

EARLY EXPERIENCE OF ICT INTEGRATION IN TEACHING: EXPLORING THE PERCEPTIONS OF THE ROLES OF COOPERATING TEACHER

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ABSTRACT

The use of ICT has become a priority in education with the huge investment placed on initiatives related to ICT. Many studies has also highlighted the importance of field experience in teacher education program to integrate ICT effectively in the classroom. Support from the cooperating teacher has the most significant influence on the development of pre-service teachers during field experience. However, the level of support given varied from the roles expected. This study focuses on the roles of the cooperating teacher as perceived by the pre-service teachers and the cooperating teachers themselves. A case study with embedded cases of seven pre-service teachers and six cooperating teachers at three secondary schools was employed using interviews for data collection. The findings of this study confirmed the different levels of support given to the pre-service teachers with regard to their use of ICT during field experience. Results indicated that both pre-service teachers and cooperating teachers have identified specific roles that each must engage in to strengthen their relationship. These roles include having the cooperating teacher as a role model, evaluator, mentor and peer to the pre-service teachers. This study was limited in that it was designed as a case study, and thus, limits the generalizability of the findings to other contexts. Therefore, further research into the practice of a larger sample of Malaysian pre-service teachers and cooperating teachers may reveal variations of practice as well as enabling greater confirmation and generalisation of these findings. Although the cooperating teachers in general, do not use the ICT in their teaching, it is recommended that they support and give the opportunity to the pre-service teachers to enhance their ICT knowledge and skill. Teachers also need to be aware and clear about their responsibilities before, during and after the

supervision period. To establish this, more training in supervising the pre-service teachers which includes the use of ICT in teaching should be organised.

Keywords: ICT integration, field experience, pre-service teachers, cooperating teacher.

1.0 INTRODUCTION

Field experience is an essential component in the preparation of preservice teachers to establish practices they will use in future settings (Thompson, Hagenah, Lohwasser & Laxton, 2015; Salehi & Salehi, 2012). Based on the theory of constructivist learning, students can increase their knowledge and skills by being able to build on their existing knowledge with ‘hands on’ learning experiences (Moore, 2003, p. 33). Therefore, pre-service teachers should not only be able to build on their existing learning experiences during field experience but also add more to their overall learning experience. Likewise, field experience is equally important in terms of creating a positive attitude among teachers who are required to make use of technology in teaching (Bahr et al., 2004). Gaining field experience is another way of preparing pre-service teachers to teach in schools. Basically, the term “field experience” is often used interchangeably with other terms such as: “classroom observation”, “practice teaching”, and/or “student teaching” (Hunt, 1995, p. 37). It means that field experience is gained through real-life exposure to teaching a large group of students inside or outside the vicinity of a classroom. For this reason, within such field experience student teachers in the 21st century are also likely to gain experience with ICT in classrooms that enhance their understanding of the complex interaction of digital technologies with content and pedagogical knowledge (Compton & Davis 2010).

Utilizing good support during field experience is crucial in meeting the need for the development of prospective teachers. A number of studies have identified the cooperating teacher as the most significant influence on the development of pre-service teachers during field experience (Killian, & Wilkins, 2009; Haigh & Ward, 2004). Killian and Wilkins (2009), recommend that selection of cooperating teachers includes sufficient teaching experience and successful supervision of prior pre-service teachers. Killian and Wilkins (2009), also suggest that pre-service teachers who were placed with highly effective teachers gained more confidence in teaching. Palmer (1998), stated that good teachers “must be truly present in the classroom, deeply engaged with their students and their subject, and able to weave an intricate web of connections” so that pre-service teachers and students could benefit more from the collaboration/partnership. Pre-service teachers can receive adequate support and added knowledge from their cooperating teacher or advisor during field experience (Rozelle & Wilson, 2012; Seferoglu, 2000). Furthermore, the continuous

practice and exposure to the use of teaching technologies is the best solution in terms of increasing pre-service teachers' knowledge, skills, and self-confidence in the use of more advanced technologies in teaching (Zhou & Zhang, 2011; Markauskaite, 2007). A number of studies have been conducted in Malaysia in order to understand the dilemma faced by pre-service teachers during their teaching practices (Ong et al. (2004). Pre-service teachers faced challenges in communicating with their cooperating teachers due to cooperating teachers' heavy workloads (Md Yunus, et.al, 2010).

