

Teacher professional development at a tsunami-affected school in Banda Aceh

Fadliadi Ubit

Balai Diklat Keagamaan Provinsi Aceh, Indonesia:
fadliadi73.fa@gmail.com

Pam Bartholomaeus

Flinders University, South Australia: *Pam.bartholomaeus@flinders.edu.au*

The 2004 tsunami in Aceh resulted in significant post-disaster problems which extended far beyond the loss of possessions and infrastructure destruction. In addition to having to deal with their own problems as a consequence of the tsunami, teachers were faced with the additional problems arising from working with children who had been exposed to the traumatic event. Teacher professional development was regarded as an important support mechanism to help teachers in this period. Findings from a qualitative study conducted in one school affected by the tsunami in Banda Aceh provided evidence that teachers indeed needed professional development that went beyond enhancing their knowledge and skills to teach their subjects to working with young people affected by the traumatic event. This paper discusses teacher professional development, focusing on the five criteria for effective professional development proposed by Desimone.

Key Words: Teacher professional development; Aceh; tsunami

INTRODUCTION

At 7.58 a.m. on 26 December 2004, an earthquake measuring 9.0 on the Richter Scale occurred in the Indian Ocean. It resulted in a tsunami that produced waves of up to 30.5m high which impacted 11 Indian Ocean countries: Indonesia, Sri Lanka, India, Thailand, Somalia, Myanmar, Maldives, Malaysia, Tanzania, Bangladesh, and the Seychelles (Jordan, 2006). The province of Aceh, which is surrounded by the sea: the Indian Ocean on the west and southwest, and the Malacca Strait on the north and northeast (Ananta, 2007), was the closest to the earthquake epicentre and suffered more than any other region. There was not only a significant loss of lives but also much destruction of private and public facilities, including houses, schools, health centres, and businesses.

There is much evidence that, in addition to casualties and damage to property, disasters often result in post-disaster problems (Freedly, Shaw, Jarrel, & Master, 1992; Leon, 2004; Lindell, 2011) that have a greater impact than simply the loss of possessions and destruction of infrastructure, especially for young people (Silove & Zwi, 2005). Severe impact, including symptoms of moderate to severe post-traumatic stress disorder (PTSD) (Agustini, Asniar, & Matsuo, 2011). For children, such events can have a profound negative impact many years post disaster (Walmer, Laor, Dedeoglu, Siev, & Yazgan, 2005). Specifically, students who have been exposed to traumatic events may have impeded classroom performance (Cole, et al., 2005) and behave badly; their behaviour

may cause them to be rejected by teachers and peers and even their caregivers, reducing their opportunities for positive social engagement, classroom participation, and supportive instruction and feedback (Harris, Putnam, & Fairbank, 2004).

Children may not recognize the nature of their own problems and seek help for themselves to address issues they are facing. It is, therefore, critical that adults from their social network do so (De Anstiss, Ziain, Procter, Warland, & Baghurst, 2009, p. 590). Because of the significant amount of time children spend at school, it is possible that teachers have a strong influence in children's lives (Russo & Boman, 2007). As adults, it is necessary that teachers understand children's emotional reactions and respond to them in appropriate ways (Fasler, n.d.; Mandel, Mullett, Brown, & Cloitre, 2006) to facilitate children's successful coping, adaptation and functioning, and their normal development (Walmer, et al., 2005).

However, many teachers in Aceh are the survivors or the witnesses of the tsunami themselves and may also have lost much in the tragedy, including loved ones and property. This could have an impact on their lives and role as educators and impose limitations on their performance at school as well as providing support for those in need, such as students affected by the tsunami. In addition, many people, including teachers in Aceh, may have a lack of natural disaster-related knowledge and be unaware of the possible vulnerability hazards caused by the disaster (Khairuddin, Zubir, & Kismullah, 2009).

Borko (2004) suggests that teachers should be given support and guidance to deal with the consequences of disasters. A possible method is through professional development (PD) programs that addresses teachers' perceived and current needs (Bissaker & Heath, 2005). However, as I reflect on my personal experiences as a teacher in Aceh and my current job as an instructor at a teacher training centre in Banda Aceh, I note that, in fact, teachers in Aceh have very limited opportunities and access to PD. Considering how important teacher PD is to improve teaching and learning generally, developing such programs is an important issue for teachers in Aceh. This paper highlights the nature of teacher PD and the need for effective PD for teachers, especially for those working at schools affected by a natural disaster, such as the school discussed in this article.

