# HIGH SCHOOL TEACHERS' PERCEPTION TOWARDS THE IMPLEMENTATION OF THE FLIPPED CLASSROOM IN TEACHING BIOLOGY IN LIBYAN SCHOOL IN JAKARTA

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#### **Abstrak**

Penelitian ini bertujuan untuk menyelidiki persepsi guru terhadap implementasi Strategi Flipped Classroom (FC) di sekolah Libya di Jakarta. Metode penelitian yang digunakan adalah penelitian deskriptif. Pengumpulan data dilakukan dengan menyebarkan kuesioner kepada guru Biologi di sekolah Libya, di Jakarta. Ditemukan bahwa sebagian besar guru yang ditargetkan memiliki persepsi positif terhadap implementasi FC dalam pengajaran Biologi di sekolah Libya, dan mereka telah mengonfirmasi bahwa FC memenuhi waktu yang dialokasikan di kelas. Namun, penggunaan metode tradisional dalam pengajaran dan pembelajaran tidak dapat diabaikan dan harus digunakan jika diperlukan. Saran untuk penelitian masa depan adalah untuk menyelidiki implementasi FC yang sebenarnya di kelas nyata untuk menguji teori dan praktik dengan efisien.

Kata kunci: Biologi; Strategi Flipped Classroom; Persepsi; Sekolah Menengah.

#### **Abstract**

This study aims at investigating the teachers' perceptions towards the implementation of the Flipped Classroom FC Strategy in the Libyan school in Jakarta. The research method uses descriptive research. The data collection was carried out by distributing a questionnaire to Biology teachers of the Libyan school, Jakarta. It has been found that most of the targeted teachers have positive perceptions towards the implementation of the FC in teaching Biology in the Libyan school as well as, they have confirmed that the FC meets the allocated time in the classroom. However, the use of the traditional methods in teaching and learning could not be neglected and should be used when necessary. Suggestions to future studies to investigate the real implementation of the FC in a real classroom to examine the theory and practice efficiently.

Keywords: Biology; Flipped Classroom Strategy; Perceptions; High School.



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#### **INTRODUCTION**

Internet-based technologies are becoming more and more prevalent in education. Where intranets, websites, and computer-based communications are used in educational institutions, e-learning environments and online courses emerge (Williams, 2002). The 21st century has seen great advances in technology in many industries, including language teaching. Students these days are tech-savvy and enthusiastic about social situations and teamwork.

To use technology as a tool to enhance collaborative learning and rethink learning and teaching systems, educators are working hard to develop ways to integrate technology into the educational process (Karimi & Hamzavi, 2017; Gariou-Papalexiou, Papadakis, & GEORGIADU, 2017). According to Abukhattala (2016) and Basal (2015), the integration of technology into the educational process has led to the success of language teaching and learning today.

One of his most recent Active His learning strategies, known as "flipped learning," uses technology in the classroom to improve student learning opportunities and promote a positive learning environment (Basal, 2015). Flipped learning replaces classroom time with practice at home using technology, especially video (El-Bassuony, 2016). Obari & Lambacher (2015) argue that the flipped classroom model is a unique learning environment that is slowly gaining acceptance among educators around the world. This is an educational approach that reverses the roles of lecture and homework. In a flipped classroom, students study lectures in advance (online or through recorded videos, course materials, etc.) and spend the majority of class time participating in interactive discussions and workshops to ask questions and get answers. spend.

Blended learning is a teaching method that combines traditional classroom instruction with a variety of technology-based learning tools such as web-based learning, real-time collaborative software, and electronic performance support systems (Singh, 2003). According to Baepler, Walker, and Driessen (2014), blended learning may benefit from using flipped classroom as a learning strategy.

Many science education researchers believe that teachers play a key role in bringing about innovation in schools and classrooms. Paradoxically, because of their traditional beliefs, they are also seen as the greatest obstacle to change (Prawat, 1992; Levitt, 2002; Funda, 2009). Aubusson and Watson (2003) found that teachers have a significant impact on the quality of classroom teaching and learning. When teachers are proactive and enthusiastic about new initiatives, they are more likely to successfully apply innovative curricula. According to Pekel, Demir, and Yildiz (2006), teachers both hinder and facilitate student learning and are thus critical to student perceptions of learning. They further noted that teacher qualities that lead to effective interpersonal relationships included positive affection, warm demeanor, tactful teaching, teacher immediacy, teacher power, teacher proactiveness and responsiveness, and discriminatory treatment. It has been found that the Flipped Classroom is suitable for many context especially meeting the allocated time oof the classroom (Dewi, Padmadewi, & Santosa, 2021).

The majority of teachers at all levels are trained in traditional fact-based science classrooms. In such classrooms, knowledge structures are formally ephemeral and didactic pedagogies remain the norm. According to Adeyemo (2011), the teacher's perception of the lesson also determines the student's level of comprehension. Teacher perception is the most important educational input that predicts student performance. The majority of teachers at all levels are trained in traditional fact-based science classrooms. In such classrooms, knowledge structures are formally ephemeral and didactic pedagogies remain the

norm. In addition, Dorji, & Dorji, (2022) have found that the teachers agree that the use of technology in the Flipped Classroom does not fully neglect the traditional lecture mood.