Several studies have reported the importance of providing a technology-rich environment for pre-service teachers during field experience (Dawson, 2006; Niess, 2005; Damon, Steven, Briant, Valerie & Linda, 2004). However, limited ICT resources contribute to the minimal use of ICT during field experience. Furthermore, the failure to integrate technology during field experiences was not influenced by the complexity of the context only, but also the challenge of knowledge transfer (Dawson & Dana, 2007), and the associate teacher's skill and knowledge of ICT integration in teaching (Niess, 2005). Several studies explained that due to the "shortage of teachers", most of the currently employed teachers are already overloaded with work (Khan, Hasan, & Clement, 2012). For this reason, most school teachers will have no time to create a new strategy on how they can effectively incorporate the use of ICT with the course curriculum (Khan, Hasan, & Clement, 2012; Afshari et al., 2009). Thus, it is another possible barrier to a successful supervision in relation to the integration of ICT in class (Salehi & Salehi, 2012).

Purposes

This study focuses on the roles of the cooperating teacher as perceived by the pre-service teachers and the cooperating teachers themselves. We seek to answer: 1) What are pre-service teachers' perceptions of cooperating teacher's roles; and, 2) What are cooperating teachers' belief about the role of the cooperating teacher?

2.0 METHODOLOGY

The study employed a multiple case study design (Yin, 2009), which utilizes the technique of interview with seven pre-service teachers and six cooperating teachers at three secondary school in Kedah during their teaching practice. Focusing on multiple cases allowed the researcher to explore the situation of pre-service teachers' experience whilst also recognizing the complexities of the context. In this study, 'purposive sampling' (Simons, 2009), is used in order to facilitate in-depth investigation. The interviews, based on a semi-structured interview guide, were conducted three times, at the beginning of field experience, during field experience and after field experience. Researchers employed member check and peer validation strategies in order to demonstrate the credibility of the findings (Merriam, 1998). To maximize variation among the chosen sample, the researcher selected seven pre-service teachers (3 pre-service teachers with ICT major, 2 pre-service teachers with ICT minor and 2 pre-service teachers with non-ICT major or minor) to participate in the study. All seven pre-service teachers who had been identified through maximum variation sampling strategy were invited to participate in the study.

All interviews were recorded on tape to protect all information to be used for analysis (Merriam, 1998). The interview tapes were then transcribed verbatim (Bogdan & Biklen, 2003, 2007). This process could provide the researcher with an understanding of the participant's context before conducting the follow-up interviews. After completing the interview session, the researcher coded the interview tape and transcriptions accordingly to ensure the anonymity of the participants. Members of the research team read all transcripts and identified themes. Final interpretation was created through a process of negotiation of individual interpretations (Kirk & Miller, 1986; McCracken, 1988).

2.0 FINDINGS

Context of Study

For the purposes of this study, the pre-service teachers agreed with the given pseudonyms of Ida, Adys, Lynna, Zaman, Ayu, Suria and Ramli in order to ensure participants' anonymity. The context of the study is structured and described in three parts following the three secondary

schools in which the seven pre-service teachers were placed during their field experience: Secondary School D (SSD), Secondary School E (SSE) and Secondary School F (SSF) (see Table 1).

Table 1: Pre-service teachers' placement at three different schools

School	n	Participant	Cooperating Teacher (CT)	Visiting Lecturer (VL)
SSD	1	Ida	CTD	VLD
SSE	2	Adys	CTE	VLE
		Lynna	CTE	VLE
SSF	4	Zaman	CTF1	VLF
		Ramli	CTF2	VLF
		Ayu	CTF3	VLF
		Suria	CTF4	VLF

Secondary School D (SSD)

Ida's teaching practice at Secondary School D (SSD) was for ten weeks from May 2011 until August 2011. SSD is a secondary school located in a rural area in Kedah. The school has approximately 800 students. In SSD, Ida was guided by her kind, helpful and cooperative cooperating teacher, CTD. CTD teaches Business to students in Form four classes and Accounting to Form five students. She was a senior teacher with a background of vocational skills. Ida was also supervised by a visiting lecturer, VLD, who specialises in ICT in Educational Studies at one of the public universities in the northern part of Malaysia. Currently, at the time of writing her story, Ida is a pre-service teacher with a major in Business and a minor in Multimedia Interactive. At 24 years old, she is in her final year of a four-year course at the teacher education programme which she started in 2008, after completing her matriculation programme.

