HOW DOES A VIRTUAL COMMUNITY OF PRACTICE FOR TEACHER TRAINERS IMPACT ON THEIR PROFESSIONAL PRACTICE?

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Introduction

Communities of Practice (CoPs), a term originally coined by Lave and Wenger in 1991, have been defined as "a set of relations among persons, activity and world" in which people are bound together by shared expertise and passion for a joint enterprise or goal (Wenger & Snyder 2000). The phrase *community of practice* initially referred to relationships in a physical workplace, but recently it has been extended to include online communities and interactions at a distance. Such communities have been referred to as "virtual communities of practice." (e.g. Ardichvili et al. 2003).

In the past few years, there has been much interest in the professional development of teachers through virtual CoPs. Studies have shown that virtual CoPs can help raise teachers' competence levels, reinforce their professional practice, and satisfy the need for professional development (Barab, MaKinster & Scheckler 2004; Duncan-Howell 2009, Goos & Bennison 2008; Hawkes 1999; Parr & Ward 2006; Riverin & Stacey 2008). CoPs, it is claimed, can provide "genuine opportunities for continued pedagogical growth for teachers." (Duncan- Howell 2009: 610)

In the field of ELT, there has, however, been little empirical research into the extent to which online communities of practice have impact on the practice of teacher educators. This study explores this issue in the context of an online community of practice for Iranian teacher educators working in the field of English Language Teaching.

Literature review

The literature pertinent to the present study comes from three distinct areas: firstly, an overview of online communities of practice in ELT; secondly, investigations into the impact of online CoPs on the professional development of teachers and trainers in ELT: lastly, an overview of the functions of a CoP as a knowledge management system. I will describe these in more detail below.

Online communities of practice in ELT

Online professional development has been available to teachers in ELT for some time in the form of virtual courses, seminars and workshops (Garcia & Susuki 2008; Hubbard & Levy 2006; Johnson 2006). These formal options are often delivered by experts in the field, and are sponsored or supported by a well-known institution or organization, such as a university, an international teachers' or researchers' association.

In recent years, alternatives consisting of mainly informal, online professional development have also appeared (Johnson 2006). These are usually started by an individual, institution or group of teachers. An example of such a CoP is Harvard University's *Education with New Technologies* (http://learnweb.harvard.edu). Open groupware (e.g. Yahoo Groups) are among the most frequently used platforms for this purpose. ELT Dogme is an example of a teacher-led CoP which has been in existence on Yahoo Groups since 2000.

Online communities of practice using mainly asynchronous virtual learning environments (VLEs) to support ELT development projects such as the one in this study have been used to some extent by the British Council. They are used predominantly on projects which require communication over large geographical areas, and where project participants are deemed to need follow-up support after initial face-to-face courses. The English for Teaching: Teaching for English project which ran from 2007 until 2011 in seven countries in Central and South Asia made use of a project Moodle, for example. (Adamson et al. 2014). However, these online communities have not been the subject of research.

Impact of online communities of practice on the professional development of teachers and teacher trainers in the field of   ELT

As Duguid (2005) points out, community of practice theory is inherently a social theory. CoPs are "places where a process of social learning occurs between people with a common interest in a subject or problem who collaborate over longer periods of time to share and exchange ideas, find solutions and build knowledge" (Kirschner & Lai 2007:128) An assumption underlying online CoPs for teachers, then, is that exchanging ideas, views

and experiences and sharing resources can enhance individual teaching practices. Communication among colleagues through these CoPs potentially offers greater chances of professional development through situated learning and reflective practice (Garcia & Susuki, 2008; Hanson-Smith, 2006; Johnson, 2006).

CoPs for practising EL teachers have not been investigated in any depth. Of the few studies conducted, some have focused on participation levels. Pino-Silva and Mayora (2010) compare participation rates of moderators and participators in a Yahoo group of EL teachers from Venezuela, concluding that both participation and moderation may serve as a deterrent to language loss. Two studies conducted in Malaysia (Thang et al. 2011; Murugaiah et al. 2012) focus on the e-CPDelT Vision 2020 model, which aims to bring about innovation in practice through an online or virtual CoP. Thang et. al describes an initiative, focused on teachers of English, Maths and Science, which used web logs (blogs) and a Virtual Interactive Platform (VIP) to "provide teachers with an online environment for professional learning and a vehicle for improving their instructional practices" (p.90). The study focuses on the low participation rates on the VCoP, and the reasons for that are described.

