontrak	
()	5. Minta contoh kontrak dari murid	
()	6. Bincangkan kemungkinan tugasan	
()	7. Cadangkan tugasan daripada murid	
()	8. Cadangkan tugasan daripada guru	
()	9. Persekitaran Tugasan	
()	10. Aktiviti yang	
()	11. Kekad persetujuan yang murid cadangkan	
()	12. Capai persetujuan tentang kadar tugasan untuk setiap perijmpaan	

Slide 4

Contoh proses Perundingan Kontrak

Senarai semak kontrak

(s)	Tugasan	Catatan
()	13. Tetapkan masa yang diperlukan untuk menyelesaikan tugas	
()	14. Tetapkan kriteria atau tahap pencapaian tugas	
()	15. Bincangkan bentuk penilaian yang akan digunakan	
()	16. Capai persetujuan persetujuan yang akan digunakan	
()	17. Jelaskan semula bentuk penilaian yang akan digunakan	
()	18. Capai persetujuan persetujuan yang akan digunakan	
()	19. Tetapkan tarikh untuk perundingan semula	
()	20. Salahkan dan salin kontrak	
()	21. Berikan kandungan kontrak kepada murid	
()	22. Dapatkan persetujuan secara lisan dari murid	
()	23. Guru dan murid tandatangan kontrak	
()	24. Ucap terima kepada murid dan diri sendiri	

Slide 5

TOKEN EKONOMI

Satu sistem pengiraan TL dimana guru dan murid membuat persetujuan tentang jumlah mata mata yang akan diberi pengiraan jika terlah laku dipamerkan murid mendapatkan token mata token dikira untuk ditukarkan dengan ganjaran *Token Ekonomi*

- Ganjaran mata yang diperolehi dan ditukarkan
- Token ditukarkan dengan ganjaran lain yang dikehendaki
- Guru menyediakan mata mata pengiraan untuk dipetik oleh murid mengikut minat
- Token diberi sebuah, setiap TL sauran dipamerkan
- Pengiraan sekurang-kurangnya 100 mata mata diberikan sebuah, setiap mata mata tertentu dikumpulkan
- Salahkan mata tertentu untuk membolehkan token dengan ganjaran
- Salahkan dari menggunakan mata mata "free" murid
- Kena ganjaran perlu diambak semula untuk pengiraan murid
- Salahkan mata mata yang mempunyai ganjaran "Ruang Pengiraan"

Slide 6

GANJARAN	ALASAN/INI	JUMLAH MATA
Mazing	10	15
Mewarna Gambar	10	15
Bingo	15	20
Baca Komik	15	25
Puzzles	20	25
Bermain Chess	25	30
Gunna Komputer	30	30
Menonton television	30	30

Appendix K
Sample Page of a Directive to Incorporate the Internet
in Coursework Portfolio

<p>Title of Coursework:</p> <p>The optimum attainment of the objective of teaching depends on the ability to plan and choose an approach and manage a suitable method and technique that is suitable.</p> <p>Based on the following handout, choose any approach, method and technique, and by finding materials from different sources, plan a teaching and learning activity based on any KBSR subject that is chosen (Handout B). Present the output individually in about 7-10 minutes in a micro session.</p>				
Coursework Portfolio Learning Output	Aspect that is Evaluated	Weightage	Strategy and Activity	Evidence of Materials in Portfolio
To identify and collect materials from different sources that are related to approach, method and techniques of teaching	Knowledge of contents	40%	1. Form a group that consists of 3 or 4 members 2. Collect information from reference books, magazines, journals and the Internet	1. Bibliography of sources of materials 2. Summary in the form of short notes and graphic representations based on the information that has been collected. 3. Reflective Writing

Appendix K1
Sample Page of a Directive to Incorporate the Internet in
Coursework Portfolio
(Bahasa Malaysia Version)

<p>Tajuk Tugasan :</p> <p>Pencapaian objektif pelajaran secara optimum bergantung kepada kecekapan merancang dan memilih pendekatan, kaedah dan teknik dan cari bahan-bahan dari pelbagai sumber. Merancangkan satu aktiviti P&P yang sesuai dengan pendekatan kaedah atau teknik yang dipilih berdasarkan contoh kemahiran daripada pelajaran KBSR yang dipilih (Lampiran B). Bentangkan hasilnya secara individu selama 7-10 minit.</p>				
Hasil Pembelajaran KKB	Aspek yang dinilai	Pemberatan	Strategi dan Aktiviti	Bahan dan Bukti
Mengenal pasti dan mengumpul bahan daripada pelbagai sumber yang berkaitan dan bersesuaian dengan teknik mengajar	Pengetahuan isi kandungan	40%	<p>1. Bentuk satu kumpulan yang terdiri daripada 3 atau 4 orang.</p> <p>2. Kumpulkan maklumat daripada buku rujukan, majalah, jurnal dan Internet.</p>	<p>1. Bibliografi bahan rujukan</p> <p>2. Rumusan dalam bentuk nota ringkas dan lakaran grafik berdasarkan maklumat yang dikumpulkan</p> <p>3. Penulisan refleksi</p>

