

CHAPTER II

REVIEW OF RELATED LITERATURE

A. Review of Related Literature

1. Definition of Students' Engagement

Based on Trowler's opinion, student's engagement is concerned with the interaction between the time, effort and other relevant resources invested by both students and their institutions that intend to optimize the students' experience enhance the learning outcomes and development of students and the performance, and reputation of the institution.¹² So, there is a close connection of the students and the institution to create the learning out come that will affect the reputation of the institution. In addition, McMullen states that student engagement is undoubtedly a major component of any successful classroom environment.¹³ Therefore, classroom environment has an effect to the students' engagement.

Then Krause and Coates indicates that engagement is the quality of effort students themselves devoted to educationally

¹² Vicki Trowler, *Students' Engagement Literature Review* (Department of Educational Research: Lancaster University, 2010).

¹³ Victoria McMullen: "*Student Engagement and Motivation: Research Analysis of Influences and Effects on Student Achievement, Behavior Management*". (USA: Webster University, 2007).

purposeful activities that contribute directly to desired outcomes.¹⁴ So, students' engagement can be defined as the quality of their effort toward the class that automatically results in learning outcome. Parsons and Taylor state that student engagement is primarily and historically about increasing achievement, positive behaviors, and a sense of belonging in all students.¹⁵ This means that students' engagement here is related with the students' positive behavior and their achievement. Moreover, disengaged students are distracted, passive, do not try hard, give up easily facing the difficulty or challenge, expressing negative emotions, failing to plan or monitor their work, and generally withdraw (for example: when I am in class, I usually think about other things).¹⁶ So, when the students do not engage to the class they will show negative emotion in the class. Moreover, student engagement can be defined as the level of participation and intrinsic interest that a student shows in school. Engagement in schoolwork involves both behaviors (such as persistence, effort, attention) and attitudes (such as motivation, positive learning values, enthusiasm, interest,

¹⁴ Kerrie lee Krause & Hamish Coates. *Students' Engagement in First Year University*. (Australia: Griffith University Australia, 2008).

¹⁵ Jim Parsons & Leah Taylor, *Student Engagement: What do we know and what should we do?* (University of Alberta, 2011).

¹⁶ Hyungshim Jang, Johnmarshall Reeve & Edward L. Deci, "Engaging Students in Learning Activities: It Is Not Autonomy Support or Structure but Autonomy Support and Structure". *Journal of Educational Psychology*. Vol. 102 No. 3, 2010, 588–600.

and pride in success).¹⁷ This means that the students' engagement is the students' involvement in school work includes their behavior and attitudes.

Knowing the definitions mentioned above, it can be concluded that students' engagement is that the students have a sense of belonging at school or class in which they have positive behavior, good emotion and cognition during the period of their study.

2. Measuring the students' engagement level

There are some theories in measuring students' engagement level. A research about engagement in the classroom describes both psychological and behavioral characteristics.¹⁸ So, psychology and behavior of the students will show how high the level of the students' engagement is. Then, Wellborn & Connel cited in Fredricks, McColskey, Meli, Mordica, Montrosse, and Mooney, state that students' engagement can be measured based on some items, they are Engagement-Behavior, Disaffection Behavior, Engagement Emotion, Disaffection- Emotion, Re-

¹⁷Chris Goldspink, Pam Winter & Margot Foster, *Students' Engagement and Quality Pedagogy* (www.earlyyears.sa.edu accessed on March 03, 2014).

¹⁸ Judy R. Jablon & Michael Wilkinson, "Using Engagement Strategies to Facilitate Children's Learning and Success" (Beyond the Journal, March 2006. <https://www.naeyc.org>).

engagement (Optional).¹⁹ So, students' engagement can be measured from their positive and negative emotion and behavior. In addition, based on flow theory about the students' engagement concentration, interest and enjoyment in an activity, students must be experienced simultaneously in order the flow to occur.²⁰ It means students must interest, enjoy and concentrate on the class simultaneously to create engagement of the students to the class activity. Fredricks, Blumenfeld, Paris, Skinner, Furrer, Marchand, Kindermann, & Wellborn (cited in Jang, Reeve, and Deci) state that engagement expresses the behavioral intensity and emotional quality of a student's active involvement during a learning activity.²¹ Therefore in measure students' engagement, we have to consider their behavior and emotional quality.