LITERATURE REVIEW

PD is a continuing learning process in which a person deepens their knowledge and skills, and stays up to date with important developments in the field, with the promise of improvement in practice throughout their career (Grundy & Robinson, 2004, p. 149). Specifically, Day (1999, p. 4) defined teacher PD as:

[T]he process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purposes of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues through each phase of their teaching lives.

Vrasidas and Glass (2004) suggest that PD gives teachers opportunities to share expertise, learn from each other, and collaborate in particular activities. In this sense, teacher PD programs should not be simply about transferring knowledge and skills to teachers but allowing those who participate in it to develop the reflective skills they need to obtain new insights into their pedagogical approaches and teaching practices; to achieve a clear

view of the connection between what they learn during their participation in the program and the reality of their practices. Therefore, PD programs must be continuous, coherent, and consider the complexity of teachers' practices (Vrasidas & Glass, 2004). In other words, effective PD programs are those which consider what teachers learn in the programs, the circumstances in which it will be applied, deepen teachers' knowledge of the methods and contents they are teaching, and involve teachers in active and collective participation, and with the programs sustained over a period of time (William, 2006, p. 287).

Interestingly, while PD programs for teachers should be mainly based on teachers' needs, Gusky (2003) comments that, rarely, are teachers themselves able to articulate their needs. Therefore, "a well-planned, carefully organized collaboration between district-level personnel who have broader perspective on problems and site-based educators who are keenly aware of critical contextual characteristics seems essential to optimize the effectiveness of PD" (Guskey, 2003, p. 13).

CONTEXT OF THE STUDY

In general, education, from kindergarten to university, in Indonesia, including in Aceh, is provided in either secular and religious institutions. They can be public or private. The Ministry of National education (MoNE) manages the secular educational institutions, which account for about 80% of schools in the country, while the remaining 20% religious schools are under the Ministry of Religious Affairs (MoRA). Both secular and religious schools have the same general curriculum but additional religious courses are taught in the religious educational institutions.

The school which was purposively selected for this study was a public junior high school, located in a village located in an area identified as impoverished and socially disadvantaged. Many of the inhabitants worked as fishermen, pedicab drivers or sellers in the local market. The school was approximately three kilometres from the city of Banda Aceh in one of the nine sub-districts of the Banda Aceh municipality. The school was close to the sea; about 1.8 kilometres from the shore, less than half a kilometre from an estuary, and about five metres above sea level.

At the time of the study, there were 153 students enrolled, compared to about 500 before the school was totally destroyed by the tsunami. The study school lost nearly all students in the tsunami. When the school reopened three months after the tragedy, only seven students returned. There was no data on whether the students who did not return were killed in the tsunami or had moved to other areas; however, many people believed that the students were killed in the tsunami.

Teachers in the school characterized the currently enrolled students as troubled students either because of their academic work or behaviour. Most of the students so characterized were those who had been rejected by other schools in the neighbouring areas. Of 12 possible classrooms, only nine were occupied, with 15-18 students in each class. The teachers in the study school were locals who had graduated from universities in Aceh. Of the 27 teachers, 24 were employed by the government as civil servants who had passed a series of tests; three were non-permanent teachers who had been recruited directly by the school and had not been specifically tested because the school lacked a teacher for a particular subject. Teachers in the study school, as in Aceh in general, have very limited access to teacher PD programs. Most of the programs provided to teachers were those

merely related to subject content training or training related to teaching methods or instructional media.

METHODOLOGY

The study was a cross-sectional qualitative study using case study as the method of inquiry. Data were collected between April and October 2010 using semi-structured interviews with teachers and community members supported by observational data collected from classroom teaching of some teachers in the study school. Interviews took place for about one hour with each participant individually at a mutually agreed place and time; for example, at the participants' home, in a café, at the office or at the school.

Teachers in the school were invited to voluntarily participate in the study. At first, of the 27 teachers, only eight agreed participate. After spending some time at the school and as the teachers gained a better understanding of the merits of the study, all teachers verbally agreed to participate if required. Later, for the purpose of data saturation, another three more teachers were purposively selected for interviewing because of their role in the school: a teacher who was also the school counsellor; a teacher who served as the vice principal dealing with the curriculum; and the principal, who also taught classes. In total, six female teachers and five male teachers were interviewed.

