

PPIP-ONLINE: ADVANCING WITH EMERGING TECHNOLOGY

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Abstrak: Artikel ini melaporkan tentang pembinaan *PPIP-Online* yang menyediakan akses internet dan muat turun bahan pengajaran dan sokongan di samping meningkatkan mutu pengajaran bersemuka yang sedia ada. Secara khusus, *PPIP-Online* memberikan manfaat 24 jam kepada pelajar dari segi akses kepada bahan pembelajaran dalam pelbagai bentuk elektronik, membolehkan pelajar muat turun nota dan bahan pembelajaran lain. *PPIP-online* dibina berasaskan teori yang dikenali sebagai Teori Aktiviti. Teori ini berasal daripada Teori Vygotsky yang berkaitan dengan mediasi alatan. Menurut teori Vygotsky, aktiviti manusia dapat dijelaskan sebagai proses mediasi yang dicetuskan oleh artifaks (peralatan teknikal) atau simbol (peralatan psikologi) dalam persekitaran sosial yang menyumbang kepada pembelajaran individu. *PPIP-online* yang berbentuk interaktif ini mempunyai beberapa ciri unik yang terdapat dalam tapak e-pembelajaran seperti forum, sumber, kuiz dalam pelbagai bentuk, blogs, wikis, aktiviti database, tinjauan dan ruang chat. Namun, *PPIP-online* ini juga mempunyai beberapa cabaran antaranya pengguna masih belum bersedia sepenuhnya menggunakannya dan pengguna dewasa kurang daya tumpu terhadap bahan yang dirujuk dan kerap mengubah selera kepada laman web lain.

INTRODUCTION

We are in the midst of an e-learning revolution, which brings with it rapid change, a myriad of emerging technologies, and greater opportunities to generate significant returns on e-learning investments. Thus, e-learning is fast gaining the acceptance as a tool for training in corporate institutions and for teaching and learning in academic environments.

Employing new pedagogies and technologies, where appropriate, will enhance the paradigm shift as described by Hairul & Fong (2005) and Barr & Tagg (1995) in creating an ideal e-learning environment for students and educators to attain some measures of constructivist learning, where students learn at their own convenience and at a time and place of their choice. It eliminates the barriers of time and distance. Approaches to learning that promote social constructivism, or learning within a social context and that feature active group construction of knowledge, rather than transfer of knowledge, then provide ideal learning environments for the new era. Today, an exciting emerging technology, the learning management system (LMS) might be able to deliver the e-learning environment to deliver social-constructivist learning.

In general, there are two types of e-learning - asynchronous and synchronous. Asynchronous Learning is the most widespread e-learning style today. It involves self-paced learning, either CD-ROM based, network-based, Intranet-based or Internet-based. It may include access to instructors through online bulletin boards, online discussion groups and e-mail. It may also be totally self-contained with links to reference materials in place of a live instructor. Conversely, in Synchronous Learning, real-time communication with a live instructor facilitates the learning process. Every student logs in at a set time and communicates directly with the instructor and each other. This type of learning typically takes place via the Internet using the text-chat, audio-chat and even webcam video-chat.

LEARNING MANAGEMENT SYSTEM (LMS)

Learning Management Systems (LMS) is a multimedia and Internet-based technology, where the content is delivered digitally using text, graphics, animation, sound and video. It was designed with the underlying concept of a “virtual teacher within a virtual classroom environment”, having the ability to “teach” the students rather than just simply deliver the learning materials to a learner. Using an intelligent navigation feature, the system would deliver materials according to the ability of the individual student. Each learner would be presented with different sets of materials based on their ability. An extensive tracking and monitoring feature built into the system intelligently records the learner’s progress and activities, which is subsequently used to evaluate and measure the effectiveness and return-on-investment (ROI) of the training. This could also be used to identify problematic areas for each learner and customize appropriate measures to be taken. All data can be viewed graphically.

LMS has many supporting tools such as Staff and Student Registration System, Learning Object Manager, Question Bank, Intelligent Navigation System, Short Notes, E-Mail, Online Chat, White Board, Newsgroup, Bulletin Board and Report Card. The development of LMS really signifies the creation of an intelligent, interactive, self-paced and instructor-led, web-based teaching and learning tool. These supporting tools allow teachers to manage class and student assignments, track individual student progress, create custom diagnostic tests, and automatically generate prescriptive assignments based on each student’s unique areas of need.

