

## WEBLOG: AN ALTERNATIVE PLATFORM TO DELIVER FORMAL LIFELONG LEARNING

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### Abstract

*Weblogs (or blogs) usually contain diary style content, with updates posted on a regular basis and displayed in reverse chronological order controlled by a single author. The blogs can be publicly accessed by anyone or by invitation from the blog's author. The content or use of a blog is the choice of the author and may include news, updates, articles, and reflections. The small but developing literature on web logging underscores its potential as an effective learning resource for use in higher education. Some advantages of blog for learning include assisting students to become subject-matter experts through a process of regular scouring, filtering and posting, increasing student interest and ownership in learning, giving students legitimate chances to participate and acculturating them into a community of practice and providing opportunities for diverse perspectives. However, the use of the blog for formal lifelong learning is very much limited as the open universities prefer to use their own learning management systems or other online platforms to deliver the teaching and learning activities. This paper contributes to these discussions through a case study of the author's experience with the on-going development of an educational blogging resource for use in an undergraduate IT subject. Using the instructional strategy of independent study and indirect instruction to support the learner-centered pedagogies, the author believe the elements of content, interactivity, collaboration and assessment are the pillars to make an education-based blog for adult learners to support their self-managed learning. Detailing the theoretical aims, design, implementation and students' evaluation of the blog, the paper puts forward the argument for the educational use-value of blogging as a platform to support self-managed learning for adult learners in the formal lifelong learning environment.*

### Introduction

Weblogs (or blogs) usually contain diary style content, with updates posted on a regular basis and displayed in reverse chronological order controlled by a single author. The blogs can be publicly accessed by anyone or by invitation from the blog's author. The content or use of a blog is the choice of the author and may include news, updates, articles, and reflections. According to Blood (2000), the phrase 'web log' was first used in 1997 and the shortened version by Merholz in 1999 (Merholz, 2002). Blogging as a phenomenon started to increase steadily after this time, and then there was an explosion in the number of blogs when the first free, do it yourself blogging tools became available in mid-1999, most notably *Blogger.com*. Herring, Scheidt, Wright and Bonus (2005) identified three blog genres: personal journals, filter blogs, and knowledge blogs (K-logs). The personal journal blogs were a highly individualistic; while the K-logs resembled learning or research journals that were used to record learning processes or artifacts. The academic blogs in our study can be viewed as K-logs, which are significantly different from personal journal blogs.

### The Problem

The majority of the studies conducted on blogs were interested in either the general blogger population (e.g. Hsu & Lin, 2008; Nardi, Shiano, Gumbrecht & Swartz, 2004; Stefanone & Jang, 2007) or blogging as personal or leisure-related activities. Although three studies – Trevino (2005), Guadagno, Okdie and Eno (2008), and Wang, Lin, and Liao (2012) – involved university students, their focus was not on blogging for learning purposes. The use of the blog for formal lifelong learning is very much limited as the open universities prefer to use their own learning management systems or other online platforms to deliver the teaching and learning activities. Within the growing body of literature on the educational use of blogs, little attention has been paid to the design and implementation of knowledge-blog for adult learners especially to cater for their self-managed learning (SML), which is an important component in blended pedagogy. Garrison (1997) and Knowles, Holton, and Swanson (1998), state that self-directed learning is part and parcel of the psychological and social development of adulthood.

## Objective

The objective of the paper is to:

- Propose a framework for a learning blog to support self-managed learning (SML) of adult learners for formal lifelong learning;
- Implement the above framework; and
- Explore adult learners' perceptions of the learning blog in terms of any impact they considered it made on their learning, preferences and to which extent the blog supports their self-managed learning.

While acknowledging the fact that the design of this study was not experimental, it nevertheless offers a means or case study through which the researchers can assess the value of using the education-based blog to support SML among the adult learners.

## Significant of the Study

Compared to asynchronous discussion forums such as newsgroups and bulletin boards, Ferdig & Trammel (2004) contend that blogs are more successful in promoting learning as it offers greater flexibility in teaching and learning. Thus, this paper will validate whether blogs can be useful learning platform for the adult learners in the formal lifelong learning environment.

## Methodology: Case Study Approach

This study adopted an interpretive case study methodology approach. Erickson (1986, pp. 119-161) described interpretive case studies as:

*... the intensive investigation of a single object of social inquiry such as a classroom ... and that it holds major advantages in that it allows the immersion of oneself in the dynamics of a single social entity and enables the uncovering of events or processes that one might miss with more superficial methods.*

Burns (1997) further commented that the case studies have a number of purposes or functions within educational research. Due to their intense and subjective nature, he stated that they are particularly suited to acting as preliminaries to major investigations by providing a "source of hypothesis for future research" (Burns, 1997, p. 365) or by assisting in developing deeper understanding "of the class of events from which the case has been drawn". The methodology in this instance allowed the researchers to gain deeper insights into any value the blog held from the students' perspective. Interpretive case study approach had also been used by Falloon (2011) for his study concerning the online learning.