Appendix L
Sample Page of a Bibliography of an Academic Coursework Portfolio
with Articles from the Internet

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2. Mohd Salleh Lebar., Guidance and Counselling. Longman Malaysia Selangor Darul Ehsan
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5. Sarul, Zaman Haji Mohd Lazim, International Drug, Academic (Global) April, May 1996.
6. Sezaki Din, Problems of Drug Abuse, Academic (Global), Special Edition, 1998.
7. Nor Azizan Jaafar, Heroine- Britain citizen hanged, Utusan Malaysia, Tuesday, 4 July 2000.
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9. National Drug Agency, Ministry of Home Affairs, Kuala Lumpur
10. National Drug Agency, Federal Territory. Kuala Lumpur
11. Drug treatment and rehabilitation,
<http://www.laman.map.com/kdhidmat/dadah/dadah.htm>.
12. National Drug Agency. Desk Help One stop center,
http://www.kdn.gov.my/bmalaysia/meja_bantuan/ADK.html
- 13 Drug Abuse, <http://sites.netscape.net/ramleetamin1/dadah>
14. Dahri, Rasul. Why the Islamic religion bans cigarettes or tobacco,
http://members.xoom.com/_XMCM/_Salafiyyun/rokok.html

Appendix L1
 Sample Page of a Bibliography of an Academic Coursework Portfolio
 with Articles from the Internet
 (Bahasa Malaysia Version)

1. Ee Ah Meng, Perkhidmatan Bimbingan dan Kaunseling, Penerbit Fajar Bakti Sdn Bhd. 1998
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5. Sarul, Zaman Haji Mohd Lazim, Perdagangan Dadah Antarabangsa, Akademik (Global) April, Mei 1996
6. Sezaki Din, Masalah Penagihan Najis Dadah, Akademik (Global) , Keluaran Khas, 1998.
7. Nor Azizan Jaafar, Heroin: Rakyat Britan dihukum gantung, Utusan Malaysia, Selesa, 4 Julai 2000
8. Saifudi Abdullah, Dadah, Persatuan Belia Usah Berdian Diri, Utusan Malaysia, Rabu, 28 Jun, 2000
9. Agensi Dadah Kebangsaan, Kementerian Dalam Negeri, Kuala Lumpur
10. Agensi Dadah Kebangsaan, Wilayah Persekutuan, Kuala Lumpur
11. Rawatan dan Pemulihan Dadah
<http://www.laman.map.com/kdhidmat/dadah/dadah.htm>.
12. Agensi Dadah Kebangsaan Meja Bantuan One Stop Centre.
http://www.kdn.gov.my/bmalaysia/meja_bantuan/ADK.html
13. Drug Abuse, <http://sites.netscape.net/ramleectamin1/dadah>
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Appendix M
Sample Page of how the Internet is used in
a Student's Assignment.

4.2 The Language Medium in Primary Schools

According to the Razak report, the primary Malay schools were to be called "General Schools" whilst the primary English schools, Chinese and Tamil schools are called "General Type Schools."

In these general schools, the national language would be the medium of instruction. The English primary schools would use the English language as the main medium of instruction while the Tamil schools would use the Tamil and the Chinese schools use Mandarin as the main language. This proposal was seen as suitable for the cosmopolitan society that existed in our country.

With this step, every race was assured that their language would not be neglected. This indicated racial tolerance which was very important for creating racial unity in our country.

4.3 Standard Curriculum and Syllabus

A standard curriculum and syllabus was envisioned to be very important in creating racial unity amongst the society in a country. This was also stated in the Razak Report, 1956, as,

"We cannot over emphasize our conviction that the introduction of syllabuses common to all schools in the Federation is the crucial requirement of educational policy in Malay. It is an essential element in the development of a united Malaysian nation. It is the key, which will unlock the gates hitherto standing, locked and barred against the establishment of an educational system "acceptable to the people of Malaysia as a whole."

Once all schools are working to a common content syllabus, irrespective of the language medium of instruction, we consider the country will have taken the most important step towards establishing a national system of education which will satisfy the needs of the people and promote the cultural, social economic and political development as a nation." (Razak Report, Paragraph 119)

The importance of a standard education syllabus was also explained by an educationist in the Specialist Teacher Training Institute in Kuala Lumpur in an article on the **Internet**. She is Hannah Pillay, who said,

"It was hoped that a common language and a national education system would create a common culture and a new national identity in pluralistic society."

