

Written Journal To Promote Reflective Thinking Among Pre-Service Teachers

Yee Bee Choo, Tina Abdullah, Abdullah Mohd Nawi

ABSTRACT---Journal writing is a common practice for pre-service teachers to reflect on their learning and teaching experiences about the course in the campus. Dewey (1933) believed that thinking is natural but that reflective habits of mind needed to be taught. This study aims to investigate the use of written journal to promote reflective thinking by the pre-service teachers. The case study was conducted among the twenty pre-service teachers who carried out a micro-teaching session in a children's literature course. A content analysis was carried out on the reflective journals written by the pre-service teachers. The findings indicated that the pre-service teachers employed five strategies of reflective thinking such as identifying, associating, analysing, assessing and decision-making in their written journals. It is recommended for teacher education to establish learning and teaching environment and promote a shared practice among the peers that facilitate reflective thinking

Index Terms: Written Journal, Reflective Thinking, Pre-Service Teachers.

I. INTRODUCTION

It is a common practice for pre-service teachers to use journal writing to reflect on their learning and teaching experiences about the course in the campus. Reflective thinking is a skill we should learn as Dewey (1933) supported that we cannot learn or be taught to think, but "we do have to learn how to think well, especially how to acquire the general habits of reflecting" (p.35). Here Dewey has likened reflective thinking to a habit that we should nurture. He believed that thinking is natural but that reflective habits of mind needed to be taught. This is important for pre-service teachers as they will continue this reflective habit later when they enter the real world of teaching.

Reflective activities have long included journal writing which requires the teachers to write their reflective practice in text and print form. Journal writing has been used to develop the pre-service teachers' reflective thinking habits and skills (Hatton & Smith 1995; Pultorak 1996). Therefore, it is the aim of this study to investigate the use of written journals to promote reflective thinking among the pre-service teachers in a children's literature course.

II. LITERATURE REVIEW

Dewey (1933) agreed that the challenge of learning was learning to think. We may have gained a lot of knowledge through education but the knowledge itself is not sufficed.

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Yee Bee Choo, Language Department, Institute of Teacher Education Tun Hussein Onn Campus, Johor, Malaysia. (beechoo.yee@iptho.edu.my)

Tina Abdullah, Language Academy, Universiti Teknologi Malaysia, Johor, Malaysia.

Abdullah Mohd Nawi, Language Academy, Universiti Teknologi Malaysia, Johor, Malaysia.

We need to have the ability to apply the knowledge through understanding and personal disposition to operate such knowledge and understanding. Lyons (2010) connected reflecting thinking to the aim of education with moral dispositions and aesthetic concerns and its purpose, to make possible conscious meaning. Reflective thinking is a habitual meaning-making process that enables one to connect theory to practice.

Mirzaei, Phang, and Kashafi (2014) discussed that observation, communication, team working, judgment and decision making are five reflective thinking skills that are required for teachers. According to Spalding & Wilson (2002), reflective thinking is essential to identifying, analysing, and solving the complex problems that characterise classroom teaching. In the classroom, teachers work to consider their practice within the moment of instruction (*reflection-in-action*) and afterwards (*reflection-on-action*) (Schon, 1983). Killion and Todnem (1991) identified the third reflection: *reflection-for-action* which is thinking about future actions with the intention of improving or changing a practice. It is important for teachers to constantly engage on reflective thinking before, during and after classroom experiences in order to bring meaningful learning for their students. Figure 1 shows the different stages of reflection that occurs during the lesson in a classroom.

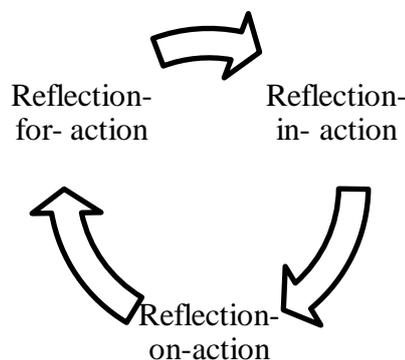


Fig. 1: Reflective Stages

As novice teachers, the pre-service teachers might lack the field experiences in teaching the students in the real classroom. They have limited experience and understanding of the realities of teaching (Cole & Knowles, 1993). In teacher education, they learn several content and pedagogy

courses to help them develop knowledge and skill to prepare them for their future career. However, when they start teaching students in the real classroom, they find difficulty in bridging theory and practice by applying what they learnt in the campus in the real contexts (Yee, Tina Abdullah & Abdullah Mohd Nawi, 2016). So, they need reflective thinking to help them connect theory to practice.

