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Source of Ideas of Teacher-Generated Innovation in Teaching Arabic Language in Primary Schools

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Abstract

Education today encounters challenges that demand change in terms of teaching and learning approaches. The challenge also expects that Arabic teachers adjust the teaching approach to a more innovative teaching approaches and strategies and equip themselves with a wealth of knowledge and skills. In innovation, an innovative teacher needs to go through the progress of generating ideas in which the teacher will come up with ideas and think of ideas that are considered appropriate for innovation to solve the teaching and learning problems that have been identified among students. Therefore, this study aims to identify the source of ideas for teacher-generated innovation among primary-level Arabic language teachers to solve student learning problems and enhance the effectiveness of teaching and learning (TnL) in the classroom. This study uses a qualitative approach with a multi-location case study design. A total of three primary school Arabic language teachers with the criteria of being innovative teachers were selected as the study participants. The data of this study were collected through in-depth interviews, documentary evidence and audio visual materials. Atlas Ti software and Channel Telegram applications have been used as research data managers to promote analysis of themes in the study findings. This study shows that there are 11 themes derived from the sources of ideas for teacher-generated innovation among primary-school Arabic language teachers. These sources include specific thinking practices, reading materials, TnL findings, unique stimuli, other subject material, intuition, open source (Internet), popular songs, television series shows, modifications of other people's ideas and observations. All these findings are expected to serve as a reference and guide for teachers who want to explore innovative ways to continually improve teacher professionalism.

Keywords: Teacher-generated Innovation, Innovative Teacher, Teacher-Innovator, Teacher's Innovative Behavior, Arabic Language Education, Innovation.

Introduction

The word innovation comes from the Latin word and originally the word means renewal. According to Dewan Bahasa dan Pustaka (2010), innovation means creating something anew. Some scholars give different definitions of these as the creation, development and successful introduction of new products, processes or services (Udwadia, 1990). The term innovation was first introduced by world economist and Austrian Nobel prize winner Joseph Schumpeter

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(1934) to the so-called "Prophet of Innovation" in the title of a book (McCraw, 2007). His theory construes innovation as the commercialization of a combination of new knowledge and existing knowledge whether it is new products, new processes, markets or new organizations.

In education policy, innovation is a key agenda in achieving Student Aspiration through the Malaysian Education Development Plan 2013-2025, the government aims to foster creative and innovative thinking among every student so that they can innovate, create new possibilities, and create new ideas or knowledge (Ministry of Education Malaysia, 2013). On that basis, teachers need to apply knowledge of subject content, teaching and learning methods and technological knowledge to facilitate learning experiences, apply creativity and innovation in face-to-face interactions and virtual environments with students. In order to ensure the effectiveness of teaching and learning (TnL), teachers as a key element must implement innovation in practice (Zainal & Matore, 2019; Tukimin et al., 2020).

Statement of The Problem

Innovative teachers are key operators for actualizing transformation in education. In line with the Transformation era in education in conjunction with the ideas of the National Transformation (TN 2050), teachers were introduced as the engine to transformation and innovation in the curriculum (Talip, 2012). The need for teacher-to-teacher innovation is because external innovation development is often inconsistent with curriculum, teacher thinking and student level (Tomlinson, 2001; Olson, 1980). Although there are a wide variety of TnL aids available for sale in the market, these materials rarely meet the overall needs of students in classrooms of varying levels of mastery, skills, learning abilities and learning styles (Feldhusen & Treffinger, 1977). Messmann and Mulder (2011) are of the view that teacher-led innovation can supersede the flow of innovation ideas from exterior agencies. Innovative teachers are pioneers in other teachers in using something new as a result of their own ideas or adapting by doing modification to an existing teaching material to bring about improved teaching and learning quality (Zin, 2014).