Appendix M1
Sample Page of how the Internet is used in
a Student's Assignment.
(Bahasa Malaysia Version)

4.2 Bahasa Pengantar di Sekolah Rendah

Mengikut Laporan Razak, sekolah rendah Melayu dipanggil "Sekolah Umum" manakala sekolah rendah Inggeris, Cina dan Tamil dipanggil "Sekolah Jenis Umum". Di sekolah-sekolah ini bahasa ibunda menjadi bahasa pengantar. Sekolah rendah Inggeris menggunakan Bahasa Inggeris sebagai bahasa pengantar sementara Sekolah Tamil menggunakan Bahasa Tamil dan Bahasa Cina menjadi bahasa pengantar di Sekolah Cina. Cadangan ini adalah bersesuaian dengan masyarakat majmuk yang wujud di negara kita.

Dengan langkah ini, maka setiap kaum telah diberi jaminan bahawa bahasa mereka tidak akan diabaikan. Ini merupakan satu strategi tolak ansur yang dianggap sangat penting untuk mewujudkan perpaduan kaum di negara kita.

4.3 Kurikulum dan Sukatan yang Standard

Satu kurikulum dan sukatan pelajaran yang sama adalah amat penting dalam membentuk perpaduan di kalangan masyarakat sesebuah negara. Perkara ini telah ditegaskan dalam Laporan Razak, 1956 iaitu:

"We cannot over-emphasize our conviction that the introduction of syllabuses common to all schools in the Federation is the crucial requirement of educational policy in Malaya. It is an essential element in the development of a united Malaysian nation. It is the key which will unlock the gates hitherto standing locked and barred against the establishment of an educational system 'acceptable to the people of Malaya as a whole'. Once all schools are working, to a common content syllabus, irrespective of the language medium of instruction, we consider the country will have taken the most important step towards establishing a national system of education which will satisfy the needs of the people and promote their cultural, social, economic, and political development as a nation."

(Laporan Razak, Perenggan 119)

Kepentingan satu sukatan pelajaran yang sama juga telah diuraikan oleh seorang ahli pendidik di Specialist Teachers Training Institute di Kuala Lumpur dalam satu artikel di Internet. Beliau ialah Hannah Pillay. Beliau telah menyatakan:

"It was hoped that a common language and a national education system would create a common culture and a new national identity in pluralistic society."

Appendix N
Sample Page of An Hotmail Account showing Assignments
Sent in via the E-mail

MSN HOTMAIL

From manimekalai muthusamy @ yahoo.com
To: hzz98@hotmail.com
Subject: Basic Principles of Behavior Management

- Attachment: BEHAVIOUR MANAGEMENT2.doc (69K) -- [View Attachment](#)
- Attachment: BEHAVIOUR MANAGEMENT1.ppt (140k) -- [View Attachment](#)
- Attachment: Consequences of Behaviour.doc (81k) -- [View Attachment](#)

Appendix N1
Sample Page of An Hotmail Account showing Assignments
Sent in via the E-mail
(Bahasa Malaysia Version)

Hotmail Folder: Inbox Page 1 of 1

Home Hotmail Search Shopping People & Chat
Passport sign out

Keep up on the news that interests you

Hotmail® hzz98@hotmail.com

Inbox Compose Address Book Folders Options
Messenger Calendar Help

Folder: Inbox

From: manimekalal muthusamy <manalanbawani@yahoo.com> [Save Address](#) - [Block Sender](#)

To: hzz98@hotmail.com [Save Address](#)

Subject: Prinsip asas mengurus t/i

Date: Tue, 22 May 2001 23:09:20 -0700 (PDT)

Reply
Reply All
Forward
Delete
Previous
Next
Close

Do You Yahoo!?

Yahoo! Auctions - buy the things you want at great prices
<http://auctions.yahoo.com/>

Attachment: PENGURUSANTINGKAHLAKU2.doc (69k) -- [View Attachment](#)

Attachment: PENGURUSANTINGKAHLAKU1.ppt (140k) -- [View Attachment](#)

Attachment: KonsekuenTingkahLaku.doc (81k) -- [View Attachment](#)

Notice: Attachments are automatically scanned for viruses using

(Move to Selected Folder)

Inbox Compose Address Book Folders Options
Messenger Calendar Help

Get notified when you have new Hotmail or when your friends are on-line. Send instant messages. [Click here to get your FREE download of MSN Messenger Service!](#) Share information about yourself, create your own public profile at <http://profiles.msn.com>

Other Links:
[Buy Music](#)
[Download Music](#)
[Buy Books](#)
[Free Games](#)
[Pharmacy](#)
[More...](#)

Special Features:
[eShop: great stores, great deals](#)
[Are your friends online?](#)
[The Web's best personal finance site](#)
[Keep your car running longer](#)
[Get on your soap box](#)
[More...](#)

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.../zetmsg/cumrbox=F000000001&a=146c8e873046387046a4311492d91d3&msg=MS699055/25/01

Appendix 0
Sample Page of A Directive for Coursework To
be Sent in via the E-Mail

BEHAVIOUR MODIFICATION COURSEWORK

Weightage: 60% coursework
: 40% examinations

In groups of two, choose any of the topics in the syllabus on behavior modification and carry out a class discussion:

Fix a date for a Power Point Presentation

Send by e-mail to: hzz98@hotmail.com not later than a week after the presentation

All coursework to be incorporated in the class diskette.

