



Teachers Competency In Malaysia During Covic19 Pandemic

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ABSTRACT

Fundamental elements and principles of teacher competence related to knowledge, skills and personal characteristics of a teacher in performing the tasks from time to time in accordance with educational requirements in Malaysia. In line with the changes in education around the world as we move towards the 21st century, education based on Information and Communication Technology (ICT) demand for increased levels of competency of teachers today. Within the context, teachers should be more creative when planning their teaching. Teachers' teaching should correspond to students' abilities. During the Covic19 pandemic, teachers are encouraged to enhance their ICT skills and knowledge to deliver on-line courses in an orderly and systematic manner. Thus, continuous monitoring and training for teachers to ensure that they achieve at least minimum level of competence in performing their duties effectively, also gives students a tremendous impact on their academic achievement to improve the quality of education in Malaysian schools.

Keywords: teacher competence, teaching and learning, online learning, information and communication technology (ICT)

1.0 INTRODUCTION

system Malaysian education undergone a comprehensive and systematic change to prepare its citizens to prosper and be globally competitive. Malaysia and other countries around the world are moving into 21st century of information and communication technology (ICT) - based education. The rapid evolution of teaching and technology indicates that the use of ICTintegrated teaching materials in the teaching and learning process is beginning to draw attention. The existence of technological diversity has the potential to effect positive change in the education system. The changes have also changed the role of teachers who

are the main implements in this field to be in line with the passage of time and new methods of learning in the 21st century. In order to achieve the latest level of learning today, teachers must have a high level of competence with strong knowledge, solid pedagogy and high technological knowledge to take over the conventional teaching methods that are less relevant today. (Norasiah, Nor Risah Jamilah and Rosnah, 2012).

Education has the ability to shape the future of individuals and influence self - development because the process of developing innovative human capital and skills can support the social, cultural and economic growth of a country (Nur Bahiyah Abdul





Wahab, Maryati Mohamed, Azman Hassan & Mohd Najib Haron 2013). The achievement of a country is highly dependent on the knowledge, skills and competences of its people or citizens. As a result, it is not surprising that countries with higher levels of education are more likely to enjoy greater economic prosperity. Establishing Malaysia's Education Development Plan 2013 - 2025 stipulates that to achieve good economic growth and development in Malaysia, education plays a very important role. (Ministry of Education, MOE-2015).

Basically, human capital growth depends heavily on a teacher's quality. Teachers must be competent and act as a means of passing on knowledge, forming positive attitudes and nurturing constructive values among students. Competence is defined as the ability, capability and skill of a person to perform a task in an efficient work environment. Indeed, Malaysia's Education Development Plan 2013-2025 also emphasizes improving the level of professionalism of teachers. (Ministry of Education Malaysia 2013). Highly skilled teachers are able to produce students who are competent and able to adapt to the changes occurring around them.

Moments challenging the abilities and competencies of teachers have arrived as the world faces a pandemic of Covic19. The pandemic that erupted in China around December 2019 has spread worldwide, including to Malaysia. The government implemented the Movement Control Order (MCO) nationally, which ordered the closure of the entire sector, including public and private schools and higher education institutions. This has affected the learning process, but is considered necessary to stop the spread of Covic19. Consequently, virtual or online learning appears to be able to overcome the difficulties encountered in continuing the learning process. This virtual learning is seen as an alternative and a new norm that needs to be implemented for the continuity of learning in Malaysia particular and the world in general.

1.1 Problem statement

The simultaneous closure of all schools in Malaysia and the majority of countries in the world due to the spread of the Covic19 pandemic had a huge impact on the world of education through the MCO which was implemented by the government to prevent the spread of infection. This huge impact requires that students who normally go to school every day to sit, stay at home to ensure that their lives and their families are safe. This slows down the learning process amongst the pupils. Yet in the era of Industrial Revolution 4.0 we can now move from conventional teaching and learning processes to the use of the internet as a digital electronic medium to connect students with teachers online. To ensure that not all students miss out on learning, teachers need to begin using available options, such as running online classes. There is no doubt that a number of difficulties arise when teachers wish to implement this method of online learning. For teachers, there is skepticism when many platforms are available and can be used appropriately for online learning and most use by trial and error methods. In addition, due consideration should also be given to each student in terms of ability, knowledge, facilities such as having or not having a personal gadget or smartphone, internet access at their residence and some may not have enough internet data.

