The Analysis of the Blogs Created in a Blended Course through the Reflective Thinking Perspective*

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Abstract

Blogs have evolved from simple online diaries to communication tools with the capacity to engage people in collaboration, knowledge sharing, reflection and debate. Blog archives can be a source of information about student learning, providing a basis for ongoing feedback and redesign of learning activities. Previous studies show that blogs can enhance reflective thinking, provide deeper learning and construct the knowledge. The aim of this study was to analyze the content of the student’s blogs to achieve the reflections and the reflections level of the students. The study was conducted at a second year undergraduate level course called “Instructional Technologies and Material Design”. The course was redesigned for blended learning model. The researchers used the Drupal web development software to create blogs and integrated them to the course website. They used content analysis method and reflective writing framework to analyze postings in the blogs. The purpose of data analysis was to explore participants’ reflections and blog entries within the educational settings. Findings suggest that students mostly wrote descriptive writing at the descriptive reflection level in three main themes, including the course, learning and personal thoughts. By focusing on this authentic blogging practice, this study contributes to an understanding of how to harness blogging the in higher education settings.

Key Words

Blended Learning, Blogging, Online Learning, Reflective Writing.

The widespread use of ICT in education has significantly changed teaching methods and materials as well as the learning environment. E-learning includes all the learning and teachings methods assisted by ICT systems in order to transfer knowledge and skills acquisition. Due to the continuous development of ICT, and as a result of the accelerated evolution in the software applications designed for the educational domain, definitions of the renovated learning are constantly changing and new concepts are emerging such as online, ubiquitous, blended, web-based learning (Mihai, Stanciu, & Aleca, 2011). Online and blended learning environments grew dramatically in K-12 and higher education settings. The Sloan Foundation report confidently estimates that 3 million students are registered for fully online courses in colleges and universities in United States of America (Picciano & Seaman, 2007). There is some confusion related to definitions fully online course and blended

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An online course was defined "as 80 percent of the course which is delivered online" and online learning is becoming a "critical" part of the educational policy makers in their long-term planning strategies (Picciano & Seaman). According to a report published by the Sloan Foundation in 2011, in the USA, over 6.1 million students were taking at least one online course during the fall 2010 term; an increase of 560,000 students over the number reported the previous year. Thirty-one percent of all higher education students now take at least one course online. In the same report sixty-five percent of all reporting institutions said that online learning was a critical part of their long-term strategy. For-profit institutions include online learning as part of their strategic plan (Allen & Seaman, 2011). However, various limitations of e-learning as a teaching method have led many to try blending various delivery methods. Thus, blended learning, which typically combines face-to-face learning with online learning, emerged in many educational settings (Boyle, Bradley, Chalk, Jones, & Pickard, 2003; Duhaney, 2004). According to Allen and Seaman (2011) if 30% to 79% of a course is given online it can be called blended learning. So, in blended learning the instructor does not necessarily deliver all the course material online; but just the necessary and appropriate parts. Blended learning combines strengths of two delivery methods, face-to-face and online instruction. The online activities include lectures, videos, simulations, tutorials, interactive content, slides, quizzes and more. One can also use Web 2.0 technologies such as blogs, wikis, RSS, forums and social media to support learning and teaching in blended learning settings (Edginton & Holbrook, 2010; Tselios, Daskalakis, & Papadopoulos, 2011; Walker & Keeffe, 2010). Alongside wikis and RSS technologies, blogs are cited as the most familiar Web 2.0 applications in the business and education community (Kim, 2008; Martin, 2007).

Educational Blogging

The popularity of blogging among young people has motivated educators to seek the ways of integrating computer-mediated communication tools at the university level (Halic, Lee, Paulus, & Spence, 2010). Blogging is considered as one of the most popular online activities among social-media users (Kang, Bonk, & Kim, 2011). Blogging is the technology that is being tested and assessed for its value in educational environments. Prior research has shown that these technologies offer promising benefits for instructors and students (Abat, Gomes, & Linton, 2011). Despite the fact that blogs have been around for roughly half the history of the World Wide Web, they have only relatively recently been integrated into the teaching and learning environments (Gray, 2007; Williams & Jacobs, 2004). Blogging empowers bloggers (students) when they are involved in the activities of writing what they think and receiving feedback promptly. This kind of learning environment makes a blog a learner-centered instructional site (Higdon & Topaz, 2009). Blog archives can be a source of information about the student's learning, and a basis for ongoing feedback and redesign of learning activities. Previous studies show that blogs can enhance reflective thinking (Farmer, Yue, & Brooks, 2008), deeper learning and knowledge construction (Ferdig & Trammel, 2004; Williams & Jacobs). Sim and Hew (2010) listed a broad range of anticipated positive effects of blogging, including improved analytical skills and reflective thinking, as well as changes in attitude to learning with electronically. In educational settings, blogs have been examined as a means to increase student reflective capacity (Williams & Jacobs). Deng and Yuen (2011) suggest that the benefits of educational blogs center on two broad pedagogical uses: interactive and reflective. Yang (2009) examined the use of blogs as a reflective platform for students and teachers and found that all students...
used the blog platform for reflection and commenting. Blogs can develop reading comprehension and writing skills, promote higher order thinking skills of going beyond knowledge and comprehension to application, analysis, synthesis and evaluation (Risinger, 2006). They also increase student interest and responsibility in learning (Ducate & Lomicka, 2005; Ferdig & Trammel) and give voice to students who often feel uncomfortable about speaking up in class (Brownstein & Klein, 2006).