Eight community members were also invited to participate in the study and all agreed to be interviewed, including the parents of two student, an officer of the local office of the Department of Education, the community leader, the youth leader of the village where the school was located, the leader of a teacher organization in Banda Aceh, the head of the school committee, and one community member who did not have a particular role in the community. There was considerable variation among the participants in the study, especially among the community member participants. It was expected that their different roles would provide rich information and different perspectives of the phenomenon under study.

Collected data were analysed through the process of transcribing interviews, and reading and rereading the interview transcripts in order to become familiar with and develop a deeper understanding of what I obtained in the field (Creswell, 2008; Liamputtong, 2009). I applied a coding process to break down data and conceptualize it, before organizing the emerging issues (Douglas, 2003). I used a constant comparison method where newly and previously coded ideas were continually compared within and across each source of data (Bowen, 2008; Lindlof, 1995) looking for commonalities and differences on the central issue to report as findings (Dye, Schatz, Rosenberg, & Coleman, 2000).

Liamputtong (2009, p. 277) contends that data analysis in a qualitative study is a process of turning raw data (all material obtained during data collection) into evidence-based interpretations that are clear, understandable, insightful, and trustworthy. Validity within this study can be viewed as the ability to fully represent the subjective reality of the people participating in the study (Rooney, 2005). Therefore, I use extensive quotes from participants to fully represent their perceptions (Bailey & Jackson, 2003).

FINDINGS AND DISCUSSION

One of the important issues that emerged from the study was the need for quality teacher PD for teachers working at schools affected by a natural disaster, such as the case of the

study school. The study findings suggested that teachers not only had to cope with a lack of resources for teaching and learning but had been provided with little extra support as a result of the disaster. Teachers in the school lacked access to PD and, for a range of reasons, including in their subject specialisations, the opportunity available for PD programs among teachers was unequal. In particular, few opportunities were available for teachers in the school for training to enhance their knowledge and skills about students' social and emotional development and related issues.

Research suggests that teachers can learn and improve their knowledge, skills, and teaching practices through experiences embedded in their teaching work, from day-to-day activities at school, such as informal talks with other teachers, to formal structured activities, such as teacher training programs and seminars and teacher group study (Desimone, 2009). However, teachers in the study school seemed not to have access to such experiences. Jennings & Greenberg (2009) also found that, despite high expectations put on the teachers' roles for creating a positive classroom environment and improving students' achievement, there was a lack of training, particularly for specific programs concerning students' social and emotional development and how to manage social and emotional issues in classrooms. Unless the teachers received the support they required, they were unlikely to help themselves and provide support for others, such as for students. Moreover, they could experience greater psychological stress and, as Hobfoll (1989) has suggested, when people are in the position that they need support but are also required to provide support for others, they are likely to experience increased psychological stress.

Desimone (2009) argued that what matters most is actually not the type of activities in which the teachers are involved in their professional learning but rather the characteristics of the activities that determine whether or not it is effective. For understanding teacher PD in the study school, I focused on the five "critical criteria" for effective PD proposed by Desimone (2009), which are drawn from her extensive reviews of the literature on effective PD. They are "content focus", "active learning", "coherence", "duration", and "collective participation".

Content focus

Desimone (2009, p. 184) noted a link between effective teacher PD programs that focus on subject matter content and methods by which the content can be effectively delivered to students and an increase in teachers' knowledge and skills and their teaching practices of the subject teachers teach, as well as, to some extent, increase in students' achievement. In line with Desimone (2009), it was evident from the interviews that the provision of quality education in the school needed to be improved. Although they seemed to find it difficult to articulate their needs (Guskey, 2003), the teachers indicated that they needed opportunities to improve their knowledge and skills, and the teaching methods directly related to the subject they were teaching in order to improve the quality of teaching and learning at the school (Thair & Treagust, 2003).

Borko (2004) claimed that many current PD programs for teachers in general, whether training, seminar or other forms, are "intellectually superficial" and do not consider how teachers can best learn from the activities. Moreover, Vrasidas and Glass (2004) argued that many existing PD programs are not those that teachers need or want; rather, very often, PD is something imposed on teachers by the local office of Department of Education, which decides what programs teachers need and how the programs will be delivered. Fullan and Hargreaves argued that:

Many staff development initiatives take the form of something that is done to teachers rather than with them, still less by them... ignore different needs among teachers related to years of experience, gender and stage of career and life (1996, p. 17).