In preparation for the uncertainty of systems and policies in education as a result of changing times, innovative teachers as innovators are needed as this group of teachers is able to adapt to any current situation and to accustom their teaching approaches and techniques with the passage of time. Even this innovative group of teachers is able to create an abstract product of creativity such as methods and techniques or concrete products such as new aids as a result of such adaptations (Messmann & Mulder, 2011). However, the number of teacher-innovator is still low among the primary school Arabic language teachers in Malaysia. A survey of the involvement of primary school Arabic language teachers in innovation and action research for the purpose of improving teaching practice found that only 22% of 109 surveyed sampels had ever produced innovation (Tukimin et al., 2019). Most Arabic language teachers are innovation adopters and have not been able to create and innovate especially innovations that require high technology skills and knowledge (Majid & Ismail, 2018). Among the identified barriers to innovation are teachers not knowing how to implement TnL innovation and lack of resources and ideas for innovation (Kadir et al., 2014; Ilias et al., 2016; Abdullah & Zhaffar, 2018).

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On that basis, there is a need to study the sources of innovative idea of teacher-generated innovation that are being implemented by innovative teachers in Arabic language at the primary school level in order to encourage innovation culture among Arabic teachers in particular and all teachers in Malaysia generally. The findings of this study are intended to provide guidance and reference to teachers who wish to explore innovation as a practice in teaching and learning.

Research Objectives and Research Questions

The purpose of this study is to identify the sources of teacher-generated innovation ideas that are honed among the Arabic language teachers at primary level. While the research question is, what is the source of the idea of teacher-generated innovation habituated among the Arabic language teachers at primary school level?

Research Methodology

This study uses a qualitative approach with multisite case study design. Therefore, this study used the interview method as the primary method of data collection. This interview data is supported by document analysis and audio visual recording observations. Three study participants were selected among primary school Arabic language teachers based on their involvement in the development of innovation for the purpose of application in teaching and learning (TnL). The usage of the purposive sampling method is to obtain the required information in more detail about the phenomenon or case that is being studied. Although the findings from the study which uses purposive sampling do not represent a specific population, they can at least serve as references to the field of study (Aripin et al., 2014; Wimmer & Dominick, 1997).

This study of the practice of innovative Arabic language primary school teachers using criterion sampling strategy by selecting a sample of studies that have the criteria of being an innovative teacher. Three selected study participants met the criteria, all three of whom were Arabic language teachers in primary school, teaching Arabic language courses on a timetable and producing innovations in the form of materials, techniques, methods or strategies for the purpose of increasing the quality of the Arabic language teaching and learning. Even reputational case selection sampling strategies are also used when the study participants selected among the primary school Arabic language teachers are obtained through the recommendation and advocacy of key informants consisting of desk staff of the Arabic Language Unit at Curriculum Development Division, Ministry of Education Malaysia, National Head Coach for primary Arabic language subjects, Innovation and ICT Sector, Curriculum Development Division, MOE, Negeri Sembilan Education Department, Pahang and Sarawak. Proposals for nomination of the participants in this study were attained through the application of a written proposal or an official interview.

In this study, data collection was in three ways, namely in-depth interviews, audio visual observation and document analysis. Interview methods are used to sum up the views of the study participants in matters that are beyond the reach of the researcher (Merriam & Tisdell, 2016). In the practice of innovation, researchers should not be able to observe the whole process of the innovation journey which derives of different phases of action and requires a certain period of time that is beyond the scope of the study. This kind of thing can only be explained verbally by the study participants to the interviewer. Therefore, the best

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data collection technique for qualitative case studies is through interviews conducted with study participants (Merriam & Tisdell, 2016). Researchers conducted face-to-face interviews either at the study site or online face-to-face interviews. Online face-to-face interviews were conducted during the follow-up process of data collection with the second study participant and the informant of the second study participant because of the long distance between the researchers and the study participants. Online interviews are done using the Whatsapp Video app by recording real-time phone screen and also recording voice interviews using voice recorder. According to Merriam & Tisdell (2016), the existence of the Internet has changed the world and enabled an interview to be conducted online using various forms of information and communications technology (ICT) and various types of computer-based communication tools as the primary medium.