Blogs are being increasingly used in higher education (Halic et al., 2010). With the increased use of blogs, various research studies have been conducted to investigate effects of blogging on students’ learning (Chen & Bonk, 2008; Li, 2010; Shim & Guo, 2009). Previous studies show that blogging can enhance students’ learning (Churchill, 2009; Ducate & Lomicka, 2008; Goldman, Cohen, & Sheahan, 2008; Shim & Guo).

Students’ and teachers’ perceptions of blogging have been investigated in many studies (Avcı, 2009; Çiftçi, 2009; Demirel, 2010; Taslacı, 2007); but, what they write and reflect in their blogs have not been investigated enough. It is clear that by examining students’ postings it is possible to provide feedback about students learning, and evaluate the course. In the present study, the purpose is to investigate the content of the blogs and reflective level of the participants’ writings.

This study also investigates the reflection levels of the students by analyzing their blog postings. The themes and codes emerged in this analyze is another issue investigated in this study. Also the reflection of the students was investigated by the analysis of the blogs. The distribution of the reflections in the blogs also investigated in this study.

Method
This study used a qualitative descriptive study design. The descriptive research provides a detailed profile of an event, condition or situation using either quantitative, qualitative or a combination of methods (Jacobson et al., 2008).

The data reported in this paper are drawn from the implementation of a weblog environment that was a component of a blended undergraduate-level course “Instructional Technologies and Material Design”. The course had two parts. The goal of the first part was to help students gain the necessary theoretical knowledge about instructional design theories and get familiar with the relevant instructional tools. The goal of the second part was to help the students to create an original design of a specific teaching tool at elementary level. The blogs were aggregated into a single webpage so that students could read each other’s reflections. However this cross-blog reading is not the focus of the analysis reported in this paper. This paper uses patterns of blogging, content analysis of the students’ blog posts and the level of the students’ reflection.

Participants
The study conducted in a middle-sized university located at the southwest region of the Turkey. The participants were the second year students who were studying Primary School Teacher Education Department in Faculty of Education. Of the 60 students enrolled in the course, 52 were fully engaged into the blog activities at the online sessions. Eight students were excluded from the analysis because the students didn’t edit their blogs during the study time. Participants’ ages ranged from 19 to 23. Of the 52 students 38 were female, 14 were male.

Blended Context and Data Tool
The researchers used the Moodle learning management system for the online part of the course. The content including lecture notes, slides, interactive materials, quizzes, and videos were prepared in modules. Self assessment quizzes were provided at the end of the modules. In face-to-face sessions, feedback was provided to the participants, and debates were organized between small groups and in the whole group. To promote the learning, students were asked to write blogs after finishing each module in an online part of the course. A small lecture was given to the students about how to reach the blog webpage, write a blog, and make a comment and reply to the others’ blogs. In addition to a PowerPoint presentation, lecture notes and video were prepared to teach how to write an effective blog and how to write an effective reply or comment on the website. The student’s wrote their blogs regularly every week, and at the end of the three week blog writings stopped. The blog postings used as a data to be analyzed, by the researchers.

Data Analysis
To analyze the data, the qualitative research technique was used. Students’ responses were analyzed with content analysis method. All blog entries were initially analyzed via utilizing the Reflective Writing Framework (Freeman & Brett, 2012; Hatton &
Smith, 1995; Moon, 2006) to determine the level of the reflective effort. The Reflective Writing Framework identifies four types of writing, three of which are considered reflective (Descriptive reflection, Dialogic reflection, Critical reflection) and one is descriptive (Descriptive writing). The reflection types could be used for analyses showed below the Table 1. Atlas Ti 6.0 qualitative data analysis software was used for the content analysis. The researchers did not use any pre-formed coding schema to analyze the data. Rather they wanted to reveal the codes during the data analysis. Two researchers coded all the blog entries independently and later codes were compared and regulated. In order to determine the intercoder reliability the researchers used this formula: Reliability= Number of agreements / (Total number of agreements + disagreements).

