❒ 632

# Quality of mentoring of mentor teachers: Perspective of the trainee teachers

**Mohd Fairuz Jafar[1], Mohd Faiz Mohd Yaakob[2], Ramlan Mustapha[3], Muhammad Noor Abdul Aziz[4], Mat Rahimi Yusof[5], Hapini Awang[6]**
[1,2,4,5]School of Education, College of Art and Science, Universiti Utara Malaysia, Malaysia
[3]MARA University of Technology, Raub Campus, Malaysia
[6]School of Computing, College of Art and Science, Universiti Utara Malaysia, Malaysia

## Article Info

## ABSTRACT

Mentoring by the mentor teachers to the trainee teacher is an important element in the component of professional practice, namely practicum. Mentoring of mentor teachers in this study refers to the quality of guidance given by mentor teachers to trainee teachers. This aspect is seen to have an impact on the success of trainee teachers during the practicum session. However, there are past studies that state that mentor teachers do not provide guidance as required by the trainee teachers. Therefore, this study aimed to examine the quality of mentoring of mentor teachers from the perspective of trainee teachers. This study used a mixed-method approach. Quantitative study was using a questionnaire namely mentor teacher's guidance while utilizing random sampling method was used on a sample of 217 trainee teachers from the Institute of Teacher Education in the northern zone of Malaysia who have undergone the practicum session. The qualitative approach, on the hand involve semi-structured interview with two trainee teachers as the participants. This study found that the quality of guidance of mentor teachers is at a very good level. Quantitative findings are supported by qualitative findings. Four themes were identified from the interview analysis namely; excellent guidance, informative, cooperation and the needs of mentor teachers.

## Corresponding Author:

Mohd Fairuz Jafar
School of Education (SoE), College of Art and Science
Universiti Utara Malaysia
Sintok, 06010 Bukit Kayu Hitam, Kedah, Malaysia
Email: mohdfairuz.edu@gmail.com

## 1. INTRODUCTION

The Education Development Blueprint 2013-2025 [1] in the fourth shift emphasizes the development of the teaching profession as a career of choice. The transformation process intended in Malaysia Education Blueprint 2013-2015 directly emphasized the teacher education program as an important element to produce quality education graduates. Therefore, the teacher education program offered by the faculty of education at Public Universities (PU) and the Institute of Teacher Education (IPG) should be given attention so that the education graduates produced can meet the needs desired by the Ministry of Education Malaysia (MOE). Teacher education programs in PU and IPG in Malaysia must meet the standards set by the MOE with one of the main aspects that need to be implemented is practicum. This is in line with the Professional Circular No. 7/1985 dated 17 June 1985 which requires a component of teaching training to the trainee teachers who follow the program of study in the field of education in any institution that offers

teacher education programs. This government directive is a testament to the government's seriousness towards the development of effective teacher education programs over the past three decades.

The implementation of teaching training differs between one institution and another. Most educational faculties in PU implement the practicum programs in semester 8 while in IPG it is implemented when the trainee teachers are in semester 5 and semester 7 [2]. IPG conducts two practicum sessions for the trainee teachers compared to only once by most PUs in Malaysia. Essentially, the teaching training program serves to provide an opportunity for trainee teachers to experience the real atmosphere of the classroom environment for them to implement content knowledge and pedagogy [3], [4]. The actual environment experienced by the trainee teachers during the practicum is expected to be able to form a superior teacher personality such as being independent, positive, has reflective skills and skilled in problem solving aspects [5], [6]. However, there are some issues related to the practicum when the trainee teachers had stress experienced [7]-[9], the concerns of unsatisfactory mentor teachers, insufficient training duration, the process of supervision and interaction between the school and the educational institution [10]-[12]. Such things need to be considered because the practicum is an important platform for trainee teachers to learn the skills that they need to acquire in real situations [13].

The element of mentoring by the mentor teachers while the trainee teachers undergo the practicum is one of the main aspects in the teaching training program. The aspect of mentoring in the context of teacher education is described as a complex form of interaction. This pattern of interaction leads to professional relationships between mentor teachers and trainee teachers to achieve certain defined goals [14], [15]. The mentoring aspect becomes a form of interpersonal relationships to form one's personality as a whole [16], [17]. The process of mentoring during practicum is a process of individual development to acquire extensive knowledge and enrich skills in the field ventured [18]-[20]. In fact, studies in several fields other than education in some countries [21]-[23] also found that the aspect of mentoring during the training in the real field awards great benefit during the mentoring process through the approach and the trust that exists in the relationship between mentors and trainees. In the context of practicum, the aspect of mentoring is different from supervision. Mentoring involves activities such as providing assistance, building relationships as friends, giving guidance, advising and providing counselling services to trainee teachers. On the other hand, supervision places more emphasis on specific elements such as the role of teachers, assessors and experts [23]. Mentoring emphasizes on the process of giving guidance, giving encouragement, making improvements and giving constructive reprimands to produce better teaching compared to supervision which is more focused on the process of making assessments by lecturers to award marks [24].