This case was noted by one teacher participant who reported that “there should be more professional programs that focus directly on subjects we are teaching”. And he quoted an example “when I participated in teacher certification training program, I learnt lots of new models for teaching and learning and that increased my knowledge in the area”. Conversely, the teachers did not value another teacher PD program that he had attended because “there were no new teaching methodologies and how students can learn the content subject effectively was not taught in the activities”.

Coherence

Guskey (2003) reminded us that the provision of PD for teachers should be based mainly on teachers’ needs. What is taught in PD should also be consistent with the school and local context (Desimone, 2009; Thair & Treagust, 2003; William, 2006). In this sense, PD programs should have a clear view of the connection between what teachers learn during their participation in the program and the reality of their teaching practices (Vrasidas & Glass, 2004; William, 2006). Study findings suggest that much of what teachers learnt from the PD sessions they had attended did not match with the reality they were facing in the school. Thus, teachers would find it very difficult to implement what they have learnt from the program if the new skills and knowledge are inappropriate to their school context (Thair & Treagust, 2003). For example, a teacher in the study school commented that she could not incorporate what she had learnt from professional programs she had attended about using new teaching methods and using instructional media such as technology in the school because the school simply did not have those facilities. In reality, teachers in the school still continued to use out-dated teacher-directed teaching methods by which teachers lectured and wrote lessons on the blackboard for students to copy and memorise.

When asked about the need to have PD related to psychological knowledge, teachers in the school indicated that it was important to have the kind of training or PD program that could enhance their knowledge in psychological aspects, especially knowledge about young people. They believed it was even more important since they worked in a tsunami-affected school where students showed signs of behavioural problems. Although the officer from the local office of the Department of Education believed that all teachers from the school in the area had been provided with training related to how to address psychological issues after the tsunami, such as stress and trauma, many teachers in the study school noted that they had not attended any such kind of PD. Knowledge and skills about working with traumatised young people, especially to better understand those with behavioural problems, were perceived by teachers as important in order to improve the quality of education at the school. Moreover, the school counsellor, whose main role in the school was to deal with troubled students, did not have formal education in the field and had never had training to help her with her work as a counsellor. Her appointment in the role was only because of the absence of people with the expertise in the field and people’s perception that she cared about troubled students in the school.

It is interesting that the officer in the office of the local Department of Education argued that such training had been provided to teachers in the early years following the tsunami and it was no longer needed. Part of the officer’s argument was based on the fact that

there were no reports received by the office from schools about the existence of ongoing psychological issues in schools in the area, including in the study school, six years after the tsunami. It was concerning that the authority took for granted reports from a “Pengawas” (school supervisor) about what was happening at schools, including at the study school, while many teachers in this study reported that the work of the Pengawas was ineffective. This suggests that the authority needs to work more closely with the school to be able to identify the challenges and needs for teachers in the school. Better support and resources for teachers would, consequently, benefit not only students but the school as a whole.

The head of the teacher organization, in his interview, expressed his concern about the fact that he had seen teachers in the study school who did not seem to understand their students and acted inappropriately when dealing with students, especially when they were misbehaving at the school. He argued that, ideally, teachers who were teaching at tsunami-affected schools, such as the study school, should be those who had some sort of understanding about students, including students who were from poor families, were orphans or were having psychological issues that might be a result of the tsunami. Similar expectations were also expressed by other community members who expected teachers to understand young people and their problems after the tsunami.

Active learning

Research suggests that active learning is a characteristic of effective PD that involves more than simply sitting and listening to a seminar or a lecturer (Bissaker & Heath, 2005; Desimone, 2009). Based on observational data and from interviews and conversations with teachers, including the principal, it was evident that teachers at the school themselves were generally passive or not keen to improve their own knowledge and skills. What I observed was they did not learn on their own, with colleagues at school or seek knowledge such as through reading. For example, I observed that teachers rarely read or discussed topics related to their profession when they were in the teacher office during lesson breaks or on other occasions when gathered together. This was confirmed by one teacher’s comments in the interview. She said, “I saw in other schools that teachers were sitting together discussing school issues such as how to make lesson plans. But here, teachers are only gossiping. None discussed lesson plans”. Another teacher’s comments in one interview, as illustrated in the interview excerpts below, also confirmed my observation:

Fadliadi: There is a theory called lifelong learning such as teachers keep learning and learning. Is there anything like that here at this school?