While the use of data from audio visual material analysis is a new form of data collection that is emerging in line with the digital age (Creswell & Poth, 2018). The visual audio material used in this study was in the form of photography either obtained directly during the data collection process at the study site or contributed by the study participants. Likewise, video-recording materials of teaching and learning in the Arabic language classes were voluntarily contributed by the study participants as supporting data for the researchers' findings. Researchers also retrieve data from social media such as TnL reflection notes shared by study participants through Facebook accounts, sharing of innovation materials or any other important data that researchers find in other social media applications by scanning screens to confirm insights from different sources. Whereas data collection through documentary evidence involves several types of documents, especially written forms such as school magazines, teacher teaching books, textbooks, innovation papers, innovation assessment records, certificates, handouts, student achievement records, activity checklists, records assessments, innovation materials and so on.

In this study, several activities were performed for the purpose of data analysis. These include the transcription process based on verbatim data, data filtering, theme construction, theme coding and reporting view. Researchers have used Atlas-Ti 8 and Channel Telegram software as tools to manage the study data. Through the use of this software, researchers have found that the task of processing and shaping themes becomes simpler and systematic. Thematic analysis methods are applied by performing several phases of the process that are flexible and not just in the linear order of being familiar with data, generating prefixes, constructing themes, reviewing themes, defining and refining theme names and generating thematic reports (Clarke & Braun, 2014).

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Some of the abbreviations and codes used during the data analysis process are shown in Table 1 below:

Table 1.

Abbreviations used in the Study Data Analysis Process

No.	List of Abbreviations Code	Interpretation
1	D1 / D2/ D3/ D4/ D5/ D6/D7	Document 1/2/3/4/5/6/7
2	11 / 12	Interview 1 / 2
3	ALIT1 / ALIT2 / ALIT3	Arabic Language Innovative Teacher 1 / 2 / 3

Research Findings

The process of finding ideas is one of the development process at the stage of generating innovation ideas where ALIT produces and devises ideas that feel like innovation to solve the specific problems that students face in learning Arabic. The search for ideas is through a variety of ways and ideas are garnered from various sources. In total, the researchers found that 11 key themes were identified based on the results of the study that showed the sources of ideas for teacher-led innovation practiced by the Arabic Language Innovative Teachers in primary schools. Each of these will be described together with evidence of narrative statements from the study participants.

1. Specified Thinking Practices

The study participants were able to come up with ideas of innovation in a very specific way of thinking. This is shown by the following statement:

"...It's just that we need to think how it is actually. And when the how comes up, I have to think and research about it then. Yes, I am like this, if I already have the idea then I'm good. The important thing is as long as I have an idea...."

(D7: I1ALIT3301218)

2. Reading Materials

The study participants also came up with the idea of solving student learning problems by affirming a reading culture from a variety of reading materials to generate ideas. This can be seen in the statement below:

"....Hence, in other words, when I was doing the research, I have to do a lot of reading. Because when we're researching something, we refer a lot to other people's research. So, the KPI (Key Performance Indicator) is like that..."

(D4: I1ALIT2201218)

3. The Findings of Teaching and Learning

The ideas obtained through the findings of the TnL results are mentioned by the study participants as follows:

"...sometimes when we're doing the lesson plans, we will see it somehow. But when we do it, the acceptance of the meaning from the students.... the idea will instantly come to do this and to do that. It's like that..."

(D3: I2ALIT1160719)

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4. Unique Stimulus

ALIT can also easily come up with an idea of innovation by looking at something unique or interesting such as merchandise at a department store or stationery or any other form of material found on a daily occurrence. For example, the idea of an Arabic game came about when looking at the unique shape of a fan remote control that became a playground for children while relaxing at home. This is explained by the study participants in the statement below:

"....I am...my ideas are mostly from what I observe. For example, the one that I mentioned about the fan remote control. That was a coincidental idea. Looking at the remote control fan gives me an idea to innovate something about it... But that was a coincidence while seeing my child playing with it...he was playing like rearranging them. And I was thinking I could implement it in my TnL. And that's how I got those ideas..."