## Data Collection

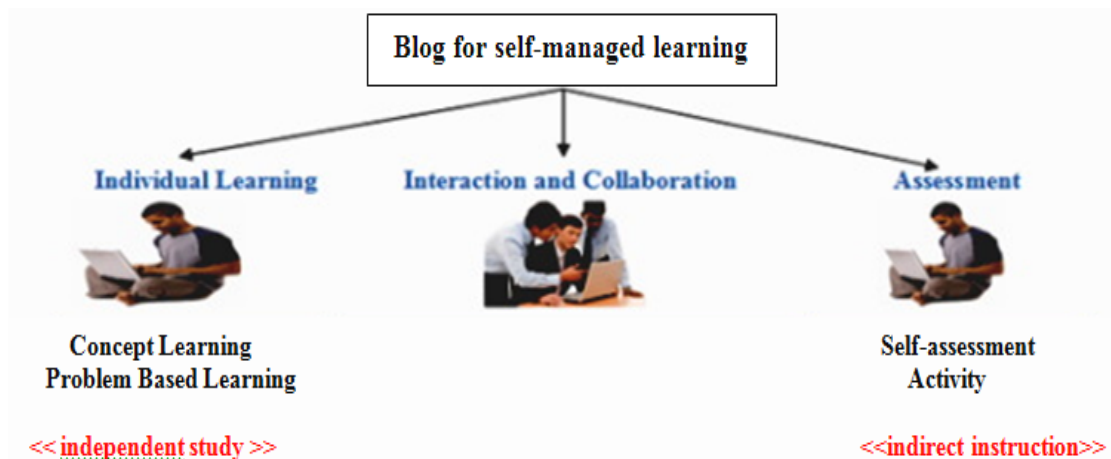
The blog was implemented for the subject *CBOP3203 – Object Oriented Programming* (CS1 subject) since Jan 2014 onwards using the blended pedagogy. This subject is an IT-based subject. At the end of the semester May 2014, all students taking this course (65 of them; 26 to 48 years old) have been given online questionnaire and 24 learners (36.9% of the population) responded to the survey. The questionnaire had three sections, with the first section eliciting students' perceptions of their learning experience in the blog. There were four items in this section. The second section had one item which measured students' perception of the extent to which the blog helped their self-managed learning. The third section elicited students' perceptions of their preferences for the blog over the face to face interactions. There were two items in this section. Data was analysed using descriptive statistics of mean scores. All items were measured on a Likert scale from 1 (strongly disagree) to 5 (strongly agree).

## Proposed Framework

Many experts do not believe that a unilateral approach to using technology to support learning will be successful. Instead, based on the author's own experiences in conducting online courses for almost 10 years and through reference to the work done by Jochems, Koper and Merrienboer (2003), and Garrison, Anderson and Archer (2001), online learning in the form of the blog will be effective if it is implemented in an integrated manner that incorporates the following FIVE critical principles, so that it empowers the students' learning:

1. The blog has to be learner-centred, whereby learners become the primary focus of attention, as opposed to the traditional emphasis upon the instructors.
2. The best approach to teaching and learning is the bi-instructional method where e-learning is utilised for *independent study* to support self-managed learning (SML) and *indirect instruction* to support peer collaboration, interaction and eliminate isolation.
3. Assessment must become an integral part of the blog so that the learners would be able to self-assess themselves and think of ways to improve their assessment. Assessment is an integral part of learning. A good learning environment should allow the learners to test their knowledge after performing learning activities or at intervals.
4. A successful blog must support instructor and cognitive presences which are two important components in the community of inquiry (CoI) model.
5. A successful blog must support learner-learner (collaboration), learner-instructor and learner-content interactions. Collaboration and interaction allows the knowledge comprehension and construction through social process (Preston, 2005).

The FIVE principles given above are essential so that all the aspects of online learning be incorporated, in order to attain the goals of a learning blog. In addition, for blog to be effective, it must be combined with various forms of interactions which include student-student, student-content and student-instructor interactions. Figure 1 shows the framework for implementing the concept of the learning blog for SML based on these principles.

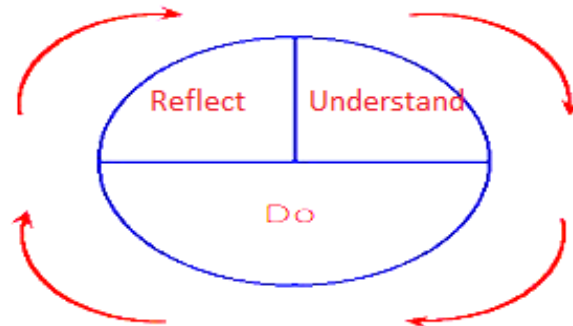


**Figure 1:** The proposed framework of the learning blog for formal lifelong learning

Through this framework, maximum learning opportunities are provided via integration of *Recorded Tutorials* and *Recorded Lectures* for problem-based learning and knowledge (concept) learning respectively, as well as other supplementary resources such as *Assessment* and *Activity* to support assessment. Using this approach, learners can access the content anytime and anywhere, enabling them to enjoy the learning experience via blog. In order to stimulate the learning, the blog contains less words but more video and activities to sustain the learners' attention.