The mentor teachers play an important role in helping trainee teachers to practice their knowledge in real teaching situations effectively [25]. The mentors play a role in helping trainee teachers to relate the knowledge of educational theory which they learn at the institute to the environment with students in the classroom [26], implement the knowledge in aspects of classroom management [27] and manage their self-learning for creating adaptation to the authentic learning environment in schools [28]. In fact, the trainee teachers consider that the mentors who give them the opportunity to see the teaching activities implemented by the mentors to be used as a guide as a very valuable experience in the teacher education program. Thus, trainee teachers consider mentors as important characters who are able to influence their teaching style [25], [29]. In addition to that, literature supports the transfer of knowledge from the more experienced mentors to the trainee teachers throughout their teaching practice has a positive impact on their teaching skills [30].

However, the practicum situation that is considered as a complex situation also affects the role of mentor teachers. In some situations, what the mentor teachers intend may be contrary to the intention of the institution which is represented by the supervisor (lecturer). The mentors feel that they have to meet the requirements set by the institution rather than developing the coaching process that they feel is necessary for trainee teachers [31]. Although mentoring is a very important element to produce the quality prospective teachers, some weaknesses in this matter should be given serious attention. Soslau and Raths [32] explain that the trainee teachers expressed their regret according the guidance given by their mentor teachers during the practicum encompasses the aspects of giving feedback, assistance to plan their teaching, poor tutoring on how to implement the assessments and the mentor teachers did not provide the guidance on how to build good relationships with pupils. Supposedly, mentoring aspects become the closest resource to the trainee teachers to play their competencies before becoming the real teacher in the future [33]. In fact, it is an obligation to the mentor teachers to be the best models and to provide the supports to trainee teachers in all aspects of teaching [34], [35].

However, the studies on the role of mentor teachers from the perspective of trainee teachers in the context of teacher training in Malaysia must be conducted because some trainee teachers mentioned that they did not satisfy concerning to the guidance that received from mentor teachers during the practicum. This situation may give the unhealthy impact on teacher training program if we do not find the characteristics of mentoring which preferred by the trainee teachers. During the practicum there is also a conflict between

trainee teachers and the mentors when there is a clash of views between the two parties [36], the mentors did not provide the guidance to plan the lessons [37] and the mentors did not provide assistance which is required during the practicum [38]. Therefore, this study focuses on a further research on the level of quality of mentoring of the mentors during the practicum from the point of view of trainee teachers. Thus, two research questions are posed namely; 1) What is the level of mentoring of the mentors to the trainee teachers during the practicum? and 2) To what extent does the mentoring of the mentors help the teaching skills of the trainee teachers during the practicum? This study through the exploration using the mix method approach is expected to provide a meaningful information to the educational institutions to formulate the strategies to improve the quality of practicum in the future. In fact, this study will guide the prospective mentors to understand the needs of trainee teachers during practicum.

Mentoring aspect shows a very close relationship with the support given to the trainee teachers during the practicum. Thus, the aspect of mentoring provided by the mentors is in line with the role of the Zone of Proximal Development (ZPD) which is found by a Russian theorist named Vygotsky [39] in the theory of social cognitive development. The researchers believe that Vygotsky's social cognitive theory is the basis in this research to study the impact of mentors' guidance on the trainee teacher's competency during the practicum. The researchers would like to assess if the mentoring by the mentors becomes an important factor in improving knowledge and competence of the trainee teachers.

The ZPD is defined as the space between the actual stages of development that an individual can achieve with his own abilities and with the help obtained from others [39]. Assistance obtained from other parties are stated as scaffolding. In the context of practicum, the guidance obtained from the mentor is a form of scaffolding. Vygotsky [39] categorizes an individual's achievement into three parts namely: 1) Individuals can achieve success with their own efforts; 2) Individuals achieve success with the help of others; and 3) Individuals fail to achieve success. In terms of mentoring, assistance or encouragement given by the mentors is a scaffolding element to help trainee teachers to achieve optimal teaching quality.

Based on Vygotsky Social Cognitive Theory, Warford [40] suggests a better approach to explain the role of ZPD in the context of teacher development that called the Zone of Proximal Teacher Development (ZPTD). ZPTD explains two main things. The first is the situation of trainee teachers who can carry out teaching activities on their own effectively without the help of others. The second is the situation of trainee teachers who need help to perform teaching activities better through assistance from others, especially from the mentors [40]. Vygotsky outlined four issues regarding ZPTD among trainee teachers, namely self-assistance, teacher-assisted stage, internalization and recurrence [40]. The first stage of self-assistance is the level where trainee teachers explore their own experiences regarding aspects of teaching through the process of reflection.