The last day to send in the diskette: 8th May 2001

Weightage of this coursework: 30% of which 20% is for contents and 10% is for the Power Point presentation

Exam: Contains 30 multiple choice questions

Weightage = 30%

Appendix 01
Sample Page of A Directive for Coursework To
be Sent in via the E-Mail
(Bahasa Malaysia Version)

KERJA KURSUS

PENGURUSAN TINGKAH LAKU

Pemberatan : 60% KK
: 40% peperiksaan

1. Dalam kumpulan berdua pilih mana-mana tajuk dalam Sukatan Pelajaran Pengurusan Tingkahlaku secara perbincangan kelas:
 - Tetapkan tarikh untuk pembentangan dalam 'Power Point'
 - Hantarkan menggunakan E-mail kepada :
hzz98@hotmail.com tidak lewat daripada seminggu selepas pembentangan.
 - Semua kerja kursus dimuatkan ke dalam disket kelas.
 - Tarikh akhir penyerahan disket : 8 Mei 2001
 - Pemberatan KK ini: 30%
 - 20% = isi
 - 10% = persembahan
2. Ujian : mengandungi 30 soalan aneka pilihan
 - Pemberatan = 30%

Appendix P
Sample page of a Bibliography of a Tennis Coursework Portfolio
with Articles from the Internet

BIBLIOGRAPHY

Jenkins, Sally (2000). *'The talented Mr. Agassi'* In Tennis Magazine, New York: (June 2000).

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Leand, Andrea (1999). *'Working out with Andre Agassi'* in Tennis Magazine, New York: (October, 1999).

St. John, Allen (2000). *'US Open 2000'* in Tennis Magazine, New York: (September, 2000).

L. Jon. Werthem (2000). *What a racket- Andre Agassi has risen to the top of the tennis world again* in Sports Illustrated Magazine for Kids. New York: Time Inc (June, 2000).

_____ *'Player Profiles: Andre Agassi (USA)'*,
[http:// www. zoomtennis.com/pages/profile/tennis_pp2.html](http://www.zoomtennis.com/pages/profile/tennis_pp2.html)

_____ *"2000 was a struggle", says Agassi,*
[http:// www2. tennisbullet.com/news/USA/977435710.46.html](http://www2.tennisbullet.com/news/USA/977435710.46.html)

_____ *'Player DataBase Head to Head Report,'*
<http://onlinesql.itfte.../headresults.asp?adl=9%Eand+AGASSI528USA%29&id2=121>

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_____ *'Official Site of Australian Open 2001'* by IBM-Players
<http://www.ausopen.org/bios/profile/ms/atpa092.html>

_____ *'This week on the ATP Tour-week of November 27'*
[http:// www.zoomtennis_feature/new/rick_yach/975314752.html](http://www.zoomtennis_feature/new/rick_yach/975314752.html)

_____ *'ATP Top 20 single players (December 4, 2000)'*
[http:// www.zoomtennis.com/atp/statistics_contentframe.html](http://www.zoomtennis.com/atp/statistics_contentframe.html)

Appendix P1
Sample page of a Bibliography of a Tennis Coursework Portfolio
with Articles from the Internet
(Bahasa Malaysia Version)

BIBLIOGRAFI

Jenkins, Sally (2000). 'The talented Mr. Agassi' dalam Majalah Tennis, New York: (Jun 2000).

Jenkins, Sally (2000). 'Rebel with a Cause' dalam Majalah Tennis, New York: (Oktober 2000).

Leand, Andrea (1999). 'Working Out with Andre Agassi' dalam Majalah Tennis, New York: (Oktober, 1999).

St. John, Allen (2000). 'US Open 2000' dalam Majalah Tennis, New York: (September, 2000).

