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GO ONLINE AND HAVE A CHAT WITH YOUR COLLEAGUES: A NEW IMAGE OF TEACHER PROFESSIONAL LEARNING IN INDONESIA

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Abstract

This paper describes the new model of Teacher Professional Development (TPD) named Online Learning Community for Teacher Professional Development (OLC4TPD) to support ongoing teachers' professional learning in Indonesia. Research shows that ICT shows a lot of potential to support ongoing learning, however, it has not been fully explored how it can support ongoing TPD process. This paper was a result of a research conducted by the first author to develop an online learning community to facilitate ongoing social learning interaction of educators in Indonesia. Three online learning environments, which were Web Portal Discussion Forum, Skype and Facebook, were adopted and social learning interactions within these environments were analysed. The paper discusses the differences of members' participations in these three online environments and the impacts of their online learning interaction for their professional development.

Background

The rapid pace of technological innovation has changed the knowledge-based society and gradually changed the way teaching and learning are conducted (Hargreaves, 2003). Teachers are increasingly viewed as not only the knowledge providers, but also the facilitators of a learning process. These changes have been difficult for teachers to adapt to, requiring substantial amounts of professional development. Many teachers, however, are not yet ready to deal with the new challenges because they have been raised and educated in a 'conventional way' (Friesen & Clifford, 2003), which Haberman (1991; 1992, p. 16) defined as the *Pedagogy of Poverty* (p.16).

Development of teachers professionalism has been defined into four main periods by Hargreaves and Fullan (2000), which are the *Pre-professional Age*, the *Autonomous Professional Age*, the *Collegial Professional Age* and the *Post-Professional Age*. During the *Pre-professional Age*, which was the first half of the 20th century, teaching was a matter of recitation, lecturing, note taking, questions and answers. Only in 1960s did children start to be considered as significant subjects in the teaching process (*Autonomous Professional Age*). During this period, teachers had more autonomy in choosing their pedagogical methods. They maintained their primary role as information providers in a classroom. Two decades later (1980s), there was a significant growth of awareness of collaboration among teachers as a means for professional development processes. Pupils were no longer considered as an object in the teaching and learning process, for there was a societal change that pupils should be included in decision-making. The policy makers mandated the new collaborative structures among teacher colleagues in schools to improve teachers' professionalism. A number of studies conducted during this period established a solid knowledge base that Teacher Professional Development (TPD) process was considered as an effective way to change teachers' behaviour and influence student outcomes (Guskey, 1986; Joyce & Showers, 1982) (*Collegial Professional*). The last period began during the 21st century (Hargreaves, 2000). This period is characterised by globalisation of economics and rapid development of educational technology. This significant change in the world has caused an uncertainty among teachers as well as policy makers, concerning what knowledge is, and what kind of knowledge is valuable to pass on from one generation to the next (*Post-professional*). Hargreaves (2000) considers this fourth period as a crossroad for teachers' professionalism and the way professional development for teachers should be perceived and interpreted.

The transition from one period to another differs from one country to another - from one school to another. Based on Hargreaves' periodic division, we are currently in the fourth period. Yet, a lot of teachers' mindsets are still in the previous periods. In Indonesia, a large number of teachers still believe strongly in the teacher-centred process of teaching and learning (*pre-professional age*), while the others have started to move to the *age of the collegial professional*. As the first author started the study in 2008-2009, she encountered several groups of teachers who had been, or had just started, growing their awareness about the importance of collegial collaboration to develop their professional competencies. In 2010, she had an opportunity to meet a group of teachers and school leaders, who have just moved into the post-professional period.

Research has shown that pedagogical transformation of a teacher can be facilitated through ongoing TPD (Darling-Hammond, 1994). TPD allows teachers to reflect on their own practice through interactions with other practitioners, which can improve their professional practice. Conventional TPD practices, however, may not be relevant to the needs of teachers in the knowledge society. Organised as a periodic activity (Lock, 2006), these conventional TPD practices employ a directive top-down approach to facilitate professional learning. These practices are also often characterised by a lack of effort; to 1) engage and motivate teachers in Community of Practice (CoP) (Joyce & Showers, 1980); 2) encourage teachers to reflect on their professional practice on ongoing basis (Helleve, 2010), and 3) provide ongoing support for teachers (Scott, 2003).