Recommendations from mentors are needed by trainee teachers to help them analyse the strengths and weaknesses of the planning and the implementation of their teaching activities. For the teacher-assisted stage, the mentor must provide intervention to the trainee teachers in the form of intensive teaching demonstrations. The third stage is internalization, where the trainee teachers are required to practice the knowledge that they acquire from the guidance provided which covering the aspects of content knowledge and pedagogy. Next, in the fourth stage that called recurrence, the trainee teachers need to be prepared to take on any challenges in their actual teaching in the classroom and apply the theories which they have learned to solve problems that arise.

Based on Vygotsky's discussion of Social Cognitive Theory, the researchers believe that the aspect which needs to be given serious attention by the trainee teachers and the mentors is reflection. The practice of critical reflection should be given guidance to trainee teachers when they face the real situations during teaching practice because the experience gained by trainee teachers can be integrated with the theoretical knowledge that they have learned to produce better quality teaching. This aspect of the integration of experience and theory can also be associated with the equilibration process [41] when trainee teachers accommodate the information received during teaching practice to a new concept [42].

## 2. RESEARCH METHOD

This research used a mixed-method approach called explanatory sequential design [43]. Through this study approach, the quantitative data was analysed first and subsequently followed by qualitative data analysis. The concept of quantitative data triangulation with qualitative data was implemented to enrich the research data so that the findings obtained can be explained in more depth. The integration of quantitative and qualitative data in the form of a mixed methods study has great potential to strengthen the rigor and enrich the analysis and findings of the quality of mentors in this study. The quantitative findings are explained in more detail through the qualitative data. The results from instrument data the mentors' quality

can be explored further with qualitative interview to better understand how the personal experiences of individuals match up to the instrument results.

The quantitative survey in this study used a set of instruments called the quality of mentoring by mentor teachers [44] which was adapted from [45]. The questionnaire was developed based on the model which was introduced by Glickman, Gordon, and Ross-Gordon [46]. The questionnaire had four sub-constructs with a total of 25 items. A five-point Likert scale with a range between a value of 1 (very bad) and a value of 5 (very good) was used. The sub-constructs and distribution of the questionnaire items are shown in Table 1.

Table 1. Sub-constructs and number of items of the quality of mentoring

| Sub-constructs | Number of items |
|---|---|
| Mentoring via directed behavior | 8 |
| Mentoring via informative directed behavior | 5 |
| Mentoring via collaborative behavior | 6 |
| Mentoring via non directed behavior | 6 |

The process of determining the validity and reliability of the instrument was implemented before the study of the actual sample was performed. The content validity was conducted by researchers using the content validity index (CVI) method. The value of each item was determined through an expert content analysis of seven experts. Each item specified by a panel of experts obtained a value exceeding 0.78. The content validity for each item was based on the i-CVI cut off point proposed by Lynn [47] which is 0.78, while for the overall content validity of the s-CVI construct, the cut-off point used is .86 as suggested by Smith, Thurkettle, and F Cruz [48]. Therefore, none of the items from this questionnaire were dropped. The second process was pre-test, which was conducted to identify whether the items in the questionnaire used could be well understood by the respondents [49]. For this process, we gathered ten trainee teachers who shared the same characteristics as the actual sample of the study to be interviewed in groups. Pre-test focuses on five aspects as suggested by Kumar, Talib, and Ramayah [50] namely term accuracy, accuracy of question sequence, clear understanding by respondents of all questions, essential to add questions or drop existing questions and the clarity aspects in the items that used. The third process before the actual study was to determine the reliability of the measuring instrument used. There are 50 respondents who had similar characteristics to the actual study sample answered the questionnaire. The reliability analysis was determined based on Cronbach's analysis. Each sub-construct in the questionnaire obtained the Cronbach alpha value between 0.79 to 0.88 which indicated that the level of reliability is high.

The sample of the study for quantitative measurement was 217 trainee teachers who were undergoing the practicum in the northern zone of Malaysia, namely Kedah, Perlis and Penang. The data collection process was carried out at random. The list of trainee teachers was obtained from the IPG and a sampling framework was created. A random draw method was made to select the study sample. Then, the data were analysed using IBM Statistics software version 25. Descriptive analysis was used to answer the research questions. The interpretation of the mean score value is as in Table 2.

Table 2. Interpretation of the quality of mentoring

| Mean score | Interpretation of the quality of mentoring |
|---|---|
| 1.00-1.80 | Very bad |
| 1.81-2.60 | Bad |
| 2.61-3.40 | Moderate |
| 3.41-4.20 | Good |
| 4.21-5.00 | Very good |

In support to the data obtained earlier, the researchers conducted semi-structured interviews. The interview questions were prepared and given to two field experts to see the coherence between the questions provided and the objectives of the study. This process was done to ensure validity determination in qualitative studies [51], [52]. After the interview questions were validated by the experts, a pilot study was conducted with a trainee teacher. The pilot study allowed us to see the suitability, accuracy, reliability, usability and confusing questions in the interview protocol before going down to the field [53]. The results of the pilot study interview were analysed by looking at the alignment between the respondents' answers and the objectives of the study. This process was implemented by the researchers and reviewed by two experts in the field of education and qualitative research to ensure the reliability of the interview protocol. Two trainee

teachers who were undergoing the practicum were selected in the actual study to be interviewed. The recording of the interview was transcribed verbatim and then analysed by the researchers to identify the main themes regarding the mentoring quality of the mentors.

