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Examining effectiveness of communities of practice in online English for academic purposes (EAP) assessment in virtual classes

检验在线学习社区在虚拟班级中进行英文学术能力评估的有效性

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这篇文章主要调查博客在大班级中是否能够帮助学生改变他们对学习的看法

ABSTRACT

The literature on English for academic purposes (EAP) methodology highlights the significance of learners' engagement in learning language (Hyland, 2006) in mainstream general and online contexts. Blogs have been recommended in many studies as having the potential to bring the sense of community and collaboration in online classes. Therefore, this study sought to investigate whether blogs in large classes would help students enhance their perceptions of learning. To this end, Forty-two undergraduate students of Information Technology (IT) at an Iranian university participated in a weblog writing course in order to promote collaboration and reflective learning. Instrumentation included a questionnaire of perceived learning and sense of community, semi-structured interviews, and participant observations. The findings revealed a significant difference in perceived learning between the students with low sense of community and those with a high sense of community. Based on the qualitative findings of the study, we suggest an assessment framework incorporating constructivist and social-interactionist theories of learning in order to treat students as members of a community of learning. The findings may promise implications for gearing EAP assessment to more collaborative modes in online courses and suggest a model framework for the assessment of students in EAP online classes.

研究工具

结合学习的建构和社会交互理论，这篇论文建构了一个评价学生是否积极参与到线学习社区中的框架，一个评价学生在线学习课程中英文学术能力的框架。

1. Introduction

博客能够促进知觉学习　学生使用博客的主要原因有几个　采用数据说明学生使用博客的主要原因是博客是评价的一部分　评价系统应该随着教育发生方式的改变而改变。

When education is witnessing a change from a traditional, campus-cantered, full time system to an online virtual mode, the evaluative system should also be modified (Garrison, Anderson, & Archer, 2000). Online courses require a different framework for evaluation (O'Reilly & Morgan, 1999). Generally speaking, it is argued that online courses promise different approaches to teaching/learning methodology (Yang, 2011). For instance, Churchill (2009) demonstrated that blogging can contribute to perceived learning. In his study of a group of post-graduate students studying M.Sc. in Information Technology in Education, Churchill (2009) stated that students' sources of motivation for using blogs included: (1) regular learning tasks which require students to present their research in their blogs, (2) blogs being used as an assessment requirement and (3) regular blogging of their teacher. Furthermore, Churchill (2009) believes that assessment is an important factor for motivating the students to engage in the blogging component of the course; 92% of the students in this study reported that they were blogging because blogging was an assessment requirement and also 79% stated that if blogging is a part of assessment requirement, they would blog in the future. In addition, 83% of the students in this research indicated their willingness to blog in the future if required to do so by the facilitator. However, 54% of the students seemed less willing to continue blogging in the future on their own to support their learning without being required to do so by the facilitator or a course instructor.

Further, the impact of variations of social presence on perceived learning was studied by Caspi and Blau (2008); in this study, the students who posted more messages showed a higher level of perceived learning. Similarly, So and Brush (2008) reported that higher levels of collaboration predict higher levels of perceived learning. Goldman, Cohen, and Sheahan (2008) too investigated the effect of using blogs on perceived learning and nearly half of their subjects reported that blogging enhanced their learning.

社会存在感对知觉学习的影响：有研究表明，发出信息越多，合作水平越高的学生的知觉学习水平越高。也有研究表明，博客能够提高学生的学习水平。

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Online communities are learning communities (Cuthell, 2002) and the students are expected to learn to adapt themselves to the norms, rules, and etiquette of the corresponding community (Lave & Wenger, 1991). A similar sense to the sense of belonging is the sense of community which triggers perceptions of acceptance, care and respect (Willms, 2000; Yasuda, 2009). 接受、关心和尊重

在线教育模型 认知存在 学生在学习社区中通过不断的反思和讨论建构意义

Garrison et al. (2000) proposed a model for online education based on cognitive presence called 'the cognitive presence' or 'the practical inquiry model'. Garrison, Anderson, and Archer (2001) defined cognitive presence as "the extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained reflection and discourse in a critical community of inquiry" (p.5). This model has four phases (see Table 1). In this study, for class instruction the practical inquiry model was used. This model seems to have the potential for creating an educational community of inquiry and mediating critical reflection and discourse. It was hoped that this model would help facilitate a community of inquiry in a virtual learning context.

