21st Century Practicum Supervision Training via Case Study Writing

Ang Chooi Kean[1*], Man Ah Keow[2], Thirrumurthy A. Maruthai[3], Kasmawati binti Baharuddin[4], Mohd Zulkarnain bin Nordin[5]

Institute of Teacher Education International Languages Campus,
59200 Kuala Lumpur, Federal Territory of Kuala Lumpur, Malaysia
angchooikean@gmail.com
akman65605823@gmail.com
thirrummurthy@ipgm.edu.my
kasmawati.baharuddin@ipgm.edu.my
zulkarnain.nordin@ipgm.edu.my
[*]Corresponding Author

Abstract: This research project aims to improve the quality of practicum supervision in terms of 21st century educational skills through a case study writing approach as an alternative training/retraining mode in Teacher Training Institutes in Malaysia. This research project applies a qualitative approach with three instruments namely case study template, online questionnaire and follow-up interview. This paper presents findings which comprises two phases of the study: (1) implementation of pioneer training/ retraining of Practicum supervisors using the case study writing, and (2) evaluation of the alternative training mode. Findings reveal positive feedback from the 20 respondents particularly in raising awareness and improving their skills in supervising their student teachers in terms of the 21st century educational skills.

1.   Introduction

Qualified, competent and dedicated teachers are the real agents for developing skills and competencies to catalyse national development. It is appropriate to say that teachers are the nation's builders, and the destiny makers of youth and custodians of the future (Pradhan, 2014; Babu 2016, Patel, 2018). It should be noted that the better teachers the nation has, the more solid citizens it has and hence the more developed it is (Khan et al., 2015; Patel, 2018). Quality teachers are the most important contributors to student learning in classrooms (Aina et al., 2015; Bardach, 2020). As indicated by Candal (2015), teachers are not born but are created. Good teachers can be produced only if we have a good system of teacher education with dedicated and efficient teacher educators. The success of the education system determines the success of a nation, but the success of the education system is established only on the quality of teachers, where the quality of teachers is based on the quality of teacher education (Azam et al., 2014). Teacher preparation programmes must be able to demonstrate with evidence that teacher education improves student learning (Brabeck et al., 2014, Scheeler et al., 2016). Hence, teacher's education courses are very much connected to practice as well as to theory. Good teacher training programmes are streamlined to enable student teachers to enhance the content, pedagogy and experience base. During teacher education training, practicum is an experiential form of

learning for student teachers where they develop their competencies and integrate their knowledge and skills. Practicum supervision is carried out by a qualified supervising lecturer and a cooperating teacher who hold the responsibility for guiding the students during the practicum period, and assessing their performance (Allen & Wright, 2013; Al-Jaro, 2020). There are significant concerns that many student teachers lack confidence in managing challenging classroom problems and experience difficulties in conducting teaching and learning in the classroom and adjusting to school life during teaching practice in schools (Ersin et al., 2020; Hojeij 2023). This clearly shows the importance of ensuring the quality of supervision, the motivation and engagement of supervisors, as well as quality assurance.

In Malaysia, the Institute of Teacher Education Malaysia (IPGM) ensures that practicum supervision is properly implemented so that student teachers develop their identity and beliefs, as well as the skills needed to become professional teachers, in accordance with the national education system's aspirations. Clinical supervision is employed to lead the teacher trainees towards effective teaching and learning. Clinical supervision focuses on the improvement of student teachers' performance through direct interaction of supervisors and student teachers in natural teaching settings (Cogan, 1973). Thus, supervisors should critically reflect on their own supervision practices in order to successfully monitor their student teachers. Greater understanding of the situations may help them to establish more effective supervision techniques and promote better skills in managing student teachers' concerns with this reflective practice. Currently, the guidelines on practicum supervision do not focus on the quality of supervision and how it can be carried out effectively in teacher education institutes. There seems to be a lack of concern in providing adequate training for practicum supervisors particularly towards inculcating 21st century educational skills. Ang et al. (2018) identified two factors which affect supervision, namely (1) the quality of implementation of the "shadowing" system in the training of practicum supervising lecturers and the extent of scopes of supervision or the roles which are required of supervisors and (2) some supervising lecturers still need more information and guidance in using Clinical Supervision Model in their supervision despite the emphasis on its use.