On the positive side, the spread of the Covic19 epidemic has sparked extraordinary enthusiasm and effort for educators in Malaysia in ensuring that students are not left behind in education. Educators are working hard to diversify teaching methods. They study unabashedly in order to improve their educational abilities in accordance with technological progress. In accordance with the new norm, online learning requires the commitment of all stakeholders, namely teachers, students and parents. This extraordinary effort is no exception and requires students to be fully engaged. Student participation in this online course is not just listening to the educator's chatter, but also providing answers and





completing assigned tasks. It is therefore necessary to improve teachers' level of competence in line with current needs. This means that existing skills can be implemented anywhere, even if teachers are away from school.

1.2 Objectives

The aim is to identify the need to increase teachers' skills and knowledge in mastering ICT technologies if they are to conduct the online learning process in dealing with the Covic19 pandemic.

1.3 Methodology

Qualitative method was used, encompassing content analysis approach through sources such as journals, past researches and internet. Using this method can explain theories related clearly by reading, analyzing and structuring relevant content according to the study. This theoretically conducted research is part of an effort to justify the significance of the study.

1.4 Teacher Competence

Competency refers to the elements of knowledge, skills and personal characteristics that a teacher should have. Based on the statement of Daud Ibrahim (2003) that competence means "competence, proficiency, skilful and skill" and is defined as a combination of aspects of knowledge, skills and personal characteristics that need to be possessed and practiced to perform a job or position as a teacher. The elements are as follows:

1.4.1 Professional competence (knowledge and understanding):

- Understand the theory of the subject being taught.
- Master the implementation of the theory of the subject taught.
- Master the selection, formulation, planning, and presentation of subject theory.

 Master the principles, rules, theories, and theoretical concepts in the context of the learning environment.

1.4.2 Pedagogical competence (intellectual skills):

- Understand the curriculum and develop lesson plans.
- Understand approaches, methodologies and techniques in learning and applications in the classroom.
- Understand the implementation of the learning of the subject taught.
- Understand the learning assessment system and its implementation in the classroom.
- Master the skills to assess the level of understanding and potential of students in learning.
- Master the skills to conduct research in the learning of the subjects taught.

1.4.3 Personal competence (personality and practical skills):

- Possess a mature personality, noble character, wisdom and charisma, as well as suitability be a role model to students.
- Understand the rights and responsibilities of professionals as teachers.
- Understand the duties and functions of professionals as teachers.
- Understand the impact of educational innovation in developing national character.

Basic skills and competencies have evolved and developed as pioneers in the education and learning process through the use of ICT innovation such as online learning to overcome the current pandemic situation associated with Covic19 that causes the learning process to take place from home. This development of teaching techniques and learning processes should be emphasized, as it is considered very important for a teacher to effectively manage the learning process with the concept of online learning which is being implemented by the current government in Malaysia. Thus, the capacity and competence of teachers to use digital





resources and ICTs in teaching and learning is able to provide an instructional and learning environment that offers opportunities and space for students to explore, interpret and find meaning in the evidence from existing media sources. (Endacott, 2010; Bolick & McGlinn, 2004; Sandwell, 2004; Schrum, 2001).

These skills and abilities are part of the changes and improvements required in the instructional skills of a teacher who is now facing the challenges of 21st century education and at the same time able to effectively implement e-learning in society while worldwide is grappling with the pandemic Covic19 at this time. From a teaching perspective, the theory of TPACK has to be carefully studied and adapted to the teaching skills of teachers. Additionally, nine (9) Gagne instructional events and techniques are to be understood. So that teachers are more competent in dealing with ICTs that are used effectively in the learning process.

