



CO-CONSTRUCTION OF ELT PEDAGOGICAL CONTENT KNOWLEDGE IN DISCUSSION FORUMS

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ABSTRACT

English teachers need continuous professional development programs but the problem is that, at least in Iranian EFL context, either teacher trainers have almost no time for such programs or running such programs is not cost effective; therefore, a more practical way out of this problem is for the teachers themselves to discuss pedagogical issues in online peer-to-peer settings. The main purpose of this study was to investigate the extent to which virtual peer-to-peer settings successfully help EFL teachers build Pedagogical Content Knowledge (PCK) collaboratively without a teacher-trainer's intervention. To meet this objective, the postings to three English teacher discussion forums were collected and were coded qualitatively and quantitatively using Beatty (2010) scheme for coding discourse strategies for collaboration. The analysis of the postings revealed that teachers employed collaborative strategies such as explaining the task and offering suggestions effectively and frequently. Thus, the findings clearly indicate that PCK appears to be constructed collaboratively in discussion forums. However, most of the postings offering suggestions or support were in fact the participants' personal opinions with few of them directing the groups' attention to a teaching principle or an SLA theory. On the basis of this finding, knowledge building is collaborative in peer-to-peer discussion forums, but it seems that it is some immature, intuitive knowledge that is built rather than PCK. This study has taken a step in exploring the impact of peer collaboration in ELT PCK construction.

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Keywords: Co-construction, Pedagogical content knowledge (PCK), Discussion forums.

Contribution/ Originality

The main purpose of this study was to help EFL teachers build pedagogical content knowledge collaboratively in online discussion forums and without a teacher-trainer's intervention since teacher trainers, at least in Iran, are usually so engaged in their teaching and researching that they

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have almost no time to spend with pre- or in-service teachers out of class or even online. Mostly, previous researchers gathered such technical information as the number of postings, length of messages and other details that track the use of forums and active participation in them. Although statistics are useful for assessing participation in a discussion forum, they do not tell us about its educational content like sharing ideas, collaborative dialog, constructing knowledge and so forth. It appears that there is a need for in-depth qualitative analyses of the actual content and discourse of messages in these forums. Moreover, most of the previous researches were instructor-centered debates in online forums, while this study examined peer-to-peer discussion in public English teacher forums.

1. INTRODUCTION

It's like learning and professional development stops after English teachers graduate from colleges or universities because teacher trainers are usually so occupied with their teaching and researching that they have almost no time to spend with them out of class or even online; therefore, it is up to the teachers themselves to discuss pedagogical issues and co-construct knowledge in peer collaborative settings without a teacher-trainer's intervention. Co-construction of knowledge is possible through learner-learner face to face communication and debates; however, due to some limitations, such knowledge building tasks if technology oriented are more practical. So, one question that keeps coming to mind is whether virtual peer-to-peer settings are collaborative and effective enough to help English teachers co-construct teaching knowledge and promote professional skills.

Co-construction of knowledge can find theoretical grounding in [Vygotsky \(1978\)](#) conceptualization of social constructivism which suggests that knowledge is first constructed in a social context and is then taken up by individuals (p. 57). Vygotsky's theory is called a social constructivist theory because learning happens with the assistance of other people, thus contributing the social aspect of the theory. This theory shows that learners can assist one another in building knowledge collaboratively.

[Beatty \(2010\)](#) defines collaboration as "a process in which two or more learners need to work together to achieve a common goal, usually the completion of a task or the answering of a question" (p. 109). Collaboration assumes that the ultimate responsibility for making meaning and communication rests with the students themselves, so it is associated with social constructivism. The individuals' interdependence in collaboration enables them to share ideas and reach a conclusion or produce a product ([Ingram and Hathorn, 2004](#); [Garrison, 2006](#)). Learners may start collaboration for some purposes, inter alia, gaining content matter ([Wells and Chang-Wells, 1992](#)) and developing critical thinking skills ([Wells and Chang-Wells, 1992](#)). Does online technology facilitate achieving such purposes?