Through micro-teaching session during the course in the campus, they are able to engage in ‘mock classroom’ that helps them to review and reflect on their teaching strategies and techniques and receive feedback from their lecturers and peers. As they work to develop and enact knowledge of learners, curriculum, and pedagogy, they also immerse in learning about how to learn from their own (Kajder & Parkes, 2012) and others’ teaching. Building reflective practice often involves critical friends, collaborative dialogue and structured communities of practice which provide the safe context in which teachers are supported, pushed, and empowered (Kajder & Parkes, 2012). Therefore, the pre-service teachers need support when they reflect individually and collaboratively.

There are a number of tools that cultivate and scaffold reflective thinking. They include personal journals, portfolios, reflective writing and even technology tools such as blogs and weblogs. This study focuses on the use of reflective journals as it could help the pre-service teachers to improve their reflective thinking (Spalding & Wilson, 2002). Kajder and Parkes (2012) also supported that written journals remain a print-dominant means of communication and presents physical in terms of sharing, collaborating, and capturing raw thinking in the moment.

In a research carried out by Pedro, Abodeeb-Gentile and Courtney (2012), they found their pre-service teachers engaged in reflective strategies that included clarifying, enhancing, providing evidence, challenging and different thinking when they reflected on their experiences in a language arts class. Therefore, this study provides insight on the strategies of reflective thinking employed by the pre-service teachers through their written journals.

III. METHODOLOGY

This study adopted a qualitative methodology of a case study. According to Yin (2009), by using the case study, a researcher is able to investigate a phenomenon “in depth and within real-life contexts, especially when boundaries between the phenomenon and its contexts are not clearly evident” (p.18).

Participants

The study was conducted among the twenty pre-service teachers who carried out a micro-teaching session in the course of children’s literature. To protect the confidentiality of the participants in this study, pseudonyms were used instead of their real names.

Research Procedure

The instrument used was mainly reflective journals. Before the pre-service teachers conducted the micro-teaching for a children’s literature lesson, a digital story was created individually. They chose any stories found in the primary school textbook and designed the digital story by

inserting images, sounds and videos using appropriate software.

Then the pre-service teachers presented their digital storytelling in the class and their peers gave feedback on an observation checklist. The peers observed all the participants and gave them points on the crafts of storytelling (voice projection, diction, poise, gestures, facial expression, body movements, time intonation and use of props) based on a Likert scale which ranged from 1 (very weak) to 5 (very good). However, the data of the checklist were not analysed in this study as it served as a guide for the participants to write their reflective journals. At the end of the presentation, they wrote a reflective journal based on their experiences of digital storytelling and the feedback given by their peers through the checklist.

IV. RESULTS AND DISCUSSIONS

This study employed content analysis to analyse and interpret the data from the twenty reflective journals. The authors interpreted all of the data collaboratively, following a process of iterative readings of the data until the themes emerged.

The patterns coded in the written reflective journals revealed that there were five strategies that the pre-service teachers used to develop their reflective thinking. These strategies emerged from the data that the authors coded from their written journals. The five strategies employed by the pre-service teachers were identifying, associating, analysing, assessing and solving problems. The definition for each strategy is given in Table 1.

No.	Strategy	Definition
1	Identifying	Identifying the learning and teaching experiences that happen in the classroom which take account of one’s feeling and behaviour.
2	Associating	Associating the experiences to one’s prior knowledge or theories, assumptions and values.
3	Analysing	Analysing the causes and consequences of the experiences that have taken place.
4	Assessing	Assessing the experiences with judgment, or with additional explanations and theories to find the best idea.
5	Decision-making	Making decisions for further or future actions.

Table 1: Strategies Used for Reflective Thinking in Written Journals



The use of these five strategies had helped the participants to reflect and think critically about their digital storytelling during the micro-teaching in the classroom and to help them to construct meaning about their learning and teaching experiences. Below are the discussions for each strategy with excerpts given from the written journals to support the different strategy used in reflective thinking.

1) Identifying

In their written journals, the participants described their teaching and learning experiences as Farhan wrote, "From the storytelling, I managed to apply the crafts of storytelling that I had learnt in a real life situation. I also learned to conduct a storytelling session. These experiences were new for me and it will definitely help me in my teaching years later on."

The micro-teaching had not only given them the experiences in delivering the storytelling, but also enabled them to identify their strengths and weaknesses during digital storytelling through the peer observation checklist.