1.4.4 TPACK (Technological Pedagogical Content Knowledge)

Teaching methods are a very broad process which requires teachers to have various kinds of knowledge expertise. (Suriati, 2016). Teachers capable of handling technology are creative, flexible and adaptable teachers in various ways where they are able to overcome constraints and continue to interact in the TPACK framework. (Mishra & Koehler, 2008).

Technological pedagogical content knowledge (TPACK) is a framework on how to understand and describe the types of knowledge a teacher needs for effective pedagogical practice within a learning environment that implements the use of technology. Mishra and Koehler (2008) said technology is as a modeling element for pedagogical content knowledge (PCK) in TPACK.

TPACK Technological Pedagogical Content Knowledge (TPACK) Technological Technological Technological Pedagogical Content Knowledge Knowledge Knowledge (TK) (TPK) (TCK) Pedagogical Content Knowledge Knowledge (PK) (CK) Pedagogical Content Knowledge Contexts

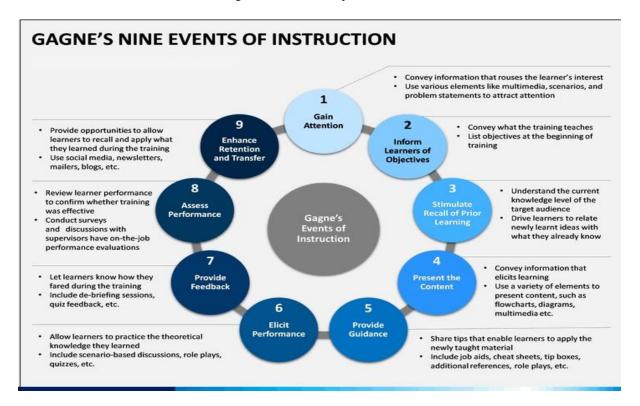
FIGURE 1

Source: http://www.tpack.org





FIGURE 2 Gagne Nine Events Of Instruction



Source: (Suriati, 2016)

1.4.5 Gagne's Nine Event of Instructions

The teaching strategy that Gagne has introduced is closely related to e-learning techniques. It is said to be very appropriate for teaching models in educational technology because the content of the lessons to be given can be integrated in the development of the learning software system. This introduced learning model will provide a better learning effect with a combination of content and technology formulated based on the adequacy of the learning performed.

- i. Attracting attention The use of animation, audio, graphics and more is important to combine the impact with the content to be presented to stimulate learning. This is not only to impress students, but also to create curiosity and motivation to learn about a subject.
- ii. *Inform students of objectives* Students should know what they will learn and state

the objectives as clearly described during instruction. Also indicate what should be accomplished in learning.

- iii. Stimulate existing knowledge-Frequently ask students while teaching with questions related to the topic taught in addition to provide exercises that will help students to relate the concepts they have learned to previous experience or knowledge.
- iv. Presenting content Presenting learning content interactively. Use characters and stories to convey content, ask questions and get input from students, games, scenarios etc. will stimulate the learning process. Using interactive Flash animations as an example to emphasize content and to enable students to implement skills applications with new knowledge.
- v. Provide learning guidance This is an opportunity for students to apply the knowledge and skills learned with guidance.





One good example is using simulations. Any guidance can be sent to students using email. Although it is not immediate guidance but it is also a guide that can be used by students as guidance.

vi. Unearthing performance - Allows students to practice new skills through an interactive exercise or simulation. Here, students can use existing skills and practice using them. This is an opportunity for students to test their understanding of the content they have learned and an opportunity to practice and improve their knowledge.

vii. *Giving Feedback* - Giving feedback on the learning process carried out.

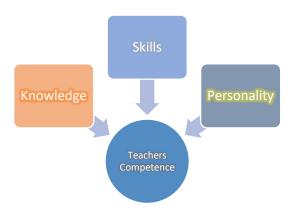
viii. Assessing performance - The training provided is solely to assess the performance of student achievement. Feedback for both correct and incorrect answers will be given to students through the system. Each correct answer will be given additional information that can improve memory, while incorrect answers will be given feedback on why their answers are incorrect.

ix. Maintain, enhance and transfer learning - Provide conclusions on whether planned learning has a positive impact and meets objectives as planned.