Apart from a model for online teaching and learning, a model is also needed for online testing. In this regard, Palloff and Pratt (1999, 2001) proposed one of the most popular models of online assessment which regards the importance of the group, the tasks, the technology and the facilitator (see Table 2). 在线评价的最受欢迎的模型之一

上述在线评价模型在本文中的使用说明

Palloff and Pratt (1999, 2001) model of online assessment was used in this study to make sure that each student would participate in the learning process, the tasks would promote a sense of collaboration while encouraging critical thinking, and the facilitator would create an environment for learning through interaction. The online tools were also evaluated for ease of use, since from a teaching and learning perspective, online tools promise the potential to enhance the students' engagement and provide an environment for collaboration and creation of knowledge (Arslan & Sahin-Kizil, 2010). One of the main tools which a great majority of university students are familiar with is the weblog. Weblogs are also very useful because they provide support for student interactivity and collaboration (Godwin-Jones, 2006; Miceli, Murray, & Kennedy, 2010). Moreover, previous research has identified the potential of blogs to enhance collaborative learning (Churchill, 2009; Ducate & Lomicka, 2008; Ellison & Wu, 2008; Shim & Guo, 2009; Xie, Ke, & Sharma, 2008). 博客能够提高合作学习

In Iran, online English language teaching is dominated by traditional methods of language teaching (Atai, 2006; Atai & Dashtestani, 2013). Atai (2006) argues that textbooks are the only materials used in Iranian EAP courses and they follow a limited range of fixed instructional activities and exercises for all academic disciplines without any concern for the nature of the academic field. When it comes to virtual teaching, there are many different methods and procedures that can make English learning easier; in order to improve the quality of online language teaching at Iran University of Science and Technology Virtual Campus (IUSTVC), we worked for making a learning community through using blogs. The core principles of learning communities as echoed in the literature are active learning, student engagement, and student responsibility. This study intends to see if the students' engagement in groupblogs and their degree of sense of community would affect their degree of perceived learning. As a part of their task students were to use their blogs to publish their own work, discuss group assignments, peer review each other's work, collaborate on projects and manage their digital portfolios. Moreover, to better assess the students in online classes, this study also tried to present a framework for assessment that could be implemented in an actual online course.

虚拟学习社区的好处：更多的学习方法和资源 本文利用博客构建的学习社区的核心：积极学习、学生参与、学生责任
研究的目的：学生参与度以及学生对社区的社会存在感是否会影响学生的知觉学习水平

2. Research questions

The students in this study were considered as participants and co-constructors of their own communities of practice. So the following research questions were raised: 研究问题的提出，什么样的才算是一个研究问题

1. Does the use of blogs in an online EAP class enhance the IT students' perceived learning?
2. Is there any significant difference in the degree of perceived language learning of EAP students based on the degree of sense of community in online classes?
3. What is an optimal online framework of assessment for EAP students of IT studying at IUSTVC?

3. Method

3.1. Context of the study 研究背景

We examined the students' perceptions of experiences with blog integration in an undergraduate class at Iran University of Science and Technology Virtual Campus (IUSTVC), located in Tehran, Iran. As part of their regular assignments, the students were encouraged to engage in weblog conversation related to themselves and their interests. Each student was required to submit one post and five comments per week for a period of 13 weeks. Since it was a groupblog, all the students wrote in the same blog but they all had their own passwords. The assumption underlying this design was to encourage learning through reflection and engagement, facilitated by the asynchronous nature of groupblogs. Even though the virtual environment used in this study was moodle, inclusion of the groupblog seemed necessary since it displayed posts and comments in the same place. The instructor, who acted as a facilitator and a guide, tried to use additional tools whenever possible to improve the student's precision through collaboration and to promote the sense of community among them.

微博的异步交互 指导者利用格外的工具通过合作提升学生的准确性，以及提升学生对这个学习社区的社会存在感

In this study, attempts were also made to present a framework for assessment that could be implemented in an actual online course. To this end, a qualitative approach was adopted since data were based on the perceptions of the people in the environment, and the class

在线评价框架的产生是基于定性研究方法，因为它的形成主要是基于该环境中人们的看法

Table 1
The cognitive presence or the practical inquiry model (Garrison et al., 2001).

Initiation	(triggering event) teachers question, a problem to solve
Exploration	(moving from private to social) brainstorming, questions and dialogue
Integration	producing ideas and constructing meaning
Resolution	students implement and test their new knowledge

Table 2
Model for online assessment proposed by Palloff and Pratt (1999, 2001).

Individual	The individual is assessed according to the quality of the outcome of the work, ability to work at their own pace, sense of self expression, sense of accomplishment
Three criteria for assessing the tasks	A common sense of purpose, whether they are a source of motivation and whether they promote a sense of collaboration
The facilitator	Creation of a safe environment for interaction, encouraging the students, self organization and empowerment.
Group	Assessed on collaboration, team work, sense of well-being, reflection, reduced isolation
Evaluation of technology	Communication tools, tasks, transparency and ease of use

participants were the primary source (Key, 1997). The instructor in this study was a participant observer in the online course; hence, according to Bogdan and Biklen (1998), this is considered a participatory research.