Sarah commented that her strength in digital storytelling was the use of props as she wrote, "I have received the highest mark for this aspect which is scale 5. I have prepared excellent props to deliver the story. I wore a maid costume and rabbit ears to arouse the pupils' interest to the story. I also made a big pocket watch to give a picture of the rabbit based on the story."

In identifying her weakness in digital storytelling, Hama wrote in her reflective journal, "I noticed that I have problem with my body movement when I deliver the story." Mary also wrote the following,

"I did not do well in the oral storytelling in the aspects of body movement, gestures and facial expression. Those were the three aspects from the crafts of storytelling that I had the lowest average scores which were assessed by my peers."

Through peer observation checklist, the pre-service teachers could reflect not only individually, but also with the help from their peers. Jali wrote, "Besides from being assessed by my peers, I also assessed their storytelling and gave them marks on their storytelling. I gave my honest opinions so that they know their strengths and weaknesses when they did their storytelling. After I finish my turn in presentation, I received the peer observation checklists from my peers and I started doing my analysis so that I could identify my strengths and weaknesses in digital storytelling."

Farhan also agreed that the peer checklist is a good way to generate timely feedback. From the peer feedback given by his classmates based on his storytelling, he managed to find out his strengths and weaknesses.

Through reflective thinking, the pre-service teachers were aware of their strengths and weaknesses in digital storytelling. Reflective practice begins with the self, but it achieves fruition when reflection leads to communication and collaboration (Ostermann, 1990). The peer observation checklist is a shared practice that enabled the pre-service teachers to help one another to identify their problems and they could find the alternatives to improve themselves.

2) Associating

The strategy of associating involves the participants in associating the experiences to one's prior knowledge or theories, assumptions and values. For example, Hama tried to associate her experiences to her assumptions and values of learning technological knowledge as she wrote, "I learn which software is more suitable. I learn how to make a storyboard for primary school students. I also learn how to make the digital storytelling easy to be understood, flexible and interesting. I also learn how to manage my time on certain task."

Besides increasing their knowledge in technology by using the software for digital storytelling, the participants were also able to increase their knowledge in pedagogy. This was true from the case of Hama as she learnt to use digital storytelling effectively through having good time management and creating interesting lesson for her pupils.

In his concern for his pupils' needs, Amal reflected by connecting the experiences to the books or theories he had read. He wrote the following, "Along the process, I learned and read books regarding pedagogical knowledge for stories for young learners, to better equip myself. Using digital stories not only can help learners improve their listening skills and their pronunciation, but they can also be useful for teaching vocabulary and sentence structures."

Schon (1983, 1987) focused on reflection in professional knowledge and practices, and explained that reflection requires an individual to thoughtfully consider his/her own experiences and apply prior knowledge to practice for developing professional knowledge. This is true as in Hama's and Amal's experiences as they could relate to their technological and pedagogical knowledge which would contribute to their professional knowledge in future.

3) Analysing

Reflecting thinking could also help the participants to analyse their strengths and weaknesses in digital storytelling. When knowing his strength in voice projection, Farhan analysed that it was due to the fact he was born as a man and naturally a man will have a loud and clear voice when compared to a woman.

Lin reasoned that she had a good facial expression because she was able to depict the emotion and mood of the story. She further reasoned that it was important for teachers to have a good facial expression because it helped to deliver the right mood or feeling to the audience so that they could understand the story better.

Judge also realised that voice projection, diction and body movement were his strong points. He felt that as a teacher, it is very important to master these three features. He wrote in his journal, "Without voice projection, pupils at the back of the classroom will not be able to hear my voice, without diction pupils will not be able to even understand my words and lastly, without body movement, the communication between me and the pupils will not be as strong and effective."

After identifying her three weaknesses in body movement, gestures and facial expressions during digital storytelling, Mary reasoned, "In my opinion, those aspects are very important in storytelling. However, I was not able to perform well enough. Even from the schooling days, I had troubles in those aspects when it came to storytelling. I became stiff and was not dared to move around and interact with the audience."

Judge also admitted his weakness was on facial expressions. He wrote, "I did not do well on making the right facial expression as I was not serious in delivering the right expression and emotion to the pupils. This is an area that I need to improve on in my storytelling as facial expression plays a huge role in delivering the message of the story correctly"

According to Shoffner (2009), reflective thinking provides teachers the opportunity to analyse issues of teaching and learning. When the participants were able to analyse their strengths and weaknesses from different perspectives, this could help prepare them to handle various challenges in their future teaching practice.