FIGURE 3

Conseptual Framework of Teachers

Competence



2.0 LITERATURE REVIEW

The Malaysian Education Development Plan (PPPM) 2013-2025 has been designed to transform the national education system to improve the quality of student academic achievement as the main agenda and with the commitment of all parties, especially teachers, it can be realized. Since teachers are the main role in realizing this main agenda, the level of competence of teachers needs to be emphasized so that it can be fully achieved.

The three (3) aspects of the characteristics or components of teacher competence that they need to have are knowledge, skills and personal characteristics to be applied while teaching in school. In the context of knowledge and skills, teachers need to be more creative when planning their lessons. The teacher's teaching must be appropriate to the abilities and capabilities of the students. Teachers need to actively involve the students in the teaching process. The traditional pattern approach "chalk and talk" are less relevant to the needs of today's students. Students are more interested if they are also involved in the teaching and learning process carried out by teachers. This will have more effective impact towards achieving the goals of education itself. Learning will occur when what is taught makes sense to the students (Caine & Caine, 1994). The fact is that as a professional teacher one should always add knowledge and skills to his teaching. The competence of teachers' skills in teaching regarding the ability to diversify teaching strategies, make learning assessments and skills in using technology is very important and is required in increasing students' interest and understanding process as well as denying the term "the dead man of curriculum" which has long plagued students' minds (Rohana Zubir, 1987). The competence of teachers' skills is expected to be able to affect the improvement of performance in line with the importance of a subject itself which is selected as a subject taken in the examination at the SPM level.





Personal characteristics can be summarized as behaviors (personal attributes and behavior) that need to be appreciated and practiced by a teacher. A teacher needs to be able to control his or her own behavior in building a self - concept that includes and perceptions about himself his surroundings through himself as well as feelings about his abilities covering his self confidence and self - esteem. It allows a person to be able to control and regulate his or her own behavioral patterns in changing any of these responses, such as controlling behavioral impulses, restraining desires, controlling thoughts and changing emotions (Rahmah, 2009). According to Losius Goliong, Mohd Khairuddin and Rosy Talin (2016) personal competence refers to the existing self - worth of teachers and should be developed so that it can provide a more effective contribution to the education profession to achieve goals as enshrined in the National Education Philosophy.

Through personal competency, teachers immerse themselves in a concept that introduces teaching based on creativity, innovation and the performance of a teacher who teaches. This is a concept of a teacher's beliefs and attitudes about the ability of an individual (the teacher himself) to engage in motivational roles sources of cognitivism and actions necessary to meet the needs of a particular situation or situation faced (Schmitt and Highhouse, 2012). According to Mullins (2005), the creativity measures consist of the preparation and planning of the first stage of the creative process which includes formal education and training. Creative teaching through the personal characteristics of the teacher (Self Regulation Teaching) is a concept that introduces teaching based on the attitude and creativity of a teacher.

2.1 Teachers 'ICT pedagogical competency needs during the covic19 pandemic

Everyone is aware that as the Covic19 pandemic hits the world, online learning is being actively implemented worldwide, including in Malaysia. Therefore, the focus on

teachers' competence in managing ICT in the process is considered important for the success of the learning process and provide good engagement to students.

Sumitra Pokhrel and Roshan Chhetri (2021) state that e-learning tools have played a crucial role during this pandemic, helping schools and universities facilitate student learning during the closure of universities and schools (Subedi et al., 2020). There are a variety of subjects with varying needs. Different subjects and age groups require different approaches to online learning (Doucet et al., 2020). Online learning also allows physically challenged students with more freedom to participate in learning in the virtual environment, requiring limited movement (Basilaia & Kvavadze, 2020). Pedagogy available and used for face-to-face learning is not feasible for online learning. Though a range of pedagogy has been devised for online and distance learning, teachers who are technologically backward require proper professional development and training in order to orient themselves towards their students.