According to Adeyemo (2011), the teacher's perception of the lesson also determines the student's level of comprehension. Teacher perception is the most important educational input that predicts student performance. The importance of this research to shed light on the implementation of the Blended Classroom in Libyan school which is located in *Melayu Kecil* street, Tebet, Jakarta city with a number of students about 50 students male/female. Therefore, the study investigates about the implementation of the FC especially in terms of teachers' perceptions; those perceptions may affect positively or negatively towards its implementation. Thus, if teachers perceive the implementation of the Blended Classroom positively, means that they implement it correctly and it is not implemented correctly if they have perceived it negatively.

## **METHOD**

This research utilizes a qualitative approach as the analyst explores a social wonder by deciphering, clarifying, and analyzing individuals' sees and viewpoints in common settings. The sees of the members in this investigate were the recognitions of instructors towards the usage of the teaching of Biology using the Flipped Classroom in Libyan school in Jakarta. Savin-Baden and Howell-Major (2013) point out, "Qualitative analysts tend to look at wonders in their normal settings, frequently endeavoring to translate these wonders in context"; the setting in which the analyst examined the execution of the Flipped Classroom in the Libyan school. Besides, the analyst was the key device within the information collection handle. Savin-Baden and Howell-Major (2013) portray qualitative research as "value bound". That's to say, "researchers accept that their values are apparent in how the analysts inquire questions and decipher results". Hence, analysts are portion of a request handle.

The participants of the study were 2 Biology teachers who teach Biology subject to high school students in the Libyan school in Jakarta. The school is located in Jakarta and following the Libyan educational system; Primary level (6 years), Preparatory level/junior high school (3 years/grades 7-9) and the high school level (3 years/grades 10-12). The curriculum that the school follows is the Libyan curriculum, Arabic language is the medium of instructions/teaching and learning except for English language subjects across the grades.

High schools are divided into two majeors, namely, Scientific and Literacy; since the students' number is not high the school has only Scientific major for high school. A questionnaire has been distributed to the teachers to figure out their perceptions towards the implementation of the Flipped Classroom in teaching Biology subject. "The purpose of data analysis is to bring meaning, structure, and order to the data" (Marshall & Rossman, 2014). Translation of the information requires a basic mindfulness of it, concentration, as well as openness to inconspicuous undercurrents of social life. Thus, the researchers then analyzed the data critically to describe their perceptions.

## **RESULTS AND DISCUSSION**

To answer the question of the study, the researcher distributed a questionnaire to the participants to describe their perceptions. The questionnaire contained 14 items starting from inquiring about their teaching experience, going to the details about the implementation of the Flipped Classroom in teaching Biology.

Since the Libyan school in Jakarta implements the Arabic language as means of teaching and instruction, the teachers' backgrounds are Arabic more than English. Therefore, the items of the questionnaire have been written in both Arabic and English.

The first part of the questionnaire has contained general items regarding whether the participants have prior knowledge about the Flipped Classroom, their impressions about it, whether they implement it or not, and whether they use the technology in implementing the Flipped Classroom. However, the four participants have positively answered the items since they do implement the Flipped Classroom in teaching Biology in the Libyan school in Jakarta.

The responses to the first part of the questionnaire have shown positive perceptions since the teachers confirmed their knowledge and understanding of the Flipped Classroom which affects positively to its implementation in the real classroom. Therefore, those results confirm the findings of Adeyemo (2011), who confirmed that when teachers respond positively to a strategy of teaching and learning means that the chance of implementing it correctly in the classroom is increased.

Although, the teachers have experience of teaching with less than 10 years, still, they see that the implementation of the Flipped Classroom does not neglect the use of the traditional methods when it is needed in order to meet the learners' needs as seen in Figure 1. Thus, the literature confirms the recent study of Dorji, S., & Dorji, K. (2022).

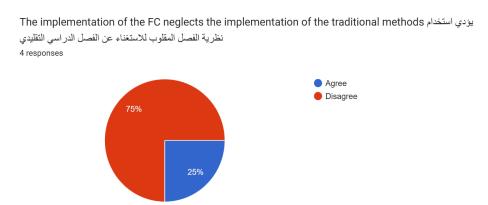


Figure 1. The Implementation of The FC Neglects The Implementation of The Traditional Methods

It has been found that the teachers do use technology to flip the classroom, as technology is a main part of the FC. Therefore, this confirms the previous

studies which support the technology use in flipping classrooms in high schools (Karimi & Hamzavi, 2017; Gariou-Papalexiou, Papadakis, & GEORGIADU, 2017). This comes as result of post-pandemic teaching strategies, as most of the teachers prefer to implement the flipped classroom rather than other strategies.

In addition, the literature shows that the implementation of the Flipped Classroom suits the allocated time in the classroom since the students come to class ready to discuss about the topic starting from the first minute, this saves time of explanations (Dewi, Padmadewi, & Santosa, 2021). The implementation of a strategy or an approach in a classroom normally followed by some obstacles and this is what has been confirmed by the participants of the current study. However, the implementation of the Flipped Classroom in the context of Libyan school in Jakarta meets the allocated time as shown in Figure 2.