## Reflect-Understand-Do cycle

In developing the learning blog to support the principles highlighted above, we have adopted “**Reflect-Understand-Do**” thinking cycle in a continuous manner to reinforce learning among the learners for the particular subject (Figure 2).



**Figure 2:** “**Reflect-Understand-Do**” model of the proposed learning blog

Using the instructional strategy of independent study and indirect instruction to support the learner-centered pedagogies, we believe the elements of content, interactivity, collaboration and assessment are the pillars for an effective education-based blog for adult learners to support their self-managed learning. In this regard, we believe:

1. Learning has to be learner-centered whereby learners would be the primary focus of attention as opposed to the traditional emphasis on the instructors.
2. Assessment must become an integral part of learning so that the learners would be able to self-assess themselves and think of ways to improve their assessment.

In order to achieve these, the following learning materials are provided in the blog:

- Lesson overview (*reflect*)
- Recorded Tutorials from real classroom (*understand*)
- Recorded Lectures (*understand*)
- Recorded Lecture with engagements (*understand* and *do*)
- Flash-based activities (*do*)

The tools mentioned above are described in the next section.

## Tools

The tools that are available in the blog are described below.

### *Lesson Overview*

Lesson overview (Figure 3) is provided so that the learners can reflect on the topic before embarking on the video lecture. Lesson overview supports the “reflect” component in the “Reflect-Understand-Do” cycle.

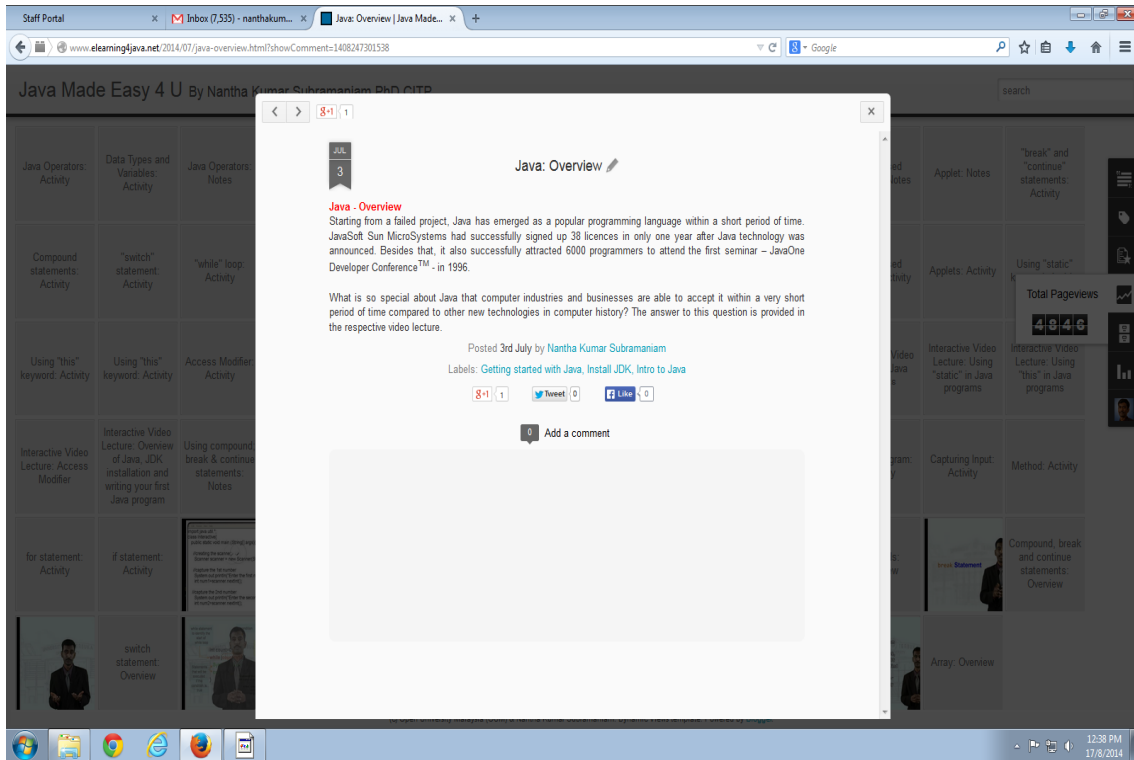


Figure 3: Lesson overview

### Recorded Tutorials (iTutorial)

*iTutorial* (Figure 4) are the tutorials recorded from the real tutorials. In this tutorial, the teaching approach is “problem-based learning (PBL)” so that the learners can learn on how the concepts are applied in solving a problem. Recorded tutorials support the “understand” component in the “Reflect-Understand-Do” cycle.