The study of Johannes König, Daniela J. Jäger-Biela & Nina Glutsch (2020) is concerned with the adaptation of new teaching methods that need implemented by teachers in the face of the Covic19 pandemic in Germany. This research focused on the skill level of teachers who had to teach online due to the closing of schools in Germany in the fight against the Covid-19 pandemic, as in many other countries of the world. This has obliged teachers to adapt to online education. Results of regression analysis showed that ICT tools, especially teachers' skills in digital and teachers' training opportunities to learn more about digital are very important in helping teachers adapt to online teaching during school closures in the face of Covic19 threats.

Carmen Carrillo & Maria Assunção Flores (2020) the Covic19 pandemic has impacted education at all levels around the world in various ways. Educational institutions, lecturers, teachers and students at different levels of education should react quickly to the unexpected change from





classroom teaching and learning to online learning. The results of the study indicate that there is a need to have an overview and to examine aspects of online education where technology integrates education in order to support teaching and learning.

Ana, Javier, Lucia & Raimundo (2020) studied the need for digital competence or ICT literacy among university graduates. They need to be constantly sensitive and in line with current scientific developments, changes from pedagogical aspects and must master new methodologies and trends in their field. The professional importance competence in ICT for teachers requires great responsibilities such as professional ethics and this is the responsibility of professionals in the field of education to preserve, enhance and update the level of digital competence themselves and in turn enhance the learning and teaching process.

Subri, M. R., Jacob, R., & Boheran Nudin, A. (2021) the challenge of pandemic Covic19 has changed the pattern of excellent Malay language teachers from teaching face face to online teaching. implementation of online teaching demanded them to equip themselves with the technology in achieving the goal. The readiness and ability of teachers to implement online teaching has been an important issue in ensuring effectiveness in teaching and learning. Teachers who are creative in implementing online teaching and learning for students are needed to ensure that the delivery of knowledge can be implemented appropriately even when facing this situation (MOE, 2008)

Fatima Mustafa, Kamarudin Hassan, Salinah Pit (2021) focus on online teaching and learning at Institut Pendidikan Guru Kampus Perempuan Melayu (PGK PM) during the pandemic covic19. Lecturers play an important role in determining the learning outcomes during the period of MCO where it implemented effectively. be implementation of online learning during this pandemic is a challenge for lecturers in terms of knowledge, resources, facilities and professional development contribute a great impact on the quality of the learning process.

The importance of Pedagogical Technology Knowledge (PTK) skills not only involves the question of knowledge about how the content is presented to students but also relates to the extent to which teachers can understand the learning problems faced by students especially in the content (Shulman, 2005). These skills will facilitate lecturers in adapting pedagogical materials using technology. PTK is one of the elements that is importance and also emphasized by the Ministry of Education Malaysia when the Malaysian Teacher Standard (SGM, 2010) also gives special emphasis to the importance of Pedagogical Technology Knowledge in rating teachers. According to HU Jing-Jing, (2014); Loveless et. al., (2000) and Shahabuddin et al., (2007) if a lecturer does not have good Pedagogical Technology Knowledge, he or she will most likely not be able to achieve satisfaction factor in implementing online learning because one of the factors is dependent on knowledge mastery of Pedagogical technology.

3.0 SIGNIFICANCE OF STUDY

Changing trends in education demand an increase in the level of competence of teachers who are primarily responsible in this field in accordance with the passage of time and new approaches introduced to assist teaching and learning the 21st century. ICTs or the digital era demonstrate the rapid development of education and technology through the use of educational materials in the form of technology and multimedia such as slideshows, videos, animations, the use of computers developing websites in the online teaching and learning process started to be seriously taken into account by the MOE. The existence of this technological diversity can bring positive changes to the educational system. Teachers must raise their level of competence in ICT knowledge and skills in the use of ICT equipment provided in learning and adapt their personal features to participate in 21st century learning today.

However, the outbreak of the Covic19 epidemic has changed all forms of educational planning that have been designed in Malaysia





in particular and worldwide generally. In Malaysia, teachers always strive to pursue the learning process of being creative in diversifying teaching methods. They are always willing to improve their educational capacity in response to technological advances.

