A STUDY ON INFORMAL LEARNING SPACES IN THE FACULTY OF COGNITIVE SCIENCES AND HUMAN DEVELOPMENT (FCSHD)

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Statement of Originality

The work described in this Final Year Project, entitled
“A Study on Informal Learning Spaces in the Faculty of Cognitive Science and
Human Development (FCSHD)’’
is to the best of the author’s knowledge that of the author except
where due reference is made.

27.6.2011
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A STUDY ON INFORMAL LEARNING SPACES IN THE FACULTY OF COGNITIVE SCIENCE AND HUMAN DEVELOPMENT (FCSHD)

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This project is submitted in partial fulfilment of the requirements for a Bachelor of Science (Honours) Cognitive Sciences

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ABSTRACT

A STUDY ON INFORMAL LEARNING SPACES IN THE FACULTY OF COGNITIVE SCIENCE AND HUMAN DEVELOPMENT (FCSHD)

FATIMAH BINTI MOHAMAD ZIN

The aim of this study is to investigate the relationship between usage of informal learning spaces and student engagement in learning. At the same time, this study also investigates students’ choice, requirement and preference in the informal learning spaces. This research was conducted in one of the faculty in University Malaysia of Sarawak (UNIMAS) which is Faculty of Cognitive Science and Human Development (FCSHD) where informal learning spaces are provided. This is a quantitative study involving second and third year student in FCSHD who have knowledge and experience about four types of informal learning spaces in FCSHD: rest room, resource room, lounge and computer lab. A set of questionnaires constructed from previous research findings about informal learning spaces is used as the research instrument. There are 60 sets of questionnaires distributed to the respondents from two programme in FCSHD which are Cognitive Sciences and Human Development. The descriptive statistic is used to find the popular aspect in each informal learning space, the reason why students use informal learning spaces, and student preference in each informal learning space. It is also used to analyze the aspect in the spaces that can be improved in order to facilitate student to enhance informal learning processes and increase student engagement. While inferential statistic is used to test research hypotheses by using Correlation-Pearson test. This study found that there is a relationship between usage of informal learning spaces and student engagement in learning. Moreover, it also found that student choice, requirement and preference in the informal learning spaces depend on the environment and facilities provided in the spaces. It can be concluded that well-designed informal learning spaces can encourage students to use the space and increase student engagement in learning.
ABSTRAK

A STUDY ON INFORMAL LEARNING SPACES IN THE FACULTY OF COGNITIVE SCIENCE AND HUMAN DEVELOPMENT (FCSHD)

FATIMAH BINTI MOHAMAD ZIN

Kajian ini bertujuan untuk menyelidik perhubungan antara penggunaan ruang pembelajaran tidak formal dan komitmen pelajar dalam pembelajaran. Pada masa yang sama, ia juga bertujuan mengkaji pilihan, keperluan dan kecenderungan pelajar di dalam ruang pembelajaran tidak formal. Kajian ini dijalankan di salah sebuah fakulti di Universiti Malaysia Sarawak (UNIMAS) iaitu Fakulti Kognitif Sains dan Perkembangan Manusia (FSKPM) di mana ruang pembelajaran tidak formal disediakan di fakulti. Kajian ini adalah kajian kuantitatif yang melibatkan pelajar tahun dua dan tiga di FSKPM yang mempunyai pengalaman dan pengetahuan berkenaan empat jenis ruang tidak formal di FSKPM iaitu Bilik Rehat, Bilik Sumber, Ruang Menunggu dan Makmal Komputer. Set senarai soalan yang telah dibina daripada penemuan kajian terdahulu tentang ruang pembelajaran tidak formal digunakan sebagai alat kajian. Sebanyak 60 set senarai soalan diedarkan kepada responden daripada dua program di FSKPM iaitu Kognitif Sains dan Pembangunan Manusia. Statistik deskriptif digunakan untuk mengenal pasti tentang aspek paling diminati di dalam setiap ruang pembelajaran tidak formal, tujuan pelajar menggunakan setiap ruang pembelajaran tidak formal dan kecerendungan pelajar di dalam setiap ruang tidak formal. Selain itu, ia juga digunakan untuk menganalisis aspek di dalam ruang yang boleh dinaik taraf agar dapat membantu pelajar untuk mengembangkan prases pembelajaran tidak formal dan meningkatkan komitmen pelajar. Statistik inferensi iaitu ujian Kolerasi-Pearson dijalankan untuk menguji hipotesis kajian. Kajian ini mendapati terdapat hubungan di antara penggunaan ruang tidak formal dan komitmen pelajar dalam pembelajaran. Selain itu, kajian ini juga mendapati bahawa pilihan, keperluan dan kecenderungan pelajar di dalam ruang pembelajaran tidak formal adalah bergantung kepada suasana ruang itu sendiri dan kemudahan yang tadapat di dalamnya. Kesimpulannya, penyediaan ruang tidak formal yang baik boleh menggalakkan pelajar untuk menggunakan ruang tersebut dan meningkatkan komitmen pelajar dalam pembelajaran.
1.0 Introduction