This study intends to increase supervision quality through training or retraining, as well as using case studies to reflect on supervisory practice. It also aims to improve the quality of supervision by adopting an alternative mode of case study to improve the training or retraining of practicum supervisors on 21st century educational skills. These skills are crucially important because as emphasised by Partnership for 21st Century Skills (2019), learning and innovation skills are increasingly being recognized as attributes that prepare students for a more complex life and work environment in the 21st century. 21st century education should be geared towards the mastery of 21st century skills which encompasses the competencies that should be integrated with the day to day lessons in all subject matters. Formerly, it covers the 4 Cs: Communication, Critical thinking, Collaboration, and Creativity. Later, education experts came up with additional Cs: Connectivity and Citizenship were the two C's coined by Miller (2015), while Character and Culture were the terms preferred by Fullan (2014). For school students to be well equipped with 21st century skills, they are supposed to be taught by teachers who have good command of those skills and are able to impart the skills to the students. Kim (2019) also posits that we should "focus on teachers' 21st century skills and re-conceptualise how we can evaluate and train teachers" in order to create 21st century learners. In view of this, the integration of 21st century skills in teacher education programmes is essential (Malik, 2018). According to Kim (2019), "it is equally important to prepare and train teacher trainees in not only the acquisition of 21st-century skills but also the dissemination of these skills." So, the courses in pre-service teacher education must be geared towards 21st century skills mastery as teacher education institutes play an important role in training the teacher trainees.

Student teachers in Malaysian teacher education institutes are required to apply elements of New Pedagogies for Deep Learning (NPDL) in their coursework, such as project based learning, product creation, presentation, and academic writing. In particular, the New Pedagogies for Deep Learning proposed by Fullan et al. (2017) forms the backbone in moving towards a transformation of teacher education. Designing and developing pedagogical capacities that cultivate the six C's of global competencies is the focus of NPDL. As proposed by Fullan et al. (2017), trainees have the opportunity to be the co-designer and co-learner with their lecturers in determining learning intention and success criteria. Several courses are interrelated in the coursework with one Big Idea and few Essential Questions. Such efforts help students to gain new knowledge through the learning partners and through the leveraging of digital technology. Besides that, students will be able to accelerate and deepen their

learning by engaging, enhancing and extending their learning through their innovative projects that promote lifelong learning opportunities. Hence, it is utmost important for practicum supervisors to guide and facilitate student teachers in enabling them to relate and transfer their NPDL learning experiences (particularly 21st century skills which are the six Cs skills) into their teaching practice in schools.

One of the major challenges faced by supervisors in practicum is the quality of practicum supervision. They need to be able to guide student teachers to plan and organise teaching sessions, formulate relevant and achievable learning objectives, and facilitate trainee involvement in the learning process. Experiences that student teachers encounter during the practicum have been shown to be extremely influential in shaping their professional practice (Kania et al., 2020). Since practicum supervision is an integral part of practicum, supervisors are responsible for ensuring that adequate support and orchestration are given to their trainees for the development of their competencies in delivering knowledge and skills in the classroom in innovative ways. They provide tutelage in the form of feedback, guidance, sharing experience, and so on, to the student teachers. In supervision sessions, helping the student teachers to develop their own solutions requires the supervisor to have skills in identifying alternatives and problem-solving. Supervisors will also, at times, need the ability to motivate student teachers. Specifically, supervisors need to develop 21st century skills among their student teachers.

In a nutshell, practicum supervisors play a dual role of a mentor and coach. A mentor is someone who shares their knowledge, skills and/or experience, to help another to develop and grow. A coach is someone who provides guidance to a client on their goals and helps them reach their full potential. Ultimately, both coaching and mentoring are about helping people to get where they want to go by leveraging the experience of the coach or mentor. Due to that, the role of the supervising lecturers is highly complex, encompassing advisor, encourager, giver of feedback, observer, role model and supporter. They can be seen to evolve from directive (mentoring) to non-directive (coaching) in a chart often used to depict the differences (Downey, 2003).

2.   Method

This research adopts a qualitative approach. Data collection comprises content analysis of the case studies obtained from participating lecturers at the end of the pioneer alternative mode of training via a practicum case study writing workshop and subsequent online survey. There are four phases involved in the project study. The phases are listed below:
Phase 1: Developing the training module of the case study writing as alternative mode of training
Phase 2: Pilot study of alternative mode of training
Phase 3: Implementing the alternative mode of training
Phase 4: Evaluation of the alternative mode of training

Prior to this subsequent study, a preliminary study was conducted based on Phase 1 and 2. This paper reports on the pilot study of Phase 3 and Phase 4 of the project study. This study involved two phases as follows:

(i)   Implementing the case study writing workshop as an alternative mode of training and retraining of Practicum supervisors.
(ii)   Evaluating the use of the case study writing as an alternative mode of training and retraining of Practicum supervisors.