## 3. RESULTS AND DISCUSSION

Table 3 shows the results of descriptive analysis for each sub-construct that measures the quality level of mentoring by mentor teachers. Based on the mean score obtained in this study, the level of mentoring to trainee teachers during practicum is at a very good level (M=4.24, SD=0.46). The analysis based on the sub-constructs found that the mentoring through informative behavior (M=4.25, SD=0.53) and mentoring via collaborative behavior (M=4.25, SD=0.66) processed the highest mean scores. The mentoring via directed behavior (M=4.24, SP=0.59) and the mentoring via non directed behavior (M=4.24, SP=0.58) obtained the same mean score value. Table 4 shows the result of qualitative data. Four main themes emerged from the interview analysis.

Table 3. Mean score of the level of quality mentoring

| Sub constructs | Mean score | Standard deviation |
|---|---|---|
| Mentoring via directed behavior | 4.24 | 0.59 |
| Mentoring via informative behavior | 4.25 | 0.53 |
| Mentoring via collaborative behavior | 4.25 | 0.66 |
| Mentoring via non directive behavior | 4.24 | 0.58 |
| Mentoring (as whole) | 4.24 | 0.46 |

Table 4. The themes and participants' response

| Main themes | Participants' response |
|---|---|
| Excellence mentoring | Trainee teacher 1: <br> *"I like the way the guidance of the mentor. He always reminded me of the importance of writing a lesson plan.* **Excellence** *mentoring"* <br> *"The mentor teacher is very friendly with me. This makes me feel very comfortable. A **very good** mentoring that I get"* <br> *"I always meet the mentor to show my lesson plan. He never turned down to review my lesson plan. For me, the guidance given is **very good**"* <br> Trainee teacher 2: <br> *"I have fun with the mentor at this school. She is a teacher who masters the content of the subject well. An **excellence** mentoring process"* <br> *"I gained various new knowledge during my time with the mentor. She is also very kind and hardworking. She always shared new knowledge with me. I think she is **very good** at guiding me and other fellow teachers."* |
| Informative | Trainee teacher 1: <br> *"The mentor is **very skilled with the content** of the subject. He reprimanded me for my mistakes when I was wrong in delivering lessons to the students"* <br> *"He showed me how to apply the concept of 21st century of teaching"* <br> Trainee teacher 2: <br> *"My mentor is an **expert teacher** in the field, she is an excellent teacher, so she really likes to share with me the interesting teaching methods"* <br> *"The mentor showed me **how to obtain additional information** on the content of the teaching and how to adapt the content of the teaching to the activities used"* |
| Collaboration | Trainee teacher 1: <br> *"He gave me **the opportunity to give opinion and we discussed** how to make the lesson more interesting"* <br> *"The mentor **invited me to produce teaching aids together**"* <br> Trainee teacher 2: <br> *"The mentor **helped me to prepare the teaching materials** when the supervisor wanted to evaluate my teaching"* <br> *"The mentor **often invites me** to be with her to prepare teaching materials"* |
| Mentoring Guidelines | Trainee teacher 1: <br> *"The mentor teacher told me, **if there is a practicum guidance handbook** for the mentor so it is better so that they are clearer with the requirements of the institution"* <br> *"Only one-time practicum briefing. **It is not enough** as a guide for the mentor to implement better guidance because there is no clear guide"* <br> Trainee teacher 2: <br> *"If possible, the institution should provide a specific guideline for the mentor"* <br> *"The guidance teacher asked me to suggest the institute to organize a special workshop on practicum mentoring for the mentor"* |

The quality of mentoring by mentor teachers to the trainee teachers who undergo the practicum is at a very good level based on the data obtained in this study. The researchers believe that this excellent quality of mentoring is due to the ability of teachers selected as mentor teachers by administrators in their respective schools to have excellent knowledge in the subjects taught and teaching methods. In fact, there are mentor teachers chosen by the administrators who were awarded as the excellent teachers by the ministry of education. The selection of mentors was also based on the work procedure instructions which was set out in the MS ISO 9001: 2008 LAM-PT 05-08 Working Procedure Manual which requires the mentor to be experienced and qualified in the major option [54].