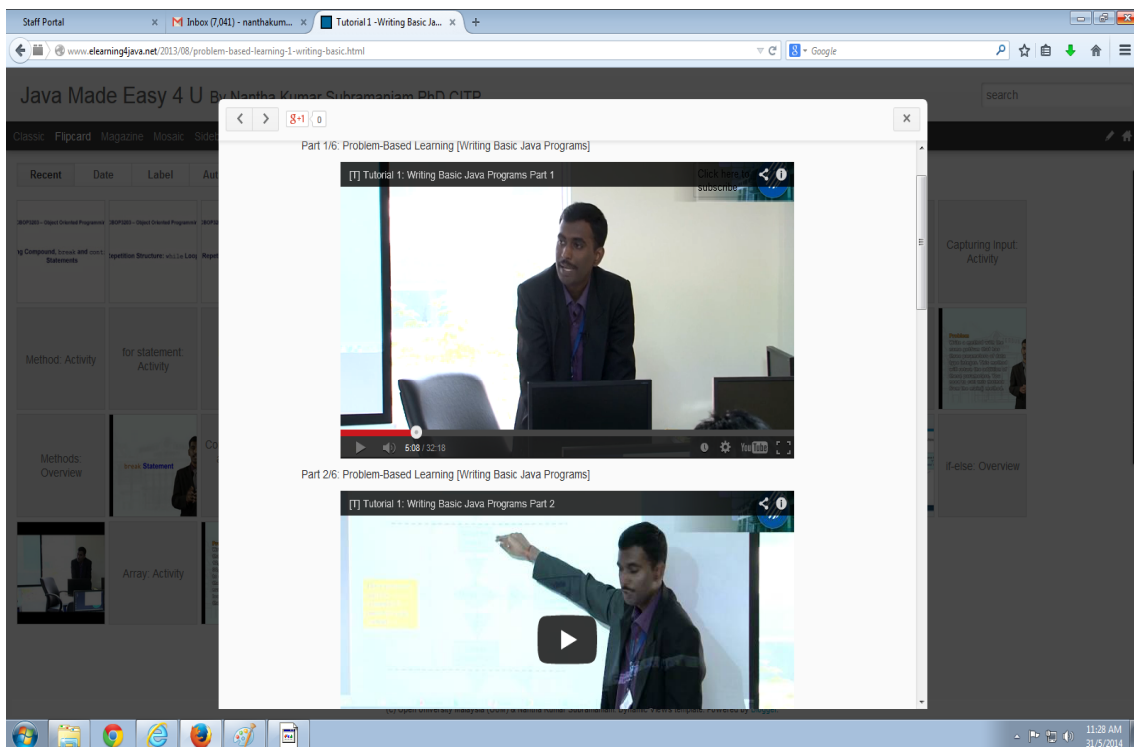


Figure 4: *iTutorial*

### Recorded Lectures (*iLecture*)

Recorded tutorials or *iLecture* (Figure 5) are lectures recorded from the studio. In this learning material, the teaching approach is “concept-based” so that the learners understand important concepts covered in the subject. *iLectures* support the “understand” component in the “Reflect-Understand-Do” cycle.



Figure 5: *iLectures*

### Recorded Lectures with Engagement (*iLecture+engage*)

*iLecture+engage* (Figure 6a) is similar to *iLecture* described above. However, *iLecture+engage* contains multiple quizzes (Figure 6b) at certain intervals in one video lesson. Learners cannot proceed to the next part of lecture without attempting the quiz. This will allow the learners to immediately test their understanding of the sub-concept covered in that video. These provide a kind of engagement between the contents and the learners. *iLecture+engage* support the “understand” and “do” components in the “Reflect-Understand-Do” cycle.