3.2. Participants

被试的学历 性别 专业 年龄 学习现状 按第一次考试成绩分为两个组

Forty two undergraduate sophomore students, twenty seven males and fifteen females, studying Information Technology at IUSTVC took part in this study. The participants' age ranged from 20 to 32 years. All participants had passed the first general English course which is a four-credit obligatory course and at the time of this study were taking the second general English course. Based on the scores of the students on their first general English course, the participants ranged from experienced English learners with little knowledge of technology to students who were very comfortable with technology but were at a lower level of English proficiency.

3.3. Instruments

A wide range of qualitative and quantitative instruments including a questionnaire of perceived learning and sense of community, a TOEFL test of general English proficiency, Garrison et al.'s (2000) practical inquiry model, semi-structured interviews, participatory observations, records of events of the classes, researchers' journal and written memos, students' homework and assignments, the participants' discussion forums entries, email messages, blog posts and comments were employed in this study. 数据收集的方面

1.为了保证参与者水平差不多

To ensure the homogeneity of the group with respect to their English language proficiency, a paper-and-pencil version of a retired TOEFL test was administered to the students. Students who ranged within one standard deviation above and below the mean were considered as participants of this study. The content validity of this test was checked by three ELT experts. Each item was judged on a scale ranging from 1 to 5, which represented a continuum from "very bad item" to "very good item." The items were judged for form, content, and the overall goals of the test. The reliability of the test, estimated against Chronbach's alpha, turned out to be .87. 2.内容效度的保证

3.问卷的信效度的保证

An adapted version of a previously-validated questionnaire that addressed college students' perception of learning and sense of community through blogs was used in this study (Halic, Lee, Paulus, & Spence, 2010). This instrument included two dimensions, Perceived Learning (PL) and Sense of Community (SC). To record the students' perception of learning, the perceived learning dimension of the questionnaire included seven items. To identify attitudes towards community building through blogs, there is the sense of community dimension with six items. The questionnaire items were rated based on a five-point scale with the rate of five showing 'strongly agree' to one showing 'strongly disagree'. The validity and reliability of the questionnaire were already examined by Halic et al. (2010). Since the questionnaire had two parts, reliability was estimated separately for each part. Cronbach's alpha for the perceived learning part was .79 and for the sense of community part it was .82, both values show a good to excellent reliability level (George & Mallery, 2003; Lounsbury, Gibson, & Saudargas, 2005).

4.三角互证的方法

In addition to groupblog, the students used other tools including Virtual learning Environment (VLE) moodle, project discussion forums, online word processors (e.g. http://sync.in/, http://primarypad.com/), emails, chat rooms, and adobe acrobat meeting pro. Since multiple methods and sources produce more credible and reliable results by triangulation of data (Jasso-Aguilar, 1999; Key, 1997), we employed these methods and sources in order to evaluate the students as individuals and as members of the community of learning. Furthermore, in this study, to evaluate students' shared knowledge and co-construction of meaning, the practical inquiry model proposed by Garrison et al. (2000) was followed.

利用该模型来评价学生分享的知识和协同建构的内容

3.4. The instructional treatment

教学的执行过程 多久见一次 平台上每个角色的任务 moodle能记录日志和成绩导出等

The frameworks presented by Garrison et al. (2000) and Pallof & Pratt (1999, 2001) were integrated and utilized in order to evaluate the students enrolled in this online course. Given the fact that the course was totally online, the students were not able to meet each other in person; therefore, some techniques and methodologies had to be used for the application of language learning and for gaining the attention of the students. The main goal of the course was to promote collaboration between the students, by taking advantage of the online technology and of the multiple and dynamic novice-expert knowledge of the class participants since they had different levels of computer knowledge and they could rely on each other's knowledge of English. 利用网络工具，提升学生之间的沟通交流，使他们相互学习

The syllabus consisted of ten units each containing a reading comprehension and several exercises based on that text. The students met twice a week for two hours each session. The class started with a PowerPoint presentation of the reading text which all the students contributed in exploring and understanding of the text followed by a reflective asynchronous discussion in an electronic forum.

All this took place in the Acrobat Adobe meeting pro environment and the virtual learning environment (moodle). Adobe acrobat meeting provided an opportunity for synchronous communication where students could meet and interact with each other, ask questions, and chat with the instructor. Moodle also provided the opportunity for the instructor to present detailed information on the students' online activities, as well as generating grade reports.

The teacher, who was the first researcher in this study, took the role of a facilitator. The facilitator's role was to guide and assist students as they took on more responsibility for their learning. Meanwhile, the facilitator attempted to make learning interesting, engaging, and meaningful.

Blog-related activities that took place in the class can be divided into four different types; the facilitator and her blog posts, the facilitator and the students' blog posts, the students and their blog posts, the students and blog posts of the other students and blog posts of the facilitator. The facilitator had to provide the course groupblog, give the students their username and passwords, post 'after class' reflections and summaries of major issues for students to record and comment on, post announcements, encourage students to read and provide comments, monitor comments and provide responses, provide additional resources, set details and describe tasks for the students.

Further responsibilities of the facilitator included regular monitoring of students' posts, providing feedback on students' work, encouraging students to contribute, and providing individual students with resources.