MOE directly involved in the issues related to the competence of these teachers where they play their role by formulating and planning improvement strategies in terms of improving the quality of delivery and teaching by teachers which include three elements or components of competencies that have been discussed earlier namely the elements of knowledge, skills and personal characteristics. Changes and improvements in improving teachers' ICT skills need to be given immediate emphasis for rapid response in addressing online learning during the period of MCO. The ministry needs to plan and build effective training modules to guide and further improving the level of competence for new and existing teachers so that the quality of teaching and learning can be achieved either in schools or online. Furthermore, the people involved can also be planned and positive measures can be taken to improve the academic quality of the country. It is hoped that this will contribute to the formulation and planning of better strategies for the development of education in Malaysia.

4.0 ANALYSIS AND RECOMMENDATIONS

If we want to achieve excellence in learning, a number of desirable steps need to be implemented. The excellence meant is the need to improve the level of competence of teachers which has a direct impact on the effectiveness of their teaching aimed at disseminating knowledge and imparting various types of skills as well as shaping the personality of students. The role of a teacher is very important as a communicator of information and knowledge to students. The role of a teacher is to help students understand concepts, such as math, English, and science through instruction and learning implemented from time to time.

Education is seen as the best and most appropriate way to impart knowledge to students in training and educating them to achieve learning goals. Therefore, the level of teachers' competence is very important especially in performing the task in teaching and learning process because it gives a very big impact to them. If we want to produce quality students then the person who teaches must have a higher quality than the students (Abd Rahim, 2001). According to Suhardiman (1999) this shows that how important it is for a teacher to have high level of competence in performing a good job as an educator.

The critical situation experienced by the country at this time is where the spread of the Covic19 epidemic has changed the national education landscape from face -to face learning to online learning. Therefore, the strengthening of teachers' skills or competencies on ICT has been given emphasis to ensure that the online learning process implemented at this time runs smoothly and effectively. This step is seen in line with a study conducted by Sumitra Pokhrel and Roshan Chhetri (2021) which requires proper professional development and training for the teachers in order to orient themselves towards their students. Ana, Javier, Lucia & Raimundo (2020), Johannes König, Daniela J. Jäger-Biela & Nina Glutsch (2020) and Carmen Carrillo & Maria Assunção Flores (2020) also stated that it is important for teachers to equip themselves with ICT skills to cope with the online learning process during the current Covic19 pandemic outbreak. This presented opinion has been supported by Subri, M. R., Yaakub, R., & Boheran Nudin, A. (2021). In addition, the study by Fatima Mustafa, Kamarudin Abu Hassan, Salinah Pit (2021) focus on online teaching and learning at Institut Pendidikan Guru Kampus Perempuan Melayu (PGK PM) during the pandemic Covic19 has revealed the findings are the same and so on emphasizes the importance of ICT skills that need to be mastered by educators for the success of the online learning process.

Therefore, in order to achieve this goal, the best and most effective way is through continuous monitoring and training





for teachers to ensure that they achieve a minimum level of competence at least in performing their duties effectively for teaching and learning process to students. Armed with the required combination of expertise, power, skills and personality obtained from the training process and guidance provided by the MOE, it is not impossible that the level of competence of teachers is at a high level during the learning process.

5.0 CONCLUSION

The implications that arise from the influence of a teacher's knowledge, skills and personal characteristics competence in teaching students and academic achievement are parallel. This means that the higher level of competence of a teacher, the higher quality of teaching conducted and thus improve the academic achievement of students. Emphasis and evaluation on aspects of teacher competence in comprehensive teaching and learning will be able to provide a broader and more accurate picture with respect to student achievement in learning. The relevant parties should always provide support by providing appropriate facilities, monitoring and related training such as ICT as well as promoting a suitable environment while giving autonomy for teachers to develop the competencies they have in the teaching and learning process. The MOE needs to be more proactive providing professional development training in effort to improve the competence of teachers in all related aspects. It is more effective if given as early as the teachers are in their training preparation program at institutions that offer teaching programs such as universities and institutes of teacher education (IPG).

Thus, it can be concluded that the role of teachers is not only as a communicator of knowledge to students based on pedagogical skills alone but they are also responsible for highlighting themselves with a high level of professionalism competence and required personal behavior. These three elements move in parallel with the academic achievement of students.

