The 4th International Research Symposium on Problem-Based Learning (IRSPBL) 2013

CRAFTING A GOOD PBL SCENARIO IN COMPANY SECRETARIAL PRACTICES COURSE

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Abstract

The objective of this paper is to disseminate the relevance of PBL approach in classroom teaching and how instructors craft/design real workplace scenarios. PBL has been claimed as an approach that incorporates multi-level skills, higher order thinking and generate discussion, exploration and interest in learners. In order for these learning processes to occur, instructors need to know and understand the underpinning of what constitutes a good and effective PBL scenario. Thus, this paper highlights the intricate process of what elements instructors need to consider when crafting the scenario: know the level of knowledge to be learnt, identify types of problems appropriate with the course content, refer to a review checklist, and able to differentiate between good and bad scenario. Finally, a sample of a good scenario is presented, together with learning outcomes, prior knowledge, duration of task, FILA chart, and assessment plan.

Keywords: PBL scenario, crafting problem, teaching approach, good PBL problem

1. Introduction

One of the key elements to an effective use of PBL in the classroom is to create an authentic problem scenario. Crafting a problem scenario is a complex and multifaceted issue with very few direct answers due to the difference in the nature of knowledge and how the knowledge is to be applied. However, considerations should be given to the type of problems based on the different levels of a course and the types of questions that learners are required to engage students' curiosity and initiate learning the subject matter while solving or managing the problem (Nor Aziah, Zuaini & Wan Nordin, 2011).

Schmidt and Moust (2000) suggested an approach to problem design by taking into account the different types of knowledge that learners need to acquire in a program. From this perspective, different types of problems are identified to guide learners towards the development of that particular type of knowledge. This approach is helpful in the initial stage of problem design. By identifying the types of knowledge to be learnt, the problem can be more focused. The Taxonomy on the types of knowledge and the different types of problem that require the application of those different types of knowledge is shown in Table 1.

Table 1: Types of Knowledge and Problem

Type of knowledge	Goal of the knowledge	Type of problem	Example of type of question
Descriptive knowledge	Acquire knowledge about facts	Fact-finding problem	What are the facts?
Explanatory knowledge	Acquire knowledge on why something occurs (such as the cause of it happening)	Explanation problem	Why did it occur?

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Procedural knowledge	Acquire knowledge to act upon the situation in order to change it	Strategy problem	What steps should be taken? What would you do?
Personal knowledge	Acquire knowledge to examine and understand personal conviction or attitude	Moral dilemma resolution problem	What would/should you do in a dilemma situation?

Source: Temasek Polytechnic (2006)

Although the above given guideline is very useful, however, common principles for effective problem design based on the different types of knowledge are not independent of each other. For example, learners are assumed to have acquired an understanding of either descriptive or explanatory knowledge or both to respond effectively to both procedural and personal knowledge.

Besides taking into consideration the types of knowledge and types of question, there are also common principles or guidelines for effective design of problems (Temasek Polytechnic, 2006; Savin-Baden & Howell-Major, 2004; Dolmans & Snellen-Balendong, 1997; Barrows, 1994). Essential elements for crafting effective PBL scenarios are real life, relevant and authentic; acquire new knowledge; stimulate elaboration and higher order thinking; generate learning issues; engage discussion and exploration; integrate other disciplines; outcome based; realistic process; deliverables; and resources.

The elements described above in reviewing a problem scenario, is presented in the form of a checklist (Table 2) as a guideline to ensure the crafting of effective scenarios.

Table 2: Problem Scenario Review Checklist

Essential Elements of Good Problem Scenario
Real life, relevant and authentic
• Presented as it would be in the real world.
• Relevant to the learners' future profession.
• Reflect contemporary situations of interest to the learner.
• Exhibit the experiences and skills required in the workplace.
• Occur frequently in real life.
Acquire new knowledge
• Create seed of interests and roles that learners can relate.
• Apply prior knowledge in understanding the problem.
• Trigger learners to acquire soft skills.
• Engage learners to discover new knowledge.
Stimulate elaboration and higher order thinking
• Encourage HOTS through cues.
• Require extended inquiry.
• Provide sufficiently enough information.
• Sufficiently open ended.
• Not limited to one single correct solution.
• Evaluate solutions and justify all decisions.
• Begs for action or resolution.
Generate learning issues
• Encourage learners to identify multiple learning issues.
• Allow exploration of ideas.
• Not too directive or too structured.
Engage discussion and exploration
• Stimulate learners to be curious and investigate further.
• Encourage learners to function as a group.
Integrate other discipline
• Promote integration of multi disciplinary area.
Outcome base
• Address the intended outcome of the course/programme.
• Written at an appropriate learning level.
Realistic process
• Realistic in terms of timing/independent study/research.
Deliverables

- Specify realistic and feasible deliverables.
- Present in a clear and coherent manner.