Students' tasks on their blogs comprised presenting completed tasks, reflecting on learning through the use of journals or group discussions following practical experiences, sharing ideas, providing information and resources that they found interesting, as well as monitoring comments and responding to them. The students were supposed to visit their peers' blogs, provide comments and recommend resources, read and reflect on posts provided by the facilitator, access resources, provide and monitor comments on the facilitator's blog posts.

4. Findings

4.1. Quantitative data analysis

定量数据分析

For the quantitative part of this study, a questionnaire was administered to the 42 students of the class and using an independent *t*-test, the mean difference in perceived learning between students with a low sense of community and students with a high sense of community in an online environment was examined. The sense of community of the students was calculated by computing the mean score of the items in the questionnaire that were related to this dimension. Participants were divided into two groups: high sense of community (values of four and higher) and low sense of community (values of three and lower).

根据问卷中社会存在感维度的题项，将被试分为high和low两组

In Table 3, the descriptive analysis for the Likert-scaled items elicited through perceived learning and sense of community questionnaire is reported. For clarity reasons, the percentages of the 'strongly agree' and 'agree' responses were merged and reported under 'agree' column. Likewise, the sum of 'strongly disagree' and 'disagree' responses were inserted under 'disagree' column.

问卷相关题项的呈现，以及两两维度的合并

As Table 3 illustrates, the majority of the learners were satisfied with their learning experience and achieved learning level. Descriptive statistics revealed that 68% of the participants reported that weblogs enhanced their overall learning. Moreover, 72% of the participants responded that blog discussions stimulated thinking outside the class. Some students perceived that blog discussions helped them understand other points of view (57%). The students also reported that they actively took part in the blog discussions because they believed that they could share their knowledge and experience with their peers through blogging (59%). The students perceived the use of blogs very helpful since it helped them to enhance their learning experience in general (68%). The learners acknowledged the interactive nature of the blogs and reported that their view point's had been acknowledged by their peers in the course (63%) and that their peers comments on their blog posts were important to them (52%).

对问卷各个维度以及所占百分比进行了介绍

To investigate the difference in the degree of perceived language learning of EAP students studying IT based on the degree of sense of community in online classes, a *t*-test was calculated. The homogeneity of variance was checked using Leven's test. The results showed that the homogeneity of the variance was not violated. As Table 4 depicts, the *t*-test confirmed a significant difference [$t(40) = -8.038$; $p < .005$] in perceived learning between the students with a low sense of community ($M = 21.90$, SD = 3.192) and those with a high sense of community ($M = 31.00$, SD = 4.087). The students with a high sense of community outperformed their counterparts.

t检验的结果

4.2. Qualitative data analysis

Although questionnaires are among the most commonly used instruments, the data obtained through questionnaires may be one-dimensional (Hyland, 2006). Accordingly, in order to obtain credible and reliable results, triangulation of the data was observed (Jasso-

问卷的局限性　三角互证法　的相关有依据的文献参考

Table 3
The perceived learning and sense of community questionnaire.

	Agree % (*n*)	Disagree % (*n*)
Perceived learning items		
1. The blog discussions help me to share my knowledge and experience with my peers.	59%	23%
2. I believe that incorporating blogs with teaching can enhance my learning experience in general.	68%	21%
3. Other students' comments on my blog posts are important.	52%	14%
4. Blog discussions help me understand other points of view.	57%	27%
5. Blog discussions have made me think about our course subjects outside of this class.	72%	12%
6. My point of view has been acknowledged by my peers in this course.	63%	31%
7. Overall using the blog has helped me learn.	68%	22%
Sense of community items		
8. I visit our blog more than required by my instructor.	45%	13%
9. The blog helps me feel connected to other students in this course.	58%	22%
10. Due to the class blog, I feel that I am an important part of our classroom community.	44%	15%
11. I have been stimulated to do additional readings or research on topics discussed on the blog.	51%	18%
12. In comparison to my other classes, the amount of my interaction with other students in this class has increased due to the blog.	71%	9%

Adaptation from Halic et al. (2010).

Table 4
Descriptive statistics and *t*-test results for perceived learning of students with low/high sense of community.

	Sense of community	*N*	Mean	Std. Deviation	Std. Error mean
Perceived learning	Low sense of community	21	21.90	3.192	.697
	High sense of community	21	31.00	4.087	.892

		Levene's test for equality of variances	t-Test for equality of means					
		F	Sig.	*t*	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confidence interval of the difference	
									Lower	Upper
Perceived learning	Equal variances assumed	1.707	.199	−8.038	40	.000	−9.095	1.132	−11.382	−6.808

Aguilar, 1999; Key, 1997). Data were gathered through semi-structured interviews, participatory observations, records of events of the classes, researchers journal and written memos, students homework and assignments, the participants discussion forums entries, email messages, blog posts and comments. 如果是在协同备课的过程中，应该就是观察　问卷　和对学习元的贡献三方面来看

对三角互证法的一些介绍

Triangulation as explained by Lincoln and Guba (1985) addresses concerns regarding reliability and validity of data analysis. Lincoln and Guba (1985) also introduced some criteria for trustworthiness which have some points in common with the validity criteria proposed by Maxwell (2005). The criteria include credibility, transferability, dependability, and conformability. In this study, credibility was gained by prolonged engagement with the students through class observations and interviews. For transferability, a thick description of the class activities was kept in the teacher's memo. Dependability included accuracy and authenticity of data and conformability comprised of all the video records, voice records, pictures, and the stories that the students provided.