Secondary School E (SSE)

Adys and Lynna completed their ten-weeks of field experience at Secondary School E (SSE) from May 2011 until August 2011. SSE was established in 1999 and located in an urban area in Kedah. The school has approximately 1522 students and 93 teachers. In SSE, they were guided by a cooperating teacher, CTE. CTE teaches ICT to form four students. He has good knowledge about using ICT and is responsible for maintaining the ICT facilities at SSE. They were also supervised by a visiting lecturer, VLE, who specialises in Educational Studies at one of the public universities in Malaysia. Adys and Lynna took ICT as their major and Moral Education as their minor course. Coming from Sarawak with similar cultural backgrounds, their different personalities made their stories even more interesting. As they were guided by the same cooperating teacher and visiting lecturer, and provided with good ICT facilities to teach Computer Literacy, they were expected to integrate ICT into their teaching.

Secondary School F (SSF)

Similarly, four pre-service teachers: Zaman, Ramli, Suria and Ayu undertook their teaching practice at Secondary School F (SSF) for ten weeks from May 2011 until August 2011. SSF was located in a rural area in Penang and categorized as School Category Type B with the number of students not more than 1000 and very limited ICT facilities. At 24 years old, Ramli, Suria and Ayu were in their final year of a four-year course at the teacher education programme which they started in 2008, after completing the matriculation programme. Zaman, 25 years old, took a Diploma Programme in Accounting at one of the public universities in Malaysia prior to the teacher education programme. All four pre-service teachers were guided by the same visiting lecturer, VLF, who specialises in Educational Studies at their public university in Malaysia. From the observation made by the researcher, SSF had no specific room for ICT purposes. They have a 'computer laboratory' without computers, while the other computer room, which was fully equipped with ICT hardware and software for teaching and learning purposes, was specifically designed for multimedia productions and for Multimedia majoring students only. The projector that could be used for teaching needed to be reserved beforehand and most of the time, the pre-service teachers conducted the session without using the projector.

During their field experience at SSF, Zaman was guided by cooperating teacher, CTF1. CTF1 teaches ICT to Form two students and is responsible for handling the computer laboratory at SSF. Zaman was interested in using and teaching ICT as a student with an Information Technology Education major, and his minor was in Moral Education. At the time of data collection, he was in his final year and would be posted to the new school after completing the field experience. Ramli was a pre-service teacher with a major in Business Management and minor in Multimedia Interactive. In SSF, Ramli was guided by a cooperating teacher, CTF2. CTF2 teaches Business to students in Form four classes and Accounting to Form five students. Ayu and Suria came from the same hometown and took the same major, Moral Education and minor, Malay Language at the Initial Teacher Education programme. Prior to the field experience, they had completed their major subjects in Moral Education and had more subjects from their minor course, Malay Language, to be completed after field experience. Ayu and Suria were guided by two different cooperating teachers: CTF3 and CTF4 respectively. Both cooperating teachers teach Malay Language at SSF.

Roles of Cooperating Teacher

In general, cooperating teachers and pre-service teachers appeared to be satisfied with their relationship during field experience. Three major themes emerged from the analysis of data with regard to the roles of cooperating teachers. Results indicated that both pre-service teachers and cooperating teachers have identified specific roles that each must engage in to strengthen their relationship. These roles include having the cooperating teacher as a mentor and role model, evaluator and peer to the pre-service teachers. These findings were consistent with findings by Melody, Russell and Jared (2011), and Iancu-Haddad and Oplatka (2009), which identified cooperating teacher's roles were to guide, support, or as a critical friend.

The mentor and role model. Mentoring during field experience is a collaborative agreement between cooperating teacher and pre-service teacher (Russell & Russell, 2011). It is about assisting and guiding pre-service teachers to learn and work within a supportive environment. Furthermore, support from the cooperating teachers played an important role in assisting pre-service teachers to develop more of their teaching. Pre-service teachers in this study agreed that learning from the cooperating teachers was the best approach in developing their knowledge.

They could model and assist pre-service teachers with different ways of teaching as they had more teaching experience. Moreover, pre-service teachers in this study stated that they expected their mentor to stay in the class to give feedback on how were they doing, “*rather than going off to do other stuff*”. For example, if the class was getting ‘out of control’, then they hoped that the cooperating would be there to help to gain some kind of control.