The case study writing workshop as an alternative mode of training and retraining of Practicum supervisors was implemented via an online workshop using Google Meet and Google Classroom platform. This study utilised three research tools which are; a case study template, an online questionnaire and follow-up interview. The case study writing template was pilot-tested and improved based on the feedback received from senior practicum supervisors during the preliminary study. The online questionnaire was developed based on the first two research questions as mentioned above. It consisted of structure items (five statements of agreement using 5-point Likert scale) and seven open-

ended items. The questionnaire was administered after the workshop. Additionally, a follow-up interview was conducted with selected lecturers who have supervised Practicum after the workshop.

The names of all participants in this study are pseudonyms. Altogether there were 32 lecturers (9 males, 23 females) who participated in this study. The participants ranged from novice to senior lecturers .Content analysis was used to examine case study writing produced by participating lecturers. These writings were used as data in this study. The process was guided by the 5s Framework (Downey, 2003), thus it was driven by theory and deduction. As the meaning units emerged in the texts, different codes were assigned according to the 5s Framework. Segments of texts, rather than single words or single sentences, were treated as meaningful units. The codes served as heuristic devices to understand the text in new ways. The 5s Framework comprised five major components of reflection, which are reporting, responding, relating, reasoning, and reconstructing (Bain et al., 2002).

In this study, the content analysis was carried out by two coders. Data analysis was an ongoing and iterative process between the co-coders. Each of the two coders had familiarity with the theoretical basis behind the 5s Framework and with the theoretical basis behind the context of the work of the supervising lecturers. The results enabled inferences about the level of reflectiveness in the texts in terms of seeking to analyse an underlying meaning or latent content of the text.

With regard to ethical consideration, a specific informed consent agreement was developed in order to gain the informed consent from the respondents. The agreement include the following items: (i) they are participating in research; (ii) the purpose of the research (without stating the central research question); (iii) the procedures of the research; (iv) the risk and benefits of the research; (v) the voluntary nature of research participation; (vi) the procedures used to protect confidentiality. The informed consent agreement forms are sent to the potential subjects via WhatsApp or email with a clear explanation prior to data collection. They are informed of the purpose of the study and the confidentiality of their responses. They have the right to withdraw at any time when they feel inconvenienced. They were assured of the non-disclosure of individual identity and their liberty from any liability or risk arising from the study or the response. Besides that, they were informed that all documents or part thereof are kept confidential and will not be disclosed to third parties in any form. All who ended up being respondents were in agreement with its content and signed.

3.   Results and Discussion

This section presents the findings based on the data collected at the end of the workshop.

3.1   Respondents' profile

A total of 20 respondents (3 males and 17 females) submitted their case studies at the end of the workshop. The majority of respondents are female (85%) and a fairly equal balance of novice and experienced supervisors. The experiences range from less than 5 years to 25 years. From the 20 respondents, 18 had supervised English Language subjects, one had supervised French Language and one History subject.

3.2   Focusing on 21st century education skills in Practicum Supervision

Based on the 20 case studies collected in this study, the 21st skills ranged across all six Cs which are communication, critical thinking, creative thinking, collaboration, character building and citizenship.
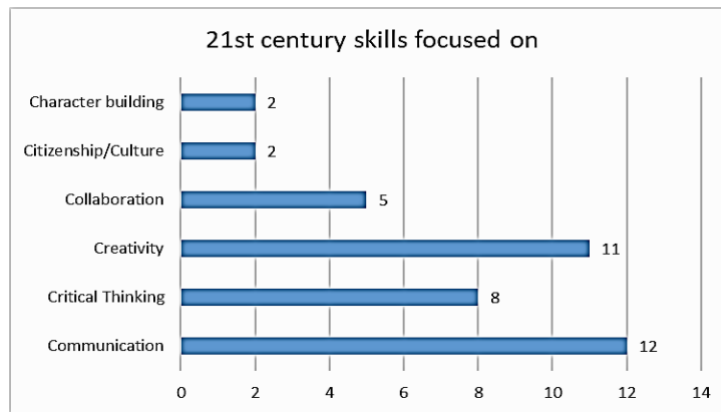
Fig. 1 21st century skills focused on

Figure 1 clearly illustrates that Communication and Creativity skills are dominant focused skills among six Cs of the 21st century skills. They are subsequently followed by Critical Thinking and Collaboration.