Other studies have focused on professional learning. A study by Liu (2012) investigates the application of an online videocase discussion community among pre-service and in-service EL teachers in Taiwan, looking particularly at teachers' perceptions of their professional learning. A further study by Liu and Kleinsasser (2014) reports collaborative interaction, reflective practice and emotional support on an online community on a web-based asynchronous discussion board. The study concludes that the community had a positive impact on teachers' instructional ideas.

Little attention has been paid to the impact of online CoPs on the *practice* of either teachers or teacher trainers in the ELT field.

Knowledge management and on-the-job skills
According to Alavi and Leidner, a CoP can be described as a Knowledge Management System, defined as "(an) information system designed specifically to facilitate the sharing and integration of knowledge" (1999, p.1). Wick's (2000) definition of a community of practice is as an entity that helps to solve authentic problems.

Members of CoPs are thought to be efficient and effective conduits of information and experiences which can lead to practical learning (Archdvili et. al 2003, Wenger et al. 2002; Wasko

& Faraj 2000, Davenport & Prusak 1998). Members of a CoP have tacit knowledge, which includes valuable context-based experiences that cannot easily be captured, codified and stored (Nonaka 1994). This means that one person can share the best way to deal with a situation based on his or her experiences, which may enable the other person to avoid mistakes in a similar situation. Duguid (2005) clarifies the difference between tacit knowledge, or knowing *how*, and explicit knowledge, or knowing *that*. Performing optimally in a job requires the ability to convert theory into practice-from *knowing that* into *knowing how*. CoPs help the individual bridge the gap between *learning about* and *learning to be*. As Duguid notes, "*Learning about* only requires the accumulation of *knowing that*, which confers the ability to talk a good game, but not necessarily play one" (p.113).

It has been argued that sharing and internalising tacit knowledge requires active interaction among individuals, especially in the form of storytelling (Wenger et al. 2002; Brown & Duguid 1991) Drawing on the experience of service technicians, Brown and Duguid note that communities of practice help foster the process of storytelling among colleagues which, in turn, helps them strengthen their skills on the job. Storytelling involves an individual telling another individual how they themselves solved practical problems. Other studies have shown that workers spend a third of their time looking for information and are five times more likely to turn to a co-worker rather than an explicit source of information such as a book, manual, or database. (Davenport & Prusak, 1998.)

The Study
Context
The context is that of an international trainer training project involving participants from the Islamic Republic of Iran. The British Council-funded project is called the Iran Teacher Training Project (ITTP). The project began in 2011 and is ultimately aimed at Iranian teachers of English at secondary level. It is a cascade training project, involving the training of Iranian teacher trainers and Master Trainers (MTs) by international consultants- the author of this study, and colleagues. Once trained, the MTs train their own cohorts of teacher trainers in Iran. The project is described in detail in Leather and Motallebzadeh (2015).

The project involves training, assessment and professional support on a VLE for project participants. Because of political tensions between

Iran and UK in recent years, and the closure of the British Council office in Tehran in 2008, there has been difficulty in using British Council online platforms. For this reason, the project uses the consultants' Moodle platform as its VLE. The platform, initiated in Spring 2012, is used to deliver CPD to participants in the form of professional development topics. The topics are chosen with a view to the real-world practice and problems of the teacher trainers in the group. Examples of topics are: *Designing and planning in-service training courses, What is effective teaching?* and *Evaluating a training course.* Topics are sometimes chosen by the British Council project manager, sometimes by the consultants and sometimes by the trainers. The asynchronous discussions are facilitated by the international consultants, guest facilitators, and the Iranian MTs.

Facilitators usually start each topic with a relevant article, plus a few open questions about the topic. Participants are typically given free rein to comment on these questions, though at some stage in the discussion, they are asked to apply principles to their own training and teaching context, and to solve the problems they are faced with on a day-to-day basis.

Participants take part in the discussions and tasks voluntarily and are assessed only in their participation. At the time of writing this article there were 125 participants signed up for the ITTP Moodle. Participants come from all over the country. Of the 125 participants there are around 20-25 who contribute regularly to forum discussions.

