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To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v12-i11/15155 DOI:10.6007/IJARBSS/v12-i11/15155

Received: 08 September 2022, Revised: 10 October 2022, Accepted: 26 October 2022

Published Online: 06 November 2022

In-Text Citation: (Mazlan et al., 2022)

To Cite this Article: Mazlan, N. H., Ambikapathy, A., Zulkefli, M. Y., & Talib, N. Z. (2022). Components for Flipped Malay Writing Instruction Module: A Systematic Literature Review. *International Journal of Academic Research in Business and Social Sciences*, *12*(11), 365 – 376.

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Vol. 12, No. 11, 2022, Pg. 365 – 376

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Components for Flipped Malay Writing Instruction Module: A Systematic Literature Review

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Abstract

Language education sustainability necessitates more access to language abilities, which technology should facilitate and applies to the Malay language. The Covid-19 pandemic accelerates digital adoption in education. The restriction on spatial and time allows the flipped learning model - a hybrid approach to triumph within the limitation. This paper reports the systematic literature review on the flipped learning model components in education. We implement the Evidence-Informed Management Knowledge Review Protocol to guide our review. Six major themes emerged from the review -course and participants, online learning resources, online learning platform, face-to-face learning activities, assessment, and learning reflection platform. The findings substantially informed our next phase - the design of the flipped instructional module for Malay language writing.

Keywords: Flipped Learning, Language Learning, Writing Instruction, Systematic Literature Review

Introduction

The Malay language is a medium of instruction in public-funded national schools in Malaysia due to its status as the national language as stipulated in Article 152 (1) under Constitutional Law. However, despite high percentages of passes on Malay language subjects in Malaysian national public examinations, the level of language mastery- specifically writing- among students- shows contrary evidence. Several factors are posited to contribute to this issue: lacking writing skills (Jamiat & Othman, 2019), a deficit in content knowledge and low integration of technology in pedagogy (Mazlan et al., 2020). Along with these factors, individual factors such as low motivation and negative perceptions towards writing classes were also evidenced, stemming from the traditional practices of teaching writing (Yunos, 2015). Furthermore, with the diverse ethnic and cultures in Malaysia, the Malay language acquisition process among non-native speakers is at stake since the different home environments possibly affect the smoothness of the acquisition (Ujai & Muhammad, 2017).

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Besides that, language education sustainability demands more access to language skills in which technology should catalyse those purposes, which also applies to the Malay language. As a national language, it is essential to ensure that sociocultural issues among non-native speakers do not impede the language learning process. With the emerging technologies, the landscape of Malay language education is continuously reshaping and being agile is the key to staying relevant in the era of Industrial Revolution 4.0. One way to stay relevant is to explore the possibility of technology integration in several aspects of language education, including teaching and learning. In recent years, the popularity of Flipped Learning Model (FLM) has been increasing. Many documented studies reported the positive outcomes of FLM on language learning (Arslan, 2020; Giannakos & Krogstie, 2018; Zainuddin et al., 2019). Based on these factors, we suggested adapting the flipped learning model (FLM) on our development of flipped writing instruction to overcome this critical issue, both in classroom practices and in the broader view.

The need for Systematic Literature Review (SLR)

Development of flipped Malay writing instruction module is time-consuming and demands a high cost; hence, sound planning is required to identify the model components carefully. One rigorous way to identify components of FLM is through conducting a systematic literature review. Thus, a systematic literature review can provide a channel for the researcher to explore areas outside of their research through search strings, extensive searching methods, and specific criteria of inclusion and exclusion (Shaffril et al., 2020). Less documentation on FLM within the Malay language area would be compensated with the findings from the systematic literature review. Whilst there are several systematic literature reviews on FLM, documentation on the identification of components of the model specifically for Malay language instruction is lacking. At the time of the current review, most of the related systematic reviews on FLM were exploring the challenges and benefits of the model (Arslan, 2020; Zainuddin et al., 2019) and the theory implementation of FLM (Giannakos & Krogstie, 2018). Thus, explaining the need for a specific systematic literature review to identify the components of FLM for Malay language instruction.