3.3 Use of Case Study Writing to Reflect on Practicum Supervision

A few issues related to the trainees were highlighted by the respondents in the case writing. These issues include the ignorance of character building among pupils, lack of critical thinking and creativity, lack of communication with supervising lecturers and cooperating teachers, poor class management, lack of content knowledge, inability to carry out tasks correctly, and inability to achieve learning outcomes. Overall, based on the results of the content analysis, it was found that the case studies comprise all the components in 5s Framework of Bain et al. (2002). Each writing has more than one element of the framework. The majority of the writing, however, was more concerned with reporting and responding than with relating, reasoning, and reconstructing.

Reporting

The first component, reporting, was most prominent in all the writings. The elements of reporting include both positive and negative aspects. The positive aspects are related to enthusiasm, rapport and voice projection whereas the negative aspects include the personal contact, class control, content delivery, communication skills, lesson planning, and use of technology. Below are examples of reporting:
● In the 1st observation, the lesson plan was not attractive and did not fulfil the criteria. The trainee did not consult the lecturer before observation even though advice was given. (Yasmin)
● Nina taught in a semi-urban school where most of the students come from poor family backgrounds. She uses this as an excuse to use BM [Malay language]to explain matters. As such, students are not bothered to listen or learn the meaning of words as they know she will be providing them with direct translations. (Kamala)

Responding

The second element, responding, was shown by the respondents through emotional or personal responses to the situation by making observations, expressing feelings or asking questions. Several reactions were shown corresponding to the reporting or the issues raised. Examples of 'responding' can be shown by some of the excerpts below.
● I did not criticise her, as she has the knowledge and is IT savvy but just doesn't know how to deliver… I encouraged her to be a friend to her pupils and to use teaching aids to enhance her pupils' comprehension of the lesson. (Vijay)
● Show examples of CT questions and activities; Show videos of creative teaching; Suggest to ask 'why' questions when asking pupils to respond or when giving the activities;

Creates activities based on Bloom taxonomy; Show video; Suggests to use differentiated strategies. (Lai)

Relating

At this level, respondents made a connection between the incident or issue and their own skills, experiences, or understanding. For example:
- For face-to-face lessons, no teaching aids, just use a textbook; No creative activities. This is related to the attitude of the trainee. (Juliana)
- Adopt the Community of Wenger, where students share a common interest and to learn from and contribute to the community of practice with their different experiences. (Yani)

Reasoning

At this level, respondents highlighted in detail significant factors underlying the situation, incident or issue and indicated why they are important to an understanding of the situation, incident or issue, as exemplified by the excerpts below.
- Remind the trainee about the importance of both the physical and psychosocial environment of a classroom to create a conducive learning environment. (Ganesan)
- This indicates that face-to-face teaching and learning is more effective since trainees can understand better and more discussions can be made. (Juliana)

Reconstructing

At this level, respondents drew conclusions and developed a future plan based on a reasoned understanding of the situation, incident or issue. Below are excerpts taken from the reflective writing of the respondents.
- The student admitted that she was more confident now to teach younger children. She also texted later in the week that her lessons had better engagement with the children and that the websites for young children teaching and learning ideas shared by supervisors is indeed very useful and beneficial too. (Sunita)
- In the trainee's reflection written, she was indeed happy as her lesson progressed well with her pupils participating and engaging in her activities. The group activity had reduced noise and encouraged strong teamwork. With that she had more time to facilitate weaker pupils from other groups who raised their traffic lights (yellow or red) for help. (Julie)

Based on Downey (2003)'s Coaching Spectrum diagram, the effective supervision (which comprises mentoring and coaching) progresses from the directive phase, namely instructing and telling, into a non-directive phase of learning, namely reflection and raising awareness. Findings indicate concentration on the directive rather than non-directive phase. This finding suggests supervisors do need formal skills in reflective practice as stated earlier. Supervisors should think about observing encounters with their student teachers to see what worked or did not work and what lessons they could take away. In other words, in improving effectiveness in their supervision, supervisors should be relating, reasoning and reconstructing instead of merely reporting and responding to the student teachers' performance. Specific findings pertaining to the focus of 21st century education skills in the Practicum supervision are summarised in Table 1.