Memos were used to record the facilitator's thoughts and ideas about the reflections on the methods of teaching and learning. During the process of transcribing the data from various sources, many codes emerged. The data formats that were coded ranged from transcribed texts to videos. The codes were then categorized and indexed into sections or chunks of data and the themes of this study emerged from the data.

Five themes emerged out of the pool of data analyzed (i.e. ongoing dialogic evaluation, inner circle standards, open structured learning and evaluation, accumulative learning, and group work and community learning). Fig. 1 below illustrates these five themes which regard assessment in an online course to be the result of knowledge created and shared interactively.

4.2.1. *Ongoing dialogic evaluation*

对正在进行的对话的评价：教师对学生　学生对学生

In online contexts where students cannot see each other and are sitting by their computers, it is important to make them feel involved in class activities. This gives students the opportunity to be engaged in dialogues with the teacher and other students. The dialogic evaluation happened in two forms in the class: teacher–student and student–student. The teacher–student dialogic evaluation was usually based on the feedbacks the students received from the teacher either orally or in written format. For example teacher–student dialogic evaluation happened when the teacher visited the students' pages on the weblog or when she dropped in when they were working as a group in the

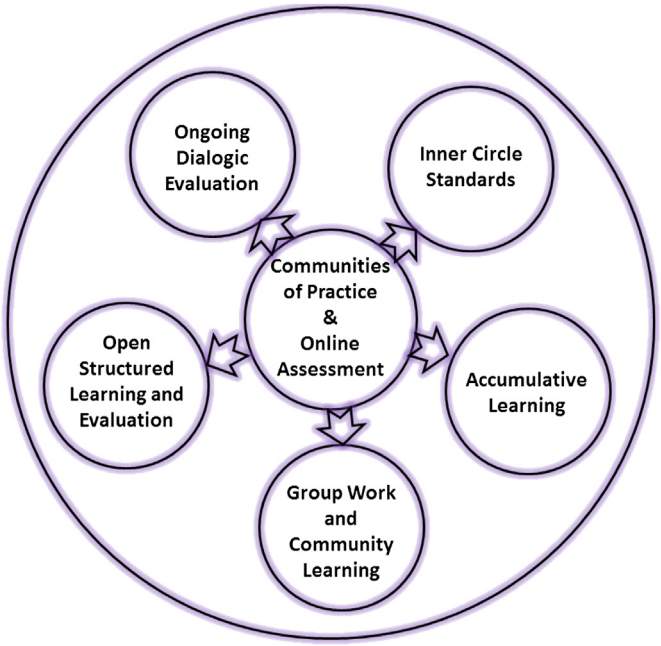

Fig. 1. Assessment framework based on constructivist and social interactionist theory of learning.

online word processors (http://sync.in/, http://primarypad.com/) and gave feedbacks like "well done, this is good work", or "you're not using the vocabulary of this lesson very much, try to use the new vocabulary so you would get more familiarized with them."

Evaluation does not always have to take place from an authority like the teacher. Students themselves can also help each other. In every class, there are always students who are more knowledgeable than others. The students who have more expert knowledge in the English language are always great sources of help to the novice students with a lower level of English language. Moreover, when it comes to online classes, some students seem not to enjoy adequate experience in the use of technology in the class. The students are a great source of help to each other. In this study, the students used emails, discussion forum entries and chat rooms to stay in contact and deal with their problems as a group. This sharing attitude of the students was supported by the results of the questionnaire as 63% of the students agreed that peer acknowledgement was a source of encouragement in their learning.

4.2.2. *Open structured learning and evaluation* 对开放结构的学习的评价

In this study, the format of the examination was not fixed and the students used their own creativity to come up with the best presentations. Students explored a lot, exchanged questions and opinions with the other members of the community. This helped the students explore the topics in greater depth. For example, in one of the recorded sessions, Sara, one of the active students of the class, commented:

> I agree with Soheila and Mahshid. The Internet can be a great source for finding information. Let's divide the work, each of us will search for some part of it and then we will share what we have found.

Mahshid continued:

> We can even use newspapers and journals, just to get some ideas from them. If we find something good in them we can add it to our project in our weblog.