Resources

- Adequate and accessible resources.

Designing a good problem scenario is not an easy task. A well design, well-structured, open-ended, real-life, engaging problem forms the core of a PBL curriculum. A problem that is poorly design does not encourage an inquiry process and inhibits the attainment of the learning outcome. How should problems be crafted to optimize student learning using the PBL approach? The dilemma in crafting problems is well discussed and documented by Margetson (1987:155).

"The form of a question is superficially that for which draws attention to something not known or to something which might not be known. It points, as it were, to an outcome space or an answer space, while leaving the content of that space open".

Good and bad problem scenario is differentiated in below (Table 3).

Table 3: Good and Bad PBL Scenario

Good Problem	Bad Problem
Growing web • complex and indeterminate • problem and context inseparable • space for growth	Convenient peg • arbitrary • problem is subordinated to knowledge transfer • test of strength
Question in question form • What is time? • Concept and value orientated • No right answer • Neither tutor nor student knows the answer	Question in statement form • What is the time? • Content orientated • A single right answer • The tutor knows the answer

Source: Margetson (1987:155)

2. Presentation of Problem

The problem scenario can be presented in different format. The scenario need not necessarily be in the form of a problem that needs solution. Clarifying a phenomena, challenge, dilemma, difficult concept, designing or creating something, new ways of doing things, and triggers can also be a problem. According to Mauffette et al., (2004:11), two characteristics namely variety and challenge are very important in a good problem design. Problem designers need to devote considerable time and thought on the problem format. Ideas for crafting scenarios can come from anywhere. Nor Aziah, et al. (2011) interviewed the CEO of a halal food manufacturing and distributing enterprise and visited the plant to reflect the real halal food manufacturing business in crafting the problems. Listed below are various format for presenting different problem scenarios.

dialogues	posters	reflective journal
cartoons	songs	diary entries
diagrams	letters	memos
dilemmas	audio-tape recordings	e-mails
newspaper articles	video clips	photographs
minutes of meeting	quotations	

Sole reliance on a particular format may have dysfunctional consequences for the learner (Bransford, et al., 1989). Various modalities in presenting the problem will benefit learners and prepare them to deal with real problems through perceptual learning as this allow learners to recognize not only verbal, but visual, auditory or non-verbal cues. Since PBL curriculum prepares learners for professional practice, the problem should be presented in a format that resembles the actual workplace practice (Wee, 2004).

In PBL, the problem functions as a trigger that drives learning. The ability to craft good quality problem scenario is a critical skill for the PBL facilitator. The next section presents an example of how problem in a company secretarial practices course is crafted.

3. PBL Scenario in Company Secretarial Practices

The scenario crafted covers the company secretarial practices topics that are generally taught at the accounting undergraduate level. The issues highlighted in the scenario are frequently discussed, and by creating such scenes will help learners further understand the underpinning principles embedded in these scenarios. There are two emails in this task. In the first email, Imran informed Taufiq of what transpired during their 'teh-tarik' sessions. They have decided to venture into business. Fitri's uncle suggested they become his teak furniture distributor in Kuala Lumpur while Harith feels strongly towards starting his own workshop with his friends. At the moment, they cannot decide which business to take up. The more pressing concern is whether the proposed business should be set up as a partnership or a company. Therefore, Imran wants Taufiq to explain to the others the reasons why it is better to set up a company rather than a partnership. In the second email, the group has decided to set up a company instead of a partnership. Imran requested Taufiq to explain the procedure of setting up the company and help him to prepare the required documents to be submitted to the Companies Commission of Malaysia (CCM).

Item 1: Title of Problem – *Catchy, Keep It Short and Simple*

Teh Tarik Chatterbox

Item 2: Problem Scenario – *well structured/contextual-relates to everyday life/professional life of learner/authentic/engage learner; 4 characteristics-hook/context/content/form; variety of stimulus-memos/cartoons/dialogue/etc.; include graphics/photos wherever possible*.

E-Mail 1

Inbox: Need your help (1 of 50) Move | Copy Trash

Delete | Move to Trash | Reply | Reply to All | Forward | Redirect | Blacklist | Message Source | Resume | Save as | Print Back to Inbox

Date: Mon, 19 September 2011 14:03:32 +0800

From: imran@uum.edu.my

To: taufiq@yahoo.com.my

Subject: Need your help!