Flipped instruction, as stated in this current paper, applies a concept of FLM. It is defined by Flipped Learning Network (2014) as follows;

...pedagogical approach in which direct instruction moves from the group learning space to the individual learning space and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter (p.1).

In the early years of flipped learning, most studies reported digitizing and distributing learning contents prior to the class session (Bergmann & Sams, 2014). Inevitably, technological advancement impacted the flipped learning model with more researchers and practitioners incorporating different learning strategies and technology, and this trend evolved into the nature of flipped learning itself. From the flipped classroom to the recent flipped learning 4.0, it has now been regarded as a learning platform offering flexibility in practising multiple learning strategies, hence, promoting a meta-strategy approach among the community of researchers and practitioners (Bergmann & Talbert, 2017). With multi-faceted FLM, designing and developing a language learning module based on this approach demands empirical study to identify the components used by researchers and practitioners worldwide. The result from

this review is potentially informing us the next phases of design and development in our current works. We emphasize on the Malay language writing instruction and FLM in the Malaysian context. Thus, we finalized the research questions for the review as listed below

- 1. What are the recent studies on the FLM?
- 2. Based on the previous literature, what components should be included in the proposed flipped Malay writing instruction module?

In this section, an introduction of the issues, problem statements and research questions are formulated. Then, in the next section – Methods, we report the methods and review processes involved in our current work. Following the Methods section are Results- in which we present the results from the review, and in the last section, we discuss the results from the review.

Methods

This paper administered a systematic literature review as a methodological process. First, we adapted review processes- planning, conducting and reporting as Kitchenham and Charters (2007) suggested. Then, we used the review protocol suggested by Tranfield et al (2003), which was mainly developed for the social science field to guide the review process in terms of databases utilization (Web of Science, Scopus, i.e.), review process protocol (identification, screening and eligibility), data abstraction and analysis.

Evidence-Informed Management Knowledge Review Protocol

In this study, we adapted Evidence-Informed Management Knowledge Review Protocol by Tranfield et al (2003) as a review protocol. Specifically developed for management and social science, this review protocol acknowledges differences between social science research and science-based research. Furthermore, as we are dealing with both educational technology and language education, this review protocol, among others - allows flexibility in review processes, experimentation may or may not be a feasible intervention, accepts both qualitative and quantitative methods, and broader coverage of resources including-unpublished works, conference proceedings and websites (Durach et al., 2017; Tranfield et al., 2003). Al-Samarraie and Saeed (2018) also used this protocol in a review. Thus, we expected our design and development phase of flipped instruction for Malay language writing would be benefitted from the unique features offered by this selected protocol.

Identification and Screening

This study extended its database resources beyond the Web of Science (WoS) and SCOPUS. Hence we explored EBSCO (Education Research Complete), IEEE Explore, and Universiti Malaya (UM) E-Journal. Each database listed has advantages and disadvantages, and the quality assessment during the eligibility process lends accountability to the reviewed articles. The identification process involved identifying keywords related to the planned review. In this study, we used different combinations of root keywords in English and Malay based on the precedent studies- flipped classroom, flipped learning, flipped instruction, *pengajaran berbalik* and *kelas berbalik*. The Malay keywords are the translation for flipped instruction and flipped classroom. Therein, we utilized three types of search strings- phrase searching, Truncation and, Boolean Operators to identify the relevant studies as listed in Table 1. INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS AND SOCIAL SCIENCES Vol. 12, No. 11, 2022, E-ISSN: 2222-6990 © 2022 hrmars

Table 1

The search string is applied during the identification steps of the systematic review proc	ess.

Database (Resource)	Keywords used
Web of Science (WoS)	TS=(flipped*AND language)
SCOPUS	TITLE-ABS-KEY ("flipped*" AND language)
Education Research Cor	nplete SU "flipped*" AND "language learning"
(EBSCOHost)	
IEEE Explore	"flipped*"AND "language"
UM E-Journal	Flipped *; "kelas berbalik"; "pengajaran berbalik"
Emerald	"flipped*" AND "language learning"

Eligibility

The eligibility process is a manual process done by the authors to include or exclude the screened articles collated during the previous identification and screening processes. There is no fixed requirement on the type of criteria. However, according to Okoli (2015), the essential judgment in selecting the criterion should be reasonable and defendable. Therefore, we opted for several criteria based on our research questions to guide us during the eligibility process (refer to Table 2). First, we chose a publication with a time range from 2018 to December 2021 as we need to analyze the latest flipped learning models and their components. Second, we selected documents consisting of journal articles and conference proceedings while excluding reviewed articles. We accepted any publications with or without empirical results, given that they focused on the design and development of flipped learning and provided details on its components.