Participants may have met some other participants face-to-face on training courses in the project. Among the sample described below, participants estimated they had met 40-60% of the other participants in person. The frequent difficulties of connectivity, and the relative political isolation of Iran together mean that participants on the VLE have limited opportunities for professional development outside their own context.

The VLE used to support the ITTP project can be considered a CoP according to Lave and Wenger's (1990) definition: it contains a common *domain*, a relatively narrow area of expertise or purpose; a *community* where both newcomers and experts can build and share expertise in social interactions; and finally, a *practice* (*as* opposed to theory), that is, the more or less conscious effort to build a repertoire of knowledge over time by developing skills in the field hands-on.

Research Questions

In response to the gap in knowledge about the impact of virtual CoPs on the practice of EL teacher trainers, the key research questions addressed here are these:

Do participants feel that discussions with colleagues in the online CoP have an impact on their teacher training practice? If so, in what way?

Do participants cascade the knowledge they gain on the VLE to other colleagues within their daily practice? If so, in what way?

Sample

Five MTs agreed to take part in the study. They work as teacher trainers in their own institutions and are also in charge of cascading training to teacher trainers via face-to-face courses for the ITTP project. Two of them were trained directly by the author of this study; three of them were trained by other MTs within the project. The respondents were chosen by firstly finding the top 10 'engaged' participants on the Moodle, by counting number of posts over the last three-month period, then choosing five of these 10 randomly. Of the five participants, two of them, TT2 and TT3, also acted as facilitators during the three-month period under review (November 2014-February 2015), one of them for a seven day CPD topic, the other for a three- week topic. The average number of posts of each of the five participants during this whole period was 40, over three posts per week. Posts themselves were not analysed in the study.

Data collection and analysis

In order to answer the research questions, a qualitative research design was used. The methodology was a small-scale case study of the five participants, conducted over a two-month period. Data collection and analysis were guided by dimensions identified in the literature review, namely *the sharing and integration of knowledge* (Alavi & Leidner 1990)*, solving authentic problems* (Wick 2000) and *converting theory into practice*-from *knowing that* into *knowing how* (Duguid 2005). These were the deductive themes.

Data collection was carried out by means of two questionnaires and one semi-structured interview. During the process, inductive themes and sub-themes, such as *professional confidence*, and the importance of *feeling connected to the wider ELT community*, started to emerge from the data, and were incorporated into the corpus. The questionnaires were followed by individual, recorded, semi-structured interviews on Skype, each lasting 15-20 minutes. They were personalized and based on responses to

Questionnaire 2. The aim of the interviews was to provide deeper understanding and evidence of impact. The interviews were transcribed and themes were highlighted and integrated.

The data was collected using NVivo. On completion of the data collection a list of themes evident in each case was drawn up and a comparison of these was facilitated through the use of a grid, following methodology suggested in Borg (2011).

Findings

I will now present findings relevant to the impact of involvement in the online CoP on the training practice of the five participants.

Professional Confidence

The five participants commented on the impact of participation in the Moodle on what could broadly be described as their professional confidence in the training room and beyond. Involvement in the CoP affected affected the way participants look at training, and has helped them to make their training more balanced in terms of theory and practice. For some of them, the adjustment has meant making their training more practical:

> "Participation in the Moodle has changed my vision towards training .Now I look at training in a more contextual, practical and realistic way." (TT2:1)[1]

Others have learnt to introduce a stronger element of theory into their training. TT5 notes that "keeping a balance between theory and practice is another thing that has influenced my training" (TT5:1). TT5 describes herself as a trainer who is better on the practical side than on the theoretical side, which she says is "not enough for a trainer" (TT5:3). She goes on to say:

> "Both of them should … be kept in balance. Moodle has helped me a lot to reach this balance by reading articles and participating in some discussions regarding the articles." (TT5:3)

There were some allusions to the fact that the participants have become more reflective practitioners, and that this has an effect on their practice.