L. Jon. Werthem (2000). What a racket- Andre Agassi has risen to the top of the tennis world –again in Sports Illustrated for Kids. New York: Time Inc (Jun 2000)

_____ 'Player Profiles: Andre Agassi (USA)',
[http:// www. zoomtennis.com/pages/profile/tennis_pp2.html](http://www.zoomtennis.com/pages/profile/tennis_pp2.html)

_____ "2000 was a struggle", says Agassi,
[http:// www2. tennisbullet.com/news/USA/977435710.46.html](http://www2.tennisbullet.com/news/USA/977435710.46.html)

_____ 'Player DataBase Head to Head Report,'
<http://onlinesql.itfte.../headresults.asp/adl=9%Eandre+AGASSI528USA%29&id2=121>

_____ 'ATP Tour: Players: Ranking, Portraits and Stats- Player Activity by Tournament,
[http://onlinesql.itfte.../activity by tournament.asp?player1name=andre+agassi&singles=See%21&player2name=&](http://onlinesql.itfte.../activity%20by%20tournament.asp?player1name=andre+agassi&singles=See%21&player2name=&)

_____ 'Official Site of Australian Open 2001 by IBM-Players
<http://www.ausopen.org/bios/profile/ms/atpa092.html>

_____ 'This week on the ATP Tour-week of November 27'
[http:// www.zoomtennis_featurea/new/rick_vach/975314752.html](http://www.zoomtennis_featurea/new/rick_vach/975314752.html)

_____ 'ATP Top 20 single players (December 4, 2000)'
[http:// www.zoomtennis.com/atp/statics_contentframe.html](http://www.zoomtennis.com/atp/statics_contentframe.html)

Appendix Q
Sample Page of a Lesson Plan Sent in via the E-mail for E-Practicum

From: "mohd hafezi"
To: hzz98@hotmail.com
Subject: Second E-practicum

Teaching Lesson Plan for Students in Year 5 (27/03/01)

Theme: National Pride

Skills:

1.47 : To express a poem with the correct pronunciation, intonation and rhyme.

2.28 : To make a conclusion from the reading materials.

3.27 : To write comprehension answers based on the reading materials.

Objective: At the end of the teaching and learning process, students will be able to:

1. Express the poem "My Country Malaysia" with the correct pronunciation, intonation and rhyme.
2. Make a summary based on the poem, " My Country Malaysia" verbally.
3. Can write at least five correct answers for the comprehension passage based on the poem, "My Country Malaysia."

Critical and Creative Thinking Skills: make a summary and construct ideas

Noble Values: Proud of Malaysia, brave, co-operative and grateful.

Integrated Elements

Set Induction:

1. Teacher will display the flag of Malaysia.
2. Teacher will question students about the picture that is displayed.
3. Teacher relates content of lessons with the above activity.


Step One

1. Teacher will show the chart of the poem, 'My Country Malaysia'.
2. Students are then exposed to the recital of the poem via the radio.

Appendix Q1
Sample Page of a Lesson Plan Sent in via the E-mail for E-Practicum
(Bahasa Malaysia Version)

Hotmail Folder: Inbox Page 1 of 3

[Home](#)
[Hotmail](#)
[Search](#)
[Shopping](#)
[People & Chat](#)
[Passport sign out](#)


HAZINA ZAKARIA

Hotmail® [hzz98@hotmail.com](#)

[Inbox](#)
[Compose](#)
[Address Book](#)
[Folders](#)
[Options](#)
[Folder: Inbox](#)
[Messenger](#)
[Calendar](#)
[Help](#)

From: "mohd. hafezi (selendang merah) mohd. hafezi abdul hamid" <selendang_merah81@hotmail.com>
To: [Save Address - Block Sender](#)
Subject: e-praktikum kedua
Date: Mon, 26 Mar 2001 09:37:33 +0800

[Reply](#)
[Reply All](#)
[Forward](#)
[Delete](#)
[Previous](#)
[Next](#)
[Close](#)

PERSEDIAAN MENGAJAR BAHASA MELAYU UNTUK TAJUK 3 (27/03/01)

Tema : Kebanggaan Negara

Kemahiran :

1.47 : melafazkan puisi dengan mengikut sebutan, intonasi, rima dan irama yang betul.

2.28 : membuat rumusan daripada bahan bacaan.

3.27 : menulis jawapan pemahaman berdasarkan bahan bacaan.

Objektif : Pada akhir pengajaran dan pembelajaran, insyaAllah murid dapat:

1. Mendeklamasikan sajak 'Negeraku Malaysia' dengan sebutan, intonasi, rima dan irama yang betul.
2. Membuat rumusan berdasarkan sajak 'Negeraku Malaysia' secara lisan.
3. Dapat menulis sekurang-kurangnya lima jawapan yang pemahaman dengan betul berdasarkan sajak 'Negeraku Malaysia'.

KDKK : membuat rumusan, menjana idea

Nilai-nilai murni : Berbangga dengan bumi Malaysia, berani, bekerjasama, kesyukuran.

Kesejuaian unsur : Kajian Tempatan, Sastera.

Set induksi.

1. Guru menampilkan gambar bendera Malaysia.
2. Guru bersetia jawab dengan murid berdasarkan gambar tersebut
3. Guru mengaitkan isi pelajaran dengan aktiviti tadi.

Langkah 1

1. Guru menampilkan carta sajak ' Negeraku Malaysia '.
2. Murid-murid didengarkan dengan bacaan deklamasi sajak tersebut melalui radio.