6.0 REFERENCES

- Abd Rahim Abd. Rashid. (2001). Guru sejarah berkesan dan bermotivasi tinggi dalam pengajaran sejarah dan penerapan patriotisma. Persidangan Kebangsaan pendidikan sejarah kea rah pembentukan warganegara patriotic, 8-12 Oktober 2001
- Ana B. Mirete, Javier J. Maquilón, Lucía Mirete and Raimundo A. Rodríguez (2020) Digital Competence and University Teachers' Conceptions about Teaching. A Structural Causal Model. Sustainability. 12, 4842; doi:10.3390/su12124842
- Basilaia, G., & Kvavadze, D. (2020).
 Transition to online education in schools during a SARS-CoV-2 coronavirus (COVID-19) pandemic in Georgia. *Pedagogical Research*, 5(4), 10. https://doi.org/10.29333/pr/7937
- 4. Bolick, C. M., & McGlinn, M. M. (2004). Harriet Jacobs: Using online slave narratives inthe classroom. Social Education, 68(3), 198-202.
- Caine, G. & Caine, R. (1994). Making Connections: Teaching and Human Brain. New York: Addison. Wesley
- Carmen Carrillo & Maria Assunção Flores (2020) COVID-19 and teacher education: a literature review of online teaching and learning practices, European Journal of Teacher Education, 43:4, 466-487, DOI: 0.1080/02619768.2020.1821184
- 7. Doucet, A., Netolicky, D., Timmers, K., & Tuscano, F. J. (2020). Thinking about pedagogy in an unfolding pandemic (An Independent Report on Approaches to Distance Learning during COVID-19 School Closure). Work of Education International and UNESCO.





https://issuu.com/educationinternational/docs/2020_research_covid-19_eng

- 8. Daud Ibrahim (2003). Mengenalpasti Masalah-masalah Dalam Melaksanakan Standard ISO 9000. Tesis Sarjana. Bangi : UKM
- Endacott, J. (2010). Reconsidering affective engagement in historical empathy. Theoryand Research in Social Education, 38(1), 6-49
- 10. Fatimah Mustaffa, Kamarudin Abu Hassan, Salinah Pit (2021) Pelaksanaan Pengajaran Dan Pemudahcaraan Dalam Talian Pensyarah IPGK PM Semasa Pandemik COVID-19. Jurnal Dunia Pendidikan e-ISSN: 2682-826X | Vol. 3, No. 1, 465-474, 2021
- 11. Gagne, R. M. (1985). The conditions of learning and theory of instruction. Fort Worth, TX: Holt, Rinehart & Winston.
- 12. Johannes König , Daniela J. Jäger-Biela & Nina Glutsch (2020) Adapting to online teaching during COVID-19 school closure: teacher education and teacher competence effects among early career teachers in Germany, European Journal of Teacher Education, 43:4, 608-622, DOI: 10.1080/02619768.2020.1809650
- 13. Kementerian Pendidikan Malaysia (2013).

 Dokumen Standard Kurikulum Reka
 bentuk & Teknologi Tahun
- 14. Kementerian Pendidikan Malaysia (2015).
 Panduan Pelaksanaan Program
 Pembangunan Guru Baharu (PPGB)
- 15. Koehler, M. J., & Mishra, P. (2008).

 Pedagogical Content Knowledge
 (TPCK) for Educators. In A. C.
 Technology, Handbook of
 Technological. New York and London:
 Rouletdge Taylor and Francis Group