> "Moodle makes you reflect on the way you run sessions. As postings are in written form and mostly based on ELT findings and professional experiences you read them carefully and appreciate. Naturally you can see some

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[1] Data cited carry the following codes: TT1, TT2 etc. = individual trainers; 1=Questionnaire 1; 2=Questionnaire 2; 3=semi-structured interview.

manifestation of the discussions in your training room." (TT3:1)

Participation in the CoP "boosted (my) self-confidence" (TT2:2). As part of this, reading and discussion on the Moodle gave the participants confidence to deal with trainees who have a strong theoretical background, which is often the case in their context:

> "It made me read more and delve into some subjects and I feel I can handle some difficult theory-conscious trainees…. better." (TT4:1)

Reading a wide range of articles suggested by facilitators on the VLE has helped build confidence, and given participants more depth as trainers:

> "I came to understand through the Moodle that I have to know the reason for what I am doing. I have to be able to justify it. This is possible through reading more articles and theory to be able to justify what I do." (TT5:3)

Reading recently published professional articles is important in a context where the participants get few opportunities to interact with the ELT community abroad. The CoP provides "an excuse to read more" (TT4:2). This leads to a feeling among participants that, through their involvement in the CoP, they are developing professionally:

> "You keep up-to-date by reading new articles posted on the Moodle, at times mingling virtually with the other participants coming from different contexts. In a way it gives you a feeling of being a step ahead and more empowered. This certainly would lead to professional development." (TT3:1)

The themes of professional development and feeling updated came up several times in the data, as did that of feeling connected to the wider ELT world. This feeling of being in touch with the international community and knowing what is going on is important to the participants, especially because of the relative isolation of Iran.

> "Moodle encourages you to keep updated. You get information from the ELT world from the tutors and the guest facilitators. I keep myself up-to-date, ..You feel that you are not alone.You get some information. I get so motivated by that." (TT3:3)

Participants feel that discussion on the Moodle helps them to acquire a "language that a community of trainers can understand" (TT5:3), and several noted the increased confidence in writing convincing arguments in English.

Participants notice the transfer of their new-found confidence to other professional courses they are taking, or to conferences. TT5 notes: "So, now that I'm studying the DELTA, I have noticed

my patience and interest to read, as well as action which is an important thing."

TT3 did a poster presentation about the CoP for the TESOL Arabia conference in March 2015. He says:

> "In this poster presentation, showing how a Moodle works and what parts and features it has. I showed what steps the participants took and how they performed to develop professionally." (TT3:2)

Both TT2 and TT3, who acted as facilitators on the Moodle in the three-month period, notice their learnings from the experience. TT3 notices that his first experience as facilitator was not so successful, but by observing how the consultants and guests facilitated, his second attempt was much more effective. (TT3:3) TT2 notes that the experience was "a real challenge." She says:

> "Getting prepared , finding suitable resources , trying to give reliable responses to participants were among the challenges .But all were very constructive and added to my personal experience." (TT2:1)

Design and planning of training sessions

Participants noted the impact of the CoP on the way they design and plan training sessions for both teachers and teacher trainers. The three-week module on *Designing a training course*, was particularly helpful:

> "I remember the first topic was about designing a series of training workshops....we discussed about the factors, the venue, the background of the participants, all the factors. …Next month I'm going to have another training session and I will use them. I use them all the time." (TT1:3)

Sharing session plans with other participants and receiving feedback has been key in helping participants to modify session plans. TT4 mentions that he has "made many changes to session plans and order of some topics as a result of interactions with others on the Moodle." (TT4:1) He gives a concrete example:

> "For example the part which was about "Observation," particularly Clinical Supervision. It really helped me to add some more activities to my own session plan." (TT4:1)

The CoP is a "platform for learning from each other." (TT3:1) TT4 points to the "safe and supportive environment" (TT4:2) as a factor in feeling able to upload plans to get feedback from colleagues. In some cases, he and other participants have exchanged emails and have formed a "critical friendship," which enables them to give each other feedback on their plans. (TT4:1)

Sharing training plans has also helped in achieving the balance between theory and practice mentioned in D.1, as TT2 notes:

I remember once I shared one of my session plans related to methodology with other participants and received constructive feedback that the session contained too much input and so tried to minimize the feeding part, and then I applied and noticed the positive outcome . (TT2:1)

Participants talk about including their trainees' interests and needs much more when designing their sessions, partly because their needs analysis has become more thorough . TT1 mentions designing activities so that she can use the trainees "as resources and use their experience and knowledge." (TT1:2)

Delivery of training sessions and cascading knowledge

Participants observe a number of ways in which involvement in the CoP has impacted what they actually do, and the way they are, in the training room. They have transferred ideas from discussions and tasks on specific topics, such as *Loop input* or *Dealing with difficult participants,* directly into their training.