The mastery of the subject content becomes an important element that has an impact on the performance of the guidance provided. This is in line with the view of Azure [55] that teachers who have very good knowledge in the content of the subject have a very high positive correlation in the ability to provide guidance to trainee teachers. Aspects of mastery of subject content among guidance teachers are not limited to the content of the subject alone but include skills in pedagogy and the ability to design assessment activities [56]. The knowledge in the aspect of assessment is also important for an educator so that issues related to the validity of an assessment can be addressed such as the problem of grade inflation among students [57].

Through the findings of the study, mentoring towards the trainee teacher is very good through the informative directed behaviour. This explains to us that trainee teachers strongly believe in the ability of the mentor to assist them in implementing teaching practice effectively [58]. In fact, in this context, this study shows that the mentor involved have expertise in solving the problem faced by trainee teachers. Mentoring trainee teachers through collaborative behaviour proves the good cooperation between trainee teachers and mentor in the context of problem solving. The collaborative mentoring provides an opportunity for the trainee teachers to present their views to the mentor in finding the best teaching strategies. Even the trainee teachers feel more comfortable when their ideas are appreciated. The aspect of good relationship between trainee teachers and the mentor is an element to good guidance which can be implemented. This is in line with the views of Hobson, *et al.* [59] that good relationship between mentor and trainee teachers is the key in any mentoring process. Thus, the nature of tolerance and celebrating differences of opinion between the two parties will make the coaching process more effective [59]. The attitude of the mentor provides an opportunity for the trainee teachers to share information can reduce the stress which they face during the practicum [60].

The quality of mentoring while guiding the trainee teachers is also contributed by the way they communicate with the trainee teachers which includes elements of mutual engagement, participation in decision making (join enterprise) and shared repertoire [61]. Mutual engagement in decision making is the basis for making a quality mentoring. The study by Bloomfield [62] explains that to get mutual agreement in an issue is sometimes a complex process, but a good way of communicating by taking into account the feelings of both parties will result a good attitude of helping each other. This is in line with Aspfors and Bondas [63] who emphasize that effective communication will create a positive environment in the relationship between the mentor and the trainee teachers. Effective communication also contributes to the quality of mentoring when the mentor can successfully create the opportunities for trainee teachers to link existing knowledge, current experiences and aspirations of the mentors to produce the best teaching expected [64]. In addition, the ability of the mentor to provide the support in terms of the pedagogical knowledge and the emotional management also helps to make the guidance process done effectively. The mentors can use the power that they have to encourage the trainee teachers to appreciate the school culture and influence them to develop the professional identity of a good future teachers [65].

However, based on the findings obtained from the interview, the mentor expects the institute to provide a clear guideline to assist them in implementing mentoring during the practicum. Supervising teachers also expect a better relationship between the school and the institution for them to obtain information about the intentions of the institution in terms of guiding the trainee teachers during the practicum. In fact, the mentors need specific modules in implementing guidance more effectively. The researchers still do not fine the specific model or module which focuses on the mentoring of trainee teachers during the practicum especially in Malaysian education environment.

## 4. CONCLUSION

The mentoring of mentor teachers during practicum is an important form of assistance to support the teacher education programs to produce quality prospective teachers. Therefore, the quality of mentoring needs to be given attention. This study has clearly explained the quality level of mentoring of the mentors from the perspective of trainee teachers. In fact, the needs for the mentors in implementing guidance is also obtained from this study. Further studies need to develop a specific model to be used as a reference in

developing the mentoring module for the mentors to guide the trainee teacher. To date, there is no specific model that explains the aspects that need to be emphasized to be used as a guide by the teacher education institutions and the mentor to implement the best guidance process for trainee teachers during the practicum.

## REFERENCES

[1] Kementerian Pendidikan Malaysia, *Executive summary Malaysia education blueprint 2013-2025*. Putrajaya: Kementerian Pendidikan Malaysia, 2013.

[2] Institut Pendidikan Guru Malaysia, *Buku panduan akademik Program Ijazah Sarjana Muda dengan Kepujian*. Cyberjaya: Institut Pendidikan Guru Malaysia (IPGM), 2018.

[3] C. Bezzina and J. Michalak, "Preparing Student Teachers for Teaching Practicum," in *Becoming a Teacher Educator*, Netherlands: Springer, 2009.

[4] S. Leshem and R. Bar-hama, "Evaluating teaching practice," *ELT J.*, vol. 62, no. 3, pp. 257–265, 2008, doi: 10.1093/elt/ccm020.

[5] H. Alkharusi, A. M. Kazem, and A. Al-Musawai, "Knowledge, skills, and attitudes of preservice and inservice teachers in educational measurement," *Asia-Pacific J. Teach. Educ.*, vol. 39, no. 2, pp. 113–123, 2011, doi: 10.1080/1359866X.2011.560649.

[6] S. R. Hodge, R. Davis, R. Woodard, and C. Sherrill, "Comparison of practicum types in changing preservice teachers' attitudes and perceived competence," *Adapt. Phys. Act. Q.*, vol. 19, no. 2, pp. 155–171, 2002.