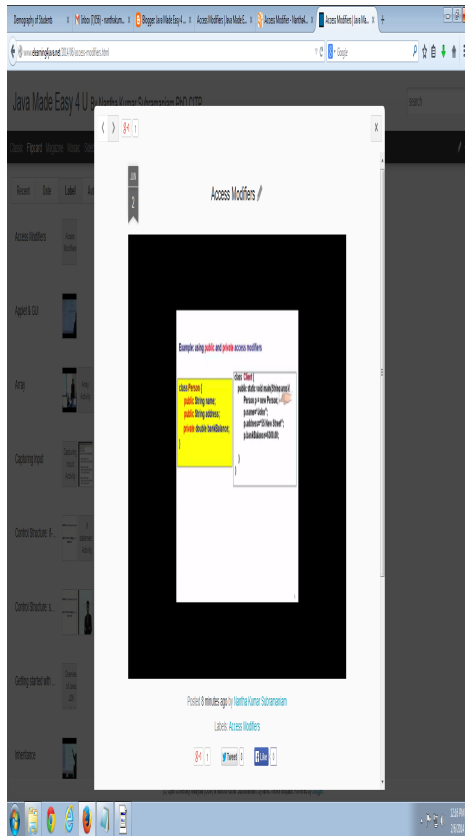


Figure 6a: *iLecture+engage*

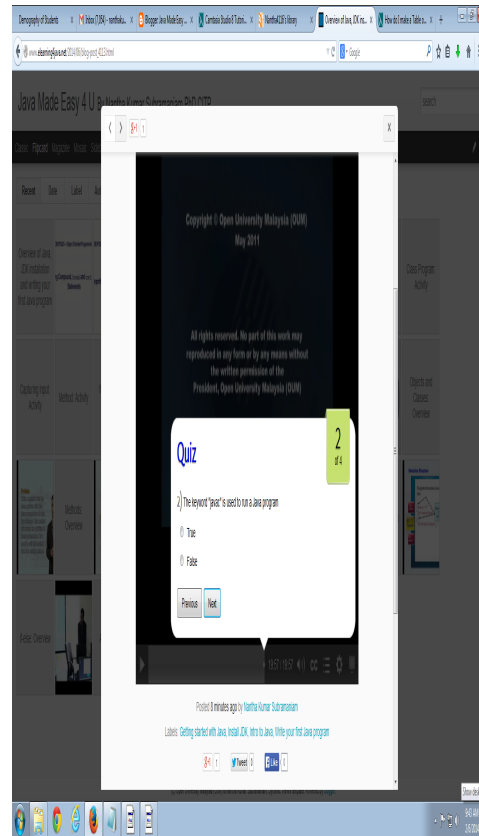


Figure 6b: Quizzes in *iLecture+engage*

### Flash-bash Activities (*iAssessment*)

*iAssessment* (Figure 7) is the flash-based activities that are loaded into the blog. *iActivity* allows the learners to test their understanding of the content by engaging in active interaction with the activity. *iAssessment* support the “do” component in the “Reflect-Understand-Do” cycle.

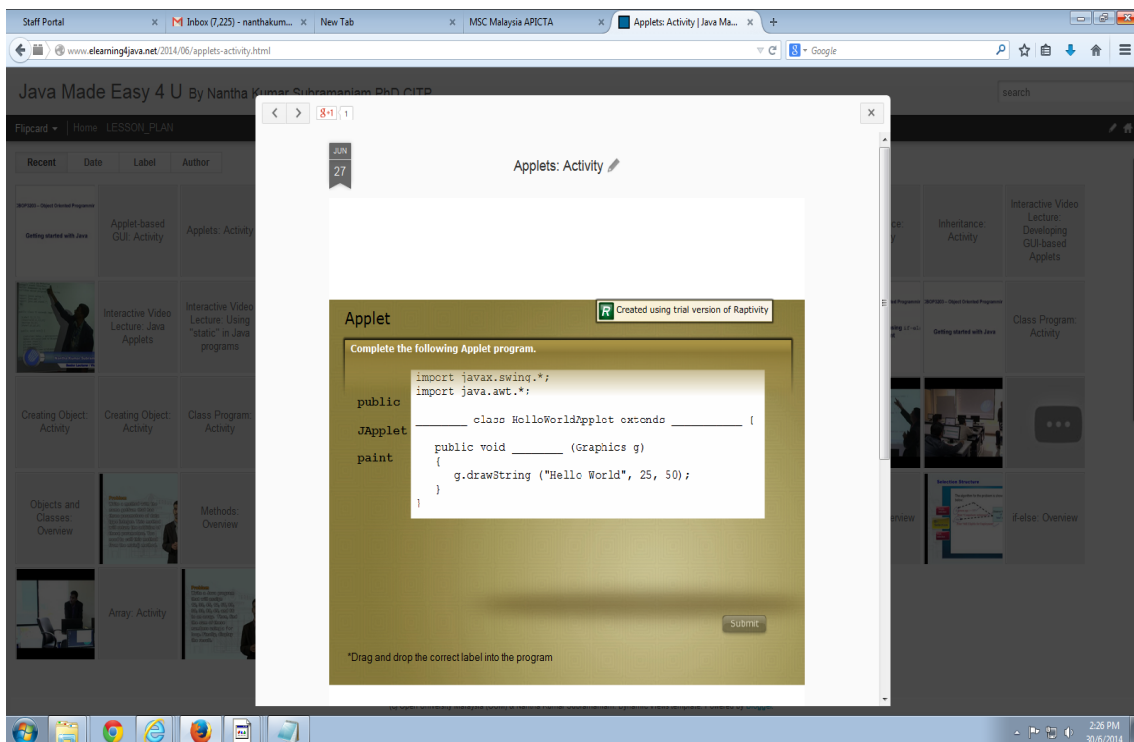


Figure 7: Assessment in the form of flash-based activity

## Interaction and Collaboration

Interaction between learner-instructor and learner-learner and collaboration is carried through the “comments” facility available in the blog (Figure 8). This facility is available for all the learning materials (*iTutorial*, *iLectures*, *iLecture+engage*, *iAssessment*) loaded in the blog.