4) Assessing

The strategy of assessing occurs when the participants were able to evaluate their experiences with judgment, or with additional explanations and theories to find the best idea.

Andy tried to assess his teaching experiences with more explanations as he wrote, "According to Ana Barbour, a professional storyteller, confidence is one of the contributing factors to the success of a storytelling. During my storytelling, I was so nervous that I began to forget my scripts and make omissions."

Through reflective thinking, one was able to apply the knowledge learnt into real situation. Andy wrote that digital storytelling is an interesting tool to enrich pupils' language skills. He cited Vygotsky in his journal on the role of language and culture in cognitive development. Human's linguistic and abilities enable them to overcome the natural limitations of their perceptual field by imposing culturally defined sense and meaning of the world. He believed that through his storytelling which forms the culture in learning, his pupils would learn English in terms of learning basic language function and structures.

Another participant, Jali stressed the importance of motivation in a pupils' learning. He cited from Woolfolk (1990) in his journal about motivation which is an internal power that arouses, directs and controls human interest and behaviour. He rationalised that when the children are motivated and interested in stories such as digital storytelling, this would motivate them and change their behaviour to be interested in learning the language itself.

Through a reflective process, people can reevaluate their own capabilities and related resources, which helps to alter their thinking and behaviours (Hsieh, 2015). When the pre-service teachers were able to identify their weaknesses, they could foresee the possible problems in their future classroom and they would be able to overcome the problems by using the correct strategy or technique.

5) Decision-making

Strampel and Oliver (2007) indicate that reflective practice could promote critical evaluation and transfer. By making decision, the participants could transfer their experiences for further or future actions.

Farhan noted that he had weakness in body movement as he was too dependent on the digital story that he forgot to move his body. He commented that he would use appropriate body movements for his storytelling in the future.

Andy realised he was lack of confidence when he presented his digital storytelling. He stated that he was so nervous that he forgot his script and made omissions. He rationalised that he would try to stay calm and take it as an experience for him to improve himself better in future.

After he was aware of his weaknesses, Jali commented, "I found that I became stiff and did not move much as I was too nervous. Based on my observations of others, I should practice speaking in front of the public more often, I can do that by doing more presentations in front of the class or giving opinions in public to help me reduce the feeling of nervousness."

Lin also decided she should practice more frequently in the future before doing a storytelling to make sure that she was prepared enough not to slip her tongue to prevent her from being too nervous. She realised that her words were all mixed up due to her stage fright.

Judge evaluated on his experiences and hoped he could transfer these experiences in the future as he wrote, "I have learnt many new things that is very useful when I will be posted to school later. I know now how to plan, organise and conduct a digital storytelling in the classroom. I will also be able to use my creativity to the maximum as I am planning my storyboard and crafting the props that I need to use. It is also an eye opener for me as I know now that technology plays a huge role in teaching a 21st century English classroom."

Zeichner and Liston (1998) explained that reflective action is also a process that involves more than logical and rational problem-solving processes. By reflecting on their strengths and weaknesses in digital storytelling, the participants could think of strategies to solve problems and make decision on using the best strategies for their future classroom

V. CONCLUSION

Figures and Tables

This study shows the reflective strategies employed by the pre-service teachers that had enabled them to identify, associate, analyse, assess and make decision when they engage in teaching and learning experiences. These strategies are able to help them apply the theory and knowledge they learnt in the books and theories and practice it in the context of digital storytelling. According to Hutchinson and Allen(1997), reflective thinking helps to link theory with practice. When pre-service teachers



participate in the actual experience of teaching and learning, there is likely to be a connection between theory and practice (Pedro, Abodeeb-Gentile, & Courtney, 2012). Therefore, through the context of micro-teaching, the pre-service teachers could promote their reflective thinking in their written journals.

It is recommended for teacher education to establish learning and teaching environment to facilitate reflective thinking. The educators should constantly provide coaching and support to the pre-service teachers to utilise reflective thinking not only during teacher education but also in their future teaching life.

A shared practice among the peers can also be promoted by using a checklist that helps the pre-service teachers to continue to develop and foster reflective thinking. A future research may be conducted by developing a tool such as peer checklist to provide teachers a way to promote their reflective thinking.

Future research can also be carried out to examine the use of reflective thinking in collaboration projects as this study only focused on individual projects. Another suggested research is to study the use of reflective thinking after these novice teachers enter the real world of teaching profession.