[7] M. Pillen, D. Beijaard, and P. Den Brok, "Tensions in beginning teachers' professional identity development, accompanying feelings and coping strategies," *Eur. J. Teach. Educ.*, vol. 36, no. 3, pp. 240–260, 2013, doi: 10.1080/02619768.2012.696192.

[8] J. Gustems-Carnicer and C. Calderón, "Coping strategies and psychological well-being among teacher education students: Coping and well-being in students," *Eur. J. Psychol. Educ.*, vol. 28, no. 4, pp. 1127–1140, 2013, doi: 10.1007/s10212-012-0158-x.

[9] R. Murray-Harvey, P. T. Slee, M. J. Lawson, H. Silins, G. Banfield, and A. Russell, "Under Stress: The concerns and coping strategies of teacher education students," *Eur. J. Teach. Educ.*, vol. 23, no. 1, pp. 19–35, 2000, doi: 10.1080/713667267.

[10] F. Wang and A. Clarke, "The practicum experiences of English Language Major student teachers during a period of profound curriculum reform in China," *Int. J. Educ. Dev.*, vol. 36, pp. 108–116, 2014, doi: 10.1016/j.ijedudev.2013.10.001.

[11] E. Walton and L. Rusznyak, "Pre-service teachers' pedagogical learning during practicum placements in special schools," *Teach. Teach. Educ.*, vol. 36, pp. 112–120, 2013, doi: 10.1016/j.tate.2013.07.011.

[12] J. M. Allen, "Stakeholders' perspectives of the nature and role of assessment during practicum," *Teach. Teach. Educ.*, vol. 27, no. 4, pp. 742–750, 2011, doi: 10.1016/j.tate.2010.12.004.

[13] D. Maskit and L. Orland-Barak, "University–school partnerships: student teachers' evaluations across nine partnerships in Israel," *J. Educ. Teach.*, vol. 41, no. 3, pp. 285-306, 2015, doi: 10.1080/02607476.2015.1046265.

[14] C. M. Fairbanks, D. Freedman, and C. Kahn, "The role of effective mentors in learning to teach," *J. Teach. Educ.*, vol. 51, no. 2, pp. 102–112, 2000.

[15] A. Roberts, "Mentoring revisited: A phenomenological reading of the literature," *Mentor. Tutoring: Partnership in Learning*, vol. 8, no. 2, pp. 145–170, 2000, doi: 10.1080/713685524.

[16] A. A. Smith, "Mentoring for experienced school principals: professional learning in a safe place," *Mentor. Tutoring Partnersh. Learn.*, vol. 15, no. 3, pp. 277–291, 2007, doi: 10.1080/13611260701202032.

[17] B. R. Ragins and K. E. Kram, *The Handbook of Mentoring at Work: Theory, Research, and Practice*. Los Angeles: Sage Publication, 2007.

[18] E. Ralph and K. Walker, "The promise of adaptive mentorship©: What is the evidence?" *Int. J. High. Educ.*, vol. 2, no. 2, pp. 76–85, 2013, doi: 10.5430/ijhe.v2n2p76.

[19] E. Ralph and K. Walker, "Adaptive mentorship," *Contemp. Issues Educ. Res.*, vol. 7, no. 3, pp. 221–226, 2014. [Online]. Available: http://eric.ed.gov/?id=EJ1073246.

[20] E. G. Ralph and K. D. Walker, "Enhancing mentors' effectiveness: The promise of the 'adaptive mentorship© Model," *McGill J. Educ.*, vol. 45, no. 2, pp. 205–218, 2010, doi: 10.7202/045604ar.

[21] K. C. Barlish and C. Traylor, "Career paths and development: Actions and examples from the heavy civil sector," *Pract. Period. Struct. Des. Constr.*, vol. 19, pp. 2–7, 2014, doi: 10.1061/(ASCE)SC.1943-5576.0000185.

[22] S. Johansson-Fua, K. Sanga, K. Walker, and E. Ralph, "Mentorship in the professions: A perspective from Tonga Seu'ula," *Int. J. Mentor. Coach.*, vol. 9, no. 2, pp. 19–37, 2011, doi: 10.1177/0278364914543793.

[23] L. Bray and P. Nettleton, "Assessor or mentor? Role confusion in professional education," *Nurse Educ. Today*, vol. 27, no. 8, pp. 848–855, 2007, doi: 10.1016/j.nedt.2006.11.006.

[24] M. F. Jafar, S. Hasan, and A. Yusof, "The influence of lecturer's supervision aspect and peer observation of teaching aspect on trainee teachers' self-efficacy: a structural model," *J. Psikol. Malaysia*, vol. 31, no. 3, pp. 120–136, 2017.

[25] A. Clarke, V. Triggs, and W. Nielsen, "Cooperating teacher participation in teacher education," *Rev. Educ. Res.*, vol. 84, no. 2, pp. 163–202, 2014, doi: 10.3102/0034654313499618.