Cooperating teachers serve as role models not only when they teach students, but also when they fulfill their role as teachers in school. Ida, a pre-service teacher which was placed at SSD mentioned that she had good support from her mentor and other teachers as well. The cooperating teacher was very helpful and assisted Ida in materials preparations as well as advising her on students’ attitudes. The pre-service teachers in this study observed that there was no or minimal support from their cooperating teachers specifically in relation to ICT use in teaching. “*My cooperating teacher was very supportive. However, my cooperating teacher could not model the use of ICT in class as she was not good in ICT*”. As for Adys and Lynna, who have completed their field experience at SSE, their cooperating teacher was helpful and guided Adys and Lynna in materials preparations as well as setting up the computer laboratory for teaching.

The evaluator. The evaluation of pre-service teacher’s competence was conducted twice during their field experience. The evaluator role played a significant change in both pre-service teacher and cooperating teachers’ relationship. The evaluation of the student’s competence is one of the most significant responsibilities facing the teacher. Good cooperating teachers must be knowledgeable about evaluating their students’ performance. The aim of the teaching practice is to assist the pre-service teachers in a variety of ways for them to experience the teaching and learning process in school context. However, it would be difficult if the cooperating teacher expected the pre-service teacher to be like them. According to Zaman, his cooperating teacher commented on a specific point that she would be doing if she was teaching. The cooperating might think that she was helping him but “*I felt like I had to do exactly the way she would do it without having a chance to come up with my own style*”. Zaman commented that he felt stressed by his cooperating teacher. Zaman’s preparation for teaching was not enough for his cooperating

teacher as she commented that Zaman either did not elaborate in detail or over elaborated or even was not suitable with Form 1 level.

“I didn’t elaborate my points in details to the students and sometimes when I tried to explain, she told me my explanation didn’t suit Form one students’ level of intelligence. She marked my report badly, with her red color pen” (Zaman).

Zaman’s cooperating teacher always be in the classroom every time he had his lesson. His cooperating teacher ensured that he followed exactly what he had in his lesson plan, even the questions to be asked. If the questions asked were not included in the lesson plan, she would give him a comment of *“where is the question?”* in his daily lesson plan. In addition to that, she always gave a very long comment with her red pen. Each time he finished the class, the CT would comment and emphasize that she had 21 years of experience. It was also noted that teachers at SSF were not giving full support to the pre-service teachers whilst they were in that school. Most of the pre-service teachers felt that they could not be trusted commented that they felt thdid not have trust from the teachers. For example, Ayu faced challenges when she wanted to use the computer lab for teaching as some teachers at SSF were hesitant to allow the pre-service teachers to use the projector because *“teachers here had the assumption that practicum teachers could not manage the students, and they were afraid that we will break the tools in the lab”*.

Peer. Cooperating teacher and pre-service teachers worked together and learned from each other. Most of the pre-service teachers stated that they had a very understanding cooperating teacher, who was also willing to learn new things. For example, Ida, her cooperating teacher had been teaching for 10 years, but had never used any technology-related teaching materials. Thus, when Ida had to teach the Entrepreneur topic, she used a YouTube video in her teaching, and the cooperating commented that *“Oh, that was so cool”*. Indirectly, Ida had inspired her cooperating to do things a little bit differently than she was used to and that benefited both of them. *“Yeah exactly, sharing from each other so it’s a kind of win-win situation”*. Ida also stated that her cooperating teachers were very committed to giving her support and feedback. *“I’m just learning so much from my peer [cooperating teacher] and from actually having to take a classroom and*

teach” (Ida), but her cooperating did not really help Ida with integrating ICT into teaching. She also noticed that she used more ICT than her cooperating. However, she got support to use ICT from the teacher of Computer Literacy and learnt from him. *“Now I know how to use it...and it was an interesting experience when we can share the knowledge that we have with others”*. Ida’s cooperating teacher commented that she learned more about using ICT in teaching from her student teacher as well. *“I learned more about teaching with ICT from her [Ida]”*. Furthermore, Adys and Lynna’s cooperating teacher explained how collaborating with student teachers helped him looked at things differently.