Teacher: There is not. There is not at all. There is not.

Fadliadi: What about discussions with colleagues?

Teacher: There is not. Even when I asked them to talk about something, about a particular thing related to education, they would tease me.

Desimone (2009, p. 184) pointed out that active learning also includes “observing expert teachers or being observed, followed by interactive feedback and discussion”. During my fieldwork, some teachers in the study school were happy and welcomed me into their classrooms to observe what was happening during classroom teaching and learning at the school. The teachers and I then had opportunities to discuss what was happening in the classroom; we appreciated the classroom observations as mutual learning opportunities.

However, there were teachers in the school who were reluctant to make such observations when I asked them. In fact, some teachers from the school also commented that it was hard to encourage teachers in the school to share knowledge and skills in teaching practices through classroom teaching observations. For example, one teacher who had been to a number of PD programs, both in Aceh and outside Aceh, was disappointed that she had not yet had the opportunity to observe her colleagues' teaching practices as many teachers seemed to be reluctant. Although she wanted to share what she had learnt from her PD program, such as new teaching methods, some of her colleagues were reluctant to be involved. Moreover, no one took the opportunity to observe her teaching when she offered it so that they could discuss issues around teaching for better teaching practices. One teacher was cynical and said to her: "Oh come on, why are you so keen about that?" Another teacher observed the same about new teaching methods. He said that many teachers were resistant to new ideas, skills or knowledge about teaching. He had been to some PD programs and would have liked to share what he had learnt in the programs with other teachers in the school. Unfortunately, the responses from his colleagues were not very positive so he was reluctant to share new teaching ideas with others.

Duration

Desimone (2009) noted that highly effective teacher PD programs are those which are sustained, both in terms of the span of time for the program and the number of hours spent in the programs. Birman, Desimone, Porter, and Garet (2000) also argued that extended PD programs will increase opportunities for teachers to engage in more active learning and focus on subject-area content and connect it with their daily practice more coherently than shorter ones. Henderson (2007) believed that PD program that were not sustained and were held as short, single sessions would have little impact on teachers' practices. Teachers in the study school commented that most of the PDs they had attended were one-off and not sustained. For example, programs related to managing psychological aspects after the tsunami, which were mainly provided by non-government organizations, had been mostly held only once or twice in the early months after the tsunami. Teachers no longer received invitations for such training since then making the initial training ineffective because of the limited scope and timeframe.

While many teachers in the school valued the importance of participation in PD programs to increase their knowledge, skills, and teaching practice to be better able to provide quality education in the school, they noted that opportunities for any kind of teacher PD programs were rare. Data revealed that there were some teachers from the school who had attended several training workshops or seminars but there was also a teacher who had attended only one teacher training workshop during his teaching career. The school itself sometimes sent the same teachers to attend a program thinking that it was a follow-up program because they had misunderstood the information from the Department of Education. Therefore, the same person attended the same program again and again while other teachers missed out on PD opportunities. As a consequence, the teachers who had attended one program and were sent to the same program again, would find it boring and be less engaged in the activities. The head of the teacher organization in Aceh argued that the local office of the Department of Education may not have good data about teachers attending PDs.

Moreover, even where there were PD programs offered to teachers in the school, the opportunities were unequal because the programs were mostly for certain subjects perceived as important subjects at school (e.g. natural science) and only certain teachers

in the school were invited to attend those programs. A social science subject teacher in the school commented:

It has been six years after the tsunami already but the type of teacher professional development program provided to teachers either by the Department of Education or by other related parties remains the same. It was only for those subjects, again and again. And the same persons go to the programs, too. It was for subjects like natural science subjects and Math. For us who teach social science and other subjects, rarely do we get the opportunity for professional development. Maybe they think our subjects are easy. Since the tsunami, I have not seen there is a kind of training for our subject and I myself have never been to any kind of professional development program since then. On one hand we are expected to enhance the quality of education but our own quality as teachers has never been enhanced. What I mean is there are no professional development programs for us.

The teacher went on to say that there seemed to be unequal support for teachers for attending professional activities such as Musyawarah Guru Mata Pelajaran (MGMP or Teacher Education Consensus Points) or discussion among the same subject teachers. The teacher questioned why:

There was funding from the Department of Education or the government for teachers teaching subjects like Math to participate in MGMP while there was no financial support for teachers who are teaching subjects like mine. Maybe, they think that our subjects are not important?