This chapter will cover the background of study, problem statement, research objectives, research questions, research hypotheses, significance of study, definitions of terms and limitation of study. This chapter is important because it explains the issues of informal learning spaces and how it affects the student engagement in learning. This chapter will end with a short summary.
1.1 Background of the study

Learning is the central activity of colleges and universities. Sometimes learning occurs in classrooms (formal learning); other times it results from serendipitous interactions among individuals (informal learning). Space, whether physical or virtual, can have an impact on learning. It can bring people together; it can encourage exploration, collaboration, and discussion or can carry an unspoken message of silence and disconnectedness (Oblinger, 2006).

Students spend hundreds of hours in class. While they might not have much choice where they spend their class time, they do control how they behave in these spaces. Once freed from the classroom, students gravitate to the spaces most appealing to them. Comfortable and customizable spaces quickly become candidates for frequent use between classes. The informal learning that takes place outside classes occurs in libraries, information commons, lounge and any other locations where students can gather. Spaces that catalyze social interaction, serendipitous meetings, and impromptu conversations contribute to personal and professional growth (Oblinger, 2006).

Informal learning spaces are common areas and lobbies in residence halls, libraries, and classroom buildings (Oblinger & Oblinger, 2005). There is a growing body of literature examining the design and development of formal and informal learning spaces, with most offering a set of guiding design principles (Jamieson, Fisher, Gilding, Taylor & Trevitt, 2000; JISC 2006; Oblinger 2005; Siddall 2006). Informal learning, which occurs outside the formal instructor-facilitated setting, is now recognized as an important part of the overall learning environment. Different kinds of learning environments aim to support students’ learning and the challenge is to create a learning environment that both gives structure and guidance for learning and also develop collaboration among student to enhance learning (Jaskari, 2009).
Informal settings include libraries and physical spaces that facilitate group and individual academic activities and computer-assisted learning. Chism (2006) also noticed that in recent studies the physical environment is an important characteristic of institutions that do exceptionally well in engaging their students. Technology has redefined the meaning of learning space by changing our notions of place and time:

- Place is defined by both physical and virtual settings.
- Learning time has become more flexible and can be formally scheduled or individually selected by the learner.
- The structure and content of learning can be formally structured and facilitated within a program or course or it can be self-directed.

This study focuses on physical setting where the spaces are built in a room, whether it is open area or enclosed by walls. Using the space, students are free to make their activity without formal instructor facilitated and are expected to make collaboration learning among friends. Even though the place where we learn is considered very important to learning, it has been argued that learning programs focus more on activities, with less focus on space and place (Beard & Wilson 2006: 79). This objective of this study is to identify popularity, usage and preference of informal learning spaces among students of Faculty of Cognitive Science and Human Development (FCSHD) and its relation to the learning engagement.

This research is conducted in one of the faculty in UNIMAS (University Malaysia Sarawak) which is FCSHD (Faculty of Cognitive Sciences and Human Development) situated in the west campus. The Faculty was established in 1994 and until now, has offered undergraduate and graduate programmes in Human Resource Development and Cognitive Science through its three main departments. These departments are Cognitive Science, Human Resource Development and Counseling. By means of the faculty mission, it wants to foster a conducive environment for
teaching, learning and research. Therefore, it is crucial to comprehend this topic area which is informal learning spaces.

Ever since the faculty was established, it has provided many facilities for students to enhance the learning process like multimedia theater, tutorial rooms and many more. The faculty is constantly upgrading its facilities such as its multimedia theater and computer laboratory where staff supervise the equipment so that lecturers and students can use it during the process of teaching and learning. Apart from that, the faculty also has provided spaces for their students outside the classroom which are: rest room, resource room, lounge spaces and computer labs in order to enhance informal learning process.

Rest rooms are enclosed rooms located at the level G and level 1 in the building and have ports for internet connection, tables, chairs and also television. The resource room is located on level G and has one computer, port for internet connection, television, tables and chairs. The place is constantly being updated since it is where students are searching and getting sources like student's thesis, books and other references. Lounge spaces, situated at level LG and level G in front of the faculty main door, both have television and sofa provided. Computer labs for open use are located at level LG and level 1 in the faculty's building where there are more than 30 computers and one projection screen at the front provided in each room.

A computer lab on level 1 is also provided with large tables and chairs on the left side of the room for students who bring their own laptop. The side space also can be used as a discussion space for group activity since the table shape is square and has more than ten chairs provided. The spaces are also equipped with ports for internet connection and free wireless connection. The spaces listed above already have equipment to enhance informal learning activity. Each type of informal learning space fulfills different needs of the student population using them. Facilities like
tables, chairs and internet connections give the chance for students to develop interest in learning outside the classroom. Furthermore, the availability of internet connections in each space can give extra ways for students to get more information for them to achieve their study goals.