3.0 DISCUSSION AND CONCLUSION

Generally, the role of cooperating teachers is to guide and give feedback on the pre-service teachers’ performance during their field experience (Haigh & Ward, 2004). However, teachers were not giving full support and guidance; some of them did not even feel comfortable with the pre-service teachers’ dedication towards work (Hapidah, et. al., 2002). Other factors contributing to the minimum support from the teachers in school were time constraints, workloads and supervision skill (Zainudin, 2006; Khan, Hasan, & Clement, 2012). Findings of this study also confirmed this with regard to the support needed from school. Some pre-service teachers in in this study commented that the support from teachers was minimal.

The support from cooperating teacher and the school are both fundamental [and] I hope that we [pre-service teachers] would be given opportunity to demonstrate and train us about proper techniques for us to teach even better (Ayu).

As observed during the fieldwork and as indicated by the Malaysian pre-service teachers’ quotations in this study, the cooperating teacher was not in the classroom during their teaching sessions, thus it was uncertain how the assistance and assessment could be given. As Fairus, Malaysian pre-service teacher, said *“My cooperating teacher was never in the class during my teaching sessions”*.

Furthermore, the integration of ICT in teaching could also be modelled by their cooperating teachers during field experience. However, modelling the integration of ICT would be a

challenge experienced in Malaysia. The reason for this was they found it difficult to cover the whole curriculum syllabus as teachers did not want to waste their time planning, fixing and implementing the new lesson with ICT use (Salehi & Salehi, 2012; Afshari et al., 2009). For example, Ida stated that “*I found that my cooperating teachers did not use technology in their classroom*” (Ida, Malaysian pre-service teacher). The cooperating teachers’ roles were clearly outlined in the Industrial Training Policy (2010), however, they were not able to give good supervision experience to pre-service teachers due to heavy workloads (Md Yunus, et.al, 2010). Cooperating teachers have important roles in supervising pre-service teachers (Timperley, 2001), and such teachers need to understand their purpose and roles during the field experience (Haigh & Ward, 2004). Generally, the teaching practicum regulations clearly state the roles of the cooperating teacher (see Ministry of Higher Education, 2010), and that support from the cooperating teacher has the most significant influence on the development of pre-service teachers during field experience (Killian & Wilkins, 2009; Haigh & Ward, 2004). However, four pre-service teachers in Malaysia did not observe their cooperating teachers teach with ICT. This suggests to some extent that the cooperating teacher was not helpful to the pre-service teacher’s development of ICT skills. This could be attributed to the teaching workload, administrative work, co-curricular duties and examinations (Thang et al., 2010).

Thus, an original finding of this study is to confirm the importance of the cooperating teacher’s role in supporting and guiding pre-service teachers during field experience including their use of ICT. It would be useful for cooperating teachers to provide more support and immediate feedback for pre-service teachers in order to build up their confidence in teaching. Although the cooperating teachers did not use the ICT in their teaching, it is recommended for them to support and give the opportunity for the pre-service teachers, to enhance their ICT knowledge and skill. To establish this, the cooperating teacher could have more mentoring and workshop to prepare them for their roles in supervising their student teachers (Melody, Russell & Jared, 2011).

REFERENCES

- Afshari, M., Bakar, K., Su Luan, W., Samah, B., & Fooi, F. (2009). Factors affecting teachers' use of information and communication technology. *International Journal of Instruction*, 2(1), 77-104.
- Compton, L., & Davis, N. (2010). The impact of and key elements for a successful virtual early field experience. *Contemporary Issues in Technology and Teacher Education*, 10(3).
- Damon, B. L., Steven, S. H., Briant, F. J., Valerie, L. K., & Linda, B. F. (2004). Preparing Tomorrow's Teachers to Use Technology: Attitudinal Impacts of Technology-supported Field Experience on Pre-service Teacher Candidates. *Journal of Instructional Psychology*, 31(2), 88-97.
- Haigh, M., & Ward, G. (2004). Problematizing Practicum Relationships: Questioning the 'Taken for Granted'. *Australian Journal of Education*, 48(2), 134-148.
- Hapidah Mahamed, Roselan Baki, Nadzeri Hj. Isa, Mohd. Sahandri Gani Hamzah & Abd. Ghani Taib. (2002). Quality of teaching and learning: A retrospective study//*Educational Research Seminar*. Institute of Bahasa Melayu Malaysia, Kuala Lumpur.
- Hunt, N. (1995). Bringing technology into the pre-service teaching field experience. *Computers in the Schools*, 11, 37-48.
- Iancu-Haddad D., & Oplatka, I. (2009). Mentoring novice teachers: Motives, process and outcomes from the mentor's point of view. *The New Educator*, 5, 45–65.
- Ismail, I., Azizan, S., & Azman, N. (2011). Internet as an Influencing Factor of Teachers' Confidence. *Malaysian Journal of Distance Education*, 13(1), 59-73.
- Khan, S., Hasan, M., & Clement, C. (2012). Barriers to the introduction of ICT into education in developing countries: The example of Bangladesh. *International Journal of Instruction*, 5(2), 61-80.
- Killian, J. E. & Wilkins, E. A. (2009) Characteristics of Highly Effective Cooperating Teachers: A Study of Their Backgrounds and Preparation. *Action in Teacher Education*, 30(4), 67-83.
- Markauskaite, L. (2007). Exploring the structure of trainee teachers' ICT literacy: The main components of and relationships between, general cognitive and technical capabilities. *Educational Technology Research and Development*, 55(6), 547-572.