Table 1. Degree of agreement* on the 21st century education skills focus via case study write-up

No	Statement	Mean	SD
1	Writing the case study made me realise that 21st century education skills in practicum supervision are very important.	4.08	1.19
2	Writing the case study made me realise that I should have focused more on 21st century education skills in my practicum supervision.	4.0	1.22

Note. Likert scale: 1 = Highly agree, 2 = Agree, 3 = Not sure, 4 = Agree, 5 = Highly agree

The above findings (with a high level of agreement, M = 4.08; SD = 1.19 and M = 4.0, SD = 1.22) clearly indicates the fact that writing the practicum case study allowed the supervising lecturers to become more aware of the importance to focus on 21st century education skills, namely the 6 Cs in their supervision. However, interestingly, one respondent, a novice lecturer with 2 years of experience in practicum supervision rated both statements very lowly at the scale of 1.

3.3.1 Feedback on the implemented Practicum Case Study Writing Workshop

Overall, all participants perceived the workshop positively. Some of the notable comments are as listed below.

● It is a good practice to reflect the strength and weakness identified in the teaching and learning process among the trainee teachers during practicum
● I had an insightful experience.
● Being selective and analytical about the relevant issue/s discussed is key in developing the content for such write-ups.

Some participants found it to be a refreshing new experience. However, two found it to be good but tedious and time consuming.

3.3.2 Enabling/Enhancing Reflective Practice

The responses with regards to the benefits gained in case study writing, concentrated on its immediate effect in enabling or enhancing reflective practice in practicum supervision. Below are some exemplary responses.

● Able to take a step back and take a second look at practices, reflect on actions taken and think of possible ways to improve the practice.
● Able to reflect and find new strategies or techniques to help students overcome difficulties during online teaching and to ease their teaching experience.
● It helps me to reflect on the approach I have applied in scaffolding trainees during their teaching practice. There are other aspects that a supervisor can focus on besides 21st century education skills, for example approaches and coaching styles, to further improve his coaching skills.

Table 2. Degree of agreement* on reflective practice in practicum supervision via case study write-up

No	Statement	Mean	SD
1	Writing the case study helped me to reflect deeply on my practicum supervision.	4.31	0.63
2	Writing the case study helped me to realise the strengths and weaknesses in my practicum supervision.	4.31	0.75
3	Writing the case study helped me to evaluate/ re-evaluate the quality of my practicum supervision.	4.31	0.75

*Note. Likert scale: 1 = Highly agree, 2 = Agree, 3 = Not sure, 4 = Agree, 5 = Highly agree

The above findings (with a high level of agreement, M = 4.31, SD = 0.63 and 0.75) clearly echoed the fact that reflective practice is indeed perceived as a significant benefit. Besides that, other noteworthy feedbacks are as illustrated below.

● It helps to document my thoughts and share with others.
● It portrays real life situations and enables us to find suitable solutions which may be used in
● similar situations in the future.
● Integrated values from other disciplines needed by supervisors such as current pedagogical
● skills, school experience, advanced ICT skills and so on.

Additionally, the novice lecturers found it to be a good reference for beginner practicum supervisors.

3.3.3 Impacts on the participating lecturers' Practicum supervision

Findings of the follow-up interviews conducted after ten months of the workshop indicated the effectiveness of the case study writing in improving their practicum supervision. Findings on three participating lecturers (1 male and 2 females) are presented as evidences.

Ganesan (Male, 15 years of experience in Practicum supervision)
Ganesan found the workshop to be beneficial and useful. He stated "...it was an enriching workshop. I got useful insights, especially through other participants' sharing of their experiences". As a matter of fact, he believes that the workshop enabled him to guide his Practicum student better, especially in handling an inclusive classroom, particularly in the case of a student teacher who was having an autistic pupil in her classroom. In his further sharing of his learning experience concerning Practicum supervision, Ganesan stated that throughout the years, he has learned a lot about supervision through his own experience and also through his colleagues' experiences. He noted that the COVID-19 pandemic which forced lecturers to conduct online classes has impacted his supervision concerning 21st century skills as he has been forced to improve on his teaching methods and strategies in line with the evolving education world. With this development, he feels more enabled to guide his Practicum student by giving more practical and relevant suggestions regarding teaching and learning, especially with regards to ICT in education.