Communication technologies can realize constructivist ideals of learning instead of knowledge transfer from one person to another ([Schank and Cleary, 1995](#)), and they can engage learners in contextualized authentic tasks as opposed to abstract instruction ([O'Malley, 1995](#)). So, Vygotsky's social constructivism theory offers a theoretical framework for understanding computer-mediated communication (CMC), which has been claimed to provide excellent conditions for interactive

learning and collaborative construction of knowledge (Lamy and Hampel, 2007). This is due to the special features of CMC – text-based, many-to-many, time- and place-independent, usable across long distances, and distributed via hypermedia – that make it a potentially useful tool for collaborative learning (Warschauer, 1997).

English teachers require continuing professional development. Pedagogical Content Knowledge (PCK) is one of the vital elements of every teacher education and development programme (Freeman, 2009). Richards and Schmidt (2002) define PCK as “a teacher’s knowledge of subject matter and the ability to represent it in a way that will facilitate teaching and learning” (p. 389). Being engaged in collaborative and constructive dialog online may be one of the best ways which enables English teachers around the world to share their ELT PCK, complete it, or generate more. Discussion forums as a form of CMC can assist this collaborative learning process. A discussion forum is “an internet-based application that makes it possible for people to communicate asynchronously” (Nichols, 2009). It accepts posts from group members and displays them online for others to read and to reply. In a threaded discussion forum, messages are arranged under defined topics enabling users to add depth and complexity to the discussion by adding a new message to a thread and to assess the value of each contribution on their own (Ingram and Hathorn, 2004).

Discussion forums have some distinguished advantages for English teachers. They enable thousands of teachers all over the world to take part in public discussions and contribute to the generation of helpful ideas regarding ELT even without the smallest intervention of a teacher-trainer. Additionally, active participation in such forums enhances the quality of social interaction among teachers (Lehtinen *et al.*, 1999) and enables them to become involved in a particular discourse community where they are actively engaged in learning and in sharing information and perspectives through their interactions with others (Harasim, 1989). Moreover, the asynchronous mode of communication in online discussion forums can promote reflective and constructive thinking because the collaborative work involved in the forums provides a common ground for English teachers to share knowledge (Harasim *et al.*, 1995). Finally, comparing threaded discussions, chat, and listserv e-mail, Irvine (2000), found that threaded discussions exhibited largely content-related statements and prompted referencing to outside sources and other messages in threads. Therefore, online discussions allow English teachers to exchange their thoughts around particular ELT pedagogical content, which provides the opportunity for them to put theory into practice (Kosunen, 2009).

1.1. Review of the Related Literature

Some studies in language education, mostly instructor-led and with L2 learners, have investigated meaningful learning in online discussion forums through collaboration and interaction. Weasenforth *et al.* (2002) study on “Realizing constructivist objectives through collaborative technologies” found that threaded discussion can represent an important forum for opening up new learning possibilities especially for non-native speakers in university ESL courses, who need to gain greater flexibility and fluency in academic language skills, this medium provides both the interactive features and the reflective qualities that oral face-to-face interaction cannot provide.

Savignon and Roithmeier (2004) analyzed the bulletin board postings by German and American foreign language learners, and they found that these postings illustrated collaboration in the construction of texts and contexts. Participants did not simply produce disconnected and isolated texts; they collaborated to create a network of intertwined postings that made sense only after reading prior contributions. Discourse features indicative of participant engagement in terms of sustaining a collaborative dialogue were numerous.

Some researchers have conducted their studies without any intervention by an instructor in peer collaboration settings. Schrire (2006) reported that students participating in discussion forums both initiated discussion and related to one another's messages to a greater extent than in instructor-led threads. The findings in this study suggest that the achievement of synergistic interaction in computer conferencing leads to greater collaboration and deeper learning and is therefore pedagogically "worthwhile".