INTRODUCING PPIP-ONLINE

In January 2004, the School of Educational Studies (SES) achieved MS ISO 9001:2000. In line with the quality policy, SES is committed to provide the best and highest quality of teaching and learning environment to all the students - holistically and continuously.

Acknowledging the academic needs of ICT-savvy students, SES created an electronic facility known as PPIP-online (<http://www.ppip.usm.my>). With the availability of a broader bandwidth to support e-learning activities at Universiti Sains Malaysia, PPIP-Online could offer high-speed accessibility and large volume downloads. It is hoped that using PPIP-Online will bring added value to all the courses and support, as well as enhance face-to-face instruction.

PPIP-online offers many benefits to students:-

- Provides 24/7 accessibility to course materials such as Instructional Plans, PowerPoint slides, lecture notes, reading articles, multimedia presentations, interactive multimedia learning materials (video clips, audio clips, animation, etc.) and assignments. These materials can be accessed prior to class or at any convenient time.
- Allows students to download and print course materials as needed. This will reduce expenses in copying and printing.
- Gives immediate access to course materials from any location. Students need not have to spend time walking across campus to the library searching for red-spotted reading materials.
- Is an advantage to students who can now focus on understanding the lectures instead of scrambling to copy notes.
- Offers asynchronous and synchronous communication tools which include a weekly bulletin board with the latest announcements for each course, discussion forums and chat sessions to give each and every student an opportunity to participate in discussions.

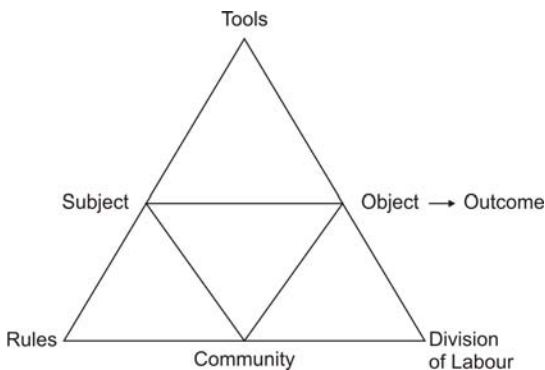
- Allows students to work in groups without the constraints of meeting together at a certain date, time and location. Permits students to upload their assignments to course lecturers.

Realizing these benefits, SES adopted a Learning Management System (LMS) from a provider called Moodle and integrated it into USM's e-learning system. Moodle is a free of charge e-learning environment built using an open-source software, combining constructivist inspired tools for open-ended investigation with communication and collaboration tools that support multi-learner collaboration and emphasizes student-centered, collaborative and critical reflection activities. For instance, it offers asynchronous and synchronous communication tools which include a bulletin board with the latest announcements for each course, discussion forums and chat sessions to give each and every student an opportunity to participate in discussions. It also allows students to work in groups without the constraints of meeting together at a certain date, time and location.

THEORETICAL FRAMEWORK

The theoretical framework underlying PPIP-Online is known as Activity Theory (AT). It is a philosophical and cross-disciplinary framework for studying different forms of human practices as developmental processes, with both individual and social levels interlinked at the same time. AT has its origin in Vygotsky's theory of tool mediation. According to Vygotsky, human activity can be explained as a mediated process triggered by artifacts (technical tools) or signs (psychological tools) in a social environment that contributes to the individual learning. Engestrom expanded Vygotsky's model of the human activity system by adding three social-cultural elements in the Activity Triangle (Fig. 1).

Fig. 1 Engestrom's Human Activity Model



Engestrom's model views a human activity system as a collective activity system with complex interrelations between the individual subject and his or her community. The basic unit of activity analysis is an activity system. There are six components in the model which can be explained as follows.

1. The subjects of the activity refer to individuals or groups of participants engaged in the activity.
2. The object represents the purpose and intention of human activity that targets certain objectives. It can be a material or mental product.
3. Tools refer to any mediating artifacts, material or conceptual, that shaped the activity.
4. Rules refer to norms, regulations and conventions that constrain the activity being carried out.
5. Division of labour refers to the allocations of responsibilities and variations in job roles of the subjects as they carry out the activity.
6. Community refers to the social and cultural context of the environment in which the subjects operate.

FEATURES OF PPIP-ONLINE

PPIP-Online has many features expected from an e-learning platform including: Forums, Content Resources, Quizzes with different kinds of questions, Blogs, Wikis, Database activities, Surveys and Chats.