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REFERENCES

1. Barr, R., Watts-Taffe, S., Yokota, J., Ventura, M., & Caputi, V. (2000). Preparing teachers to teach literacy: Rethinking pre-service literacy education. *Journal of Literacy Research*, 32, 463-470.
2. Cole, A. L. & Knowles, J.G. (1993.) Shattered images: Understanding expectations and realities of field experiences. *Teaching & Teacher Education*, 9 (5-6), 57-71.
3. Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process.* Boston: Heath and Company.
4. Hatton, N., & Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teaching and Teacher Education*, 11(1), 33-49. doi:10.1016/0742-051X(94)00012-U.
5. Hsieh, B-J. (2015). The effects of reflection on student's technology integration self-efficacy in an educational technology course (Doctoral dissertation). Retrieved from <http://diginole.lib.fsu.edu/islandora/object/fsu:360377/datastream/PDF/view>.
6. Hutchinson, D. J., & Allen, K. W. (1997). The reflection integration model: a process for facilitating reflective learning, *The Teacher Educator*, 32(4), 226-234.
7. Kajder, S.B., & Parkes, K. A. (2012). Examining preservice teachers' reflective practice within and across multimodal writing environments. *Jl. of Technology and Teacher Education*, 20(3), 229-249.
8. Killion, J., & Todnem, G. (1991). A process of personal theory building. *Educational Leadership*, 48(6), 14-17.
9. Lambert, J. & Cuper, P. (2008). Multimedia technologies and familiar spaces: 21st-century teaching for 21st-century learners. *Contemporary Issues in Technology and Teacher Education*, 8(3), 264-276.

10. McQueen, J. (2015). Digital storytelling as a reflective tool for pre-service teachers. *Proceedings of SITE 2017* (pp.410-415). Austin, TX, United States, March 5-9, 2017.
11. Mirzaei, F., Phang, F.A., & Kashefi, H. (2014). Measuring teachers reflective thinking skills. *Procedia Social and Behavioural Sciences*, 141, 640-647.
12. Osterman, K.F. (1990). Reflective practice: A new agenda for education. *Education and Urban Society*, 22(2), 133-152.
13. Pedro, J., Abodeeb-Gentile, T., & Courtney, A. (2012). Reflecting on literacy practices: Using reflective strategies in online discussion and written reflective summaries. *Journal of Digital Learning in Teacher Education*, 29(2), 39-47.
14. Pultorak, E. G. (1996). Following the developmental process of reflection in novice teachers: Three years of investigation. *Journal of Teacher Education*, 47(4), 283-291. doi:10.1177/0022487196474006.
15. Schon, D. (1983). *The reflective practitioner: How professionals think in action.* New York: Basic Books.
16. Schon, D. (1987). *Educating the Reflective Practitioner.* San Francisco: Jossey-Bass.
17. Spalding, E., & Wilson, A. (2002). Demystifying reflection: A study of pedagogical strategies that encourage reflective journal writing. *Teachers College Record*, 107(4), 1393-1421.
18. Strampel, K., & Oliver, R. (2010). They think they are learning, but are they? Strategies for Implementing Web 2.0 to positively impact student learning. *Acsilite 2010 Conference, Sydney*. Retrieved from http://www.researchgate.net/publication/236833993_The_y_think_they_are_learning_but_are_they_Strategi_es_for_implementing_Web_2.0_technologies_to_positiv_ely_impact_student_learning/file/72e7e51942e249210e.pdf
19. Yee, B.C., Tina Abdullah, & Abdullah Mohd Nawi (2016). Supporting and improving reflective practice among pre-service teachers through WhatsApp. *Jurnal Pendidikan Nusantara, Special Edition April 2016*, 53-72.
20. Yee B.C., Abdullah T., & Mohd Nawi, A. (2018) A Reflective Practice of Using Digital Storytelling During Teaching Practicum. In: Saeed F., Gazem N., Patnaik S., Saed Balaid A., Mohammed F. (eds) *Recent Trends in Information and Communication Technology. IRICT 2017. Lecture Notes on Data Engineering and Communications Technologies*, vol 5. Springer, Cham.
21. Yin, R. K. (2009). *Case Study Research: Design and Methods* (4th Ed.). Thousand Oaks, CA: Sage.
22. Zeichner, K. M., & Liston, D. P. (1996). *Reflective teaching: An introduction.* Mahwah, New Jersey: Lawrence Erlbaum Associates.