The Internet gave the students the opportunity to make their projects more live by using videos and animations. In this regard, Ali wrote in one of his blog posts:

> We can even use pictures and videos. It's good to have animations. It makes understanding easier and it's even more prestigious.

Students' content about being able to use their experiences in class activities was also acknowledged in the perceived learning and sense of community questionnaire; 59% of the students reported that the discussions helped them share their knowledge and experiences with each other. 注意量的研究和质的研究的相辅相成

4.2.3. *Group work and community learning*

Several sources and methods can be used to evaluate students as a part of a community. In this study, Garrison et al.'s (2000) practical inquiry model was used to evaluate students' shared knowledge and co-construction of meaning. Accordingly, the students' email communications, comments they left for each other in their groupblog, records of their group chats, as well as the students' forum entries were analysed in order to identify whether they had engaged in the four phases of the cognitive presence or the practical inquiry model. Also, students' projects and task products were evaluated. Furthermore, to gather more in-depth information during students interviews, they were asked to do a self-assessment to judge their sense of belonging to a community as well as their evaluation in the community from a peripheral novice participant to a more central and expert one.

Azadeh said:

> No, I still think that I'm a partial member of our group. I can't announce my opinion like the other students. I mainly read and listen to other people's ideas. I hope I can be active like the other students one day and add to class.

Even in the perceived learning and sense of community questionnaire 58% of the students agreed that the class blog helped them connect with other students in the class. This was especially beneficial to those students who were shy and were reluctant to speak in the class.

Shahla who had left comments on nearly everybody's work said:

> Yes, working like this is great. It'll take away the stress, especially since everything is explained at the beginning of the session. We have a lot of brain storming. It really is a storm in the brain [laugh]. Everyone voices their opinion. This gives us confidence to talk in class, and we would want to search the web to find a new thing to talk about in class.

Shahla was very active in the initiation, exploration and the integration phases (Garison, Anderson, & Archer, 2001). She raised numerous questions about the topics and she was a good trigger to get everybody else involved.

In the exploration phase, the students all delved into and exchanged opinions to explore the topics in greater depth and suggested websites that would help them find the right information. For example Reza said:

> Hey everybody, I found a good website. It has so much information and it's all reliable, since it's related to the library of Cambridge University. You can't study all the documents but there's enough available.

The students then wrote their projects based on their readings, discussions, experiences, knowledge and understandings. As students' responses to item 12 of the perceived learning and sense of community questionnaire indicated, the use of blog helped them to have better interaction with their peers. The students seemed more satisfied to share their findings and experiences in their blogs.

4.2.4. *Accumulative learning* 积累性的学习

During the course of learning, the students very often had to implement new knowledge into practice. In the whole community of learning, students learnt a lot from each other. The students uploaded the first drafts of their work and added to it as they went along.

Hamid wanted to make sure that everybody knew that this was not his final product so he added the following line at the top of his first blog post.

This definitely isn't my best work yet. I'm waiting for suggestions from friends to improve it.

Students built on their knowledge as they went along and as a consequence they added to the product of their learning.

Peer opinion is important. Even when we see their work it will influence not only the content of our work, but also the way we present our work.

According to the results of the perceived learning and sense of community questionnaire (item 3), 52% of the students reported that their peers' opinions were important to them and their comments had a great influence in their improvements. Thus, it can clearly be seen that in item 3 of perceived learning (52%) and also item 11 of sense of community (51%) students have reported that they did additional reading and research on the topics discussed in the class blog.

4.2.5. Inner circle standards

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Students were given tasks to do, they were not given strict orders about the process of learning or how the outcome should be presented. But they were given a deadline. The students inside their groups decided on how to go about finding information, processing it and presenting it. The limit to their work was the limit of their creativity, and they were the ones who put a limit for their perfection.

Setareh in her interview said:

I am very satisfied with the way we worked on this project. It didn't turn out bad either. If we had a little more time I'm sure it would have been even better. In the short time we had we tried to hand in a good work.

Some students presented their work in a weblog, some in a website; some others made PowerPoints and uploaded them in http://www.authorstream.com/ for everyone to see. All in all, they used their knowledge and creativity to present a work they thought would be perfect.

4.3. Perception of individuals pace

Students' interviews were analysed following Pallof & Pratt (1999, 2001) in order to assess their sense of self expression and reflection. The instructor judged the students' sense of accomplishment and satisfaction through examining their work which gave clues to their creative minds. The students also talked about their level of satisfaction with their own participation. Their ability to work at their own pace was assessed through the moodle software. Moodle showed reports on the frequency and the duration of each student's presence in the online environment, the length and number of postings, responses made to other students postings, comments they had left on each other's blogs, as well as initiation of forum discussions and uploads.

5. Discussion

When online courses are incorporated into the curriculum, the medium of distribution and organization of the course shapes not only its content but also the way the students are evaluated. The forms of assessment, such as quizzes and exams, that are very common in traditional classes, give a partial picture of the students' performances in online courses. Consequently, the important factor in online courses is the creation of co-constructed knowledge (O'Reilly & Morgan, 1999).