[26] K. Zeichner, "Rethinking the connections between campus courses and field experiences in college and university based teacher education," *J. Teach. Educ.*, vol. 61, no. 1–2, pp. 89–99, Jan. 2010, doi: 10.1177/0022487109347671.

[27] S. M. Wilson, "Professional development for science teachers," *Science*, vol. 340, no. 6130, pp. 310–313, Apr. 2013, doi: 10.1126/science.1230725.

[28] B. Avalos, "Teacher professional development in teaching and teacher education over ten years," *Teach. Teach. Educ.*, vol. 27, no. 1, pp. 10–20, 2011, doi: 10.1016/j.tate.2010.08.007.

[29] L. M. Anderson and J. A. Stillman, "Student teaching's contribution to preservice teacher development," *Rev. Educ. Res.*, vol. 83, no. 1, pp. 3–69, Mar. 2013, doi: 10.3102/0034654312468619.

[30] K. Burn and T. Mutton, "A review of 'research-informed clinical practice' in initial teacher education," *Oxford Rev. Educ.*, vol. 41, no. 2, pp. 217–233, Mar. 2015, doi: 10.1080/03054985.2015.1020104.

[31] A. Becher and L. Orland-Barak, "Integrating social activity theory and critical discourse analysis: a multilayered methodological model for examining knowledge mediation in mentoring," *Int. J. Qual. Stud. Educ.*, vol. 29, no. 4, pp. 498–519, Apr. 2016, doi: 10.1080/09518398.2015.1063732.

[32] E. Soslau and J. Raths, "Problems in student teaching," *J. Teach. Learn.*, vol. 11, no. 1, pp. 20–28, 2017, doi: 10.22329/jtl.v11i1.4612.

[33] L. Bird and P. Hudson, "Investigating a model of mentoring for effective teaching," *J. Teach. Eff. Student Achiev.*, vol. 2, no. 2, pp. 11–21, 2015.

[34] L. Cakir, "Mentoring in gifted student's education and a model suggestion," *Educ. Process Int. J.*, vol. 5, no. 1, pp. 76–90, 2016, doi: 10.12973/edupij.2016.51.6.

[35] S. Galamay-Cachola, M. C. M. Aduca, and F. C. Calauagan, "Mentoring experiences, issues, and concerns in the student-teaching program: Towards a proposed mentoring program in teacher education," *IAFOR J. Educ.*, vol. 6, no. 3, pp. 7–24, 2018, doi: 10.22492/ije.6.3.01.

[36] D. Chimhenga, "Student-teachers' perspective of mentoring practices during their practicum teaching in Zimbabwean Schools," *Glob. J. Adv. Res.*, vol. 3, no. 5, pp. 405–410, 2016.

[37] S. K. Clark and D. Byrnes, "Through the eyes of the novice teacher: perceptions of mentoring support," *Teach. Dev.*, vol. 16, no. 1, pp. 43–54, 2012, doi: 10.1080/13664530.2012.666935.

[38] M. F. Ishak, S. Sabilan, S. M. Lip, Z. N. Rashed, and S. H. Sulaiman, "Persepsi guru pelatih terhadap konteks & proses latihan mengajar/praktikum program diploma perguruan, Fakulti Pendidikan Kolej Universiti Islam Antarabangsa Selangor," *J. Pendidik. Fak. Pendidik.*, vol. 3, no. 2, pp. 12–27, 2015.

[39] L. Vygotsky, *Mind in society: The development of higher psychological processes*. Harvard University Press, 1978.

[40] M. K. Warford, "The zone of proximal teacher development," *Teach. Teach. Educ.*, vol. 27, no. 2, pp. 252–258, 2011, doi: 10.1016/j.tate.2010.08.008.

[41] J. Piaget, *Psychology and epistemology: Towards a theory of knowledge*. Harmondsworth: Penguin University Books, 1972.

[42] A. J. Reiman, "The evolution of the social roletaking and guided reflection framework in teacher education: recent theory and quantitative synthesis of research," *Teach. Teach. Educ.*, vol. 15, no. 6, pp. 597–612, 1999, doi: 10.1016/s0742-051x(99)00016-5.

[43] J. D. Creswell and J. W. Creswell, *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publication, 2017.

[44] M. F. Jafar, "Pengaruh faktor peramal terhadap efikasi kendiri guru pelatih di Institut Pendidikan Guru Malaysia," Unpublished Thesis, Universiti Sains Malaysia, 2019.

[45] S. I. S. Mustapa, "Amalan dan Pendekatan Bimbingan Pengajaran Pensyarah dan Guru Pembimbing dalam Program Mentoran Praktikum dan Hubungannya dengan Kualiti Guru Pelatih," Unpublished Thesis, Universiti Kebangsaan Malaysia, 2014.