Hi Fiq! How are you? It's been a long time since I last heard from you. Last week, I met Daniel, your ex-roommate. Still remember him? He's now working with MARA. I went to an entrepreneur seminar handled by him. He told me that you are now a successful company secretary. We're so proud of you, Fiq. You're so fortunate, as compared to some of our friends, including me, Ahmad, Fitri and Harith. We are still looking for opportunities for a better future. At this moment, Fitri and Harith are between jobs. We met a few times before for 'teh-tarik' sessions and after a few discussions, actually we are thinking of running a business. Fitri said he has an uncle in Jakarta, who owns a teak furniture factory. So the uncle suggested us to be his distributor in KL. Ahmad seems very excited about this idea. But Harith has something else in mind. He prefers to operate a workshop since he has vast experiences working with EON Services. He knows many mechanics, so he thinks he'll be able to persuade them to work in the workshop. We are still undecided on this, anyway I don't think this is an urgent matter.

Since you are the expert, I really want to ask your opinion. Ahmad wants to set up an enterprise or partnership because he thinks that the procedure is simple and less money needed. Fitri and Harith don't really care what type of business entity to set up as long as it can be operated as soon as possible. But I prefer to form a company – so I can become a so-called managing director. Sounds glamourous, isn't it? Anyway, personally, I think incorporating and running a company is not very difficult. What do you think?

Daniel also mentioned to me about this new scheme for SMI entrepreneurs. They offer financial assistance to entrepreneurs who are interested. They also offer business premises in Kepong area at a very low rental rate. However, the application to join this scheme should be submitted before 24 October 2011. We are short of time now if we want to grab this opportunity. After all, we also need to apply for a loan to start up our business since each of us can't contribute much. However, we don't have a business entity yet!

We plan to meet for our next 'teh-tarik' session this Friday to decide on the business entity. I really want to convince those guys on incorporating a company instead of setting-up an enterprise. Any tips?

Okay Fiq, I really hope to hear from you soon…very soon, and I mean before this Friday… hehe… I wish you could join us for the "teh-tarik"... but I know you are a busy businessman. Next time, I'll let you know in advance. Anyway, I really hope you can provide me with some information so that I can show and explain to those guys.

Oppss!! I have one more thing here, during the seminar we were also told that the Companies Commission of Malaysia (CCM) had proposed a new concept of "Limited Liability Partnership (LLP)", but the concept was not explained due to limited time. I just wonder why the CCM wants to introduce this concept.

Till then…

Imran

E-Mail 2

Inbox: RE: Need your help (1 of 60) Move | Copy This message to

Delete | Move to Trash | Reply | Reply to All | Forward | Redirect | Blacklist | Message Source | Resume | Save as | Print Back to Inbox

Date: Mon, 26 Sep 2011 8:03:32 +0800

From: imran@uum.edu.my

To: taufiq@yahoo.com.my

Subject: RE: Need your help

Fiq,

Thank you for your prompt reply. It definitely shows how efficient you are as a secretary. Everything is always at your fingertips. And thanks again for all the information you've shared with me. It benefits me a lot. I even shared your info with the others. Your detail explanation manages to assist us in deciding which kind of business should be chosen. After thinking in depth and having long discussion we agreed to incorporate a company rather than partnership. I'm so excited about this. We think by hiring a company secretary we will have no problem in incorporating the company. You know what, they've agreed to appoint you as a company

secretary!!! So, can we assume that you accept this appointment because we don't want to find an unknown company secretary to help us? We'll be more comfortable if you're our company secretary.

For your information, we've decided to run a furniture business as we think it has better prospects. Hope you can make all the arrangements to incorporate the company for us. If you don't mind, could you please prepare the documents ASAP since we're still hoping to get the financial assistance offered for SMI entrepreneurs? I was told by Daniel that the process will take about 2 weeks to have the Certificate of Incorporation. Hmmm.... I hope to get some ideas from you on the procedures to incorporate a new company. Really appreciate if you were able to start preparing all documents needed to incorporate the company for us.

Fiq, I think I've to stop here for now.

Hope to hear from you soon. Thanks again for helping us out.

Looking forward to have "teh tarik" together ☺. Regards,

Imran

Item 3: Learning Outcomes – *Encompasses the 3 domains; Follow MQA guideline-explicit, measurable, and achievable; arrange according to the cognitive, psychomotor and affective domains.*

Learning Outcomes

At the end of the task, learners are able to:

1. Compare and contrast the types of business entities: business firm, registered company, and Limited Liability Partnership (LLP).
2. Describe the legal and general procedural requirements on the registration of companies.
3. Prepare the incorporation documents as required by the Companies Act 1965 and Companies Regulatio 1966.
4. Differentiate formal and informal written report.
5. Collaborate effectively as a team.