The teachers had to pay for all the expenses that occurred from the activity such as transport costs and photocopying the materials. For that reason and a lack of effectiveness in the MGMP activity, as mentioned earlier, the teacher seemed to be reluctant to participate in that program even though that program was actually compulsory for teachers.

Collective participation

Studies in PD have found that collective participation is a powerful form of teacher learning in which teachers from similar background or from the same school, department or grade get together for learning activities (Birman, et al., 2000; Butler, Lauscher, Jarvis-Selinger, & Beckingham, 2004; Desimone, 2009). The studies clearly show that, through such participation, teachers (e.g. teachers teaching the same subject) have the opportunity to engage in a meaningful discussion, planning, and practice around issues they may have faced or are facing during their PD program activities or in their day-to-day work. In addition, through collaborative participation, teachers construct knowledge and develop language in common within the group when talking about teaching.

Teachers in the study school, like other teachers in Aceh and more widely in Indonesia, also had opportunities to get together to discuss issues around teaching and learning, including activities facilitated by the local Department of Education, such as MGMP or discussion among same subject teachers. The aim of the program was to enhance teachers' knowledge and skills in the subject content area and teaching methods, in which teachers who taught the same subjects from a cluster of schools in one area could have a day off when they got together to discuss issues related to teaching their subject. The officer from the Department of Education of Banda Aceh, in our interview, believed that MGMP was an effective program to help teachers enhance their knowledge and skills in teaching their subjects. She asserted that:

That program is very effective because teachers can discuss issues they were facing... Through that program teachers are helping each other to be better... we used it as a medium to improve teachers' knowledge, skills, and experience in teaching.

Research in this area suggests that such activity would give teachers opportunities to learn from each other, share expertise and collaborate in particular activities in the subject they were teaching (Birman, et al., 2000; Vrasidas & Glass, 2004). However, according to one teacher from the study school, this activity was not effective since teachers only met and discussed how to construct lesson plans. After a lesson plan was produced, each teacher then submitted the document to a person who acted as the instructor, and teachers did not even know what happened to the document after that. In addition, very often there were no experts present in the activity. It was just among teachers who actually had the same level of knowledge and skills in the area. Therefore, he argued, he had not learnt anything new from the activity that could improve his knowledge and teaching skills.

Moreover, the head of the teacher organization asserted that "The MGMP program is like a tree which grows in the jungle. It grows by itself. No one cares for it". He referred to a lack of attention and support from the local office of the Department of Education to the program. There was no supervision over the program either from the Department of Education through its Pengawasor, or from the school principal. As a result, particular teachers who were given days off to attend the program might not even attend and no one would care about it. In addition, there was no expert present in the session. He regretted that such a good program to enhance teachers' knowledge and skills in teaching subject through teachers' discussion among same subject teachers became ineffective because of those factors.

Further, according to the head of the teacher organization, there was no follow-up or evaluation of the effectiveness of a teacher PD run by the Department of Education. In this case, teachers were not monitored or supervised as to whether or not they implemented what they had learnt in programs they had attended. Therefore, teachers continued to teach the same way as before, regardless of new knowledge and skills they had obtained in their PDs. He was also concerned that many teachers attended PD programs because of the promised incentive they would receive at the end. It was common practice that teachers were given money to attend PD programs, such as for transportation, accommodation, and for personal costs during the programs. Therefore, "The first question teachers would ask was how much incentive they would receive including for transport expenses when they were invited to a teacher training program", stressed the head. "[I]deally teachers should pay for participating in training... But they already get used to that kind of practice". On this matter, Bjork (2003), in his three-year ethnographic study in East Java Indonesia between 1996 and 1998, also found a similar phenomenon: that teachers tend to invest their time to activities or tasks that bring them monetary rewards. Bjork (2003) commented that the "incentive most likely to motivate educators to carry out their professional responsibilities is the promise of financial compensation" (p. 206).