(D7: I1ALIT3301218)

5. Other Subject Material

Other subject-matter TnL tools also provide a source of ideas in ALIT innovations such as the following:

"....as a teacher we can adapt the innovation materials from the English subjects as it is the second language and are aligned with the Arabic language. We can also innovate from other innovation materials from other subjects..."

(D6: I2ALIT2011119)

6. Intuition (Ilham)

Sometimes the idea of ALIT is derived through intuition that comes suddenly and spontaneously. This is explained by the study participants in the statement below:

"...So it's like, it's like how people say...that that thing suddenly came. Might be a blessing too... That idea came. I don't know like if people say like it's a bestowal upon me that time. Like a bestowal..."

(D7: I1ALIT3301218)

7. Open Source (Internet)

Most of ALIT's ideas on innovation are determined through open source search results on the Internet such as European or Arabic educational websites, for example, Pinterest sites, social media sites such as Facebook, Telegrams and so on. This is acknowledged by the study participants in the following statements:

"...Let's say if I look it up on the Internet and it's like that, but I improvised it for my students. Like that..."

(D2: I1ALIT1191218)

8. Popular Songs

Participants in this study also gotten innovative ideas for the use of TnL in Arabic through popular songs that are frequently featured on the radio and television that are highly regarded by students. The songs are refined and modified using Arabic sentences and

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sentences based on the content of the study and the topics that are to be taught. These are mentioned by the study participants as follows:

"....And I like to use songs (in innovation) as to why...my concept is this era's songs, like the ones that I see like the songs...."

(D2: I1ALIT1191218)

9. Television Series Shows

Participants in this study also get the ideas from television programs that were viewed in the form of movies, dramas, TV series, quizzes and so on. This can be clearly seen through the following statement:

"....This Hunger Game, who gets to be the last one ...the one that didn't die...she will be entitled the Hunger game for that class. This Hunger game is actually based on the film Hunger Games itself... the game that's in the TV..."

(D4: I1ALIT2201218)

10. Modifications of Other People's Ideas

In some cases, the ALIT that is being researched has received ideas from colleagues who have spoken orally or through the suggestions submitted to the study participants to formulate ideas in producing TnL Arabic-language innovation materials. The study participants acknowledged the following:

"...Like the flower, originally Elly was the one who...shared to us that one of her school teachers made it but I improvised it into something else..."

(D7: I1ALIT3301218)

11. Observation Results

Sometimes study participants get ideas of TnL innovation from observations made especially when looking at the lessons practiced by other teachers, observing conference presentations, exhibitions and innovation competitions that has ever attended. The study participants stated the following:

"...I'm the type who likes to observer my surroundings ...so when I like to observe my surroundings, that is where the ideas came from..."

(D7: I1ALIT3301218)

Research Discussions

There are various sources of ideas used by ALIT to find solutions to students' problems in learning Arabic through innovation. Sources of solution ideas through a specific, deliberate and specific approach to a learning problem either through Logical Thinking or Lateral Thinking are one of the alternative ways that can be used in the process of generating useful ideas and beneficial. Based on existing information related to the content of students' learning, student characteristics, pedagogical aspects and so on, innovation ideas can be generated more specifically and systematically. Both forms of thinking are necessary and able to complement each other in a thinking process included in the problem-solving process of Arabic language learning (Knight et al., 2019; Kamarudin et al., 2016; De Bono, 1970).