Inclusion and exclusion ci	riteria	
Criterion	Inclusion	Exclusion
Publication timeline	2018-2021	2018 and before
Document type	Journal article, conference	Reviewed article, chapter in
	proceeding	book
Language	English and Malay	Non-English, Non-Malay
Nature of the Study	Details on flipped learning	No detail on flipped learning
	components.	components.
Accessibility	Access to full paper	No access to full paper

Table 2

Inclusion and exclusion criteria

Quality Assessment

Quality assessment is conducted through a structured interview with two experts. The experts came from research fields. The criterion for selecting an expert panel is based on the following criteria: a doctorate in a relevant field or professional working experience of more than ten years in a relevant field. Table 3 tabulated the description of the experts.

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Table 3					
Panel of e	xpert				
Experts	Designation	Area of Expertise		Academic credentials (highest)	Working experiences (years)
1	Associate	Online and h	nybrid	Ph.D in Instructional	15
	Professor	learning.		Technology, Universiti	
				Malaya, Malaysia	
2	Associate	Language Pedagogy	/ and	Ph.D in Pedagogy, The	26
	Professor	Technology (I	Malay	University of Sheffield,	
		language).		UK	

We used the per cent agreement technique with 1 and 0 to measure inter-rater reliability (McHugh, 2012). We calculated the percentage of value one over the number of all rates for each variable. We accepted variables with a score over 75% for inter-rater reliability from that place. We excluded three articles which scored 50% respectively. The following quality assessment criteria were used during a structured interview with the experts.

- 1. Do the components list appropriate for our prototype development?
- 2. Do the components list for learning resources appropriate for our research?
- 3. Do the components list for the learning platform appropriate for our research?
- 4. Do the components listed for learning activities appropriate for our research?
- 5. Do the components list for learning assessment appropriate for our research?
- 6. Do the components list for the reflection session appropriate for our research?

Systematic Review: The Process

We implemented four stages of the systematic review process in this study – identification, screening, eligibility, and quality assessment. First, we retrieved 1395 abstracts from various databases based on our search strings, and after the screening, we excluded 25 documents for duplicate issues and 765 due to exclusion criteria and eventually came up with 605 documents. After the screening, we found that 235 documents were eligible for review. With the specific exclusion and inclusion criteria during the eligibility stage, we carefully examined the full papers and selected 17 documents that gave us insights into the design of flipped learning model components and sub-components. Therein, we conducted a quality assessment with four experts to review the selected articles, resulting in five articles being removed. Finally, we concluded the review process with 12 articles as our final selection. Figure 1 illustrates the systematic review process of our study.

Data Abstraction and Analysis

We proceeded with the assessment and analyses of the remaining papers. The full papers were thoroughly read to extract the themes, resulting in several main themes that emerged from the synthesized process. We employed thematic analysis for the identification of components relevant to our studies. The findings were then reported and discussed.

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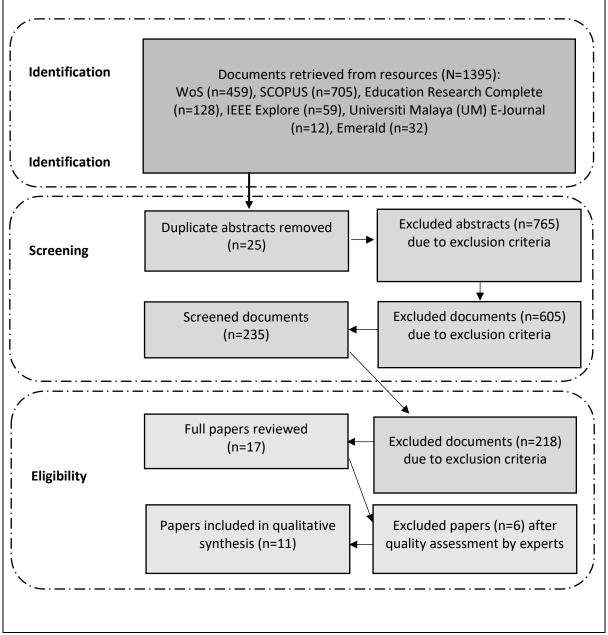