CONCLUSION

Considering the possible ongoing long-term impact of the tsunami on teachers and students, the study found that teachers in the study school were still in need of sustained training or programs to enhance their knowledge and skills. This is especially in disaster-related matters and especially to work with troubled students. In this sense, providing

teachers with training or PDs that enhance teachers' subject teaching related skills and knowledge is one important aspect in empowering teachers. The important message from this study is that, over and above the attention given to pedagogical content skills, teachers should be given support for developing their competence and confidence to manage socio-psychological issues at the schools while the community is in the process of adapting to its changed environment after the tragedy (Sahin, Yilmaz, & Batigun, 2011; Wolmer, Laor, Dedeoglu, Siev, & Yazgan, 2005). Teachers would thus be empowered to participate effectively as mediators and educators in the process of rebuilding schools and lives, especially of young people, after the disaster (Wolmer et al., 2005). "A well-planned, carefully organized collaboration between district-level personnel who have broader perspective on problems and site-based educators who are keenly aware of critical contextual characteristics seems essential to optimize the effectiveness of professional development" (Guskey, 2003, p. 13).

ACKNOWLEDGEMENTS

This paper is part of Fadliadi Ubit's unpublished PhD thesis entitled: *In the shadow of the tsunami: A case study of a tsunami affected school in Banda Aceh*. The study was undertaken at Flinders University of South Australia under the supervision of Professor Rosalind Murray-Harvey, Dr. Pam Bartholomaeus, and Dr. Neil Welch. This research was funded by a scholarship from the Aceh government and research funding from Flinders University.

REFERENCES

- Agustini, E. N., Asniar, I., & Matsuo, H. (2011). The prevalence of long-term post-traumatic stress symptoms among adolescents after the tsunami in Aceh. *Journal of Psychiatric and Mental Health Nursing*, 18(6), 543–549.
- Ananta, A. (2007). The population and conflict. In A. Ananta & L. P. Onn (Eds.), *Aceh: A new dawn*. Singapore: Institute of Southeast Asian Studies.
- Bailey, D. M., & Jackson, J. M. (2003). Qualitative data analysis: Challenges and dilemmas related to theory and method. *American Journal of Occupational Therapy*, 57, 57–65.
- Birman, B. F., Desimone, L., Porter, A. C., & Garet, M. S. (2000). Designing professional development that works. *Educational Leadership*, 57(8), 28–33.
- Bissaker, K., & Heath, J. (2005). Teachers' learning in an innovative school. *International Education Journal*, 5(5), 178–185.
- Bjork, C. (2003). Local responses to decentralization policy in Indonesia. *Comparative Education Review*, 47(2), 184–216.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3–15.
- Bowen, G. A. (2008). Naturalistic inquiry and the-saturation concept: A research note. *Qualitative Reserach*, 8(1), 137–152.
- Butler, D. L., Lauscher, H. N., Jarvis-Selinger, S., & Beckingham, B. (2004). Collaboration and self-regulation in teachers' professional development. *Teaching and Teacher Education*, 20, 435–455.

- Cole, S. F., O'Brien, J. G., Gadd, M. G., Ristuccia, J., Wallace, D. L., & Gregory, M. (2005). *Helping traumatized children learn*. Boston: Massachusetts Advocates for Children.
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). New Jersey: Pearson Prentice Hall.
- Day, C. (1999). *Developing teachers: The challenges of lifelong learning*. London: Falmer.
- De Anstiss, H., Ziain, T., Procter, N. G., Warland, J., & Baghurst, P. (2009). Help-seeking for mental health problems in young refugees: A review of the literature with implications for policy, practice, and research. *Transcultural Psychiatry*, 46(4), 584–607.
- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, 38(3), 181–199.
- Douglas, D. (2003). Grounded theories of management: A methodological review. *Management Research News*, 26(5), 44–52.
- Dye, J. F., Schatz, I. M., Rosenberg, B. A., & Coleman, S. T. (2000). Constant comparison method: A Kaleidoscope of data. *The Qualitative Report*, 4(1), 1-10. Retrieved from <https://nsuworks.nova.edu/tqr/vol4/iss1/8>.
- Fasler, D. (n.d.). Talking to children about natural disaster. Retrieved from <http://www.aacap.org/galleries/DisasterResponse/TalkingtoChildrenaboutNaturalDisaster.aacap.1.2.04.pdf>
- Freedy, J. R., Shaw, D. L., Jarrel, M. P., & Master, C. R. (1992). Towards an understanding of psychological impact of natural disaster: An application of the conservation stress model. *Journal of Traumatic Stress*, 5(3), 441–454.
- Fullan, M., & Hargreaves, A. (1996). *What's worth fighting for in your school*. New York: Teachers College Press.
- Grundy, S., & Robinson, J. (2004). Teacher professional development: Themes and trends in the recent Australian experiences. In C. Day & J. Sachs (Eds.), *International handbook on the continuing professional development of teachers*. Berkshire: Open University Press.
- Guskey, T. R. (2003). Analyzing lists of the characteristics of effective professional development to promote visionary leadership. *ANASSP Bulletin*, 87(637), 1–20.
- Harris, W. W., Putnam, F. W., & Fairbank, J. A. (2004). *Mobilizing trauma resources for children*. Paper presented at the meeting of the Johnson and Johnson Pediatric Institute: Shaping the future of children's health, San Juan, Puerto Rico, February 12-16, 2004. Retrieved from <http://www.nceev.org/pdfs/harrismanuscript.pdf>
- Henderson, M. (2007). Sustaining online teacher professional development through community design. *Campus-Wide Information Systems*, 24(3), 162–173.
- Hobfoll, S. E. (1989). Conservation of Resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524.
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491–525.
- Jordan, K. (2006). A case study: How a disaster mental health volunteer provided spiritually, culturally, and historically sensitive trauma training to teacher-counselors