Reading resources are also important in triggering ideas of innovation. According to Sarkam et al. (2018), in the process of planning and contemplating innovation ideas to be

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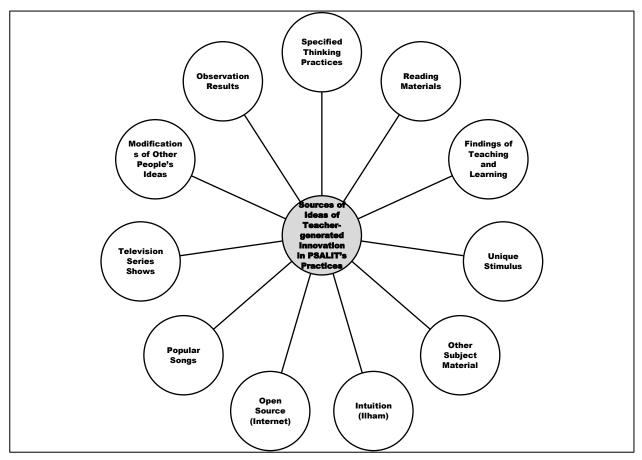
produced, innovation generators will find the best and most effective way of relating their innovation ideas through reading and reviewing libraries for the purpose of finding supporting data on their initial ideas. The search for library data is in the form of literature from a variety of reading sources, whether books, newspapers or articles in academic or non-academic journals. According to Hutchinson and Tracey (2015), the use of reflective writing such as the teaching reflections written in the Daily Teaching Record at the end of TnL implementation can be text-based stimuli capable of triggering the emergence of new ideas in the Arabic Language TnL. In the process, the experiences of the teaching and learning activities are reconstructed as inspiration for the generation of new ideas. Similarly, stimuli that are specific to certain objects or events in the daily life of an innovative teacher can be a source of ideas in innovation (Hutchinson & Tracey, 2015; Cumming, 1998; Mcfadzean, 2000).

Applying innovation in one context to another in different contexts is another form of innovation such as ICT curriculum innovation and organizational management framework based on ecological concepts in the study of Tatnall & Davey, (2004) and Stein et al., (2017). As such, ALIT's practice of adapting the ideas of other subjects in the implementation of the Arabic Language TnL through improvement and modification is also a form of innovation. Intuition or so-called in Arabic as Ilham is a form of knowledge in Islam that can stimulate or generate creativity and so forth to produce or achieve something (Dewan Bahasa dan Pustaka, 2010). It is bestowed on certain individuals through the Kashaf road and the open doorway without obstacles (Hardaker & Sabki, 2018). It is also one of the legitimate and important channels for generating creative knowledge such as innovation ideas.

The search for innovation ideas through the Internet is done in a process of generating innovation ideas, aimed at finding information to explore ideas that are original and new. This is a medium that coincides with the development of the technological age of the 21st Century and the emergence of Revolution 4.0 (Erol et al., 2016). The use of songs, the idea of television series, peer suggestions and observation stimuli are a form of stimuli that can stimulate the mind to generate exciting and creative TnL innovation ideas. Overall, the sources of ideas for teacher-generated innovation based on ALIT practices in teaching and learning Arabic can be summarized through the conceptual framework in Figure 1 below:

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Figure 1. The Conceptual Framework of the Sources of Ideas for Teacher-generated Innovation in Primary School Arabic Language Innovative Teacher (PSALIT) Practices



Conclusion

All teachers need to innovate in particular to improve the quality of teaching and learning to help students master a wide range of skills to compete globally. The demands of implementing TnL innovations on all teachers in any subject matter background including Arabic language education are due to several factors. These include different student learning problems, situations, needs, levels of mastery and students' backgrounds, TnL objectives that need to be met also vary as well as differences in teachers' abilities and competence.

Teachers who strive to innovate in teaching and learning will definitely experience a very valuable experience in which the reciprocity will be the effectiveness and improvement of teaching quality and self-satisfaction. Innovation skills and ideas can be learned and developed by individual teachers through systematic and structured exercises, through reading and many other sources of knowledge and ideas. Studies on the practice of innovation among teachers are still relatively new in Malaysia, especially in the field of Arabic language education. It is hoped that the pioneering effort through this study will serve as a guide for all parties to practice innovation among teachers in a more specific and appropriate manner so that culture in the teaching profession is in a continuous form of teacher professionalism.