TT3 states that "Once you engage in the Moodle you consciously or unconsciously bring some pieces you have collected from the Moodle into your actual class/training room." (TT3:1) He mentions that he delivered a new session on *Presenting at conferences* based on what he had learned from the topic on the Moodle. He continues:

> "Based on the topics and discussions in the Moodle I also prepared a short course on How to run an in-service training course making it in three stages, pre/core or during/post course activities and tasks." (TT3:1)

TT1 has also transferred ideas from the VLE into her training sessions. In a TKT (Teachers Knowledge Test) course she ran, she had a session on the characteristics of effective teachers. She says "so referring to the Moodle I read the facilitators' and other friends' notes there again and I took some of them with me to the class." (TT1:2) For the session on dealing with difficult participants, she says:

> "I took notes from my friends' posts and have them with me and before my sessions I look at them and try to find the best solution in that particular context and situation." (TT1:2)

TT2 has introduced keeping a teaching/training diary into her courses for both teachers and trainers, as a result of discussions about it on the VLE. When asked about the response from her participants, she says that at

first it is very difficult for them to keep a diary and talk about it, but then notices a change in their attitude:

> "By the end of the course they feel the benefits of keeping a diary." (TT2:3)

Loop Input is another topic which participants have learned about on the VLE. TT3 explains how he introduced the loop input technique into his training, after readings and discussion:

> "My participants learned about how to group people and at the same time, they were put into groups in different ways to learn about grouping." (TT3:2)

When asked how participants responded, he said: They enjoyed it. They said that this way we internalise the subject more deeply. It means we do not have to reflect on how to use this technique because we used it. (TT3:3)

When acting as facilitators, participants can get ideas from other members of the CoP. TT3 reports learning a very practical idea about setting rules when he was facilitator on the topic of *Dealing with difficult participants*. He stated thus: "One participant posted the following comment in response to the problem I had raised on the discussion forum:

> "I always try to set rules at the beginning of the course just like when I am a teacher but considering this difference that trainees are involved in setting the rules, this way fortunately there are less late comers and early leavers just to respect what they have set themselves." (TT3:2)

TT3 adds:

> "I used to set my own rules and norms on the board at the beginning of the course. Then I used the above strategy, that is involving trainees in setting the rules and class norms, and it worked well really. To my surprise, when trainees are involved in setting rules, they observe them more carefully and stick to them strongly." (TT3:2)

Reflection, or reflective practice, is a topic that was relatively new to all the participants. TT5 says that reflection was "a new and challenging issue," (TT5:2) and talks about the "undeniable importance of reflection" (TT5:1) She says she has committed herself to reflection "in every single session" of in her own training. (TT5:2) "The experienced teachers I am teaching try to use it every day in their class. They are positive towards it. They say they can see a difference." (TT5:3)

TT4 says he "used many of the reflective activities I read about in the 'Reflection on reflection' article. (TT4:1) TT1 also mentions the article and says that this and the discussion following it had a strong impact on her training.

She says: "That discussion made more reflective and I had reflection in almost all my training sessions." (TT1:1) TT2 also uses reflection activities in her training. She says:

> "As for reflection, we sometimes have it before (on the previous sessions) and sometimes after the sessions (on the sessions of the day). We have reflection every other session, not every day." (TT:2)

Participants have noticed changes in their presence and their attitude towards their trainees. They note that they listen better and are more patient. "I learned to listen to my trainees," says TT2.

TT4 notes that he has become "even more tolerant of different opinions and views." (TT4:1) TT1 points out her "patience towards difficult participants." After the discussion on the VLE, she says "I found it much easier and I tried to be more supportive. " (TT1: 1)

Discussion
Limitations
The study has limitations in terms of the size of the sample, and the fact that findings collected were from self-reported data. No post-VLE observations of the Master Trainers have taken place, and none of the project team has ever observed MTs in their own training contexts. An additional limitation of the study concerns the five participants, who, as has been described above, were of the most engaged participants in the VLE. The study does not include less engaged particpants.