- 16. Losius Goliong, Mohd Khairuddin Abdullah dan Rosy Talin (2016). Kompetensi peribadi, pedagogi, profesionalisme guru sekolah berprestasi rendah bahagian barat dan utara Sabah. *Jurnal Pendidikan Nusantara*. Edisi khas. UTM & Universitas Muhammadiyah Makassar.
- 17. Ministry of Education Malaysia. (2013-2025). Pelan Pembangunan Pendidikan Malaysia 2013-2025:Preliminary-Blueprint-ExecSummary-BM.pdf. Ministry of Education Malaysia: Kuala Lumpur.
- 18. Model Konsepsual Pendidikan Guru
- 19. Mullins LJ (2005). Management and Organisational Behaviour. Prentice hall. UK 7th Ed. 88(431):1052-1058.
- 20. N. Schmidt, & S. Highhouse (Eds.). (2012). Handbook of Psychology. Vol 12: Industrial and organizational psychology. 311-340. Hoboken. NJ: John Wiley & Sons
- 21. Norasiah Binti Abdullah, Nor Risah Jamilah Binti Mat Lazim dan Rosnah Binti Ahmad Zain (2012). Teknologi dalam pengajaran dan pembelajaran. Selangor: Penerbitan Multimedia Sdn. Bhd
- 22. Nur Bahiyah Abdul Wahab, Maryati Mohamed, Azman Hassan, & Mohd. Najib Haron. (2013). Penerapan elemen sekolah rimba Malaysia dalam kalangan murid orang asli. 2nd International Seminar on Quality and Affordable Education (ISQAE), 424–432.
- 23. Rahmah, Noor. (2009). Manajemen Sumber Daya Manusia : dalam Fransiska Lerek (2015). Pengaruh Motivasi Belajar dan Dukungan Sosial Teman Sebaya terhadap Regulasi Diri pada Mahasiswa yang Kuliah Sambil





Bekerja di Fakultas Ekonomi Program Studi Ekonomi Syariah Universitas Mulawarman Samarinda. ejournal psikologi, 3 (1) 2015 : 441-452. issn 0000-0000, ejournal.psi.fisipunmul.org

- 24. Rohana Zubir. (1987). Aplikasi teknologi dalam pembelajaran sejarah; kesan dan masalah. Masalah Pendidikan. 12. 89-98
- 25. Sanders, W. L., & Rivers, J. C. (1996). Cumulative and residual effects of teachers on future student academic achievement. Knoxville, YN: University of Tennessee Value-Added Research and Assessment Center
- 26. Sandwell, R. (2004). "Who killed William Robinson?" Exploring a nineteenth centurymurder online. Social Education, 68(3), 210-213.
- 27. Schmidt, A., Beck, J., & Gillespie, J. 2013.

 Motivation. In N. Schmitt, S.
 Highhouse, & I. Weiner (Eds.),
 Handbook of Psychology, Vol. 12:
 Industrial and Organizational
 Psychology: 311-340. Hoboken, NJ:
 John Wiley & Sons.
- 28. Schrum, K. (2001). Making history on the web matter in your classroom. The HistoryTeacher, 34(3), 327-338.
- 29. Standard Guru Malaysia 2009
- 30. Subedi, S., Nayaju, S., Subedi, S., Shah, S. K., & Shah, J. M. (2020). Impact of elearning during COVID-19 pandemic among nurshing students and teachers of Nepal. International Journal of Science and Healthcare Research, 5(3), 9.
- 31. Subri, M. R., Yaakub, R., & Boheran Nudin, A. (2021). Pelaksanaan Pengajaran Guru Cemerlang dalam Mata Pelajaran Bahasa Melayu ketika Pandemik COVID-19: Satu Kajian Kes.

- PENDETA: Journal of Malay Language, Education and Literature, 12, 21-32. https://doi.org/10.37134/pendeta.vol 12.edisikhas.3.2021
- 32. Suhardiman bin Mohd Lazim (1999).

 Kompetensi pengurusan pengajaran dan pembelajaran dikalangan guru teknikal PPPLD/PPPBS di sekolah menengah teknik di negeri Pahang.
 Tesis Ijazah Sarjana. UNIMAS.
- 33. Sumitra Pokhrel and Roshan Chhetri (2021). A Literature Review on Impact of COVID-19 Pandemic on Teaching and Learning. Higher Education for the Future 8(1) 133–141
- 34. Suriati Abdul Aziz (2016). Model konsep persembahan multimedia bersepadu bagi guru di Malaysia. Disertasi Ijazah Doktor Falsafah Pendidikan. Universiti Utara Malaysia, Sintok, Kedah.