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References

- Abdullah, W. A. A. W., & Zhaffar, N. M. (2018). *Inovasi Pendidikan Islam: Inspirasi dan Transformasi*. Kuala Lumpur: Institut Terjemahan dan Buku Malaysia.
- Aripin, N., Mustafa, H., & Hussein, A. (2014). Hubungan Kedinamikan Dalaman Dengan Keberkesanan Pasukan Maya: Satu Tinjauan Di Organisasi Bertaraf Koridor Raya Multimedia (Msc) Yang Terpilih. *Malaysian Journal of Communication*, 30(1), 191–218. Retrieved from http://www.ukm.my/jkom/journal/pdf_files/2014/V30_s_12.pdf
- Clarke, V., & Braun, V. (2014). Thematic analysis. In A. C. Michalos (Ed.), Encyclopaedia of Quality of Life and Well-Being Research (pp. 6626–6628). Netherlands: Springer, Dordrecht.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches.* Sage publications.
- Cumming, B. S. (1998). Innovation overview and future challenges. *European Journal of Innovation Management*, 1(1), 21–29.
- De Bono, E. (1970). Lateral Thinking: A Textbook of Creativity. Penguin Books (Vol. 3).
- Dewan Bahasa dan Pustaka. (2010). Kamus Dewan (Edisi Keempat). Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Erol, S., Schumacher, A., & Sihn, W. (2016). Strategic guidance towards Industry 4.0 a three-stage process model. Coma, (January), 495–501.
- Feldhusen, J. F., & Treffinger, D. J. (1977). The role of instructional material in teaching creative thinking. *Gifted Child Quarterly*, *21*(4), 450–459.
- https://doi.org/10.1177/001698627702100405
- Hardaker, G., & Sabki, A. A. (2018). Philosophy of Islam and Knowledge. *Pedagogy in Islamic Education*, 35–54. https://doi.org/10.1108/978-1-78754-531-120181004
- http://www.ipgkik.com/v2/wp-content/uploads/2015/05/Artikel17_2014.pdf.
- Hutchinson, A., & Tracey, M. W. (2015). Design ideas, reflection, and professional identity: how graduate students explore the idea generation process. *Instructional Science*, *43*(5), 527–544. https://doi.org/10.1007/s11251-015-9354-9
- Ilias, M. F., Abdullah, M., Husain, K., Jasmi, K. A., Abdullah, A. H., & Rosman, A. S. (2016). Jenis-Jenis Sumber Pengetahuan Guru Pendidikan Islam Dalam Penggunaan Bahan Bantu Mengajar di Sekolah Bestari. *e-Jurnal Penyelidikan Dan Inovasi, Edisi Khas, 3*(1), 41–55. Retrieved from https://www.researchgate.net/publication/306285799
- Kadir, A. R. A., Keong, C. M., & Abdullah, A. (2014). Tahap Amalan Inovasi Pengajaran Pembelajaran Dalam Kalangan Guru Sekolah Agama Daerah Kuala Langat, Selangor. Retrieved on 31st of July 2018
- Kamarudin, M. Y., Yusoff, N. M. R. N., Yamat@Ahmad, H., & Ghani, K. A. (2016). Inculcation of Higher Order Thinking Skills (HOTS) in Arabic Language Teaching at Malaysian Primary Schools. *Creative Education*, (7), 307–314. https://doi.org/10.4236/ce.2016.72030
- Knight, J., Fitton, D., Phillips, C., & Price, D. (2019). Design Thinking for Innovation. Stress Testing Human Factors in Ideation Sessions. *Design Journal*, 22(1), 1929–1939. https://doi.org/10.1080/14606925.2019.1594950
- Majid, M. R. A., & Ismail, Z. (2018). Pengetahuan Teknologi Guru Bahasa Arab dan Hubungannya Dengan Kreativiti Pengajaran Di Malaysia. *Jurnal Islam Dan Masyarakat Kontemporari*, 18(1), 1–13. Retrieved from https://journal.unisza.edu.my/jimk/index.php/jimk/article/viewFile/81/68