A significant reformation on the practice of TPD is thus required to address the challenges of the 21st century. A number of recent studies have been undertaken to explore how to conduct TPD in a more effective manner to ensure continual support for 21st century teachers, so that they can enhance their professional competencies and fulfil critical demands of educating students in this era of globalisation (Barab et al., 2001; Duncan-Howell, 2007; Helleve, 2010; Lloyd & Duncan-Howell, 2010; Scott, 2010)

Continuous reflection is one of the crucial elements of TPD to help teachers improve their professional competencies. Helleve (2010) believes that TPD is a continuous reflective activity conducted in a learning community. Instead of holding a TPD as an exclusive activity or in isolation, she suggested to conduct TPD as a collaborative activity in a learning community. Social learning interaction through collegial collaboration in TPD promotes different ways of thinking and empowers teachers. Communities within and outside the school have a significant role in influencing the professional development journey of teachers. In the 21st century era, the reality of being a teacher is like undertaking a journey. Lloyd and Duncan (2010) explained that the social and technological changes of this era are reflected in contemporary schooling. Teachers nowadays have to cope with these changes and master the subjects of teaching. As a result, they suggested that the online learning community (OLC) is a "*flexible, authentic, reflexive and personalised model of TPD to support, guide and inspire teachers*" (p. 60). In an OLC, community members are immersed directly within the context of teaching and learning, which subsequently affects their personal development both *over* time and *in* time.

In Indonesia, many teachers work and live in dispersed geographical locations, including remote areas. While the Indonesian government is continually developing a number of strategic education policies and implementing various pathways to improve the professionalism of teachers, for a variety of reasons there are still a large number of teachers who struggle to access the professional development support provided by the government. This is particularly the case for teachers who work in rural and remote areas, because many of the current TPD practices still focus on teacher-centred approaches instead of collaborative approaches, and often only in the format of face-to-face interaction. The typical TPD model practiced in Indonesia requires a school to send one or a few representatives to periodic teacher forums, which are usually conducted in a distant town or city. This situation results in inflexibility for participating in TPD activities. Beside limited opportunities, there are other challenges of TPD related to existing policies and practices in Indonesia, such as financial and human resources.

This paper presents the results of a study that set out to develop and implement an OLC to support the current TPD practices in Indonesia. This online learning community was called the Online Learning Community for Teacher Professional Development (OLC4TPD). The study investigated the facilitating and inhibiting factors of OLC4TPD implementation in Indonesia, and analysed how OLC4TPD supported TPD within the Indonesian context.

The Research

This research was designed using a Design-Based Research (DBR) methodological framework (Brown, 1992; Collins, 1992). In this research, an iterative design and evaluation process was conducted to address the complex problems of TPD in Indonesia (Sari & Lim, 2012). A preliminary ethnographic-inspired research was conducted prior to the design and development of the community to understand the current practice of TPD in Indonesia including its challenges. Several online technologies and online learning communities were trialed to facilitate ongoing TPD of Indonesian teachers. During the implementation, the researcher investigated the multi-layers of social learning interaction in OLC4TPD (Sari, Lim, & Pagram, 2010). Four main phases of the DBR conducted in this research are the followings:

1. Phase 1 - Problem Analysis

A field study to gather knowledge about the existing TPD practices and policies was conducted in Indonesia during 2008-2009 in addition to an extensive literature study on TPD theories and practices.