WELCOMING PAGE

The welcoming page consists of a “Welcoming Message” by the Dean, major links, a digital counter and current news of events in SES USM.

oneself on this web site. Each of the individual courses may also have a one-time “enrolment key”: This will “enrol” you in the course.

For Subscribed Members

To ensure security and confidentiality, only permitted subscribed students can log in with specific username and password.

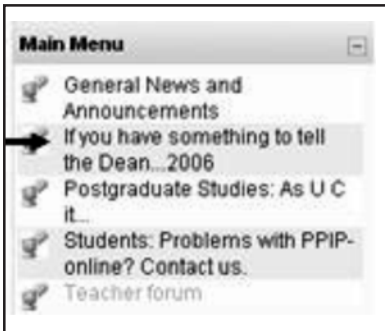
Login here using your username and password:
(Cookies must be enabled in your browser) ?

Username:

Password:

Login

Open-Forum - "If You Have Something To Tell The Dean..."



Through PPIP-Online, students were able to freely communicate with the Dean. For instance, the forum created by the Dean entitled "If you have something to tell the Dean..." attracted many curious comments and suggestions.

Dean: "In line with our quality policy, PPIP is committed to provide the best and highest quality of teaching and learning environment to our students - holistically and continuously. Suggestions on improving any aspect concerning PPIP are most welcomed. Thank you."

Siti: "It is my pleasure to be able to communicate online with you after being here for more than two years. PPIP-Online made it possible!!!. I would suggest that the computer laboratory be opened for longer hours."

Dean: "Dear Siti, Thank you for your comments. PPIP will look into the possibilities of opening our present computer lab. for a longer period of time for students to use. I will discuss the matters with Dr. Fong and we will try to rectify the problem ASAP. I will announce about this very soon. Please look out for the announcement on the main page of PPIP online."

Anne: "Hello Dean. I have never met you in person, so it is my pleasure being able to communicate with you PPIP-Online. The introduction of PPIP-Online is certainly a great idea as it makes our access to matters pertaining to our course easier – anytime and anywhere". The PPIP-Online programme is an asset for all PPIP students and I feel that we should make good use of it. However, the availability of the lab for our use should be more flexible to accommodate students at any time."

Dean: "Hi Anne, I am glad that you find our PPIP-Online useful. I will try to look into the problem. We will see how we can accommodate you and other students' need to use the lab. Thanks."

Leng Choo: "Dearest Dean, it is indeed a privilege for us to be able to communicate and give our views through PPIP-Online in regards to teaching and learning environment. Although it is the first experience for me, I find PPIP on line a very essential platform especially for E-learning. We can access it anytime and anywhere without much constraints. Learning as well as communication are made easy."

Dean: "Hi, Leng Choo, Thank you. I am happy that you all are responding very well to our effort. Work hard and be the best."

Announcements

In compliance to the ISO requirement, the attendance of students is very important. Hence, the announcement is made public and displayed in PPIP-Online as a constant reminder.



Please be reminded that Attendance to ALL tutorial classes are compulsory. If you should be absent (whether with MC or whatsoever excuse) a "Peringatan Tidak Kehadiran" will be sent to you. This is in accordance with the requirement of the MS ISO 9001:2000 regulation. If you are absent for 3 consecutive times, then you may be barred from taking the examination.

Content Resources

Prior to lectures, students may download the Powerpoint files and lectures notes through PPIP-Online.

TODAY'S MENU
Using Webcam to snap your own picture
Upload you face-photo into PPIP ONLINE
Introduction to Plagiarism
Online test on Plagiarism


PLAGIARISM
The link below contains 10 questions on recognizing kinds of plagiarism. Following completion of this short test, and upon obtaining a successful score (100 percent), you will be given an opportunity to print a *confirmation certificate*. Please click on the link to learn more concerning Plagiarism and finally "sit" for the on-line test.
<http://www.indiana.edu/~istd/>


 Using Webcam
 Introduction to Plagiarism

Powerpoint Files

Threaded Discussion Forum

With a clear understanding of their roles and the rules in the learning activity, students within small groups participate in lively intellectual discussions. The students were told that their comments and critiques were assessed and graded for their quality and maturity.

 **Seminar 1A(Chitra & Usha)**
by usha dharmarajah - Thursday, 23 December 2004, 03:19 AM

 Using ICT_to_enhance_speaking_for_primary_school.ppt

Using ICT to enhance speaking for primary school students.