/getmsg?curinbox=F000000001&n=a6ceae6eb0-172e8de0b1340b67f7795&msg=MSC985570653.36&start/3/26/2001

Appendix R
Sample Page of a Reflective Activity Sent in by a Student
via the E-Mail

Reflection for teaching session on 27.3.01

Today's teaching session went on well. From the preparation aspects of teaching, I had already got some guidelines and advice from you from the e-practicum. In the beginning, I did not have any problems in combining the skills that I have acquired. Nevertheless, from the aspects of the suitability of the teaching activity that I had planned, there was still some mismatch with the skills that I had chosen. However, with the guidance and the instruction/directives that were given to me, I managed to implement a teaching session, suited to the age level and ability of the students in the class.

From the aspects of implementation, I managed to carry out a good teaching session. The strong point that I could see in the implementation of my teaching this time was the effective communication with my students and the commitment that was given by the students. Furthermore, there was feedback from the students who continued to be lively and were actively thinking while the teaching session was being conducted.

Nevertheless, there were weaknesses that exist especially from the aspect of conducting group activities. The forming of group members of more than five pupils made the classroom environment rather noisy. Moreover, not all the students could engage actively in the work that was assigned. Thus, the expertise and cleverness of the teacher plays an important role in guiding and observing all the students so that they will be engaged and to give them feedback. This is the way that I carried out this particular activity. Sometimes, I feel that I need to be given more guidance and guidelines on more complex and accurate methods of conducting group activities in the classroom.

After the teaching session, I reflected once again about my weaknesses that I should rectify. Although the positive evaluation of the lecturer gave me confidence about the quality of my teaching this time, I am still not convinced that I am fully prepared in the aspects of planning and implementation in the teaching and learning process. I am also not fully prepared in applying psychology and sociology theories in the real environment. Further, I am unable to ensure that the students in class are always ready and interested until the end of the class session. Nevertheless, the teaching session this time gave me a better exposure and helps me to rectify my weaknesses. It also helped me to reinforce the good points in my teaching.

Appendix R1
Sample Page of a Reflective Activity Sent in by a Student
via the E-Mail
(Bahasa Malaysia Version)

Hotmail Folder: Inbox

Page 1 of 2

Home Hotmail Search Shopping People & Chat Passport
msn. From aphrodite to zygote msn
Hotmail hzz98@hotmail.com
Inbox Compose Address Book Folders Options Messenger Calendar Help
Folder: Inbox

From: "mohd. hafezi (selendang merah) mohd. hafezi abdul hamid"
<selendang_merah81@hotmail.com> [Save Address](#) - [Block Sender](#)
To: hzz98@hotmail.com [Save Address](#)
Subject: refleksi
Date: Wed, 28 Mar 2001 09:19:06 +0800
Reply Reply All Forward Delete Previous Next Close
as"Kum puan,...refleksi untuk sesi pengajaran hari Selasa 27.3.01

Alhamdulillah, sesi pengajaran pada hari ini berjalan dengan lancar dan baik. Dari segi perancangan persediaan mengajar, saya telah mendapat bimbingan dan panduan pensyarah penyelia melalui e-praktikum. Pada peringkat awal, saya tidak menghadapi masalah dalam menggabungkan kemahiran-kemahiran yang akan digunakan. Namun, dari segi keserasian perancangan aktiviti, masih ada pencanggahan dan kekeliruan dengan kemahiran yang telah dipilih. Walau bagaimanapun, hasil bimbingan dan panduan yang telah diberikan kepada saya, saya telah berjaya melaksanakan satu langkah pengajaran yang sesuai mengikut tahap umur dan kepupayaan murid kelas.

Dari segi pelaksanaan pula, saya dapat menjalankan sesi pengajaran dengan baik. Kekuatan yang dapat saya lihat dari segi pelaksanaan pengajaran kali ini ialah komunikasi dengan murid, komitmen yang diberikan oleh anak-anak murid serta rangsangan murid untuk terus bergiat aktif dan berfikir semasa sesi pengajaran dijalankan. Namun, masih terdapat kelemahan yang wujud terutama dari segi pelaksanaan aktiviti berkumpulan. Penggunaan kumpulan secara besar melebihi 5 orang menyebabkan kelas agak bising dan tidak kesemua murid bergerak aktif dalam sesi kerja berkumpulan tersebut. Oleh itu, kepintaran dan kecekapan guru memainkan peranan penting dalam megawasi serta membimbing semua murid-murid agar bergiat aktif dan sumbangsaran dalam kumpulan masing-masing dan cara ini saya cuba terapkan dalam aktiviti tersebut. Ada kalanya saya berfikir mungkin perlu saya diberi panduan dan bimbingan dengan lebih kompleks dan jitu untuk melaksanakan tugas berkumpulan di dalam kelas.