Table 1.
Types of Reflective Writing

<table>
<thead>
<tr>
<th>Reflective writing type</th>
<th>Description</th>
<th>Example blog posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive writing (un-reflection)</td>
<td>Simply reporting; writing concerned with skills in a given experience, personalistic, assumes a given research/theory base.</td>
<td>Being a student in an online course is one of the most rewarding and challenging educational experiences I have ever faced. It is rewarding because of the intensity: unlike the traditional in class experience, with online, I find I must log in, read, and write on a daily basis.</td>
</tr>
<tr>
<td>Descriptive reflection</td>
<td>Seeking best practice; giving reasons for actions taken; some attempt to provide reason for events; personal experience a focus.</td>
<td>There are a few ways in which the course has fulfilled certain preconceptions I had and the goals that went along with them, and others that did not.</td>
</tr>
<tr>
<td>Dialogic reflection</td>
<td>Stepping back from events; discourse with self; analytical and/or integrative of multiple perspectives; recognizing inconsistencies; weighing competing claims and viewpoints; exploring alternative solutions.</td>
<td>I noticed this last term teaching a business English course, but only somehow put these thoughts together this week.</td>
</tr>
<tr>
<td>Critical reflection</td>
<td>Seeing events as located in multiple historical and sociopolitical contexts; considering ethical and cultural outcomes and influences; means and ends.</td>
<td>I have always been interested in the affective dimensions of learning and see that they play a huge role in social interaction which goes hand-in-hand with community development, sociocultural learning and more.</td>
</tr>
</tbody>
</table>

(Freeman & Brett, 2012)

Table 2.
Codes, Definitions, Reflection levels and Examples

<table>
<thead>
<tr>
<th>No.</th>
<th>Codes</th>
<th>Definition</th>
<th>Reflection Level</th>
<th>Blog post examples written by students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Interpretation</td>
<td>Students interpret and reflect on what they have learnt in the course</td>
<td>Descriptive reflection</td>
<td>When teacher use instructional material, students will touch and use it with hands. So students will learn better. But sometimes teacher can not find suitable material for all student.</td>
</tr>
<tr>
<td>2</td>
<td>Subject</td>
<td>Students state the course subject</td>
<td>Descriptive reflection</td>
<td>The discussion topic of this week subject was visual design principles and Dale's Cone of Learning</td>
</tr>
<tr>
<td>3</td>
<td>Definition</td>
<td>Students give the definitions to concepts and terms</td>
<td>Descriptive writing</td>
<td>Teacher's pedagogic knowledge is the knowledge of how we can teach? Content knowledge is the knowledge of teacher he will teach, technological knowledge is the knowledge of using technology in teaching process.</td>
</tr>
<tr>
<td>4</td>
<td>Exemplification</td>
<td>Students give their examples related to the course content</td>
<td>Descriptive reflection</td>
<td>To prevent the communication problems we can make empathy to understand the feelings of the others</td>
</tr>
<tr>
<td>5</td>
<td>Beliefs on learning</td>
<td>Students state their beliefs about their learning</td>
<td>Dialogic reflection</td>
<td>Studying the subject before lesson and making small group discussions during the lesson made our learning easy and enjoying</td>
</tr>
<tr>
<td>6</td>
<td>Emotions</td>
<td>Emotions about a lecture</td>
<td>Descriptive writing</td>
<td>I had some prejudice feelings before the lesson but later I understood the importance of it.</td>
</tr>
<tr>
<td>7</td>
<td>Teaching method</td>
<td>Teaching strategies, methods and techniques</td>
<td>Descriptive writing</td>
<td>Our teacher divided the whole class to small groups and asked questions, after discussing in small groups we made whole class discussion</td>
</tr>
<tr>
<td>8</td>
<td>Judgement</td>
<td>Students infer and judge after learning</td>
<td>Critical reflection</td>
<td>To make teaching process effective teacher must have technological pedagogical content knowledge, those three cannot be separated</td>
</tr>
<tr>
<td>9</td>
<td>Prior knowledge</td>
<td>Students stated their prior knowledge about the course</td>
<td>Dialogic reflection</td>
<td>I can say that I have no knowledge about the subjects we learnt in lesson.</td>
</tr>
<tr>
<td>10</td>
<td>General feelings</td>
<td>General feelings about the course</td>
<td>Descriptive writing</td>
<td>Material design course is very important for our future lessons</td>
</tr>
<tr>
<td>11</td>
<td>Association</td>
<td>Students associate their prior knowledge with the new learning</td>
<td>Critical reflection</td>
<td>If teachers lecture according to multiple intelligence and brain based learning with instructional materials, students will learn better</td>
</tr>
<tr>
<td>12</td>
<td>Expectation</td>
<td>Expectations about the course</td>
<td>Descriptive writing</td>
<td>I hope our teacher uses the discussion method in future lessons</td>
</tr>
<tr>
<td>13</td>
<td>Interesting things</td>
<td>Emphasis on interesting things in the course</td>
<td>Descriptive writing</td>
<td>The sample case the teacher used was very interesting and got my attention</td>
</tr>
</tbody>
</table>
According to this formula the intercoder reliability is calculated %84 in this study. This reliability is acceptable for this kind of analysis (Miles & Huberman, 1994, p. 64)