However, to the best of our knowledge, the number of studies related to online teacher education in public discussion forums is few. Åhlberg *et al.* (2001) analyzed the notes posted by in-service environmental education teachers in a database program called *Knowledge Forum*® which is a shared virtual environment for collaborative knowledge building. They reported that, certainly, for some issues and for relatively short periods of time, there was real knowledge building with some of the issues directly relevant to teachers' professional lives.

Mostly, previous researchers have gathered such technical information as the number of postings, length of messages and other details that track the use of forums and active participation in them. It appears that they have done without in-depth qualitative analyses of the actual content and discourse of messages. Although statistics are useful for assessing participation in a discussion, they do not tell us about its educational content: sharing ideas, collaborative dialog, constructing knowledge and so forth. Moreover, most of the previous researches have been instructor-centered debates in online forums, while this study examines peer-to-peer discussion in public English teacher forums.

The main purpose of this study, therefore, was to investigate the extent to which online discussion forums successfully help EFL teachers build PCK collaboratively without a teacher-trainer's intervention. Taking this purpose in mind, the following research questions are addressed:

1. Do threaded discussions on ELT issues in online English teacher forums end in the construction of pedagogical content knowledge?
2. Is this pedagogical content knowledge constructed collaboratively?

2. METHODOLOGY

We referred to the weakness of quantitative analysis in telling us about educational content of the discussion forums. So, in addition to analyzing the content of discussion forums quantitatively, we decided to do an in-depth qualitative analysis of the actual content and discourse of messages in the forums. As explained by Merriam (2001), qualitative studies are the most appropriate to answering research questions that focus on what happens in a given context, how the events take place and why they occur. This kind of focus is different from simply counting examples of categories underlying quantitative research. Beatty (2010) states "in examining challenges to

collaboration, it is necessary to see how they occur in terms of discourse” (p. 135). So, discourse analysis appears to be an appropriate qualitative data analysis method for the purposes of this study. This way, one can understand when the learners are engaged in a competitive discourse and when they are following a collaborative discourse.

2.1. Cases

There are many free English teacher discussion forums on the internet, and this study examines postings on six topics obtained from three online forums (See Table 1) for generalizability purposes since even in a qualitative research “it is important to consider what kinds of generalizations can be made from a single [or a few] case” (Silverman and Marvasti, 2008). As a result, data source and topic triangulation were achieved to ensure thick description of data and to strengthen internal validity of the research.

Table-1. Descriptive Statistics of the Discussion Forums

Forum	Topic	Postings
Dave’s ESL Cafe	1. How do you focus on form?	19
	2. Fossilization	24
Tefl Net	1. Moodle - what is it?	10
	2. Songs in language classes	14
Using English	1. Age impact on language learner strategies	22
	2. How to encourage students keep talking when they are discussing a topic	10

These forums have some features including the creation of categories, topics, and statistics boards containing information on the total postings by members and the number of registered members; the registered members’ reply to postings; monitoring of the number of members who read the postings; a quote function; and an edit function. The screen capture of one of the forums is illustrated in Figure 1.