- McCraw, T. (2007). *Prophet of Innovation*. Cambridge, Mass: The Belknap Press of Harvard University Press.
- Mcfadzean, E. (2000). Techniques to enhance creative thinking. *Team Performance Management*, 6(3), 62–72. https://doi.org/10.1108/13527590010731989
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative Research: a guide to design and interpretation* (4th ed.). San Francisco: Jossey-Bass.
- Messmann, G., & Mulder, R. H. (2011). Innovative Work Behaviour in Vocational Colleges: Understanding How and Why Innovations Are Developed. *Vocations and Learning, 4*(1), 63–84. https://doi.org/10.1007/s12186-010-9049-y
- Ministry of Education Malaysia. (2013). Malaysian Education Development Plan 2013-2025. https://doi.org/10.1016/j.tate.2010.08.007
- Olson, J. K. (1980). Teacher Constructs and Curriculum Change Teacher Constructs and Curriculum Change. *Journal of Curriculum Studies,* 12(1), 1–11. https://doi.org/10.1080/0022027800120102
- Sarkam, S. F., Mustapha, M., Kader, M. A. R. A., Tajuddin, N., & Saadah, N. (2018). Ihsan, Innovation and Creativity in Student's Product Innovation: The Case of Innovation Show Event at UiTM Pahang. *International Journal of Academic Research in Business and Social Sciences*, 8(2), 658–670. https://doi.org/10.6007/ijarbss/v8-i2/3975
- Stein, E. D., Sengupta, A., Mazor, R. D., McCune, K., Bledsoe, B. P., & Adams, S. (2017). Application of regional flow-ecology relationships to inform watershed management decisions: Application of the ELOHA framework in the San Diego River watershed, California, USA. *Ecohydrology*, 10(7), 1–16. https://doi.org/10.1002/eco.1869
- Talip, R. (2012). Cabaran Guru Dalam Memperkasa Profesionalisme Keguruan Era K-Ekonomi. Utusan Borneo.
- Tatnall, A., & Davey, B. (2004). Improving the chances of getting your IT curriculum innovation successfully adopted by the application of an ecological approach to innovation. *Informing Science*, 7, 87–103. https://doi.org/10.28945/504
- Tomlinson, B. (2001). Materials Development. In The Cambridge Guide to Teaching English to Speakers of Other Languages (pp. 66–71).
- Tukimin, R., Yusoff, N. M. R. N., & Baharudin, H. (2019). Academic Qualification and Teaching Experience on the Level of Use of Innovative Teaching Strategies among Arabic Primary School Teacher. *International Journal of Academic Research in Progressive Education and Development*, 8(3), 224–234. https://doi.org/10.6007/IJARPED/v8-i3/6421
- Tukimin, R., Yusoff, N. M. R. N., & Baharudin, H. (2020). Strategic and Innovative Teaching Approach Based On Mental Imagery. *Academy of Strategic Management Journal*, 19(1), 1–6. https://www.questia.com/read/1G1-619742006/
- Udwadia, F. E. (1990). Creativity and Innovation in Organizations Two Models and Managerial Implications. *Technological Forecasting and Social Change, 38*, 65–80.
- Wimmer, R. D., & Dominick, J. R. (1997). *Mass media research: An introduction* (5th ed.). Belmont: Wadsworth Publishing Company.
- Zainal, M. A., & Matore, M. E. E. M. (2019). Factors Influencing Teachers' Innovative Behaviour: A Systematic Review. *Creative Education*, 10(12), 2869–2886. https://doi.org/10.4236/ce.2019.1012213
- Zin, A. M. (2014). Permainan bahasa dalam pembelajaran bahasa Arab di sebuah sekolah rendah di Klang. Tesis Sarjana, Universiti Malaya.