- Md Yunus, M., Hashim, H., Mohd Ishak, N., & Mahamod, Z. (2010). Understanding TESL pre service teachers' teaching experiences and challenges via post practicum reflection forms. *Procedia Social and Behavioral Sciences*, 9, 722-728.
- Melody L. Russell & Jared A. Russell. (2011). Mentoring Relationships: Cooperating Teachers' Perspectives on Mentoring Student Interns. *Professional Educator*, 35(1).
- Merriam, S. (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey- Bass.
- Ministry of Higher Education (2010). *Industrial Training Policy*. Retrieved from <http://www.utar.edu.my/fs/file/MOHE%20Dasar%20Latihan%20Industri.pdf>
- Moore, R. (2003). Reexamining the field experiences of preservice teachers. *Journal of Teacher Education*, 54(1), 31-42.
- Niess, M. (2005). Preparing teachers to teach science and mathematics with technology: Developing a technology pedagogical content knowledge. *Teaching and Teacher Education*, 21, 509–523.
- Ong, S. K., Ros, Amisha, S., Azlian, A. A., Sharnti, K. & Ho, L. C. (2004). *Trainee teachers' perceptions of the school practicum*. Paper presented at the National Seminar on English Language Teaching, Bangi.
- Palmer, P. (1998). *The courage to teach*. San Francisco: Jossey-Bass.
- Rozelle, J., & Wilson, S. (2012). Opening the black box of field experiences: How cooperating teachers' beliefs and practices shape student teachers' beliefs and practices. *Teaching and Teacher Education*, 28(8), 1196-1205.
- Salehi, H., & Salehi, Z. (2012). Challenges for Using ICT in Education: Teachers' Insights. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 2(1), 40-43.
- Seferoglu, S. (2000). The role of experienced teachers in teacher development. *Education and Science*, 25(118), 9-17.
- Simons, H. (2009). *Case Study Research in Practice*. London: SAGE Publications, Inc.
- Stake, R. E.(1998). Case Studies. In N. Denzin & Y. Lincoln (Eds.), *Strategies of Qualitative Inquiry* (pp. 86-109). Thousand Oaks: Sage Publications.
- Thang, Siew Ming, Puvaneswary Murugaiah, P., Lee, K. W., Hazita Azman, Tan, L. Y., & Lee, Y. S. (2010). Grappling with technology: A case of supporting Malaysian *Smart School*

- teachers' professional development. *Australasian Journal of Educational Technology*, 26(3), 400-416.
- Thompson, J., Hagenah. S., Lohwasser, K., & Laxton, K. (2015). Problems Without Ceilings: How Mentors and Novices Frame and Work on Problems-of-Practice. *Journal of Teacher Education*, 1-19.
- Timperley, H.S. (2001). Mentoring conversations designed to promote student teacher learning.' *Asia-Pacific Journal of Teacher Education*. 29(2), 111-123.
- Yin, R. K. (2009). *Case Study Research: Design and Methods* (Fourth ed. Vol. 5). United States of America: SAGE Publications, Inc.
- Zainudin, A. B. (2006). *Clinical Supervision in the Malaysian Teaching Practicum Context*. University of Bristol, UK.