In a similar study, Goldman et al. (2008) evaluated whether 'seminar blogs' enhanced learning in a large graduate-level introductory public health school class. In this study sixty students were divided into 6 online blog groups. The students were supposed to post their assignments and they received feedbacks from their peers. In their study, Goldman et al. (2008) reported that 60% of the students revealed that blog participation enriched their learning quite a bit, 34% a small amount, and 6% not at all; 54% stated that the blogs provided opportunities to learn from classmates. Sixty percent found it easier to write in blogs than to speak in class. Also considering current or future work, about 65% said that skills attained by participating in blogs were useful. Churchill (2009) also demonstrated in his study that blogs can be effective educational technology and he introduced some useful blog-based activities for learning: (1) reading blogs of peers, (2) receiving comments and (3) previewing tasks of peers and reading feedback received in relation to these. With regard to the findings of previous studies, our research confirms that blogging can have a major role in facilitating students' language learning.

The community of practice and online assessment framework (Fig. 1) is composed of the key components of the educational process – the learners, learning structure and evaluation. This framework also supports the idea and theories behind Garison et al.'s (2001) model and assumes that learning occurs within the Community through the interaction of the learners with their peers, instructors and the learning material.

The themes as depicted in Fig. 1, show a lot of resemblance to the essential elements in the cognitive model or the practical inquiry model proposed by Garison et al. (2001). The names of the themes in this study were chosen so as to be somewhat self explanatory. Garison et al. (2001) claim that the element that is most basic to success in higher education is the cognitive presence. They go further and explain the cognitive presence as the extent to which the participants in any community of inquiry are able to construct meaning through sustained communication. In their study, Garison et al. (2001) divided the cognitive presence into several subcategories i.e. triggering event, exploration, integration, and resolution.

In this study the students were given the power to use their own creativity to come up with the best presentations. That is, the students were given particular tasks to carry out but they were not bound to any fixed or strict procedure. They were free to use their own methods. This particular characteristic of this study has been further explained under 'open structured learning and evaluation.' Garison et al. (2001) provide partial support for this idea in their model under the subcategory of triggering event. They explain this phase as sense of puzzlement, where the students reach a stage that they are trying to explore and make meaning out of the contexts.

While students tried to explore they also reached out for help from their peers. They searched and exchanged a lot of information. The learners were working according to their own group standards. They used all their knowledge and creativity to present a work they thought would be perfect. There are a few empirical studies on text-based collaborative communication in higher education with focus on facilitating deep and meaningful learning. For instance, Newman, Johnson, Webb & Cochrane (1996) studied deep and surface approaches to learning

and thinking in computer supported and face-to-face group learning context. Using the critical thinking model proposed by Garrison (1991), they developed a content analysis method. For the exploration phase, Newman et al. (1996) devised indicators that reflected deep or surface learning approaches. For example, in their study, the deep indicators for the exploration phase were 'welcoming new ideas' or 'linking facts, ideas, and notions'. Similarly, Newman, Johnson, Webb & Cochrane (1997) documented a significant difference between computer conference and face-to-face seminars with regard to critical thinking. Students in face-to-face classes were slightly better at generating ideas while computer conferencing students often brought in outside materials and lacked creativity. Contrary to the findings of Newman et al.'s (1997) study, the students in this study proved to be more interactive. Therefore, Garison et al. (2001) believe that online classes need effective teaching presence, to encourage active knowledge construction. Following the guidance they received from the facilitator, the students tend to come up with new ideas and apply new resolutions to their learning.

Another study of knowledge construction in computer conferencing context was done by Gunawardena, Lowe, and Anderson (1997). In their study Gunawardena et al. (1997) also emphasise on critical thinking process, which is not dissimilar to Garrison (1991). Gunawardena et al. (1997) come up with a model of computer mediated communication through grounded theory analysis of the transcripts. In Gunawardena et al. (1997) the five phases of negotiation and knowledge co-construction were; sharing/comparing, dissonance, negotiation, co-construction, testing, and application. Garrison et al. (2001) also emphasize on knowledge co-construction, integration and connecting ideas. These findings appear to support our theoretical position regarding the themes emerged out of the data collected for this study, particularly: ongoing dialogic evaluation and accumulative learning.