Selepas sesi pengajaran, saya memikirkan semula kelemahan yang perlu diperbaiki dari masa ke semasa. Walaupun penilaian pensyarah memberi suatu keyakinan dalam prestasi penilaian pengajaran yang baik kali ini, namun saya masih belum berkeyakinan menyatakan sepenuhnya bahawa saya mempunyai persediaan yang elok dari segi perancangan dan pelaksanaan sesi P&P serta pengalaman dan aplikasi sepenuhnya teori psikologi serta sosiologi terhadap persekitaran dan diri murid-murid di kelas agar murid-murid terus bersiap sedia dan minat dalam sesi pengajaran hingga tamat. Walau bagaimanapun, sesi pengajaran kali ini dapat memberikan saya suatu pendedahan yang lebih baik dan memperbaiki kelemahan dan memperkukuhkan kekuatan pengajaran sebelum ini.

Get New Hotmail Notifications and Free Instant Messaging at <http://messenger.msn.com>.

[Move to:](#) (Move to Selected Folder)

../getmsg?curmbox=F000000001&a=146ctte87304658704ba4311492d91d5&msg=MSG9857572501

Appendix S
Sample Page of an Hotmail Account showing the Frequency of E-Mail
Exchanges for Assignments and E-Practicum

From	Subject	Date
<u>Azizi Kamarul</u>	E-practicum	March 26, 2001
<u>Azizi Kamarul</u>	Reflection for 3 rd lesson	March 27, 2001
<u>Mohd. Hafezi, Selenda</u>	Reflection	March 28, 2001
<u>Azizi Kamarul</u>	E-practicum	March 28, 2001
<u>Azizi Kamarul</u>	Reflection	April, 2, 2001
<u>Rusia Ginsu</u>	Re: Assignment on Parents Involvement	May 10 2001
<u>Rose Sakai</u>	Training Objective and Communication with Parents	May 22 2001
<u>Rose Sakai</u>	Training Objective and Communication with Parents	May 22 2001

Appendix S1
Sample Page of an Hotmail Account showing the Frequency of E-Mail
Exchanges for Assignments and E-Practicum
(Bahasa Malaysia Version)

Home Hotmail Search Shopping People & Chat Passport Planner

msn Hard to keep track of those little yellow notes?

Hotmail® hzz98@hotmail.com

Inbox Compose Address Book Folders Options Messenger Calendar Help

Inbox 10 new (Avoid junk e-mail, activate **Inbox Protector**)

☐ Delete ☐ Block Sender(s) ☐ Move to ☐ Move to Selected Folder

	From	Subject	Date	Size
<input type="checkbox"/>	Amir's Work	(none)	Jul 2 2000	70k
<input type="checkbox"/>	Hamidah Yazdani	(none)	Jan 8 2001	1k
<input type="checkbox"/>	mushni hashim	posting	Jan 22 2001	2k
<input type="checkbox"/>	ahmadd@mara.gov.my	[e-perniagaan] Dapatkan S975,500 tanpa banyak...	Jan 26 2001	6k
<input type="checkbox"/>	Balakrishnan Muniand...	Re: Selamat hari raya	Jan 27 2001	3k
<input type="checkbox"/>	tom bruton	Men in ur life	Mar 8 2001	1k
<input type="checkbox"/>	Azizi kamarul	e-praktikum (3)	Mar 26 2001	5k
<input type="checkbox"/>	Azizi kamarul	Refleksi Pengajaran Ke-3	Mar 27 2001	2k
<input type="checkbox"/>	mohd. hafezi selenda...	refleksi	Mar 28 2001	3k
<input type="checkbox"/>	mohd. hafezi selenda...	e-praktikum	Mar 28 2001	9k
<input type="checkbox"/>	Azizi kamarul	E-praktikum (4)	Mar 28 2001	5k
<input type="checkbox"/>	Azizi kamarul	Refleksi	Apr 2 2001	2k
<input type="checkbox"/>	mushni hashim	pkpg	Apr 20 2001	1k
<input type="checkbox"/>	tom bruton	msg from tom bruton	Apr 25 2001	1k
<input type="checkbox"/>	tom bruton	Re: msg from tom & hamidah	Apr 28 2001	3k
<input type="checkbox"/>	tom bruton	Re: msg from tom & hamidah	May 8 2001	3k
<input type="checkbox"/>	NIS_Admin@excite.com	Dear Hotmail Member	May 8 2001	11k
<input type="checkbox"/>	rusia einsu	tugasan penglibatan ibu bapa	May 10 2001	109k
<input type="checkbox"/>	mushni hashim	Bulan LIma	May 10 2001	2k
<input type="checkbox"/>	...-vuvu	Fwd: Whats going on in this world???	May 11 2001	139k
<input type="checkbox"/>	...-vuvu	see this!!!--- Grilled dead babies...!	May 11 2001	2k
<input type="checkbox"/>	Hakeem	Happy Mother's Day! - from Hakeem	May 12 2001	1k
<input type="checkbox"/>	rusia einsu	Selamat Hari Ibu dan Hari . Guru	May 14 2001	1k
<input type="checkbox"/>	rusia einsu	Selamat Hari Guru	May 16 2001	1k
<input type="checkbox"/>	esiah juri	hai	May 21 2001	1k
<input type="checkbox"/>	rusia einsu	Re. tugasan	May 21 2001	1k
<input type="checkbox"/>	Rose Sakai	Objektif latihan dan Komunikasi kepada ibu ba...	May 22 2001	67k
<input type="checkbox"/>	Rose Sakai	Objektif latihan dan komunikasi kepada ibu ba...	May 22 2001	444k
<input type="checkbox"/>	esiah juri	Euka	May 22 2001	385k