Fig. 1. A flow diagram of the review process (Adapted from Samsuddin et al., 2020)

Results and Discussion

From the review, seven themes related to the flipped learning components emerged from the review. The main themes are the study area, level of education, online learning resources, online learning platform, face-to-face learning activities, assessment, and platform of learning reflection. Table 4 tabulated the results of the review.

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Table 4

No	Author	Course and Participant	Online Learning Resources	Online Learning Platform	Face-to-Face Learning Activities	Assessment	Platform of Learning Reflection
1	Halili and Sumathy A/P Ramas (2018)	Tamil language teachers in primary school in Malaysia	YouTube videos	VLE Frog	21 st century learning approaches	Teacher-based assessment	Experience reflection: VLE Frog
2	Pugsee (2018)	Computer ethics for undergraduate students in Thailand	Videos, PowerPoint slides, online multimedia resources	Facebook, cloud- Based LMS	Collaborative learning, active learning	Instructor-based assessment	None
3	Almodaires et al (2018)	Educational technology course for pre- service teachers in Kuwait	Videos, mini quizzes, PowerPoint slides, hyperlink	Whatsapp	Group works	Instructor-based assessment	None
4	Killian and Woods (2018)	Kinesiology course for Physical Education pre- service teachers in America	PowerPoint slides, lecture audio, audio, supplemental hyperlinks and videos, photos	Learning Management System (LMS)	Group works, peer teaching, school visits (authentic learning)	Instructor-based assessment, peer assessment	None
5	Halili et al (2019)	Instructional technology course for postgraduate pre-service teachers in Malaysia	Lecture videos, YouTube videos,	Learning Management System (LMS)	Quizzes, Group discussion, active learning	Instructor-based assessment	None
6	Luo et al (2020)	ESL writing course	Instructional videos, digital reading materials, quizzes,	Learning Management System (LMS)	Group works, Collaborative learning, jigsaw- based writing activities	Instructor-based assessment, peer feedback	LMS
7	Valizadeh & Sultanpour (2020)	EFL learners in Iran	Instructional videos	Email	Group works	Instructor-based assessment	None
8	Altas & Mede (2021)	Writing course for ELT pre- service teachers in Iran	Instructional videos	Learning Management System (LMS)	Collaborative learning	Instructor-based assessment	None
9	Ping et al (2019)	English Intensive course for foreign undergraduates in Malaysia	Instructional videos	Learning Management System (LMS)	Active learning, discussion	Instructor-based assessment	None
10	Lin (2019)	Software engineering undergraduates from Taiwan	Instructional videos	Cross- platform web application	Discussion, case studies, practice exercises	Online diagnostic systems with instructor as administrator	In-class
11	Xiao-Dong & Hong-Hui 2020	EFL for college students in China	micro videos,	Smart English – /irtual Reality .earning Environment	Practice, more personalized learning	Instructor-based assessment, self- assessment, peer assessment	None

Area of Study and Level of Education

Whilst flipped learning early adopters mostly came from the STEM field, the current situation demonstrated that flipped learning research and practices are also steadily emerged from the social science–education field. Precisely for this study, flipped language learning has shown that most of the research is in the English learners' settings (Luo et al., 2020; Su Ping et al., 2020; Valizadeh & Soltanpour, 2020; Xiao-Dong & Hong-Hui, 2020) and English Language Teaching (Altas & Mede, 2021). Siti Hajar Halili & Sumathy A/P Ramas (2018) conducted flipped training for Tamil language teachers in Malaysia's public primary schools. Besides that, technology in education courses is also adopting flipped approach (Almodaires et al., 2018; Halili et al., 2019a). Besides, the science field includes kinesiology (Killian & Woods, 2018) and software engineering (Lin, 2019; Pugsee, 2018). Based on a systematic literature review, most of the studies involved flipped learning in the university setting (Almodaires et al., 2018; Altas & Mede, 2021; Halili et al., 2019; Killian & Woods, 2018; Lin, 2019; Pugsee, 2018; Su Ping et al., 2020; Valizadeh & Soltanpour, 2020). Online one selected study involved flipped learning in a school setting with a focus on professional development for primary school Tamil language teachers (Siti Hajar Halili & Sumathy A/P Ramas, 2018)

