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# The Development of the Effective Learning Environment by Creating an Effective Teaching in the Classroom.

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#### Abstract:

The changes in learning management typically involve the introduction of various alternative learning methods. The development of an effective learning experience requires the modification of conventional learning. Teaching and learning constructively synchronize instructions and assessment toward the desired learning outcomes. Notwithstanding the vast literature on the creation of effective learning, the lack of explanation on how the relationship between effective teaching and effective classroom would likely leave practitioners and academia without a clear guidance on how to operationalize the creation of effective learning in real life. A systematic literature review procedure was conducted upon published papers between 2007 and 2015 in outstanding education journals. This paper contributes to the literature by amassing the knowledge on pedagogical practices in effective learning creation. In addition, to obtain a granular elaboration about the matter, a framework to operationalize the creation of effective learning is suggested. Three aspects compose the framework namely teachers' intrinsic capabilities, educational institution support, and student's participative involvement. The roles of each party were extracted from the knowledge contained in the reviewed literature.

**Keywords:** Effective Learning, Effective Teaching, Effective Classroom, Management Effective Teaching, Management Effective Classroom, Literature Review

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## Introduction

The changes in learning management typically involve the introduction of various alternative learning methods. The development of an effective learning experience requires the modification of conventional learning. Teachers are required to create models of the effective ways to deliver lesson as well as assisting students to create an enjoyable learning experience. It is argued that an effective learning is directly correlated with the effectivity of both teaching and classroom.

Teaching and learning constructively synchronize instructions and assessment toward the desired learning outcomes. Achieving the objectives may be facilitated through the provision of tasks in learning activities that positively affecting student's learning effectivity. Imposing scores and grades to be the performance indicator of the quality education, however, may mislead by judging quality based on a set of assessment instruments (Knight, 2017). Indeed, the purpose of the assessment can be integrated into three main areas: feedback, motivation and student learning (Kyriazi, 2015). Therefore, it is substantial that teachers suppose to have clear teaching strategies during the interaction with for students (Ismail, et al 2015). Teachers have been accounted for the responsibility to develop a creative classroom environment. It underlines the centrality of teachers in developing a creative learning environment. In this regard, teachers are the central figure in determining the most effective strategies in the classroom.

Several studies have discussed various aspects related to the use of technology and media to assist students completing their tasks (Alwi, Mahir, & Ismail, 2014). The presence of more flexible communication between students and teacher is likely increasing student's information absorption. Another report on the importance of teacher's leadership was presented by Ngang and associates (2015). It is suggested that teacher's leadership practices enable the improvement of teaching and classroom management skills.

Notwithstanding the vast literature on the creation of effective learning, there seems likely a lack of explanation on how the relationship between effective teaching and effective classroom would affect the creation of effective learning. This condition would likely leave practitioners and academia without a clear guidance on how to operationalize the creation of effective learning by utilizing the management of effective classroom and effective teaching in the real life. This review examines twenty-six papers in educational publication outlets. A systematic literature review procedure was conducted upon published papers between 2007 and 2015. This paper contributes to the literature by amassing the knowledge on pedagogical practices in effective learning creation. In addition, to obtain a granular elaboration about the matter, a framework to operationalize the creation of effective learning is suggested.

The rest of the paper is structured as follows: In the next section, the procedure of conducting the review of the literature is elaborated. The perspective of effective learning in the literature is presented in the next section. The findings extracted from the review of the literature are suggested in the fourth section. The discussion upon the finding and the proposed strategies for the management of effective classroom and effective teaching in order to create effective learning are suggested in the next section. In the final section, the paper is concluded.

## Methods

The review of the literature was conducted according to the Systematic Literature Review framework (Okoli & Schabram, 2010). The review was done systematically over 26 articles in 9 outstanding publication outlets in education. To obtain the appropriate publication, the research employed keywords such as Effective Learning, Effective Teaching, Effective Classroom, Management Effective Teaching, and Management Effective Classroom. The main ideas of the reviewed articles were identified and then accumulated in accord to the keywords.

This paper was written in the foot-steps of the previously published article in literature review (Budiyanto, 2016). The insights gathered from the articles then accumulated in the matrix depicted in Table 1. The matrix is the main source for framework development that will be presented in the paper. The knowledge constructed based upon the concepts focusing on the effective learning, effective teaching, and the effective classroom. More importantly is the knowledge on how to pursue the effectiveness and the underlying rationale derived from those articles.