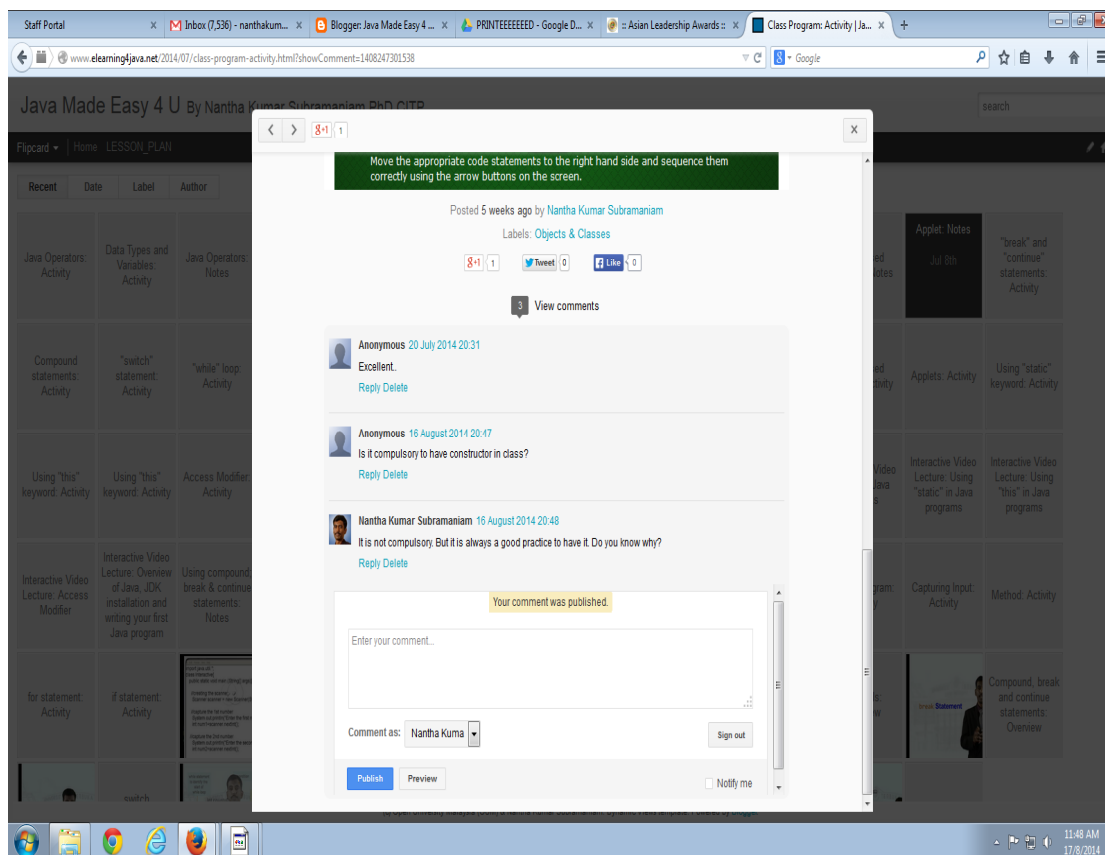


Figure 8: Using the blog’s “comment” facility to support interaction and collaboration

## Implementation

The blog was implemented for the subject *CBOP3203 – Object Oriented Programming* (CS1 subject) since Jan 2014 onwards using the blended pedagogy. This subject is an IT-based subject. The blog was developed using the Blogger (*Blogger.com*). Blogger is Google’s free tool for creating blogs. We have adopted the dynamic view (which is one of the views provided in Blogger) (Figure 9). We have chosen the dynamic view as it makes it easier to read the blogs and easy to discover posts written long ago that the learners may not have read. Each topic in the subject will have its own *iLecture* or *iLecture+engage* and at least one *iAssessment*. On the other hand, *iTutorial* will encompass multiple topics in order to support the PBL. The blog can be accessed at [www.elearning4java.net](http://www.elearning4java.net) (public access). Currently it has more than 80 posts from the author who is the instructor of the course. As of August 30, 2014, the blog has been viewed more than 5600 times from the various countries since its inception in August 2013. The blog comes with a table of contents that will allow the learner to choose their preferred topics (Figure 10). In addition, a lesson plan is also provided to give the learners the path that needs to be taken for the learning. This make it more guided kind of learning for the learners. Currently, the blog contains *iTutorials*, *iLecture* and *iLecture+engage* recordings with more than 800 minutes in combined, notes and 30 *iAssessments*.