2. Phase 2 - Design and Development

Teachers and teacher educators were engaged in several design and development activities, including: a brainstorming workshop with twenty-three teacher educators, online discussions, ICT surveys and unstructured open-ended interviews. Based on their feedback and inputs, the initial infrastructure of OLC4TPD, the online learning environments, professional learning activities were built. OLC4TPD was launched in October 2009 for testing and further refinement in Phase 3

3. Phase 3 – Iterative Testing and Refinement

Three main interventions using three main online learning environments, i.e. Web Portal Discussion Forum, Skype and Facebook, were conducted. The process of social learning among educators were analysed using Scardamalia's knowledge building perspective (2002; Scardamalia & Bereiter, 2000) and Hofstede's Cultural Dimensions (1994).

4. Phase 4 – Reflection and Documentation

The evolution of OLC4TPD from its conception was recorded to understand the process of change that had happened prior, during and after the design, development and implementation of OLC4TPD.

OLC4TPD Adoption

Based on the results of the ICT surveys on ICT competencies (see Table 1), the profiles of the early participants were mapped to inform the design and development process. Three main online environments were adopted to facilitate the online learning interactions.

Discussion forum was the first generation of ICT technology, which was suggested by most of workshop participants for facilitating online interaction. They considered the discussion forum as an effective tool to facilitate the knowledge-building process. Most participants were already familiar with this learning environment tool.

Skype was introduced in the second intervention to facilitate fortnightly synchronous online meetings. The participants of the meeting could hear and participate in the discussion on a specific time without any delay. Skype was chosen because it was available for free. It allows many people to communicate through instant messaging and voice chat. Participants could talk to each other real-time, even though they could not see each other physically.

Facebook was introduced on the third intervention; the early findings showed that more than 55 percent of the teachers and 69 percent of the teacher educators considered that they had knowledge and skills about social media, particularly Facebook (see Table 2). They had used social media mainly for networking, communication and entertainment purposes. It was expected by adopting this tool; more teachers and teacher educators could engage more in the online learning community.

Table 1 ICT Competencies of Teachers and Teacher Educators

T=74 TE=26	0 (Doesn't know much)		1 (Basic Skill)		2 (Moderate Skill)		3 (High Skill)	
	T	TE	T	TE	T	TE	T	TE
Internet (A1)	17 (23%)	0 (0%)	11 (15%)	2 (8%)	23 (31%)	3 (12%)	23 (31%)	21 (81%)
Email (A2)	18 (24%)	0 (0%)	23 (31%)	3 (12%)	26 (35%)	14 (54%)	7 (9%)	9 (35%)
Blog (A3)	33 (45%)	5 (19%)	18 (24%)	5 (19%)	10 (14%)	8 (31%)	13 (18%)	8 (31%)
Wiki (A4)	33 (45%)	3 (12%)	30 (41%)	14 (54%)	7 (9%)	6 (23%)	4 (5%)	3 (12%)
Podcasting (A5)	56 (76%)	12 (46%)	14 (19%)	12 (46%)	1 (1%)	1 (4%)	3 (4%)	1 (4%)
Social Media (A6)	32 (43%)	8 (31%)	16 (22%)	2 (8%)	20 (27%)	8 (31%)	6 (8%)	8 (31%)
Online Community (A7)	74 (100%)	16 (62%)	0 (0%)	2 (8%)	0 (0%)	4 (15%)	0 (0%)	4 (15%)
Content or File Sharing Sites (A8)	43 (58%)	7 (27%)	17 (23%)	5 (19%)	9 (12%)	8 (31%)	5 (7%)	6 (23%)
Online Learning Environment (A9)	49 (66%)	5 (19%)	18 (24%)	13 (50%)	3 (4%)	2 (8%)	4 (5%)	6 (23%)

Online Interaction @OLC4TPD

The community members chose an online environment that matched to their own circumstances in order to participate in OLC4TPD social learning activities. Their choice was influenced by several factors, such as ICT access, ICT competency, length of experience in using ICT, gender, leadership in the organisation (Sari, 2012). Their choice of the online environment influenced the membership and level of participation in the three online environments (see Table 2).