[46] C. D. Glickman, S. P. Gordon, and J. M. Ross-Gordon, *Supervision and instructional leadership: A development approach*. New York: Pearson, 2007.

[47] M. R. Lynn, "Determination and quantificatiom of conten validity," *Nursing Research*, vol. 35, no. 6. pp. 382–385, 1986, doi: 10.1097/00006199-198611000-00017.

[48] A. J. Smith, M. A. Thurkettle, and F. A. Dela Cruz, "Use of intuition by nursing students: Instrument development and testing," *J. Adv. Nurs.*, vol. 47, no. 6, pp. 614–622, 2004, doi: 10.1111/j.1365-2648.2004.03149.x.

[49] J. Blair and F. G. Conrad, "Sample size for cognitive interview pretesting," *Public Opin. Q.*, vol. 75, no. 4, pp. 636–658, 2011, doi: 10.1093/poq/nfr035.

[50] M. Kumar, S. A. Talib, and T. Ramayah, *Business research methods*. Selangor, Malaysia: Oxford University Press, 2013.

[51] C. Houghton, D. Casey, D. Shaw, and K. Murphy, "Rigour in qualitative case study research," *Nurse Res.*, vol. 20, no. 4, pp. 12–17, 2013.

[52] W. Suter, "Qualitative data, analysis, and design," in *Introduction to Educational Research: A Critical Thinking Approach*. United States: SAGE Publications, Inc., 2014, pp. 342–386.

[53] S. B. Merriam and E. J. Tisdell, *Qualitative research: A guide to design and implementation*. John Wiley & Sons, 2015.

[54] Institut Pendidikan Guru Malaysia, *Manual Prosedur Kerja Pelaksanaan Praktikum MS ISO 9001:2008 (LAM-PT-05-08)*. Kuala Lumpur: Kementerian Pendidikan Malaysia, 2014.

[55] J. A. Azure, "Influence of the pedagogical content knowledge of mentor teachers and college tutors to classroom practice of student teachers," *Am. J. Educ. Res.*, vol. 3, no. 10, pp. 1216–1223, 2015.

[56] B. Achinstein and B. Fogo, "Mentoring novices' teaching of historical reasoning: Opportunities for pedagogical content knowledge development through mentor-facilitated practice," *Teach. Teach. Educ.*, vol. 45, pp. 45–58, 2015, doi: 10.1016/j.tate.2014.09.002.

[57] R. Mustapha, Z. M. Som, M. F. Jafar, A. Shidki, A. Sarkowi, and S. Sulaiman, "Grade inflation in higher education: A guidance for future research and solutions," *Int. J. Psychosoc. Rehabil.*, vol. 24, no. 8, pp. 3583–3595, 2020, doi: 10.37200/IJPR/V24I8/PR280377.

[58] C. D. Glickman, S. P. Gordon, and J. M. Ross-Gordon, *Supervision of Instructional Leadership: A developmental approach*, 8th ed. Boston: Allyn & Bacon, 2009.

[59] A. J. Hobson, P. Ashby, A. Malderez, and P. D. Tomlinson, "Mentoring beginning teachers: What we know and what we don't," *Teach. Teach. Educ.*, vol. 25, no. 1, pp. 207–216, 2009, doi: 10.1016/j.tate.2008.09.001.

[60] P. Danyluk, "The role of the prepracticum in lessening student teacher stress: Student teachers' perceptions of stress during practicum," *Action Teach. Educ.*, vol. 35, no. 5–6, pp. 323–334, 2013, doi: 10.1080/01626620.2013.846148.

[61] L. Sheridan and M. Young, "Genuine conversation: The enabler in good mentoring of pre-service teachers," *Teach. Teach. Theory Pract.*, vol. 23, no. 6, pp. 658–673, 2017, doi: 10.1080/13540602.2016.1218327.

[62] D. Bloomfield, "Emotions and 'getting by': A pre-service teacher navigating professional experience," *Asia-Pacific J. Teach. Educ.*, vol. 38, no. 3, pp. 221–234, 2010, doi: 10.1080/1359866X.2010.494005.

[63] J. Aspfors and T. Bondas, "Caring about caring: newly qualified teachers' experiences of their relationships within the school community," *Teach. Teach.*, vol. 19, no. 3, pp. 243–259, Jun 2013, doi: 10.1080/13540602.2012.754158.

[64] A. Ambrosetti, B. A. Knight, and J. Dekkers, "Maximizing the potential of mentoring: A framework for pre-service teacher education," *Mentor. Tutoring Partnersh. Learn.*, vol. 22, no. 3, pp. 224–239, 2014, doi: 10.1080/13611267.2014.926662.

[65] S. Shields and M. Murray, "Beginning teachers' perceptions of mentors and access to communities of practice," *Int. J. Mentor. Coach. Educ.*, vol. 6, no. 4, pp. 317–331, 2017, doi: 10.1108/IJMCE-01-2017-0004.