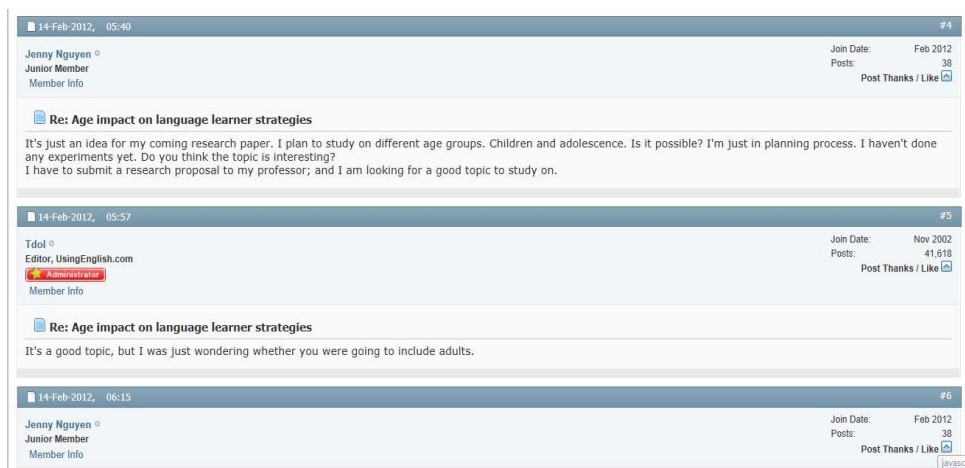


Figure-1. The screen capture of Using English Forum

The sample population comprised English teachers who were registered members of the English teacher forums in Table 1. According to Merriam (2001), a researcher needs to select cases or a sample from which the most can be learned; therefore, purposive sampling was the method of choice in this research.

2.2. Procedure

The postings to three discussion forums, based on two topics for each, obtained from six log files were collected to analyze collaborative discourse. Discourse analysis was chosen as the coding method to analyze the online public forum discourse in detail and to make inferences about knowledge co-construction. The postings of the topics were coded qualitatively using Beatty (2010) scheme for coding discourse strategies for collaboration which comprises three categories: (1) strategies used in collaboration, (2) social strategies learners use to avoid collaboration, and (3) ambiguous strategies used in collaboration. Each category, as shown in Table 2, is further divided into subcategories.

Table-2. Beatty (2010) Framework for Coding Discourse Strategies

Strategies		Description
Strategies used in collaboration		
DE	Determine participants' expertise	Clarifying what each partner knows or does not know about a task
ET	Explain the text/task/ideas	To arrive at a common understanding
OS	Offer suggestions	It is often marked by the phrase <i>I think</i> .
DX	Direct attention	Directing attention to text or images on the computer screen
SS	Solicit suggestions/support	Directly ask for one's partner's involvement
SC	Solicit clarification	One partner asks the other for more information on a statement.
SI	Signal interest in/show support of another's ideas	Signaling interest or showing support of another's ideas to indicate a common direction
SA	Solicit support for or suggest actions	It is typically marked by phrases such as, <i>should we . . . , shall I . . .</i> and so on
Social strategies learners use to avoid collaboration		
IT	Ignore the test/task	It often marks a learner's preference for pursuing individualistic or competitive goals.
IR	Interrupt	It signals that one partner does not value what the other partner wants to say.
II	Ignore ideas	It signals that one partner does not care to discuss what the other partner says.
OJ	Offer judgments	Judgments are statements without qualifying phrases such as <i>I think . . .</i>
Ambiguous strategies used in collaboration		
OH	Offer humor	It can be used negatively as an avoidance strategy or positively as a way of soliciting lateral thinking, smoothing social relations and dispelling tension.
RA	Read aloud	It may be a neutral strategy for holding space in the conversation while one partner reads what is on the screen or it may be a collaborative strategy for dictating or keeping the partner informed at each stage of learning.

Why Beatty's model? Ingram and Hathorn (2004) have identified three potential drawbacks of many current coding schemes for measuring collaboration in online asynchronous discourse. The first is that, the coding scheme may not be designed to measure collaboration but some other construct, e.g., interactivity. The second issue is that the measurement model may be based on questionnaires that measure perceived degree of interactivity which only measures opinions to the quality of the discussion. The third aspect of current models that limits their usefulness is that they may be based on face-to-face collaboration rather than on online collaboration. Considering these drawbacks, Beatty (2010) framework developed particularly for coding collaborative online discourse was selected for the purposes of this study.

The postings from discussion threads were imported into *QSR NVivo 8* which is established qualitative data analysis software. There, the content related to every category of Beatty (2010) framework was coded under some tree nodes. The nodes underwent both quantitative and qualitative analysis to demonstrate the collaborative PCK construction. NVivo enables researchers to annotate the coded content and link it to other content in the same source. While analyzing the tree nodes, the annotations and links assisted us in commenting on and interpreting the postings.