1.2 Problem statement

Previous research has shown that opportunities for students to come together outside formal class time to network, discuss and debate encourages student learning (Markwell, 2007). So, it is crucial to research this topic since informal learning space was proven to relate to student engagement in learning. While there has been increased attention given to physical learning environments, including both formal teaching spaces and informal learning spaces (NGLS, 2008), an evaluation framework to determine the impact of physical spaces on the student experience is lacking. Indeed, attempting to determine the impact of spaces is difficult given the multitude of factors that influence student learning and their experiences, from teaching methods to individual student differences (SFC, 2006). In fact, the Scottish Funding Council report highlights the lack of studies that have explored the link between learning spaces, student outcomes, and the broader student experience (2006).

There is no known study on popularity, usage and preference of informal learning spaces provided in FCSHD. So, until now no one knows whether investment on informal learning spaces provided in FCSHD gives value to students or not. In particular, no one knows whether faculty investment on the spaces gives positive effect or not to the student engagement in learning. It is critical to know the popularity, usage and preference of informal learning spaces among student since the previous study elsewhere reported that informal learning spaces can enhance student
collaborative learning and through that it can facilitate to increase student engagement.

The problem that must be brought into focus here is: ‘Are the informal learning spaces provided in FCSHD being used beneficially by students and give positive impact to them?’ The problem here must be focused since learning space is one of the criteria for students to engage with the study as reported in 2008 by Whiteside. In her report, she stated that students select different types of study spaces depending on the type of assignment and the environment they need to meet their goals for that assignment. In other reports, Lomas and Oblinger (2006) state that knowing students' study habits, needs and preferences for space is vitally important because well-designed learning space and enabling technologies encourage students to spend more time on campus, increasing engagement and improving retention.
1.3 Research objective

1. To evaluate the popularity of informal learning spaces among FCSHD students.
2. To evaluate the usage of informal learning spaces among FCSHD students.
3. To evaluate the preference of informal learning spaces among FCSHD students.
4. To find out the improvement that can be made in the current learning spaces provided for informal learning.
5. To identify the relationship between use of informal learning spaces and student engagement.
6. To identify aspect in the current informal learning spaces that give impact on student engagement.

1.4 Research question

The study aims to answer the following research questions:

1. What are the aspects in informal learning spaces that favor students to come to that place?
2. What are the reasons for students using informal learning spaces in FCSHD?
3. What are student preferences in using informal learning spaces in FCSHD?
4. What is the improvement that can be made to the current facilities provided?
5. What is the relationship between the usage of informal learning spaces and student engagement?
6. Are there any aspects on the current informal learning spaces in FCSHD that give impact on student engagement?
1.5 Research hypothesis

This study will test the following hypothesis:

H₀₁ There is no relationship between highest usage of informal learning spaces and student engagement.

H₀₂ There is no relationship between least usage of informal learning spaces and student engagement.

H₀₃ There is no relationship between adaptability aspect on informal learning spaces in FCSHD and student engagement.

H₀₄ There is no relationship between social aspect on informal learning spaces in FCSHD and student engagement.

H₀₅ There is no relationship between healthful aspect on informal learning spaces in FCSHD and student engagement.

H₀₆ There is no relationship between sustainability aspect on informal learning spaces in FCSHD and student engagement.

H₀₇ There is no relationship between resourceful aspect on informal learning spaces in FCSHD and student engagement.

H₀₈ There is no relationship between stimulating aspect on informal learning spaces in FCSHD and student engagement.
1.6 Significance of the study

The significant of the study is categorized into three which are theory, knowledge and practice. Further explanation of this significance of study is provided below:

1.6.1 Significance of the Theory

This study will help to prove existing learning theories which describe the relationship between informal learning space and student engagement. It will explain the current theory that describes how learning environments effect student engagement. According to Kolb (2005) the concept of learning space builds on Kurt Lewin's field theory and his concept of life space. For Lewin, both person and environment are interdependent variables, a concept Lewin translated into a mathematical formula, $B = f(p,e)$ where behaviour ($B$) is a function of person ($p$) and environment ($e$). In this context of study, we want to prove that student engagement (behavior) is related to how student (person) makes use of informal learning spaces (environment).

1.6.2 Significance of the Knowledge

The purpose of the study is to identify and find out the usage, popularity and preference of informal learning space provided in FCSHD among students and its relation to their engagement in learning. Informal learning space is one of the important aspects of student engagement in learning (Matthews, Adams & Gannaway, 2008). The existence of learning space outside the classroom seems to be a strong factor that encourages and drives student to do well in their study performance. Hopefully, from this study, students will start to recognize the function