Item 4: Prior Knowledge – *All related concepts and skills acquired including tacit knowledge.*

Prior Knowledge

Company Law, Type of Businesses in Malaysia

Item 5: Duration of Task – *The time taken to complete the PBL process.*

Duration of Task

The duration for the tasks is 3 weeks in total. Subcomponents of the tasks are as follows:

Task	**Duration**
Reply E-mail 1	3 days
Reply E-mail 2	3 days
Name Search:-	3 days
- Form 13A	
(Note: The facilitator acts as the CCM officer in approving the	

name search)
Lodge incorporation documents:-
– Memorandum of Association 7 days
– Articles of Association
– Form 6 and Form 48A
(Note: The facilitator acts as the CCM officer in issuing the Certificate of Incorporation)
Lodge documents after incorporation 4 days
– Form 24, 44 & 49

Item 6: Deliverables – *The output of PBL task in the form of lab report, group presentation, reflective journal, learning log, written report, models, quiz, etc. Deliverables can be submitted individually/pair/group etc.*

Deliverables

Learners are introduced to the problem by sending them e-mail 1. E-mail 2 will be forwarded after the learners have replied to e-mail 1. As a group, learners need to reply the two emails and prepare all documents and forms required by law in incorporating the company under the Companies Acts 1965.

Item 7: FILA Chart – *The content in relation to the learning outcome, it also includes the action plan to be taken in the process of solving the problem.*

Facts	Ideas	Learning Issues	Action Plan
Information extracted from the problem scenario. Grouped according to theme, wherever possible.	*Possible causes/effects/ideas/solution. Based on facts identified. Accepted without judgment. Evolves over time.*	*Phrased as questions. Answer should contribute towards solving the problem. Generate 5W and 1H questions.*	*Activities to be carried out to answer gaps in order to help solve the problem e.g. conduct research, interview.*

FILA Chart

E-mail 1

Facts	Ideas	Learning Issues	Action Plan
Imran and his friends wanted to operate a business. Ahmad wants to set up a partnership. Fitri and Harith do not really care what type of business entity. Imran prefers to form a company. Taufiq needs to reply email within 3 days. They wanted to apply for financial assistance under SMIs.	There are pros and cons for each business entity. Partnership is easier and cheaper to form than corporation. Company secretary is needed as soon as possible to set up a business. Funds offered by SMIs scheme is only for a limited time. LLP is a new type of business, which is better than	How different is a partnership compared to a registered company? Which type of business is more suitable for the group? Why? What is the concept of LLP?	Find information about business entities in textbooks and internet. • Search information on LLP. Search information from CCM website. Call CCM to assist in getting information.

• Imran wants to know about LLP.	partnership

E-mail 2

Facts	Ideas	Learning Issues	Action Plan
Imran and friends decided to run a furniture business. They wanted to incorporate a company. They need ideas on the procedure to incorporate a new company. They decided to appoint Taufik as the company secretary. It takes about 2 weeks to obtain the Incorporation Certificate.	Forms must be submitted to incorporate a company Payment must be made to incorporate a company. Legal procedure must be followed to incorporate a company. A company secretary must be hired for incorporation.	What are the legal and general procedural requirements to register a company? How do you apply legal and general requirements when setting up a company? What are the documents needed to incorporate a company? How do you prepare the documents needed for incorporation?	Find information on legal and general procedural requirements from textbooks, Companies Act 1965 and internet. Obtain softcopy of forms to be used. Search information from CCM website. Call CCM concerning documents needed.

Item 8: Assessment Plan – *The assessment tools for assessing content, process skills (PBL process and technical skills). Reference made to relevant tools provided in the appendix. List of rubrics: presentation, analytical and critical thinking, report writing, peer evaluation/teamwork/group, self evaluation, creative and innovative, life- long learning, entrepreneurship, problem solving, reflection/debriefing. Rubrics can be in the form of likert scale, checklist, criterion, holistic, open ended, etc. Frame in a sentence stating the type of rubrics to be used and rationale behind.*

Assessment Plan

The incorporation documents are assessed based on the descriptors and criteria found in Table 4.