Online Learning Resources

Flipped learning is known for its extensive use of recorded videos. Based on the systematic review, most of the studies utilize different types of videos – self-recorded instructional videos (Almodaires et al., 2018; Altas & Mede, 2021; Killian & Woods, 2018; Lin, 2019; Luo et al., 2020; Pugsee, 2018; Siti Hajar Halili & Sumathy A/P Ramas, 2018; Su Ping et al., 2020; Valizadeh & Soltanpour, 2020; Xiao-Dong & Hong-Hui, 2020), and curated supplemental videos (Halili et al., 2019b; Siti Hajar Halili & Sumathy A/P Ramas, 2018). Besides that, audio, including Podcast, is also used in the reviewed study (Killian & Woods, 2018). Digital text-based documents are also used in the studies reviewed (Luo et al., 2020; Pugsee, 2018; Xiao-Dong & Hong-Hui, 2020). Slides are also being used as learning resources, as stated in Almodaires et al. (2018), Killian & Woods (2018) and Pugsee (2018). Hyperlinks are also listed as learning resources of flipped learning (Almodaires et al., 2018; Killian & Woods, 2018). In addition to hyperlinks, Google is also a learning resource. Students have been instructed to conduct online research on specific topics. Besides, photos were utilised, as in (Killian and Woods, 2018).

Online Learning Platform

Various types of learning platforms are used, as described in the reviewed articles. Some quarters used myriad platform choices and used multi-platforms in their studies. The researcher identified four leading learning platforms used in the studies: the Learning Management System (LMS), Messenger applications, social media technology and the webbased platform. Based on the systematic literature review, most of the studies utilised Learning Management systems (LMS) provided by their learning institutions (Altas & Mede, 2021; Halili et al., 2019b; Killian & Woods, 2018; Luo et al., 2020; Pugsee, 2018; Halili & Sumathy A/P Ramas, 2018). Besides the Learning Management System (LMS), researchers and educators also experimented with social media and its tools.

Messaging is one of the most popular tools in social media. One of the popular messaging applications is Whatsapp and was used in the study by (Almodaires et al., 2018). In addition, the increasing popularity of media technology in social media also has an impact

on the way people interact. Facebook is one of the most popular social networking sites on social media with 2.38 billion monthly users worldwide (Statista, 2019). Based on the reviewed literature, Facebook is being utilized as a learning platform on flipped sessions in studies by (Pugsee, 2018). In a study by Valizadeh & Soltanpour (2020), the online learning platform being used is an email system. The pre-class instructions and content were delivered through emails among the instructor and students. In an advanced technology integrated learning platform, two studies conducted in China were utilizing smart learning system with virtual reality environment as in a study by Xiao-Dong & Hong-Hui (2020) and cross-platform web application as in (Lin, 2019).

Face-To-Face Learning Activities

The next component of flipped learning is a learning activity. Most learning activities are group-based activities such as group discussion (Halili et al., 2019a; Lin, 2019; Su Ping et al., 2020) and group work (Almodaires et al., 2018; Killian & Woods, 2018; Luo et al., 2020; Valizadeh & Soltanpour, 2020). Killian and Woods (2018) employed peer teaching in their studies. It is also found that most of the reviewed literature showed that collaborative learning had been practised in the flipped learning sessions (Altas & Mede, 2021; Luo et al., 2020; Pugsee, 2018). However, the study by Xiao-Dong & Hong-Hui (2020) applied a personalised learning strategy and together with Lin (2019), both studies implemented drill and practice learning strategies during in-class sessions. Besides that, several reviewed studies showed that active learning is also employed. Last but not least, active learning is also being employed by (Su Ping et al., 2020; Halili et al., 2019; Pugsee, 2018; Killian and Woods, 2018). Siti Hajar Halili and Sumathy Ramas (2018) stated that they utilized a 21st-century learning approach with multiple learning strategies and activities. For the face-to-face learning session, most of the learning activities involve group-based tasks. The blooms of IR4.0 demand a fresh approach to learning; shifting from teacher-based to student-based (World Economic Forum, 2017). This explains why the active and collaborative approach were largely implemented during the face-to-face session.