Lai (Female, a novice in Practicum supervision)
Lai conveyed her enthusiasm about the impacts of the workshop. She noted that it was an eye-opener for her as she was able to learn a lot of things about how to write a Practicum Case Study. In her words, "It is also very informative as it gives me a lot of information about 21st century teaching and learning which I could apply to my practicum supervision later." She further asserted that it has definitely made her aware of the 21st century teaching and learning skills that the students need to include in their teaching and that she was able to guide them better after attending the workshop. She added that she has a clearer picture of the components that she has to observe and guide her students in their practicum.

According to her, writing of the case study made her recall how she guided the students and how she could improve on her supervisory skills during practicum.

Julie (Female, 12 years in Practicum supervision)
According to Julie, the workshop attended was a formal platform putting together what practicum supervisors have been doing every practicum. However, she pointed out that due to hectic schedules, it was truly a challenge to apply and implement what had been given. Nevertheless, she found that in a way, it has served as a checklist to what her practicum supervisees have been doing in their lessons, which are planning, executing, and reflecting. She admitted that there was not much change in her supervision as what was provided in the workshop eventually served as a refresher to what she had already been doing. Julie also shared her view about 21st skills. She opined trainees have to conduct lessons through trial-and-error whether or not there are any 21st century skills employed in the lesson. Hence, they will gradually develop more confidence to include 21st century skills in their lessons.
All in all, the post workshop's interview findings echo the benefits of the case study writing among the supervisors. Additionally, they imply further benefits of sharing best practices in supervision through the case studies in order to improve on the quality of practicum supervision. . In the preliminary study, we found that all ten contributors considered that their Practicum case study write-up to be significant and beneficial in improving their Practicum supervision, namely on the possibility of reflecting on their own practices (Ang et al., 2021). Similarly, in this study all twenty workshop participants who have contributed/submitted their case studies found the experience to be beneficial too.

4.   Conclusion

In conclusion, this study reiterates the necessity for reflective practice in practicum supervision. As we have advocated in our preliminary study paper, practicum supervision is mostly dominated by observation and providing feedback to the student teachers, with no emphasis on the self-reflection process (Ang et al., 2021) nor opportunities for sharing of best practices by the supervisors. Hence, as our concluding remark, we advocate the opportunity to promote high quality practicum supervision through reflective practice among practicum supervisors. Reflective practice should not be emphasised solely in training of the student teachers but in developing the teacher educators' quality in the institutes of teaching education in Malaysia. In order to do so, it is of the utmost importance that supervising lecturers should allocate or be allocated a certain amount of time to reflect on their practice, to critically analyse and evaluate their strengths and weaknesses in practicum supervision. Additionally, sharing platforms should also be provided for the sharing of best practices in practicum supervision.

5.   Suggestions

Further studies are recommended in the areas of reflective practice among practicum supervisors and sharing of best practices particularly in practicum supervision We propose a new procedure in planning and implementing practicum supervision which requires supervisors to reflect upon their supervision in order to improve the quality of their supervision.

6.   Co-Author Contribution

The authors affirmed that there is no conflict of interest in this article. Author 1 prepared the framework of the research project, drafted the article and overlooked the write-up of the whole article. All co-authors played their assigned roles, namely carrying out the workshop together and data collection, preparing the literature review, data analysis and interpretation of the results and editing as requested by the Author 1 and whenever required.

7.   Acknowledgements

8. References

Aina, J.K., S.S., & I.A. Garuba (2015). Teacher's effectiveness and its influence on student's learning. *Advances in Social Sciences Research Journal*, *2*(4), 88-95. doi: 10.14738/assrj.24.1082

Al-Jaro, M.S., Asmawi, A., & Abdul-Ghafour, A.Q.K. (2020). Supervisory support received by EFL student teachers during practicum: The missing link. *International Journal of Language and Literary Studies, 2*(4). http://doi.org/10.36892/ijlls.v2i4.437

Allen, J.M., & Wright, S.E. (2013). Integrating theory and practice in the pre-service teacher education practicum. *Teachers and Teaching Theory and Practice, 20*(2), 136-151. https://doi.org/10.1080/13540602.2013.848568

Ang, C.K., Man, A.K., Thirrummurthy, M., Mohd Kashfi, M.J., Kasmawati, B., & Zulkarnain, N.M. (2021). Alternative mode of training practicum supervisors using case study: Developing a case study module for 21st century education skills. *Jurnal Penyelidikan Antarabangsa, 1*(1), 135-142.