Discussion of findings
Despite the limitations, evidence of impact on training on the participants is clear and compelling. The five participants all gave specific examples of the impact they had felt in the areas of in delivery of training, design and planning of training and professional development. When asked for more details about their written examples in the semi- structured interviews, they were able to convincingly describe real situations during their training. This indicates that the participants are making use of the CoP as a place they can find support and professional advice which they then actively take into their training. Three of the five gave examples of when they cascaded knowledge gained to other teacher trainers or work colleagues.

In terms of the key research questions of this paper, the results indicate that engagement in an online CoP can help trainers to convert theory into practice. It not only facilitates them in

knowing that, but also in knowing how (Duguid 2005). There is also evidence of storytelling (Wenger et al. 2002; Brown & Duguid 1991); participants in the study use the online CoP as a place where they can find and give advice about practical problems. The data collected supports the idea that participants use the CoP for the sharing and integration of knowledge (Alavi & Leidner 1990), as can be seen through the themes of cascading and professional confidence, and the sub-theme of networking and community. They also use the CoP to solve authentic problems (Wick 2000).

In addition, the results of this study add to the existing evidence about online CoPs as places where social learning occurs (Kirschner & Lai 2007). They also support the idea that communication among colleagues through a CoP can offer greater chances of professional development through situated learning (Johnson, 2006). The collaborative interaction, reflective practice and emotional support suggested by Liu and Kleinsasser (2014) is also reflected in the data.

There are specific conditions in the context of this study which perhaps make impact on training more likely. Firstly, as has been mentioned, participants are relatively isolated from professional development opportunities in international contexts. Inclusion in a British Council project is seen as a very good opportunity to have contact with the outside world, and they are eager to make use of it. Secondly, the VLE is an add-on to courses which are run face-to-face, and not a standalone course. Thirdly, and importantly, all the participants in the study have met and worked face-to-face with the project manager and with the international consultants. They have also been trained face-to-face by Iranian MTs. In this sense, they are closely linked to the 'centre' of the project, and they have known central people for a period of time. Long-term relationships are important to Iranian people, who are collectivist in nature. (Hofstede & Minkov 2010) Loyalty in a collectivist culture is paramount, and overrides most other societal rules and regulations. Feelings of loyalty and trust may well facilitate commitment to the community which is the subject of this study. In turn, that would have an effect on engagement and transfer to practice.

Further research
The possible reasons for engagement and impact on training given above are speculative, and could provide intriguing avenues for further study. Answers to the question of which factors are key

in ensuring transfer from CoP to practice would be of great benefit to the ELT community.

The study provokes further questions about how to facilitate impacts on training from virtual CoPs. It is possible to imagine a comparative study of a fully online professional development course with a course which has a face-to-face element such as this one. What , if any, are the differences in the way that engaged participants take knowledge from the CoP into the own practice?

Another area of interest involves less engaged participants and lurkers. What do these participants take into their practice from discussions within the CoP? What differences, if any, are there between less engaged and more engaged participants in this regard?

Conclusion
In this study, there was strong evidence that the CoP set up to support the Iranian project teacher trainers and to provide them with continuous professional development had significant impact on the participants' training practice. With reference to the research questions, participants felt impact on their teacher training practice in terms of the practical day- to-day design, planning and delivery of training sessions. They gave specific examples of ways in which they incorporated learnings from the CoP in their sessions. There is also some evidence that they are cascading knowledge to teacher trainers and to colleagues. In addition, the data revealed findings which were tangential to the research questions. It was clear, for example, that participants were very aware of changes in their professional confidence. Some of these areas, such as *the balance of theory and practice* relate directly to their training practice; others, such as *feeling updated* or *feeling connected to the outside world* are, one could argue, indirectly linked to their professional practice in the training room.

It is clear that the positive impact of a virtual CoP on training practices could extend to other international contexts, perhaps especially those in which participants are geographically or politically isolated. The findings suggest that the CoP is particularly successful when it is used as an adjunct to face-to-face courses or as part of a longer-term project, or both.

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