Assessment

Based on the reviewed literature, all studies implemented instructor/teacher-based assessment, with the additional one study by Lin (2019) that utilized artificial intelligent (AI) technology that allows automated online assessment. Besides instructor-based assessment, practitioners or researchers often employ it together with peer assessment (Killian & Woods, 2018; Luo et al., 2020; Xiao-Dong & Hong-Hui, 2020). Self-assessment is utilized in the study by (Xiao-Dong & Hong-Hui, 2020). Assessment is catching the gist of revolution with the shifting of a learner-centric education. It is also applicable for the assessment component where the traditional educator-based assessment is still a dominant player, and peer-based assessment is an uprising option.

The Platform of Learning Reflection

Reflection is a new component not often associated with a flipped learning model. Until recently, researchers and practitioners explored the goodness of reflection to be embedded in their flipped sessions. Based on the reviewed literature, different learning reflection medium is utilized – digital media such as a learning management system (Luo et al., 2020; Halili & Sumathy A/P Ramas, 2018) and in-class reflection (Lin, 2019). Different media connotes different learning strategies and flipped learning model implementation. The

flexibility of this model allows creativity and innovation in teaching and learning. The reflection opens the opportunity to distinguish the impact of a flipped learning model on students and learners.

Conclusion

The accelerated adaptation towards digital education flourished different model of learning and that includes hybrid learning. Flipped learning is one of the often-implemented hybrids learning model in education field. The flexibility that honors ubiquitous and spatial limitation made it one of the suitable learning models during pandemic and post-pandemic era. This study has found that seven components of Flipped Malay Writing Instruction Module emerged from the systematic review. The components are – area of study, level of education, online learning resources, online learning platform, face-to-face learning activities, assessment, and platform of learning reflection. Each of the components has elements that highly influenced by the local learning context – especially when it comes to technology integration and tools. Instructional and curriculum designers should be aware of these regional factors to ensure that the hybrid learning resources, platforms, and activities are enriching the learning experiences among the students. It will encourage more active participation and promote better learning agency in future.

References

- Almodaires, A. A., Alayyar, G. M., Almsaud, T. O., & Almutairi, F. M. (2018). The Effectiveness of Flipped Learning: A Quasi-Experimental Study of the Perceptions of Kuwaiti Pre-Service Teachers. *International Education Studies*, 12(1), 10. https://doi.org/10.5539/ies.v12n1p10
- Altas, E., & Mede, E. (2021). The impact of flipped classroom approach on the writing achievement and self-regulated learning of pre-service english teachers. *Turkish Online Journal Of Distance Education*, 22(1), 66–88.
- Arslan, A. (2020). A systematic review on flipped learning in teaching english as a foreign or second language. *Journal of Language and Linguistic Studies*, 16(2), 775–797. https://doi.org/10.17263/JLLS.759300
- Bergmann, J., & Talbert, R. (2017). *Flipped Learning 3.0: The Paradigm Shift That Changes Everything (Audio Podcast)*. Flipped Learning Global Initiative.
- Flipped Learning Network. (2014). What Is Flipped Learning? The Four Pillars of F-L-I-P. Flipped Learning Network.
- Giannakos, M., & Krogstie, J. (2018). Digital Technologies: Sustainable Innovations for Improving Teaching and Learning. *Digital Technologies: Sustainable Innovations for Improving Teaching and Learning, March.* https://doi.org/10.1007/978-3-319-73417-0
- Halili, S., Hijja, N., Rabihah, N., Sulaiman, H., & Razak, R. A. (2019). Exploring the flipped classroom approach in the teaching and learning process: a case study of preservice teachers' views. *International Journal of Pedagogies and Learning*, 14(1), 1–17.
- Jamiat, N., & Othman, N. F. N. (2019). Effects of augmented reality mobile apps on early childhood education students' achievement. *ACM International Conference Proceeding Series*, 30–33. https://doi.org/10.1145/3369199.3369203
- Killian, C. M., & Woods, A. M. (2018). Expanding Learning Opportunities in Kinesiology Through the Use of Flipped Instruction. *Kinesiology Review*, 7(4), 332–338. https://doi.org/10.1123/kr.2018-0046