In the other hand, Trowler indicates three dimension to students' engagement.²² They are as the following:

¹⁹ J. Fredricks, W. McColskey, et al. *Measuring student engagement in upper elementary through high school: a description of 21 instruments*. (Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast, 2011).

²⁰ David J. Shernoff, Mihaly Csikszentmihalyi, Schneider & Steele Shernoff, "Student Engagement in High School Classrooms from the Perspective of Flow Theory". *School Psychology Quarterly*. Vol. 18 No. 2. 2003, 158–176.

²¹ Hyungshim Jang, Johnmarshall Reeve & Edward L. Deci, "Engaging Students in Learning Activities: It Is Not Autonomy Support or Structure but Autonomy Support and Structure". *Journal of Educational Psychology*. Vol. 102 No. 3, 2010, 588–600.

²² Vicki Trowler, *Students' Engagement Literature Review* (Department of Educational Research: Lancaster University, 2010).

a. Behavioral engagement

Students who are behaviorally engaged would typically comply with behavioral norms, such as attendance and involvement, and would demonstrate the absence of disruptive or negative behavior. So, behavioral engagement can be seen from the behavioral norms of the students. In addition, Mintz states that survey questions that are grouped within this dimension of engagement include questions about homework, preparation for class, classroom discussions and assignments, and the level of academic challenge that students report.²³ It means that the behavioral engagement of the students includes their behavior in class activity, such as: the students' contribution in class, the students' performance, etc. Moreover, based on Lester opinion, the involvement in learning and academic tasks includes student behaviors related to concentration, attention, persistence, effort, asking questions, and contributing to class discussions.²⁴ It means that the students' involvement in learning can be

²³ Ethan Yazzie Mintz. *Charting the Path from Engagement to Achievement: A Report on the 2009 High School Survey of Student Engagement*. (Indiana: Indiana University, 2009).

²⁴ Derek K. Lester: "Environmental engagement demand differences within and among Holland academic environments" (Las Vegas: University of Nevada, 2011), 24.

seen from their behavior includes their concentration, attention, asking question, etc. Connell and Wellborn cited in Fredricks state that behavioral engagement draws on the idea of participation and includes involvement in academic, social, or extracurricular activities; it is considered crucial for achieving positive academic outcomes and preventing dropping out.²⁵ So, behavioral engagement includes the participation of the students to the activities of the institution in order to achieve positive outcomes.

According to those theories and the purpose of this research which focus on classroom observation, it can be concluded that behavior engagement is students' behavior in class that shows their involvement in class including their positive behavior toward the teacher and class activities.

b. Emotional engagement

Students who engage emotionally would experience affective reactions such as interest, enjoyment, or a sense

²⁵ J Fredricks, W McColskey, et al. *Measuring student engagement in upper elementary through high school: a description of 21 instruments*. (Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast, 2011).

of belonging. So, emotional engagement can be seen from the affective reactions of the students. Moreover, Finlay states that emotional engagement includes interest, values, emotion.²⁶ For example, affective reactions in the classroom, attitudes towards school and teachers, identification with school, feelings of belonging, appreciation of success in school, antithesis of positive feelings is also emotional engagement items. So, emotional engagement here means the students' reaction includes interest, enjoyment, values toward the class activity and the teacher. In addition, Fredericks et al cited in Lester state that emotional engagement comprises of students' attitudes, interests, and values particularly related to positive or negative interactions with faculty, staff, students, academics, or the institution.²⁷ This means that emotional engagement may show the students' negative or positive reaction to the institution.