- and other mental health professional in Sri Lanka, 4 weeks after the tsunami. *Brief Treatment and Crisis Intervention*, 6(4), 316–325.
- Khairuddin, K., Zubir, F., & Kismullah, K. (2009). *Integrating disaster knowledge into the curriculum unit level of education (KTSP) at elementary school in Banda Aceh*. Paper presented at the 4th Annual International Workshop & Expo on Sumatra Tsunami Disaster & Recovery. Retrieved from: <http://atdr.unsyiah.ac.id:8080/jspui/bitstream/123456789/4854/1/MicrosoftWord/TS4-4.pdf>
- Leon, G. R. (2004). Overview of psychosocial impact of disasters. *Prehospital and Disaster Medicine*, 19(1), 4–9.
- Liamputtong, P. (2009). *Qualitative research methods* (3rd ed.). Melbourne: Oxford University Press.
- Lindell, M. K. (2011). Disaster studies. *Sociopedia.isa*. DOI: 10.1177/20568460111. Retrieved from: <http://www.sagepub.net/isa/resources/pdf/disasterstudies.pdf>.
- Lindlof, T. R. (1995). *Qualitative communication research methods*. Thousand Oaks: Sage Publications, Inc.
- Mandel, J., Mullett, E., Brown, J., & Cloitre, M. (2006). *Cultivating resiliency: A guide for parents and school personnel*. New York: New York University Child Study Center.
- Muijs, D., Day, C., Harris, A., & Lindsay, G. (2004). Evaluating CPD: An overview. In C. Day & J. Sachs (Eds.), *International handbook on the continuing professional development of teachers*. Berkshire: Open University Press.
- Rooney, P. (2005). Researching from the inside—does it compromise validity? - A discussion. *Level 3*(3), 1-19.
- Russo, R., & Boman, P. (2007). Primary school teachers' ability to recognise resilience in their students. *The Australian Educational Researcher*, 34(1), 17–32.
- Sahin, N. H., Yilmaz, B., & Batigun, A. (2011). Psychoeducation for children and adults after the Marmara earthquake: An evaluation study. *Traumatology*, 17(1), 41–49.
- Silove, D., & Zwi, A. B. (2005). Translating compassion into psychosocial aid after the tsunami. *The Lancet*, 365, 269-271.
- Thair, M., & Treagust, D. F. (2003). A brief history of a science teacher professional development initiative in Indonesia and the implications for centralised teacher development. *International Journal of Educational Development*, 23, 201–213.
- Vrasidas, C., & Glass, G. V. (2004). Teacher professional development: Issues and trends. In C. Vrasidas & G. V. Glass (Eds.), *Online professional development for teachers*. Greenwich, CT: Information Age Publishing Inc.
- Walmer, L., Laor, N., Dedeoglu, C., Siev, J., & Yazgan, Y. (2005). Teacher-mediated intervention after disaster: A controlled three-year follow-up of children's functioning. *Journal of Child Psychology and Psychiatry*, 46(11), 1161–1168.
- William, D. (2006). Formative assessment: Getting the focus right. *Educational Assessment*, 11(3-4), 283–289.
- Walmer, L., Laor, N., Dedeoglu, C., Siev, J., & Yazgan, Y. (2005). Teacher-mediated intervention after disaster: A controlled three-year follow-up of children's functioning. *Journal of Child Psychology and Psychiatry*, 46(11), 1161–1168.