- Kitchenham, B., & Charters, S. (2007). *Guidelines for performing Systematic Literature Reviews in SE*. 1–44. https://doi.org/10.1145/1134285.1134500
- Lin, Y. T. (2019). Impacts of a flipped classroom with a smart learning diagnosis system on students' learning performance, perception, and problem solving ability in a software engineering course. *Computers in Human Behavior*, 95(April 2018), 187–196. https://doi.org/10.1016/j.chb.2018.11.036
- Luo, Z., O'Steen, B., & Brown, C. (2020). Flipped learning wheel (FLW): a framework and process design for flipped L2 writing classes. *Smart Learning Environments*, 7(1). https://doi.org/10.1186/s40561-020-00121-y
- Yunos, M. (2015). Hubungan Sikap dan Persepsi Murid Terhadap Pembelajaran Bahasa Melayu dengan Kemahiran Abad ke-21. Jurnal Pendidikan Bahasa Melayu, 5(Nov), 22–30.
- Mazlan, N. H., Halili, S. H., & Hai-Leng, C. (2020). Evaluating collaborative learning in Malay language writing instruction: A case study. *The Asia Pacific Journal of Curriculum & Teaching*, 8(3), 49–57.
- Shaffril, M. H. A., Samsuddin, S. F., & Abu Samah, A. (2020). The ABC of systematic literature review: the basic methodological guidance for beginners. *Quality and Quantity*. https://doi.org/10.1007/s11135-020-01059-6
- Pugsee, P. (2018). The effect of collaborative learning techniques in the flipped classroom learning: Computer ethics course. *Proceedings of 2017 IEEE International Conference on Teaching, Assessment and Learning for Engineering, TALE 2017, 2018-Janua* (December), 381–388. https://doi.org/10.1109/TALE.2017.8252366
- Samsuddin, S. F., Shaffril, H. A. M., & Fauzi, A. (2020). Heigh-ho, heigh-ho, to the rural libraries we go! - a systematic literature review. *Library and Information Science Research*, 42(1). https://doi.org/10.1016/j.lisr.2019.100997
- Halili, S. H., & Sumathy A/P Ramas. (2018). Penerimaan Guru Sekolah Rendah Terhadap Pendekatan Kelas Berbalik dalam Mata Pelajaran Bahasa Tamil. *Jurnal Kurikulum & Pengajaran Asia Pasifik*, 6(3), 49–56.
- Su Ping, R. L., Verezub, E., Adi Badiozaman, I. F. bt, & Chen, W. S. (2020). Tracing EFL students' flipped classroom journey in a writing class: Lessons from Malaysia. *Innovations in Education and Teaching International*, 57(3), 305–316. https://doi.org/10.1080/14703297.2019.1574597
- Tranfield, D., Denyer, D., Smart, P., Goodhue, D. L., & Thompson, R. L. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *MIS Quarterly*, *14*(2), 207–222. https://doi.org/10.2307/249689
- Valizadeh, M., & Soltanpour, F. (2020). The flipped pedagogy: Effects on the grammatical competence and writing skill of basic users of english. *International Journal of Instruction*, *13*(3), 761–776. https://doi.org/10.29333/iji.2020.13351a
- Xiao-Dong, L., & Hong-Hui, C. (2020). Research on VR-supported flipped classroom based on blended learning — a case study in "learning english through news." *International Journal of Information and Education Technology*, 10(2), 104–109. https://doi.org/10.18178/ijiet.2020.10.2.1347
- Zainuddin, Z., Shujahat, M., Chu, S. K. W., Haruna, H., & Farida, R. (2019). The effects of gamified flipped instruction on learner performance and need satisfaction: A study in a low-tech setting. *Information and Learning Science*, 120(11–12), 789–802. https://doi.org/10.1108/ILS-07-2019-0067