Jonassen, Davidson, Collins, Campbell, and Haag (1995) emphasize in their study that personal meaning making and social construction of knowledge and meaning are the main parts of the collaborative learning process. The collaborative learning process through the creation of shared goals, shared exploration, and shared process of meaning making encourages the students to maintain deeper levels of knowledge generation (Palloff & Pratt, 1999, 2001). Stephen Brookfield (1995) urges online teachers who are trying to facilitate collaborative processes, to promote initiation on the part of the learners, critical thinking, creativity, and dialogue. In this study the separation of the learners by time and distance from each other and from the instructor, made the learning environment the type of learning arena that the learners could set their own standards and formulate shared goals for their learning process. Given the discussion based nature of this course, dialogues were seen as the fundamental way of inquiry (Christiensen & Dirkink-Holmfield, 1995) and the learner's engagement in a collaborative learning process formed the foundation of this learning community (Palloff & Pratt, 1999, 2001). In an online learning community the greatest and most profound learning comes through reflection and interaction with one another (Palloff & Pratt, 1999, 2001). The learners are less dependent on the instructor and they feel in charge of their own learning therefore the learners will do the exercises at their own pace and they will learn to share ideas and help each other.

The main aim of this study was to present a framework for assessment of the students in an online course that would consider the online course as a learning community and an environment in which knowledge is created and shared interactively. In this study student perceived knowledge was evaluated through a questionnaire to evaluate the potential for collaboration and interaction while using weblogs as a tool for learning and evaluation in an online community. The results revealed that the students with a high sense of community performed best. Furthermore, in this study the students were assessed as individuals who were trying to construct knowledge and then as members of the society who could help each other to co-construct knowledge through participating in the online tasks.

The research claims that the results were particularly gained for this study and are only generalisable if the target context is similar to the context of this study. So, the findings of this study can be used by teachers who are planning to teach EAP writing online. It will help them realize that the module of presentation changes the form of evaluation. Of course, it is important to note that this assessment framework was developed for the English as a foreign language course under study and it needs to be tested in other similar courses. It is only the teacher who is in the place to decide what methods of assessment would provide the best information about students' progresses.

6. Conclusion

This study confirmed effectiveness of blogs as an effective technology in education. The useful blog-based activities for English language learning included: reading blogs of others and leaving comments, and reading feedbacks received in relation to the posted tasks. What encouraged students to continuously use the blogs was the learning tasks that the students were to post on their blogs on a regular basis, the weblog being an assessment requirement, the constant blogging of the facilitator and the comments the facilitator provided on the students' blog posts.

Ho and Savignon (2007) conducted a study to examine the use of face-to-face peer review and computer mediated peer review in an Asian English-as-a-foreign-language (EFL) academic writing context. Thirty-three students majoring in English studying at university of science and technology in Taiwan took part in this study. This study investigated the attitudes of 2-year college students in Taiwan toward the use of face-to-face and computer mediated peer review in composition classes. Learners in this study reported the lack of oral discussion as the major drawback for the computer mediated peer review method. On the other hand this method had several advantages such as flexibility in scheduling for reviewing each other's work. Given that peer review is a highly interactive activity in which learners constantly interpret and negotiate their understandings of one another's writing, critical thinking finds a major role (Garrison et al., 2001). In this study the blog-buddies also had a major role in guiding the students. Berg (1999) examined the effect of peer review training on revision types and writing quality. Results of this study showed that learners who had received training achieved higher scores on their second drafts compared to those who did not. Findings of Breg's (1999) study support the results of the present study and suggest that peer review with guidance can help ESL learners to improve their writing.

Consistent with the findings of many other studies on online learning (Collins, 2000; Fredericksen, Pickett, Pelz, Shea, & Swan, 2000; Jiang & Ting, 1998; Motiwalla & Tello, 2000; Oliver & Omari, 2001; Swan et al., 2000), the learners in this study reported high levels of satisfaction with the virtual course. More than 50% of the learners reported that the blog discussions helped them to share their knowledge and experience with their peers (59%); also that blog discussions helped them understand other points of view (57%); fifty-two percent of the learners also reported that the comments their peers left for them were important to them.

Similar to findings of Motiwalla and Tello (2000) and Wegner, Holloway, and Gordon (1999), the students in this study appreciated the flexibility of accessing the virtual classes at anytime and from any place. In addition to that, seventy-two percent of the learners reported that blog discussions were useful to them because the discussions made them think about their course subjects outside of class.

The students were generally satisfied with the student–student, student–blog-buddy and student–teacher interactions in this course. This finding concurs with Swan et al. (2000), Fredericksen et al. (2000), and Motiwalla and Tello (2000)'s findings that students generally perceived the asynchronous format of the blog-based class as supporting, interactive and highly engaging. In this regard 68% of the learners reported that incorporating blogs with teaching enhanced their learning experience and the same percentage of learners reported that overall the use of blogs has been very helpful in their learning.

In the context of using blogs for learning and evaluation of Iranian online EAP students at tertiary level, quantitative analysis of the data confirmed that participants with a high sense of community showed a significantly higher performance in the class and, consequently, received higher grades. The qualitative data, on the other hand, provided supporting evidence on proving the necessity to invest on students' creative and interactive learning. The findings attest to how collaboration in an online learning community can help students learn by granting them the chance to co-construct knowledge through participating in online tasks.

Appendix A. Supplementary data

Supplementary data related to this article can be found at http://dx.doi.org/10.1016/j.compedu.2013.08.016.

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