**Table 1. Matrix Concept** 

Learning Level	Basic     Intermediate	<ul><li>Beginner</li><li>Advance</li></ul>
Learning Method	<ul><li>Using technology</li><li>Formative test</li></ul>	<ul><li>Interview</li><li>Observation</li></ul>
Development Method	<ul> <li>Web 2.0</li> <li>ANOVA</li> <li>School-Wide Positive Behavior Support (SW-PBS)</li> <li>Australian Council of Educational Research</li> <li>Three Section of Instrument</li> <li>Higher Education Council (YOK)</li> <li>The Atitudes and Beliefs on Classroom Control (ABCC)</li> </ul>	<ul> <li>Constructivist Learning Environment Survey (CLES)</li> <li>Learning Environment Assessment (LEA)</li> <li>SPSS</li> <li>AMOS software</li> <li>Multimodal Presentation System (MPS)</li> <li>SETE</li> <li>SEEQ</li> </ul>

# Literature Perspective on Effective Learning

The theoretical framework proposed below was taken from the reviewed literature and other published material. The varieties and inconsistencies showed by these short summaries might offer some insight into the research of the effective learning. Effective learning is perceived to be the best in learning, controlling and checking whether the approaches and strategies that have been implemented have proved effective for specific goals and contexts(Chris Watkins, Eileen Carnell, Caroline Lodge, 2002). Moreover, Chris Watkins (2007) summoned that effective learning as the core processes of various domains, and schools must be able to play a special role to assist learners in making an effective learning process throughout the duration of their period.

According to Tang & Chaw (2016) to assess the effectiveness of learning could employ the Bloom's taxonomy revised pointers. The taxonomy has been revised in 2001 with a few changes in the categories of remember, master, implement, interpret, assess, and realize. Rather than teacher's assessment, however, the effectiveness of learning must be determined by students (Chris Watkins, 2007). The aspects of effective learning are all connected by four constraints on the future aspects, meta-learning, aware of their learning process, how they learned. Effective learners have learned to pay attention to their strategies, goals, results, effects, and context.

Effective learners are indicated by a number of characteristics such as being active, competent in collaboration, lively discussion and eagerly building knowledge in teamwork. Students also demonstrated the ability to develop goals and plans, supervise their own learning and to be very flexible in any circumstances (Chris Watkins, Eileen Carnell, Caroline Lodge, 2002). Geared with such attributes, students will be effectively learnt even in the absence of teacher which requires the active role of students within in their own learning processes (Chris Watkins, 2007). Such condition would likely diminish the involvement of teachers in delivering knowledge to students. Therefore, the need for lesson plans is mandatory in producing a positive atmosphere of classroom management.

It can be concluded that effective learning might be achieved by allowing students to be actively learning anytime and anywhere. Teachers create an atmosphere of cooperation by facilitating collaboration within teamwork setting and group projects. Teachers also provide knowledge sourced from the real world. (Ferdousi & Bari, 2015).

# The Creation of an Effective Learning Environment

# **Effective Teaching**

The concept of effective teaching comprises specific behaviors, such as "talk expressive" or "highlight key points". It also includes the universally perceived characteristics such as "active and energetic teacher" or "facilitate the lecture notes." These elements are independent of each other in the sense that the student's

assessment of the professor's organizational skills may be very different from the student's assessment of the relationship of the professor to the student (Jimaa, 2013). The final goal of teaching experience or education is to enable individuals to face the new situation of the various levels of association. It is understood that human's reaction to a future situation in life is affected by one's previous experiences (Olufunminiyi, 2015).

The characteristics of teaching' means the nature of the syllabus, evaluation, and conceptions of teaching (Chris Watkins, Eileen Carnell, Caroline Lodge, 2002). Even when the external aspect of the teaching is poorly prepared, classrooms and schools could implement effective learning to cope. The syllabus that discusses the big idea and which gives the learner the big picture is very interesting. Compliance for learners and the ability to make connections in different contexts should also be supported. In its decision, the self-assessment using social equality, and increase the responsibility of the learner.