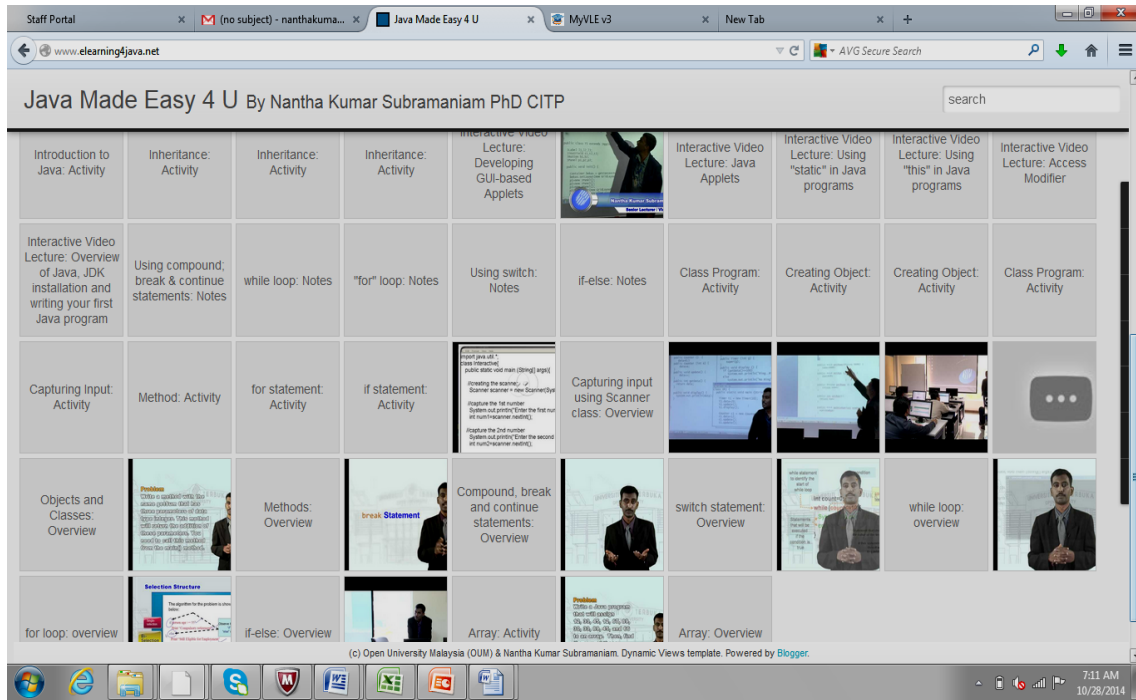


Figure 9: Dynamic view of the learning blog

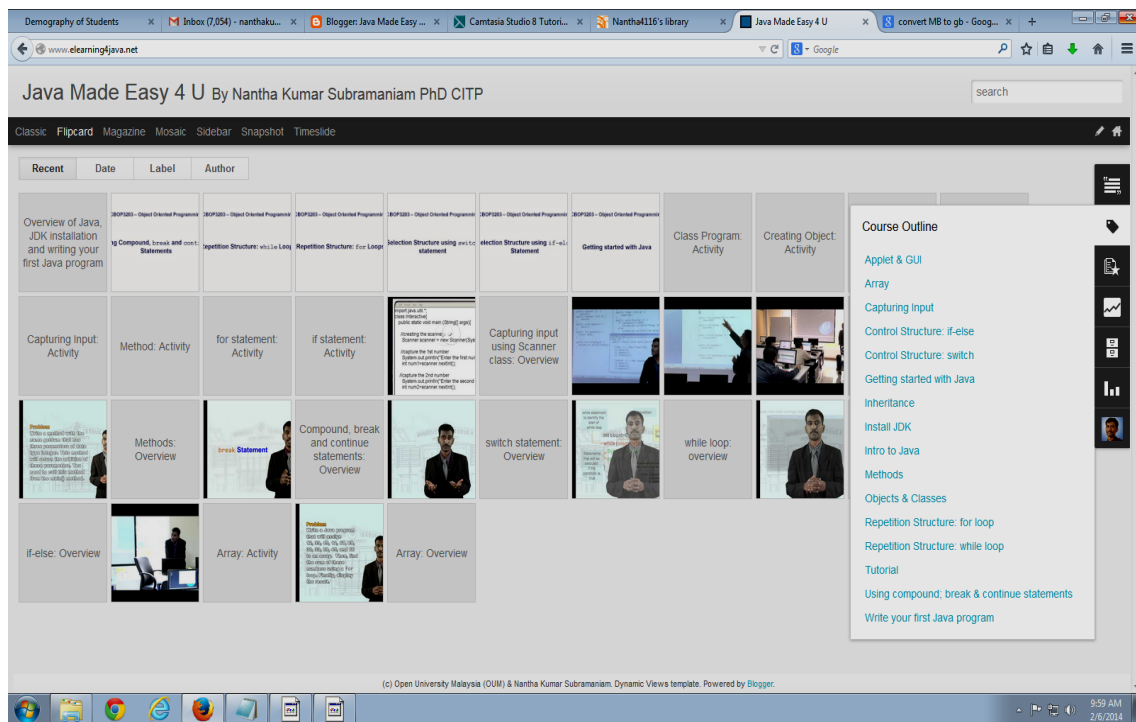


Figure 10: Table of contents for easy reference of the preferred topics

## Findings and Discussion

As stated earlier in the data collection section, data was collected for students' perceptions of their learning, self-managed learning and preference using a questionnaire. The mean score for all the items in the questionnaire are shown in Table 1.

**Table 1:** Mean Score of the Items for the Adult Learners' Perception

	ITEMS	MEAN SCORE (n = 24)
<b>LEARNING</b>		
1	I experience a higher level of learning / understanding of the lesson through blog for this subject.	3.86
2	I am able to achieve the learning outcomes at the end of using the blog for this subject.	3.77
3	I experience learning the subject in a new way through the blog for this subject.	4.01
4	My knowledge on the subject matter increases after going through the blog.	3.83
<b>SELF-MANAGED LEARNING</b>		
5	Blog for CBOP3203 helps me a lot for my self-managed learning.	4.23
<b>PREFERENCE</b>		
6	Overall, I find that the blog is very useful in learning the subject – CBOP3203.	4.33
7	There is no need for Face-to-Face tutorials for this subject as a result of having this blog for CBOP3203.	2.41