Ang, C.K., Ngu, M. K., Man, A.K., Azuar, A.R., Woo, M.W., Nur Ain, W.A., & Hasnah, R. (2018). Reconceptualizing practicum supervision towards construction of 21st century teacher educators. *Jurnal Penyelidikan Ilmu Pendidikan IPGM,* 3, 111-128.

Azam, F., Fauzee, M.S.O., & Daud, Y. (2014). Acursory review of the importance of teacher training: A case study of Pakistan. *Middle-East Journal of Scientific Research, 21*(6), 912-917. doi: 10.5829/idosi.mejsr.2014.21.06.21574

Babu, K.V. (2016). Role for teachers in nation building and future icons. *VNU Journal of Science: Education Research*, 32(4), 53-57.

Bain, J.D., Ballantyne, R., Mills, C., & Lester, N.C. (2002). *Reflecting on Practice: Student teachers' perspectives.* Post Pressed.

Bardach, L., & Klassen, R.M. (2020). Smart teachers, successful students? A systematic review of the literature on teachers' cognitive abilities and teacher effectiveness.," *Educational Research Review*, 30. https://doi.org/10.1016/j.edurev.2020.100312

Brabeck, M.M., Dwyer, C.A., Geisinger, K.F., Marx, R.W., Noell, G.H., Pianta, R.C., & Worrell, F.C. (2014). *Assessing and evaluating teacher preparation programs.* American Psychological Association.

Candal, C.S. (2015). *Great teachers are not born, they are made: Case study evidence from Massachusetts charters.* Pioneer Institute Public Policy Research.

Cogan, M.L. (1973). *Clinical supervision.* Houghton Mifflin.

Downey, M. (2003). *Effective coaching: Lessons from the coach's coach.* 2nd ed. Thomson Texere.

Ersin, P., Atay, D., & Mede, E. (2020). Boosting preservice teachers' competence and online teaching readiness through e-practicum during the COVID-19 outbreak. *International Journal of TESOL Studies, 2*(2), 112-124. https://doi.org/10.46451/ijts.2020.09.09

Fullan, M., & Scott, G. (2014). *New pedagogies for deep learning whitepaper: Education PLUS.* Collaborative Impact SPC.

Fullan, M., Quinn, J.A., & McEachen, J. (2017). *Deep learning: Engaging the world change the world.* Corwin Press.

Hojeij, Z., Baroudi, S., & Meda, L. (2023). Preservice teachers' experiences with classroom management in the virtual class: A case study approach. *Frontiers in Education*, 8. https://doi.org/10.3389/feduc.2023.1135763.

Kania, N., Nurhikmayati, I., & V. (2020). Pre-service mathematics teachers' experiences of teaching practice in function composition. *Journal of Physics: Conference Series 1613,012013*. https://doi:10.1088/1742-6596/1613/1/012013

Khan, F., Fauzee, M.S.O., & Daud, Y. (2015). Significance of teachers and education in promoting national economic development: A case study of Pakistan. *Asian Social Science, 11*(12), 290-296.

Kim, S., Raza, M., & Seidman, E. (2019). Improving 21st-century teaching skills: The key to effective 21st century learners. *Research in Comparative and International Education*, 14(1), 99-117. https://doi.org/10.1177/1745499919829214.

Malik, R.S. (2018). Educational challenges century and sustainable development. *Journal of Sustainable Development Education and Research*. 2(1), 9-20.

Miller, B.S. (2015). *The 6Cs squared version of education in the 21st century.* https://www.bamradionetwork.com/the-6-c-s-squared-version-of-education-in-the-21st-century/

Partnership for 21st Century Learning (P21). (2015). *Partnership for 21st century learning: P21 framework definitions.* https://static.battelleforkids.org/documents/p21/P21_Framework_DefinitionsBFK.pdf

Patel, J. (2018). Role of teachers in nation building. *International Journal of Trend in Scientific Research and Development*, *2*(5), 2086-2089. doi: 10.31142/ijtsrd18247

Pradhan, M. (2014). Perspective of a teacher builder. *Odisha Review*, Sept-Oct, 22-26.

Scheeler, M.C., Budin, S., & Markelz, A. (2016). The role of teacher preparation in promoting evidence-based practice in schools. *Learning Disabilities: A Contemporary Journal, 14*(2), 171-187.