Literature has identified the presence of characteristics of effective teaching. The main behaviors for effective teaching involve the characteristics that should be possessed by teachers (Alemu, 2014). Those are including the clarity in lessons delivery, the instructional variety, task orientation instructor, and teacher's involvement in the learning process. The only external indicator of the effectiveness is represented by the student success rate. It is supported by O'NEILL (2009) that the effective teaching characteristics can be seen from the attitude of the teacher. Effective teachers would likely have high expectations of their pupils while at the same time recognizing the differences between individuals. They advocate the use of a variety of pedagogy while controlling the content of their teaching. Teachers maintain the encouragement of students' responsibility. The provision of a safe environment and relationship building among students would be the priority of the effective teachers. They continuously monitor students' progress to encourage them with the appropriate feedback.

It is identified that effective teaching requires the harmony between individual teachers' characteristics and the support of school administrators (Ismail et al., 2015). In a hand, teachers are accounted for specific attributes such as well-prepared teaching materials and personal experience in teaching and content delivery. School administrators, on the other hand, are required to provide full support teacher's initiative in modifying the curriculum and/or instructional strategies. Further support of school administrator may be materialized in the provision of tools that facilitate teachers in planning their lessons effectively including but not limited to internet access, LCD projectors, etc. Whereas, school administrator not only support teachers to innovate in new teaching strategies, but they also needed to enable teachers to obtain teaching and learning resources.

## **Effective Classroom Management**

Effective classroom management is defined as the variable of the classroom environment and the general classroom instructional supported by the preparation of procedures, structure, expectations, and feedback which is consistent across grades (Stichter et al., 2009). According to Talebi, Davodi, and Khoshroo (2015), there is a relationship between the skills and techniques of effective classroom management on student academic achievement. What's more, the emotional relationship between teachers and students potentially enhance student achievement. One component of an effective classroom management is verbal and non-verbal skills. The skills can influence the behavior of individual student and students in communal. The influence could be positive or negative depending on the behavior of the teacher.

Teachers' capability in the management of effective classroom and student's behavior management is substantial to the achievement of positive educational outcomes. Teachers suffering behavior management and classroom discipline are often ineffective in class management. Inability to manage their class would potentially result in the low student achievement (Oliver & Reschly, 2007). It is evident that there is a positive and significant correlation between academic achievement and classroom management (Talebi et al., 2015). Overall, classroom management and the unconditional acceptance of students have the greatest impact on student achievement. Teachers in the classroom are suggested to be fair in dividing attention both by students and refrain from discrimination. Teachers should be flexible to encourage classroom discussion and students involvement.

An effective classroom setting requires a physical arrangement of the class that facilitates learning processes (Oliver & Reschly, 2007). The arrangement enables teachers to mitigate the existing problems caused by the limited response to student's questions and/or inability to control student's behavior. The arrangement optimizes classroom's time utilization, especially during various classroom activities transition. It also benefits the nature and the quality of student positive interactions in the classroom.

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Literature suggests that an effective classroom possesses an overarching characteristic, it is attributed as a teacher-led condition but remain student-centered (Ismail et al., 2015). Such condition may be created under a dynamic atmosphere that expectedly enhances student's autonomous and initiative that led to a higher academic outcome Dobrescu & Grosu (2014). An effective classroom management, more importantly, attributed to the arrangement of the physical environment of the classroom, management planning and programming activities, relationship management and communication in the classroom and behavior management of students (Erdogan & Kurt, 2015).

Effective classroom management triggers positive interaction between students and teacher. Students tend to be respectful when they learn theachers care about them and indicate a qenuine response (Brown, 2005). Therefore a congruent communication is considered contributive to create and effective learning. As the central actor in the discussion, an effective classroom requires teachers to be devised with skills and knowledge of classroom management. Teacher's understanding of classroom management is needed to improve teachers' readiness in the implementation of effective teacher training programs. The practice of teacher leadership is an important aspect of improving effective classroom management practices, especially for teachers in special education as stated by Ngang et al. (2015). It is teachers' responsibility to create a supportive, positive, orderly, and conducive learning environment (Caner & Tertemiz, 2015). In order to obtain those ideal circumstances, school and classroom management strategies should be developed with constructivist approaches (Erdogan & Kurt (2015)). With such consideration, classroom management should be prepared to create a meaningful learning experience for all students including those with disabilities.