Based on the numbers of members, Facebook appeared to be the most popular online environment

used in the community. There were more than 1,000 members registered on Facebook compared to the membership numbers on the Web Portal (less than 150) and on the Skype (less than 50). On the other hand, based on the level of participation, Skype seemed to attract more members to participate actively than the other two ICT online learning environments (see Table 2)

The Web Portal Discussion Forum, as the first online learning environment introduced, attracted more teacher educators than teachers during the initial stage of the research. Based on the preliminary ICT survey results, the teacher educators had better ICT access and skills (see Table 1) that enabled them to make use of the discussion forum to support their online professional development. It was found that the Web Portal Discussion Forum seemed to support teacher educators' needs for networking, exchanging information and dissemination of research results, which they had envisioned during the brainstorming workshops and interviews (Phase 1 *Problem Analysis*)

Table 2 Membership and Participation at OLC4TPD

	Period of Study	Online learning environments and Activities	Total Member		Average Monthly Participants	Total Postings
			M	F		
1	Oct 2009 – May 2010	Web Portal Discussion Forum (Asynchronous online discussion)	68	36	13.4%	98
2	Nov 2009 – Dec 2010	Skype (Synchronous online meeting)	34	11	64.4%	
3	Nov 2009 – Dec 2010	Facebook Wall (Asynchronous online discussion)	1053		7.7%	395

The Web Portal membership, however, did not progress as expected. Most of the members consisted only of teacher educators and a few teachers (who participated during Phase 1) and their colleagues. The teacher educators, in particular, felt the need of having a wider audience for the community, to foster mutual communication and collaboration between teacher educators and teachers. These teacher educators often mentioned the importance of face-to-face interaction as additional activities for OLC4TPD, to encourage more teachers to join the community (this is due to conventional paradigm and existing face-to-face practice of TPD in Indonesia).

As a result, the second intervention using synchronous online learning activities through Skype was implemented, because it could facilitate real-time interaction (voice only). The majority of the synchronous online meeting participants were first-timers in using Skype when they initially participated. While most of them faced ICT-related issues (access and literacy), Skype provided possibilities for OLC4TPD members to interact synchronously online, despite their geographical differences through online media.

The synchronous online meeting using Skype was an eye opening collaborative activity for the teachers and teacher educators. The two-hour fortnightly online meeting seemed to help a lot of educators to solve their professional problems. While it might take one day or a couple of months for OLC4TPD members to reply to email, it took only a few seconds to get feedback from other colleagues using Skype. Thus, the member participation on the Skype online meeting was higher than the Web Portal Discussion Forum or Facebook.

Facebook, as the third ICT online learning environment introduced, was found to attract new members the most (see Table 2). One of the reasons was its popularity as the number one social networking site among Indonesians, including teachers and teacher educators. These educators used Facebook on a daily basis to communicate with their friends and families. Within two months, five-hundred and twenty new educators (mostly teachers) had

joined OLC4TPD Facebook (Sari, 2010). There were many reasons why there was a significant improvement in the membership, from under 30 to over 500 members during the first two months after Facebook was launched (November 2009). The rarity of similar Facebook communities used for TPD in Indonesia, the power of Facebook as a social media and word of mouth among OLC4TPD members who had joined OLC4TPD through this media. Their personal interests rather than external factors motivated most of the members, who joined OLC4TPD through Facebook.

In contrast to the success in recruiting a large numbers of OLC4TPD members using Facebook, this online learning environment was unable to engage the same large numbers of people in actual participation. The percentage of individual participation against the total number of Facebook members was the lowest compared to the participation rates on Skype and the Web Portal Discussion Forum respectively (see Table 1). One possible reason is related to the nature of Facebook use during late 2009 to early 2010, which was mainly as a social networking tool, rather than a means for TPD. The awareness and competence of utilizing this online learning environment for professional purposes was therefore low.