According to those theories and the purpose of this research which focuses on classroom observation, it can be

²⁶ Krystina Finlay. *Quantifying School Engagement: Research Report* (Colorado: National Center for School Engagement, 2006).

²⁷ Derek K. Lester, *Environmental engagement demand differences within and among Holland academic environments* (Las Vegas: University of Nevada, 2011).

concluded that emotion engagement is the students' reaction, feeling and emotion to the class activities that can be positive or negative emotion.

c. Cognitive engagement

Cognitively engaged students would be invested in their learning, would seek to go beyond the requirements, and would enjoy challenge. It means the students will make an effort in their learning. In addition, Chapman cited in Zhu indicates that cognitive engagement refers to the extent to which students are attending to and expending mental effort in the learning tasks encountered (e.g., efforts to use knowledge and cognitive strategy to complete a task).²⁸ It means cognitive engagement is the students' effort in learning task.

In addition, Fredericks et al, cited in Lester state that two components of cognitive engagement: psychological and cognitive.²⁹ The psychological component includes motivational goals and self-regulated learning as it relates to investment, thoughtfulness, and

²⁸Xihe Zhu, Ang Chen, et al. "Situational interest, cognitive engagement, and achievement in physical education". *Contemporary Educational Psychology*. Vol. 34. No. 3. 2010, 221-229.

²⁹ J Fredricks, W McColskey, et al. *Measuring student engagement in upper elementary through high school: a description of 21 instruments*. (Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast, 2011).

willingness to put in the effort to comprehend and master difficult skills. The psychological component includes students' investment in learning and motivation to learn. The cognitive component involves self-regulated learning, metacognition, application of learning strategies in thinking and studying. So the psychological component relates to the students' psychologist in learning while cognitive component relates to the students' thought.

Then based on Fredricks thought, cognitive engagement is defined as the student's level of investment in learning; it includes being thoughtful and purposeful in the approach to school tasks and being willing to exert the effort necessary to comprehend complex ideas or master difficult skills.³⁰ It means cognitive engagement can be defined as students' will, purpose and effort to master the skill.

According to those theories and the purpose of this research which focus on classroom observation, it can be concluded that cognitive engagement is the students'

³⁰ J Fredricks, W McColskey, et al. *Measuring student engagement in upper elementary through high school: a description of 21 instruments*. (Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast, 2011).Page. 10.

thought and comprehension about the lesson that have been explained by the teacher during the class activities.

Richard and Jones argue that a cognitive domain consists of beliefs and values, emotional domain consists of motivation and feelings, and behavioral domain consists of habits and skills.³¹ So, cognitive relates to students' beliefs and values, emotion relates to the students' motivation and feeling, behavior relates to the students' habit and skills.

Then, based on Jones the students' engagement level can be measured from the characteristics of students' engagement. They are positive body language, consistent focus, fun and excitement, individual attention, clarity of learning, meaningfulness of work, rigorous thinking, and performance orientation.³²

a. Positive body language.

Students show body postures that indicate listening and paying attention to the teacher or other students. It includes their eye contact, head position, leaning forward or backward, and positions of arms.

³¹ Jones & Richard, "Strengthening Students' Engagement". *International Center for Leadership in Education*. 2008. (<http://www.cesdp.nmhu.edu/> accessed on March 03, 2014).

³² Richard D. Jones, *Student Engagement: Teacher Handbook*. (New York: International Center for Leadership in Education, 2009).

All of them show the student's level of interest and attention.

b. Consistent focus.

Students are focused on the learning activity with minimum disruptions including their attention that shows they interest with the activities.

c. Verbal participation.

Students show thoughtful ideas and answers which indicate they are active students. For example, they ask questions that appropriate to learning, share their opinion about the lesson, and reflect problem that they get in the class.

d. Student confidence.