#### Discussion

This study set off to answer the question: is there any relation between effective classroom with effective teaching to effective learning? Accross the literature, it is evident that effective classroom management and effective teaching are necessary for the creation of an effective learning environment. As it is suggested by Ismail and his associates (2015), determining the best strategy in learning is an important aspect of the teacher's creative role in the classroom. However, in effective teaching reflects effective learning and effective classroom management. Ismail et al. (2015)also theorized that effective teaching and effective learning is a function of the interaction between teachers and their students, between students and students, and between classes with the environment.

Literature demonstrate that effective learning happen for a number of reasons namely when people are willing to be sensitive, students voluntarily play an active role in their own learning process, students learn from their failure, students actively seek knowledge, teachers develop lesson plans, and when classroom management produce a positive learning atmosphere (Chris Watkins, 2007). In addition, there are several characteristics of the formation of effective teaching, are: clarity of lessons, instructional variety, and orientation of instructor duties, involvement in learning process and student success rate (Alemu, 2014) recognizing the differences between individuals, using a variety of pedagogy, encouraging responsibility of students, have control of the content of their teaching, providing a safe environment, to monitor progress and give feedback, and build positive relationships (O'NEILL, 2009). And then, there are also some characteristics of effective classroom management, including: arrangements that facilitate learning, minimize distractions, utilization of class time, ensuring that the nature and quality of student interactions are positive, communicate the appropriate behavior for the classroom (Oliver & Reschly, 2007) creating a dynamic atmosphere that will enhance students' interest in autonomy, initiative, and high academic outcome (Dobrescu & Grosu, 2014).

Derived from reviewed literature, this paper proposes a framework to help comprehend the creation of an effective learning environment. As depicted in Figure 1, teachers may not independently create the expected learning environment rather, the involvement of school administrators is fundamental. Students also contribute to the environment, since their participation in the learning processes is indispensable.

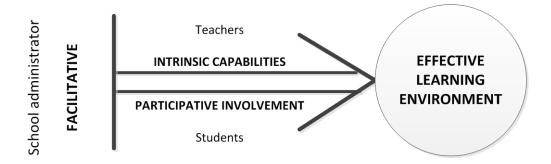


Figure 1. The Creation of an Effective Learning Environment

# Conclusion

The findings of this study exemplify the importance of the participative contribution of school stakeholders in changing conventional classroom management. Teachers, school administrators, and students constitute the school stakeholders. Learning from the findings of this study, when planning or delivering effective learning, it is necessary to change the organization of monotonous learning. Teachers need to create models or an effective way to learn, in addition, assist students in understanding the development of related courses. And effective learning is directly related to effective teaching and effective classroom management.

This paper contributes to knowledge by proposing an overarching framework of contributive factors influence the creation of an effective learning environment. Three aspects compose the framework namely teachers' intrinsic capabilities, educational institution support, and student's participative involvement. The roles of each party were extracted from knowledge in the reviewed literature.

Apart from the contribution suggested in this paper, future research is suggested to focus on teachers' skills to effectively manage the classroom. The procedures for determining the requirements of an effective classroom environment need to be explored systematically. Moreover providing in-depth insight and understanding over the effective classroom management should be planned and undertaken in further research.