To ensure that the coding and categorization of the postings obtained from the online forums was reliable, a second coder was given the categories. Lampert and Ervin-Tripp (1993) recommend training, retraining, and constant communication among coders to keep meanings calibrated. So, a discussion was conducted to verify that both coders had a similar understanding of the model. Further discussion sessions were also conducted to compare the data and to resolve any differences and possible misconceptions regarding the coding system. A minimum of 40% of the projective content was coded by the second coder and inter-rater agreement was calculated using ReCal2 (Reliability Calculator for 2 coders) which is an online utility that computes inter-coder reliability coefficients for nominal data coded by two coders. Cohen's Kappa was 0.76, and this indicates that the researchers could rely on the data.

3. RESULTS AND DISCUSSION

First, the results related to discourse strategies in Beatty (2010) framework are presented and commented upon, then some examples related to each category are presented and interpreted. Other categories not listed in Beatty's model follow these results to help us in understanding the nature of PCK being built in discussion forums by English teachers.

3.1. Discourse Strategies Used in Collaboration

The number and percentage of postings or references for each collaborative discourse strategy used in the forums are displayed in Table 3.

Table-3. Findings Based On Beatty (2010) Discourse Strategies Framework: Strategies Used in Collaboration

Strategy type		Sources (n)	References (n)	%
DE	Determine participants' expertise	3	7	3.84
ET	Explain the text/task/ideas	6	41	22.52*
				<i>Continue</i>

OS	Offer suggestions	6	28	15.38*
DX	Direct attention	6	38	20.87*
SS	Solicit suggestions/support	6	12	6.59
SC	Solicit clarification	2	5	2.74
SI	Signal interest in/show support of another's ideas	6	25	13.73*
SA	Solicit support for or suggest actions	2	3	1.64
Total		37	159	87.31

Taking a look at the total percentage of strategies used in collaboration (87.31) strongly reveals that English teachers have employed these strategies effectively to co-construct PCK. *Explain the text/task/ideas (ET)*, *Offer suggestions (OS)*, *Direct attention (DX)*, *Signal interest in/show support of another's ideas (SI)* were most frequently used strategies for collaboration.

The following excerpt by Maurice, an English teacher, was taken from Dave's ESL Cafe discussion thread for Topic 2 (Fossilization).

I have been looking for any PRACTICAL methods for dealing with 'fossilization.' I am already aware of most of the theory behind it, but I have not come across any activities that try to deal with it. It seems like most linguists seem to think adults with fossilization problems can't be helped. Any suggestions?

Maurice, who is himself an English teacher, is just *soliciting suggestions* for dealing with fossilization problem in Chinese EFL classrooms ("I have been looking for" and "Any suggestions"). This teacher also *determined his expertise* by trying to clarify what he knows or does not know about fossilization ("I am already aware of most of the theory behind it, but I have not come across any ...").

Will McCulloch, another English teacher, follows by *explaining the task or problem* initiated by Maurice in the thread. He refers to causes of fossilization among L2 learners.

My basic personal view is that most grammatical "fossilization" among L2 learners is created by a mixture of

- too many grammar topics being taught too much too soon.
- too many grammar exercises being attempted too soon.
- too many new words being learned by translation rather than by use.

Noonlite, another teacher, *offers a suggestion* to the fossilization problem initiated by Maurice in the thread.

It is best to start with a few of the most glaring errors and stay highly focused. There is no fossil great enough to withstand the conscious attention of a determined student.

He starts his posting by ("It is best to ...") that signals a suggestion or advice for an explicit focus on form to prohibit fossilization.

Participants in the discussion thread also *directed the group's attention* to each other's ideas, websites, or academic articles. In this short posting, Larry Latham directs the group's attention to Noonlite's comment related to coping with fossilization ("Noonlite's comment above").

Perhaps one of the great gems of this useful conversation is Noonlite's comment above about "*guiding [students] to self correction*".

He also *signals his interest* in both the discussion thread and Noonlites comments by saying “one of the great *gems* of this *useful conversation*”.

Noonlite, later, is *soliciting clarification* for more information related to Sita's error correction technique to cope with fossilization of errors.

I don't know the specifics of what you are doing and have discovered by observing many different teachers that different approaches work better with different people.