Note: 1 = strongly disagree and 5 = strongly agree

The result shows that the learners gave responses between 2.41 to 4.33 on the Likert scale of 1 – 5 which indicates good responses for all the sections in the questionnaire except for the item 7. Item 7 was not encouraging as it was rated 2.41 on the Likert scale. This indicates that there are areas for improvements in the dynamics of the blog and students still preferred face to face tutorials over the blog even though they find the blog very useful in learning of the subject. This could be in line with the Asian culture where attendance in a classroom is considered a must in the teaching-learning process (Miliszewska, 2007). In addition, Media Richness Theory (Daft & Lengel, 1986) opined that face-to-face communication is considered to be the richest, while other forms of media are thought to be less learner based since they have fewer contextual cues and slower feedback compared to face-to-face (Daft & Lengel, 1986). Thus, students even in the online learning environment naturally perceived face-to-face discussion to be faster, easier, and more convenient. Nevertheless, the findings have indicated that the blog had supported the adult learners' SML and this has been translated into an increased of knowledge on the subject matter after going through the blog (as indicated by good responses for item 1 and item 4 in Table 1).

## Conclusion

Blogs remain as an alien tool in open and distance learning. However, the dynamism, immediacy and commentary based system of blogging is very much suitable to support SML among the adult learners especially in the formal lifelong learning as demonstrated in this paper. Blog provides the natural tendency for reflection and analysis on the part of the student by phasing their own learning activities. The blogs have enriched the learning experience and provided an opportunity for learners to shift from the surface to deeper levels of learning. It is interesting to note that the contextualization of learning through hypertext links (supported via *tags* facility in blogs) to other materials encourages revisiting and revision of learned concepts, enriching the learning experience. Although this feature is also available in LMS, blogs go further by enhancing learners' interest and ownership in learning, giving learners legitimate chances to participate and acculturate them into a community of practice. Blogs have given ownership to the learners over their own learning and an authentic voice allowing them to articulate their need and inform their peers of their own learning.

Open universities should consider seriously on the ways to adopt blogs for learning purposes or make it a part of LMS. In our future study, we plan to make the learners the subject matter experts in the blog by asking them to create their own contents. The use of the blogs will facilitate knowledge construction among learners and their peers. This may contribute to learners being motivated in their own learning and view themselves as knowledge creators.

## References

- Blood, R. (2000). Weblogs: A history and perspective. [Verified 20 July 2014]  
[http://www.rebeccablood.net/essays/weblog\\_history.html](http://www.rebeccablood.net/essays/weblog_history.html)
- Burns, R. B. (1997). *Introduction to research methods*. Melbourne: Addison Wesley Longman.
- Daft, R. L. & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science*, 32(5), 554-571.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (pp. 119-161). New York: Macmillan.
- Falloon, G. (2011). Making the connection: Moore's theory of transactional distance and its relevance to the use of a virtual classroom in postgraduate online teacher education. *Journal of Research on Technology in Education*, 43(3), 187.
- Ferdig, R. E. & Trammell, K. D. (2004). Content delivery in the 'Blogosphere'. *THE Journal*, 31(7), 12-16.
- Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly*, 48, 18-33.
- Garrison, D. R., Anderson, T. & Archer, W. (2001). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3), 87-105.
- Guadagno, R. E., Okdie, B. M. & Eno, C. A. (2008). Who blogs? Personality predictors of blogging. *Computers in Human Behavior*, 24(5), 1993-2004.
- Herring, S. C., Scheidt, L. A., Wright, E. & Bonus, S. (2005). Weblogs as a bridging genre. *Information Technology & People*, 18(2), 142-171.
- Hsu, C.-L., and Lin, J.C.-C. (2008). "Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation," *Information & Management* (45:1), pp 65-74.
- Jochems, W., Koper, R. & Merrienboer, J. V. (Eds) (2003). *Integrated e-Learning: Implications for pedagogy, technology and organization*. London, UK: Routledge Falmer.
- Knowles, M., Holton, E. F., & Swanson, R. A. (1998). *The adult learner: The definitive classic in adult education and human resource development* (5th ed.). Houston, TX: Gulf Publishing Company.
- Merholz, P. (2002). 'Play with words'. [Verified 23 June 2014]  
<http://www.peterme.com/archives/00000205.html>
- Miliszewska, I. (2007). Is it fully 'On' or partly 'Off'? The case of fully-online provision of transnational education. *Journal of Information Technology Education*, 6, 499-514.
- Nardi, B.A., Schiano, D. J., Gumbrecht, M., and Swartz, L. (2004). "Why We Blog," *Communications of the ACM* (47:12), pp 41-46.
- Preston, D. (2005). Pair programming as a model of collaborative learning: A review of the research. *Con-sortium for Computing Sciences in Colleges*, pp. 39-45.
- Stefanone, M. A., & Jang, C. Y. (2007). Writing for Friends and Family: The Interpersonal Nature of Blogs. *Journal of Computer-Mediated Communication*, 13(1), 123-140.

- Trevino, E. M. (2005). Blogger motivations: Power, pull, and positive feedback. In *Internet Research 6.0*. Chicago: Association of Internet Researchers.
- Wang, Y., Lin, H. & Liao, Y. (2012). Investigating the individual difference antecedents of perceived enjoyment in students' use of blogging. *British Journal of Educational Technology*, 43(1), 139-152.