Students show confidence in doing their task with limited coaching or approval-seeking and active in participation of team-based work.

e. Fun and excitement.

Students show interest, enthusiasm and use positive humor.

f. Individual attention.

Students feel comfortable in asking help or questions.

g. Clarity of learning.

Students can describe the purpose of the lesson or unit rather than describing the activity based on the lesson of the day.

h. Meaningfulness of work.

Students discover that the work interesting, challenging, and connected to learning.

i. Rigorous thinking.

Students can work on complex problems, create solutions by them selves, and reflect on the quality of their work.

j. Performance orientation.

Students know what quality of work is and how it will be assessed. They can evaluate the quality of their work.

Considering those theories, the researcher concludes that in measuring students' engagement level we have to consider the characteristic of students' engagement, it includes students' behavior, emotion, and cognitive in class.

3. Outdoor classes

Scott, Rickinson, Reid, Donnel, Moris, and Dillon define outdoor class as those spaces where students can experience

familiar and unfamiliar phenomena beyond the normal confines of the classroom.³³ This definition means that the students learn outside classroom and do experiences which are related with the environment. For example, students plant some plants in the school grounds while giving name and the description of the plants using English. In the other hand, Fägerstam cited in Saroja and Yee define outdoor learning as an experiential process of learning by performing acts/experiences that take place predominantly out of the classroom setting or through exposure to the out-of-doors.³⁴ This means that they learn based on their experience out of the classroom. Moreover Adams, Sanchez et al state that the outdoor class is using a great environment to build skills which the purpose of the curriculum is to give experiences and coach children in the exercise of stewardship of the natural world.³⁵ It means in outdoor class, the student is taught to learn about the natural world. On the contrary, the definition of outdoor class in this research is just the classroom associated with environment.

³³ Justin Dillon, Marian Morris, Lisa O'Donnell, et al. "Engaging and Learning with the Outdoors – The Final Report of the Outdoor Classroom in a Rural Context Action Research Project". *National Foundation for Education Research*, 2005 (www.nfer.ac.uk. Accessed on March 05, 2014).

³⁴ Saroja Dhanapal & Cally Cheng Yee Lim: "A comparative study of the impacts and students' perceptions of indoor and outdoor learning in the science classroom". *Asia-Pacific Forum on Science Learning and Teaching*. Volume 14. Issue 2. Article 2, Dec, 2013. p.1.

³⁵ Le Adams, Sanchez, Mary Erwin, et al. *Growing The Outdoor Classroom: A Handbook on Gardening in Albuquerque Public Schools* (Albuquerque: Growing Gardens Team, 2010)

B. Review of Previous Studies

There are some researches about teaching approach, teaching tools, technology that affect to the students' engagement. First, thesis written by Bulger, Mayer, Almeroth and Blau entitled "Measuring Learner Engagement in Computer-Equipped College Classrooms". The researchers found that classroom technologies affect to student engagement levels.³⁶

The second thesis was written by Parn entitled "An-Depth Study of Student Engagement". This research was done in mathematic class of the 5th grade. The researcher discovered that giving students' specific guidelines and criteria for my expectations, as well as modeling those expectations on the rubric by using pictures, and then having students grade themselves were all key factors to increasing the level of engagement that students demonstrated.³⁷

The third thesis was written by Armbruster entitled "Student Engagement and Motivation: Research Analysis of Influences and Effects on Student Achievement", the researcher found that teacher practices and student-teacher relationships, student motivation and self-efficacy,

³⁶ Bulger M. E, Mayer R. C, Almeroth K. C & Blau S. D: "*Measuring Learner Engagement in Computer-Equipped College Classrooms*". (CA USA: University of California, Santa Barbara, 2008).