Noonlite saying “I don't know the specifics of what you are doing”, resorts to a *clarification strategy* which is a common conversational modification strategy.

In the thread, LarryLatham also *suggested actions* to help the thread members arriving at a common understanding and a working process in the discussions.

We all ought to remember that it's not fossilization that's bad; only the fossilization of *errors* that we want our students to avoid.

He says “We all ought to remember that” because some posting included comments that regarded fossilization totally harmful to L2 learning, so he made an attempt to help the group out of this misunderstanding, and this is a useful collaboration strategy.


3.2. Social Strategies Learners Use To Avoid Collaboration

Table-4. Findings Based On Beatty (2010) Discourse Strategies Framework: Social Strategies Learners Use to Avoid Collaboration

Strategy type		Sources (n)	References (n)	%
IT	Ignore the test/task	0	0	0
IR	Interrupt	2	2	1.09
II	Ignore ideas	3	3	1.64
OJ	Offer judgments	2	3	1.64
Total		7	8	4.37

Unlike strategies used in collaboration, social strategies used to avoid collaboration form only 4.37 % (Table 4) of the coded data. In the forums, nobody tried to *ignore the test or tasks* discussed; this indicates that the English teachers' preference for pursuing individualistic or competitive goals in these threads was almost absent. In terms of *interruption* which signals that one partner does not value what the other partner wants to say, Sita quotes part of Noonlite's previous comments and actually interrupts by not focusing on the thread topic (fossilization) and instead pointing to Noonlite's grammatical error (“works” instead of “working”).

Noonlite: I'm curious about how your technique is working.

Sita: “Shouldn't it be works? 

The teachers rarely tried to *ignore the other partners' ideas* signaling that almost everybody cared to discuss what the other partner wanted to say. For instance, Will McCulloch disagrees with Roger but ignores the idea by saying “so maybe another time!”.

You also say ‘The hardest to teach a second language from scratch are ADULTS!’ ...but I'd have to disagree with you there...so maybe another time!

A *judgment* is often a strategy that avoids collaboration because it has an air of finality. In the thread, Woodcutter judges the lengthy posting as unnecessary and tries to finalize the discussion by giving a short answer choosing among the best ways for error correction. You can write a lengthy essay, of course, but 4 is best and 2 is worst.

3.3. Ambiguous Strategies Used in Collaboration

In the forums, no posting or comment was found to be coded as *offering humour* as an ambiguous strategy. *Reading aloud* as a neutral strategy was not found.

Table-5. Findings Based On Beatty (2010) Discourse Strategies Framework:

Ambiguous Strategies Used in Collaboration

Strategy type		Sources (n)	References (n)	%
OH	Offer humor	0	0	0
RA	Read aloud	0	0	0
Total		0	0	0

3.4. Other Discourse Strategies

Table 6 displays other coding categories not included in Beatty’s framework. *Resorting to theory* (RT) and *Resorting to experience* (RE) are the result of an attempt to answer the first research question.

Table-6. Findings Based on Coding Categories Not Included in Beatty’s Framework

Other strategies		Sources (n)	References (n)	%
RT	Resort to theory	4	5	2.74
RE	Resort to experience	3	8	4.39
Total		7	13	7.13

Resorting to theory (RT) with 2.74 % of reference in the coded data in comparison with 4.39 % of data coded as *Resorting to experience* (RE) reveals that English teachers are more likely to refer to their own personal teaching and learning experiences to contribute to the co-construction of PCK in the discussion forums. Most of the postings *offering suggestions or support* (OS) were in fact the participants’ personal opinions with few of them *directing the groups’ attention* (DX) to ELT or SLA theories. One can hardly claim that merely sharing personal opinions can result in an improvement in the teachers’ PCK.

There was just Will McCulloch’s posting related to *Resorting to theory* in response to Maurice in Dave’s ESL Cafe discussion thread for Topic 2 (Fossilization).

The short article below is something that was written a couple of weeks ago for EL Gazette. It explains a bit more about some of the reasons behind Word Surfing....and its relationship with fossilization.