Item 9: Problem Crafters – *Individuals who contribute problem scenarios from various disciplines. They are expert practitioners of PBL who have implemented the scenarios in their teaching and learning.*

PBL Crafters

Zuaini Ishak
Nor Aziah Abd Manaf Masanita Mat Noh Sazali Saad
Dzarfan Abdul Kadir
Mohamad Naimi Mohamad Nor

Table 4: Incorporation Document Assessment

INCORPORATION DOCUMENT ASSESSMENT						
		Least complete and inaccurate		**Most complete and accurate**		
NO.	**ITEM**	**1**	**2**	**3**	**4**	**TOTAL**
NAME SEARCH						
1	Cover letter					
2	Fees					
3	*Form 13A*					
	- content					
	- signature					
	Format					
INCORPORATION DOCUMENT						
1	Cover letter					
2	Form 6					
	- content					
	- signature					
	Format					
3	*Form 48A*					
	- no. of directors					
	- copy of identity card					
	- content					
	-signature					
	- commissioner of oath					
	Format					
4	*Memorandum*					
	Front page					
	Clauses:					
	- name					
	- objects					
	- authorized capital					
	- liability					
	- subscribers' details					
	Stamp duty					
	Format					
5	*Article*					
	- clauses					
	- private co					
	- first director					
	- first company secretary					
	- subscribers' signature					
	Stamp duty					
	Format					
6	Approval letter					
7	Original copy of Form 13A					
8	Fees on Authorized Capital					
AFTER INCORPORATION						
1	Cover letter					
2	*Form 49*					
	- content					
	- signature					

	Format					
3	*Form 24*					
	- content					
	- signatures					
	Format					
4	*Form 44*					
	- content					
	- signature					
	Format					
	TOTAL					
		x 1	x 2	x 3	x 4	Score = ___
Other comments:						

4. Conclusion

PBL is claimed as one of the approaches highly recommended in teaching of business programs whether it is at the undergraduate or postgraduate level. The nature of PBL requires the instructor to be well-versed in issues pertaining to the workplace. Thus, he/she has to be creative and innovative in crafting the scenarios so as to be real and authentic. The scenarios presented will require students to search and read information from various sources and discipline, engage in discussion, integrate information, and make decisions. All these tasks require the students to apply higher thinking skills which are relevant to stimulate them into being an independent learner. As such the scenarios need to be well thought.

In order for instructors to be able to craft or design an effective PBL scenarios, he/she need to understand learners' ability and level of the course to be taught, types of knowledge and its objectives, and types of questions that will trigger learners' to acquire new knowledge so as to be able to handle the scenarios presented.

This paper has presented a clear guideline on what is required when crafting/designing a good PBL scenario in company secretarial practices in the Malaysian context. It has provided the taxonomy on the types of knowledge and problem, a checklist to guide during the crafting process, differentiate between good and bad scenarios and presented a sample of a good scenario in class.

Reference

Barrows, H, S. (1994). *Problem-based Learning*. *Problem-based learning applied to medical education*. Illinois: Southern Illinois University School of Medicine.

Bransford, J. D., Broen, A. L., & Cocking, R. R. (1999). *How People Learn*. Washington, DC: National Academy Press.

Dolmans, D. H., Snellen-Balendong, H., Wolhagen, I. H., & Van der Vleuten, C. P. (1997). Constructivism and The Technology of Instruction on O'Donnell, A. M. *Constructivism by Design and in Practice: A Review, Issues in Education, 3(2),* 285. Margetson, D. (1987). The question-led design of a degree programme. *Higher Education Research and Development*. 6, 151-173.

Mauffette, Y., Kandlibinder, P., & Soucisse, A. (2004). The Problem in Problem-based Learning is the Problems: But do they motivate students? In M. Savin-Baden & K. Wilkie, *Challenging Research into Problem-based Learning*. Maidenhead, Berks: Open University Press.

Nor Aziah, A.M., Zuaini, I. and Wan Nordin, W.H. (2011). Application of PBL in Financial Accounting Principles Course. *Malaysian Journal of Learning and Instruction* (MJLI), 8, p. 21 – 47.

Savin-Baden, M., & Major, C, H. (2004). *Foundations of Problem-Based Learning*, England: Society for Research into Higher Education and Open University Press.

Schmidt, H. G., & Moust, J. (2000). Towards a taxonomy of problem used in problem-based learning curricula, *Journal on Excellence in College Teaching*,11(2/3): 57-72.

Temasek Polytechnic. (2006). PBL Foundation Programme Learning Academy, Temasek Polytechnic: Singapore. Wee, K. N. (2004). *Jump Start Authentic Problem-Based Learning*. Singapore: Prentice Hall.