The implementation of the FC meets the Allocated time in the classroom تطبيق نظرية الفصل المقلوب مناسب لتوقيت المحصة 4 responses

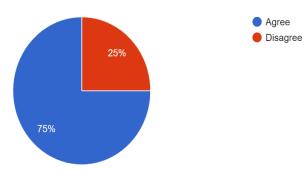


Figure 2. The Implementation of The FC Meets The Allocated Time in The Classroom

# CONCLUSION

Based on the analysis of the high school teachers' perceptions towards the implementation of the Flipped Classroom in the Libyan school in Jakarta, it could be concluded that teachers have had perceived the implementation of the strategy positively, which led to correct implementation of the strategy. However, still there are some obstacles that could hinder the full implementation of the strategy yet, the participants disagreed about the neglection of the traditional methos to implemented in the classroom when needed.

# **SUGGESTIONS**

Due to the limitation of this research to investigate only the perceptions of the teachers towards the implementation of the Flipped Classroom in the Libyan school in Jakarta, it would ne suggested for future studies to dig deeper into the evaluation, the perceptions of not only teacher but also students, as well as the real implementation of the strategy in the real classroom.

#### REFERENCES

- Abukhattala, I., (2016) The Use of Technology in Language Classrooms in Libya. *International Journal of Social Science and Humanity, 6(4),*262-267.
- Adeyemo, S.A. (2011). The effect of teachers' perception and students' perception of Physics classroom learning environment on their achievement in senior secondary schools Physics. *Int. J. Educa. Res. Tech.*, 2 (1), 74-81.
- Aubusson, P. & Watson, K. (2003). Packaging constructivist science teaching in curriculum resource. *Asia Pacific Forum on science Learning and Teaching,* 7(2), 1-25.
- Baepler, P., Walker, J., & Driessen, M. (2014). It's not about seat time: Blending, flipping, and efficiency in active learning classrooms. *Computers & Education*, *78*, 227--236.
- Basal, A. (2015). The Implementation of a Flipped Classroom in Foreign Language Teaching. *Turkish online Journal of Distance Education-TOJDE.16(4),28-37.*
- Dewi, N. S. S., Padmadewi, N. N., & Santosa, M. H. (2021). The implementation of flipped classroom model in teaching English to Sapta Andika junior high school students in academic year 2019/2020. *Journal of Education Research and Evaluation*, *5*(1), 125-135.
- Dorji, S., & Dorji, K. (2022). Flipped classroom in teaching biology assessing students' academic achievement in Tang central school, Bumthang district. *International Journal of Applied Chemical and Biological Sciences*, *3*(1), 68-75.
- El-Bassuony, J., M., (2016) The effectiveness of Flipped Learning in Developing English Grammatical Performance of Underachieving Language Learning at the Secondary Stage. *International Journal of English Language Teaching*, 4(8), 76-102.
- Funda, S.A. (2009). Teacher beliefs and practice in science education. *Asia-Pacific Forum on Science Learning and Teaching. 10* (1), Article 12.
- Gariou-Papalexiou, A., Papadakis, S., & GEORGIADU, İ. (2017). Implementing a flipped classroom: A case study of biology teaching in a Greek high school. *Turkish Online Journal of Distance Education*, *18*(3), 47-65.
- Karimi, M. & Hamzavi, R. (2017) The Effect of Flipped Model of Instruction on EFL Learners' Reading Comprehension: Learners' Attitudes in Focus. *Advances in Language and Literary Studies*, *8 (1)* 95–103.
- Levitt, K.E. (2001). An analysis of elementary teachers' beliefs regarding the teaching and learning of science. *Science Education*, 86 (1), 1-22.
- Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Sage publications. https://study.sagepub.com/marshall6e.
- Obari, H., & Lambacher, S. (2015). Successful EFL teaching using mobile technologies in a flipped classroom. In F. Helm, L. Bradley, M. Guarda, & S. Thouësny (Eds.), *Critical CALL Proceedings of the 2015 EUROCALL Conference, Padova, Italy* (pp.433-438). Dublin: Research-publishing.net.

- Pekel, F.O., Demir, Y. & Yildiz, M. (2006). Biology teachers' attitudes and communication behavior in Turkey: From the view point of their students. *Turkish Online Journal of Educational Technology*, *5*(1), 26-32.
- Prawat, R.S. (1992). Teachers' beliefs about teaching and learning: A constructivist perspective. *American Journal of Education*, 100(3), 354-395.
- Savin-Baden, M., & Howell-Major, C. (2013). *Qualitative Research: The Essential Guide to Theory and Practice.* Routledge. https://www.amazon.com/Qualitative-Research-essential-theorypractice/dp/0415674786
- Singh, H. (2003). Building Effective Blended Learning Programs. *Education al Technology*, *43*(6), 51--54.
- C. Williams, (2002).Learning On-line: Α review of recent literature in а rapidly expanding field. Journal of Further And Higher Education, 26(3), 263--272.