Will McCulloch directs the group's attention to an article on word surfing and fossilization published in EL Gazette. This remarks that English teachers rarely resort to applied linguistics theories in their online debates and have a tendency to express their own personal

opinions/experiences, a strategy that is more frequent in the thread, i.e., 6 references. For example, Larry Latham confirms that his comments related to fossilization are more based on his “personal learning experiences” rather than any SLA or ELT theory.

My own reflections on personal experiences with language learning leads me to conclude that surely *self* correction is vastly more valuable than correction from teachers or even from peers.

4. CONCLUSION

The aim of this study was to investigate the extent to which online discussion forums successfully help EFL teachers build Pedagogical Content Knowledge (PCK) in peer collaborative settings without a teacher-trainer’s intervention. The quantitative and quantitative analysis of the postings by EFL teachers in the discussion threads revealed that they employed collaborative strategies such as *explaining the text/task/ideas*, *offering suggestions*, *directing attention*, and *showing support of another’s ideas* effectively and frequently. Thus, the findings clearly indicate that discussion forums played a positive role in providing a platform for co-construction of PCK. This is a suggestion that the teachers made every attempt to construct PCK collaboratively. Even social strategies used to avoid collaboration and ambiguous strategies used in collaboration were rarely employed, and this indicates that the English teachers’ preference for pursuing individualistic or competitive goals in these threads was almost absent. Thus, the answer to the second research question is that, in line with previous research (Åhlberg *et al.*, 2001; Weasenforth *et al.*, 2002; Savignon and Roithmeier, 2004; Schrire, 2006; Hadjistassou, 2008; Saadé and Huang, 2009; Dooga, 2010; Mohd Nor *et al.*, 2012), asynchronous postings on the discussion boards can engage English teachers in a peer-feedback activity through which they collectively enhance their skills and knowledge; that PCK appears to be constructed collaboratively in discussion forums. This finding can be explained by the fact that almost all threads were initiated by a signaling for support related to an ELT issue, and everybody was trying to direct his or her postings or messages to the thread initiator. Perhaps it is at such occasions that a teacher trainer can direct the thread to more argumentative discourse.

However, the first research question was concerned with whether threaded discussions on ELT issues in online public English teacher forums end in the construction of PCK at all. The teachers who took part in these discussion threads were more likely to refer to their own personal teaching and learning experiences to contribute to the co-construction of PCK. Most of the postings offering suggestions or support were in fact the participants’ personal opinions with few of them directing the groups’ attention to a journal article, a teaching principle, or an SLA theory. One can hardly claim that such strategies can result in an improvement in the English teachers’ PCK. On the basis of this finding, the answer to the first research question will be put forward: Knowledge building is collaborative in peer-to-peer discussion forums, but it seems that it is some immature, intuitive knowledge that is built rather than PCK. This finding may be best explained by the fact that there were not more expert others in the forums to ground the discussion on an appropriate theoretical foundation rather than on personal assumptions or experiences of the participant English teachers themselves. This study has taken a step in exploring the impact of peer collaboration in ELT PCK

construction. It is possible of course that instead of unknown registered members of discussion forums either pre-service teachers or teachers known to the researcher in certain factors of particular circumstances, location, gender, age, and academic degree be chosen as participants. In addition, it is important to emphasize that methodological problems in the research design, such as sampling, may limit our interpretations.

English teachers in threaded discussions can take more active roles as discussion leaders, who pose problems to their counterparts all over the world, set agendas, summarize postings, and synthesize readings and discussions. Thus, they are encouraged to become active participants in the forum discourse instead of remaining passive recipients of information. To bridge the gap between pre-service teacher education and in-service teacher development, discussion forums can also link (Iranian) English teachers who do not experience almost any in-service learning or studying programme.

The percentage of postings related to SLA or TEFL issues is not a valid gauge of PCK construction in the forums. Through Interviews or questionnaires, the researcher along with some experts can understand whether English teachers have bolstered their knowledge due to taking part in the forum discussions.

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