Chitra d/o Subramaniam (72694)

Usha Devi d/o Dharmarajah (72679)

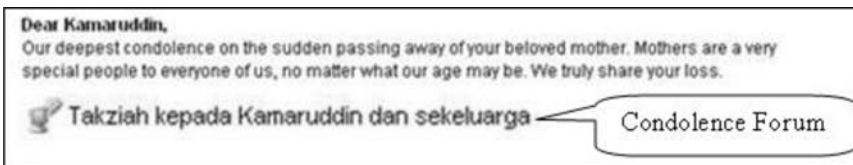
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Re: Seminar 1A(Chitra & Usha) by ngokmei goh - Thursday, 23 December 2004, 03:50 AM
Re: Seminar 1A(Chitra & Usha) by Lian Har Nee - Thursday, 23 December 2004, 04:06 AM
Re: Seminar 1A(Chitra & Usha) by usha dharmarajah - Wednesday, 29 December 2004, 07:28 AM
Re: Seminar 1A(Chitra & Usha) by Shahizar - - Friday, 24 December 2004, 02:21 PM
Re: Seminar 1A(Chitra & Usha) by chitra subramaniam - Wednesday, 29 December 2004, 07:38 AM
Re: Seminar 1A(Chitra & Usha) by usha dharmarajah - Wednesday, 29 December 2004, 07:24 AM
Re: Seminar 1A(Chitra & Usha) by min yusof - Tuesday, 28 December 2004, 01:53 PM
Re: Seminar 1A(Chitra & Usha) by chitra subramaniam - Wednesday, 29 December 2004, 07:43 AM
Re: Seminar 1A(Chitra & Usha) by ednah abu bakar - Wednesday, 29 December 2004, 05:17 AM
Re: Seminar 1A(Chitra & Usha) by chitra subramaniam - Wednesday, 29 December 2004, 07:47 AM
Re: Seminar 1A(Chitra & Usha) by norinah ahmad - Wednesday, 29 December 2004, 08:01 AM
Re: Seminar 1A(Chitra & Usha) by usha dharmarajah - Thursday, 30 December 2004, 02:42 AM



Mutual Concerns As A Community

There were instances when some family members passed away. For example, upon hearing the news of the passing away of the mother of a student, an announcement was placed in PPIP-Online. A “Condolence-forum” was immediately set up for words of condolences and encouragement.



Salbiah: “Assalamualaikum Cikgu Din, Salam takziah dari saya. Aggap ini satu lumrah hidup. Yang hidup pasti akan pergi. Take care..Bye”

Mei Ling: “Hai Kamaruddin, Salam takziah daripada saya terhadap kematian bonda yang anda sayangi dan hormati. Diharap anda dapat menghadapinya dengan hati yang tabah. Bye...”

Aizah: “Assalamualaikum Cikgu kamaruddin, Saya ucapkan takziah kepada cikgu sekeluarga di atas pemergian emak Cikgu ke Rahmatullah. Semoga dicucuri rahmat ke atas beliau dan sama-sama kita berdoa beliau ditempatkan bersama orang-orang yang beriman. Amin!”

Kamaruddin: “Terima kasih atas perhatian dan simpati yang diberikan. Thank you for everything”

ISSUES AND CHALLENGES

One of the main issues facing educators is the readiness of the learners. Many of the learners are not ready for self-paced learning. All along they have been guided in a teacher-centered system. Therefore, it will be a gradual change to switch to a learner-centered system. Most of the contents available today are in analog or paper format. The conversion from paper to digital format is expensive and time consuming. The application of instructional design during the conversion is also important. Access to good instructional designers is limited. This results in digital content that is of lower quality.

Another challenge is the short duration of concentration among the online learners. It is estimated that an adult usually has about 20-30 minutes of concentration in an online environment. In an online environment where a learner could easily switch his/

her applications to others such as browsing sports information or accessing online news, an interactive content can help to reduce distractions. Some students find that the online environment limits their ability to learn in a way that matches their learning style. In particular, for visual and auditory learners, who need the presence of a spoken word, this indeed can be a real challenge.

For many institutions, the journey to incorporate a learning management system into a predominantly face-to-face culture will take time and create many challenges. There is an old Zen saying, "The journey is the reward"; so our advice is enjoy the exploration and the journey.

REFERENCES

Barr, R. B., and Tagg, J. (1995). From teaching to learning: A new paradigm for undergraduate education. *Change*, 27(6), 13 – 25.

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