Facebook participation gradually improved over time with intervention from the eModerator. OLC4TPD members on Facebook were initially passive members (lurkers). While they constantly used Facebook, they only acted as passive receivers of information. Their motivation in engaging in social learning arose as the eModerator shared new information that attracted their interest (e.g. authentic problems, local educational issues and international education systems). In addition, the eModerator also introduced and organised synchronous online meeting activities on ongoing basis to facilitate a novel way of social learning interaction.

Impacts of Online Engagement

Regardless the level of participation and the number of members in the OLC4TPD, there were several evidences that show the impacts from the Indonesian educators going online during the period of 2008-2010. The data was collected from before, during and after the study both using online and offline methods (Sari, 2012). The presentation of the impact items was inspired by the principles of Webs of Enhanced Practice (Scott, 2009).

1. **Joint lesson planning to implement innovation.** Several secondary school teachers engaged in collaborative learning activities to write and present their lesson plans during an OLC4TPD online meeting and at the wiki of OLC4TPD Web Portal. These teachers received feedbacks from other educators in the community to refine their lesson plans. As they revised their lesson plans, they shared their experience to OLC4TPD Skype online meeting participants.
2. **Peer coaching (reciprocal observation).** While there were no actual peer-coaching activities conducted during the study, but there were a series of talks and critical discussion on these topics. One of the female teachers, Rita, shared how she has built her knowledge about peer coaching by reading to the postings, listening to the talks and engaging in online discussions on the Facebook Wall.
3. **Collegial Cultures.** OLC4TPD members supported each other when they shared authentic problems they face in their daily professional life during the Skype Online Meetings and Web Portal Discussion Forum
4. **Reflection and Discussion.** The discussion on the Discussion Forum, Facebook Wall and Skype Online Meeting has enriched and helped the members to improve current teaching and learning practice
5. **Problem Solving.** Teachers usually came up with a number of authentic problems and real ideas from their practice. They looked for solutions of their problems. Other members usually provided diverse ideas to solve the problems, including the half-bake ideas on the Discussion Forum and Facebook Wall discussion
6. **Development and Sharing of Materials.** OLC4TPD members voluntarily shared their teaching and learning materials, such as: articles, research notes, travel journeys,

- presentations, lesson plans, photo, to the community on the Web Portal Discussion Forum, Skype Online Meeting and Facebook Wall.
7. **Examination of Student Work.** A number of critical discussions on national assessment and its challenges were continually conducted on the Web Portal Discussion Forum and Skype Online Meeting.
 8. **Increase Understanding of Sound Assessment.** OLC4TPD conducted several online meetings discussing the topic of assessment were conducted on the Web Portal Discussion Forum. Members engaged in critical discussion and reflection about digital assessment and its implementation in Indonesia.
 9. **Self-determination Moderated by Collegial Accountability.** Several teachers were determined to change her *wrong* teaching practice after joining OLC4TPD Skype Online Meeting. As she participated in the community discussions, she gained new knowledge and awareness by discussing with the experts and other community members.
 10. **Empowerment.** Teachers in rural and remote schools felt supported by OLC4TPD, because they could have the same chance to engage in professional discussions with other educators across the country through Skype online meetings and Facebook Wall discussions. Regardless their locations, they could have equal chance as others to improve their professional competencies through online TPD activities.

Conclusion

While the concept of online learning community might not be new for teachers in developed countries, this concept was considered, adopted and adapted as a novel approach to support ongoing TPD of educators in Indonesia. The goal of introducing online learning community was to keep the teachers updated with the knowledge development of the 21st century and to facilitate continuous reflection process to improve their professional competencies. The implementation of OLC4TPD in this study has opened up a lot of new opportunities for teachers to use online media to collaborate with other educators across educational institutions and geographical locations in Indonesia. A new framework of social learning for teacher professional development has shown a number of impacts, such as knowledge sharing, empowerment and collaboration among teachers that never happened before. Several limitations from the implementation of three online learning environments were discovered, especially due to ICT infrastructure and literacy limitations, yet the evidences on how online engagement in the OLC4TPD that has benefited a number of Indonesian educators both from the cities and remote areas were apparent.

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