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# References

- Alemu, B. M. (2014). Enhancing the Quality and Relevance of Higher Education Through Effective Teaching Practices and Instructors 'Characteristics. *Universal Journal of Educational Research*, 2(9), 632–647. https://doi.org/10.13189/ujer.2014.020906
- Alwi, N. H. M., Mahir, N. A., & Ismail, S. (2014). Infusing Social Media in Teaching and Learning (TnL) at Tertiary Institutions: A Case of Effective Communication in Universiti Sains Islam Malaysia (USIM). *Procedia - Social and Behavioral Sciences, 155(October), 265–270.* https://doi.org/10.1016/j.sbspro.2014.10.290
- Brown, D. (2005). The Significance of Congruent Communication in Effective Classroom Management. *The Clearing House, 79, 12–15.* <a href="https://doi.org/10.3200/TCHS.79.1.12-15">https://doi.org/10.3200/TCHS.79.1.12-15</a>
- Budiyanto, C. (2016). Conducting qualitative empirical research: Review of the literature. *Proceeding of the 1st National Conference on Vocational Education, JPTK UNS, 1*(1) <a href="http://dx.doi.org/10.20961/uvd.v1i0.6650">http://dx.doi.org/10.20961/uvd.v1i0.6650</a>
- Caner, H. A., & Tertemiz, N. (Isık). (2015). Beliefs, Attitudes and Classroom Management: A Study on Prospective Teachers. *Procedia Social and Behavioral Sciences, 186, 155–160.* https://doi.org/10.1016/j.sbspro.2015.04.098
- Chris Watkins, E. C. and C. L. (2007). *Effective Learning in Classrooms*. London: Paul Chapman Publishing A SAGE Publications Company.
- Chris Watkins, Eileen Carnell, Caroline Lodge, P. W. and C. W. (2002). *Effective Learning. National School Improvement Network*, 17(Summer), 8.
- Dobrescu, T., & Grosu, E. F. (2014). Aspects Regarding Classroom Management and its Part in Making the Educational Process More Effective. *Procedia Social and Behavioral Sciences*, *141*, *465–469*. https://doi.org/10.1016/j.sbspro.2014.05.082
- Erdogan, M., & Kurt, A. (2015). Science Direct A Review of Research on Classroom Management in Turkey. *Procedia -Social and Behavioral Sciences, 186, 9–14.* https://doi.org/10.1016/j.sbspro.2015.04.212
- Ferdousi, B., & Bari, J. (2015). Infusing Mobile Technology into Undergraduate Courses for Effective Learning. *Procedia Social and Behavioral Sciences, 176, 307–311.* https://doi.org/10.1016/j.sbspro.2015.01.476
- Ismail, S. F. Z. H., Shahrill, M., & Mundia, L. (2015). Factors Contributing to Effective Mathematics Teaching in Secondary Schools in Brunei Darussalam. *Procedia Social and Behavioral Sciences*, 186, 474–481. https://doi.org/10.1016/j.sbspro.2015.04.169
- Jimaa, S. (2013). Students 'Rating: Is it a Measure of an Effective Teaching or Best Gauge of Learning. *Procedia - Social and Behavioral Sciences, 83, 30–34.* https://doi.org/10.1016/j.sbspro.2013.06.006
- Knight, P. T. (2017). The Achilles 'Heel of Quality: the Assessment of Student Learning. Quality in Higher Education ISSN:, 8322(July), 107–115. https://doi.org/10.1080/1353832022012750
- Kyriazi, T. (2015). Using Technology to Introduce Frequent Assessments for Effective Learning: Registering Student Perceptions. *Procedia Social and Behavioral Sciences*, 197(February), 570–576. https://doi.org/10.1016/j.sbspro.2015.07.195
- Ngang, T. K., Azri, N., & Abdullah, C. (2015). ScienceDirect Teacher Leadership and Classroom Management Practice on Special Education with Learning Disability. *Procedia Social and Behavioral Sciences*, 205(205), 2–7. https://doi.org/10.1016/j.sbspro.2015.09.003
- O'neill, S. (2009). Effective Teaching. Department of Education and Training, (June), 4.
- Okoli, C., & Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems Research. Sprouts Working Papers on Informations Systems, 10(26), 49.
- Oliver, R. M., & Reschly, D. J. (2007). Effective Classroom Management: Teacher Preparation and Professional Development. *National Comprehensive Center for Teacher Quality, 1–24.* Retrieved from http://tgcenter.learningpt.org/topics/effectiveClassroomManagement.pdf

- Olufunminiyi, A. (2015). Enhancing Transfer of Knowledge in Physics through Effective Teaching Strategies. *Journal of Education and Practice*, *6*(16), 37–45.
- Stichter, J. P., Lewis, T. J., Whittaker, T. A., Richter, M., Johnson, N. W., & Trussell, R. P. (2009). Assessing Teacher Use of Opportunities to Respond and Effective Classroom Management Strategies: Comparisons among High- and Low-Risk Elementary Schools. *Journal of Positive Behavior Interventions*, 11(2), 68–81. https://doi.org/10.1177/1098300708326597
- Talebi, S., Davodi, S., & Khoshroo, A. (2015). Investigating the effective component of classroom management in predicting academic achievement among English language students. *Procedia Social and Behavioral Sciences*, 205(May), 591–596. https://doi.org/10.1016/j.sbspro.2015.09.085
- Tang, C. M., & Chaw, L. Y. (2016). Digital Literacy: A Prerequisite for Effective Learning in a Blended Learning Environment. *The Electronic Journal of e-Learning, 14(1), 54–65.* Retrieved from www.ejel.org