http://www.id.id.../HotMail/?curmbox=F000000001&a=146c8e87JU4658/U4ba43t1492d91d 5/25/01

Appendix T
Sample Page of an Original Outline showing Weightage
Accorded for Pedagogy Coursework

NAME: GROUP:		
SECTION A (35 MARKS)	MARKS	COMMENTS
1a) To relate theories of learning in daily lesson plan	15	
1b) Explanation of at least 2 learning theories: a) Cognitive Theory b) Behaviorist Theory	15	
Bibliography (At least threes sources) (5 marks) - Internet - Books - Magazines - Journals - Other Media	5	
Total	35	
SECTION B (15 MARKS)		
2a) Personal/ Social	3	
2b) Education	3	
2c) Career	3	
Bibliography (At least three sources) (6 marks) - Internet - Books - Magazines - Journals - Other Media	6	
Total	15	
FINAL TOTAL	50	

Appendix T1
 Sample Page of an Original Outline showing Weightage
 Accorded for Pedagogy Coursework
 (Bahasa Malaysia Version)

NAMA:		
KUMPULAN:		
BAHAGIAN A (35 markah)	Markah	Catatan
1a) Mengaitkan teori pembelajaran dalam rancangan persediaan harian	15	
1b Huraian sekurang-kurangnya 2 teori pembelajaran:		
b) Teori Kognitif	15	
c) Teori Behavioris		
Bibliografi- minima 3 sumber (5 markah)		
- Internet		
- Buku	5	
- Majalah		
- Jurnal		
- Media Lain		
Jumlah	35	
BAHAGIAN B (15 markah)		
2a) Peribadi/Sosial	3	
2b) Pendidikan	3	
2c) Kerjaya	3	
Bibliografi- minima 3 sumber (6 markah)		
- Internet		
- Buku	6	
- Majalah		
- Jurnal		
- Media Lain		
Jumlah	15	
JUMLAH BESAR	50	

Appendix U
Sample Page of a Modified Outline showing
Weightage Accorded for Pedagogy Coursework

NAME: GROUP:		
SECTION A (35 MARKS)	MARKS	COMMENTS
1a) To relate theories of learning in daily lesson plan	14	
1b) Explanation of at least 2 learning theories:		
a) Cognitive Theory		
b) Behaviorist Theory	14	
Bibliography (7 marks)		
- Internet (Compulsory; at least four websites)	4	
- Books		
- Magazines	3	
- Journals		
- Other Media		
Total	35	
SECTION B (15 MARKS)		
2a) Personal/ Social	2	
2b) Education	2	
2c) Career	2	
Bibliography (9 marks)		
- Internet (Compulsory; at least 5 websites)	5	
- Books		
- Magazines	4	
- Journals		
- Other Media		
Total	15	
FINAL TOTAL	50	

Appendix U1
Sample Page of a Modified Outline showing Weightage
Accorded for Pedagogy Coursework
(Bahasa Malaysia Version)

NAMA:		
KUMPULAN:		
BAHAGIAN A (35 markah)	Markah	Catatan
1a) Mengaitkan teori pembelajaran dalam rancangan persediaan harian	14	
b) Huraian sekurang-kurangnya 2 teori pembelajaran:		
a) Teori Kognitif		
b) Teori Behavioris	14	
Bibliografi - (7 markah)		
- Internet (Wajib; sekurang-kurangnya 4 laman web)	4	
- Buku		
- Majalah	3	
- Jurnal		
- Media Lain		
Jumlah	35	
BAHAGIAN B (15 markah)		
2a) Peribadi/Sosial	2	
2b) Pendidikan	2	
2c) Kerjaya	2	
Bibliografi- (9 markah)		
- Internet (Wajib; sekurang-kurangnya 5 laman web)	5	
- Buku		
- Majalah		
- Jurnal	4	
- Media Lain		
Jumlah	15	
JUMLAH BESAR	50	