³⁷ Laura Parn: "*An-Depth Study of Student Engagement*". (Lincoln: University of Nebraska, 2006).

classroom environment/ students' perceptions of school influenced the students' engagement and motivation.³⁸

The fourth thesis was written by Delialioğlu entitled “Student Engagement in Blended Learning Environments with Lecture-Based and Problem-Based Instructional Approaches”. This research was about how blending of a different instructional approach with technology affected students' engagement.³⁹

The fifth thesis was written by Miller, Demoret, Wadkins entitled “Promoting Student Engagement in the Classroom”. The research was about assessing the impact of the role of faculty determined factors (e.g. class size, teaching style, and responsiveness to questions) in influencing engagement.⁴⁰

Then the sixth thesis was written by Rudolf entitled “Effect of Outdoor Education Methods and Strategies on Student Engagement in Science: Descriptive Study”. The researchers indicated that outdoor education experience effects to the students' engagement in science.⁴¹

³⁸ Ashley Armbruster: “*Student Engagement and Motivation: Research Analysis of Influences and Effects on Student Achievement*”. (USA: Webster University, 2007).

³⁹ Ömer Delialiođlu: “*Student Engagement in Blended Learning Environments with Lecture-Based and Problem-Based Instructional Approaches*”. (Turkey: University of Ankara, 2012)

⁴⁰ Richard L Miller, Martin Demoret, and Theresa Wadkins: “*Promoting Student Engagement in the Classroom*”. (Kearney: University of Nebraska).

⁴¹ Daniel William Rudolf: “*Effect of Outdoor Education Methods and Strategies on Student Engagement in Science: Descriptive Study*”. (Bozeman, Montana: Montana State University, 2012)

Those researches are about some factors that can affect to the students engagement, for example: the teachers' teaching strategy, instructional method, classroom technologies, etc.

In the other hand, there are some comparative studies of students' engagement. The first thesis was written by Nadia in 2012 entitled "A comparative study of student engagement, satisfaction, and academic success among international and American students". The researcher compared the student engagement of international and American students.⁴²

Then, the second thesis was written by Adediwura, Oluwatosin, Ajeigbe in 2008 entitled "Comparative Study of Private and Public Schools Student Engagement and School Effectiveness Indicators". The researchers examined differences between student perceptions of school engagement of private and public school. The result is there is no significant difference of them.⁴³

The third thesis was written by Hemp, Woollen, Humiston in 2008 entitled "A Comparative Analysis of Student Engagement, Learning, and Satisfaction in Lecture Hall and Online Learning Setting". The

⁴² Nadia Korobova.: "A comparative study of student engagement, satisfaction, and academic success among international and American students". (US: IOWA State University, 2012)

⁴³ Adediwura, Oluwatosin, Ajeigbe, "Comparative Study of Private and Public Schools Student Engagement and School Effectiveness Indicators", *IFE Psychology*, Vol. 16 No. 2, 2008. pp. 36-46.

researchers analyzed the student engagement, learning, and satisfaction in lecture hall and online learning settings.⁴⁴

In addition, the fourth thesis was written by Jordan entitled “A Comparative Analysis of Student Engagement between Community College Students”. The researcher compared student engagement levels between Academic and Career and Technical Education students enrolled in a college district in Texas. The result is there is no significant difference in the Community College Survey of Student Engagement data (which measures overall student engagement levels) between Career and Technical Education and Academic students⁴⁵

Those researches are about the comparison of students’ engagement in which they have different background, such as: American students with international students, students in Private School and public school, academic and career students.

Here, the researcher will focus on measuring the level of students’ engagement which have different classroom physical environment.

⁴⁴ Rabe C. Hemp, Susan Woollen, and Gail Sears Humiston, “A Comparative Analysis of Student Engagement, Learning, and Satisfaction in Lecture Hall and Online Learning Setting”. *The Journal of Criminal Justice Education*. Vol. 10. No 2 2009, pp. 207-218

⁴⁵ Paulette L Jordan., Doctor of Education: “A Comparative Analysis of Student Engagement between Community College Students”. (Liberty University, 2013).