Results

Blog entries were analyzed by the content analysis and 13 codes emerged after scanning 51 blogs and 23,000 words shown below the table. These codes, code frequencies (f) and the number of students (N) corresponds to the codes are given in table 3. By the weeks passed it is seen that blog entries and number of students decreased.

<table>
<thead>
<tr>
<th>No</th>
<th>Codes</th>
<th>1st week</th>
<th>2nd week</th>
<th>3rd week</th>
<th>4th week</th>
<th>5th week</th>
<th>6th week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Interpretation</td>
<td>84</td>
<td>38</td>
<td>75</td>
<td>46</td>
<td>63</td>
<td>45</td>
</tr>
<tr>
<td>2</td>
<td>Subject</td>
<td>60</td>
<td>29</td>
<td>71</td>
<td>49</td>
<td>63</td>
<td>42</td>
</tr>
<tr>
<td>3</td>
<td>Definition</td>
<td>32</td>
<td>23</td>
<td>2</td>
<td>2</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>Exemplification</td>
<td>19</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Beliefs for learning</td>
<td>17</td>
<td>17</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Emotions</td>
<td>16</td>
<td>16</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Teaching method</td>
<td>13</td>
<td>13</td>
<td>36</td>
<td>36</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>8</td>
<td>Judgment</td>
<td>12</td>
<td>11</td>
<td>4</td>
<td>4</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>9</td>
<td>Prior knowledge</td>
<td>10</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>General feelings</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Association</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>Expectation</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>Interestingness</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 3.
Codes, Frequencies and the Number of Students

<table>
<thead>
<tr>
<th>No</th>
<th>Codes</th>
<th>1st week</th>
<th>2nd week</th>
<th>3rd week</th>
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<th>5th week</th>
<th>6th week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Interpretation</td>
<td>84</td>
<td>38</td>
<td>75</td>
<td>46</td>
<td>63</td>
<td>45</td>
</tr>
<tr>
<td>2</td>
<td>Subject</td>
<td>60</td>
<td>29</td>
<td>71</td>
<td>49</td>
<td>63</td>
<td>42</td>
</tr>
<tr>
<td>3</td>
<td>Definition</td>
<td>32</td>
<td>23</td>
<td>2</td>
<td>2</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>Exemplification</td>
<td>19</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Beliefs for learning</td>
<td>17</td>
<td>17</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Emotions</td>
<td>16</td>
<td>16</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Teaching method</td>
<td>13</td>
<td>13</td>
<td>36</td>
<td>36</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>8</td>
<td>Judgment</td>
<td>12</td>
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<td>4</td>
<td>4</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>9</td>
<td>Prior knowledge</td>
<td>10</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>General feelings</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Association</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>Expectation</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>Interestingness</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Three themes emerged from the analysis (see Table 5). These themes named “Course theme”, “Learning theme” and “Personal thoughts theme”. In the course theme the students had written on the subject of the week, the lecturer’s teaching method in the course, general feelings about the course and finally their expectations on the learning.

In the learning theme the students interpreted what they had learnt, gave formal and informal definitions to the concepts and principles, provided samples about what they had learnt, beliefs on their learning, associations and finally judgments with their knowledge gained at the lesson.

In the personal thoughts theme the students gave information about their emotions about the course, their prior knowledge and feelings about the subject, and finally dwelled upon the things which they found interesting in the course.

Table 4.
Frequency of Reflection Type in Blog Posts

<table>
<thead>
<tr>
<th>Reflection Type</th>
<th>Number of blog posts</th>
<th>% of blog posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive reflection</td>
<td>243</td>
<td>35</td>
</tr>
<tr>
<td>Descriptive writing</td>
<td>377</td>
<td>55</td>
</tr>
<tr>
<td>Dialogic reflection</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>Critical reflection</td>
<td>35</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Course Theme: The four sub-theme constituted the main course theme. These were (a) Subject, (b) Teaching method (c) General feelings and (d) Expectations.

Subject: The students tend to emphasize the course subject when they begin to write blog. The course subject is written originally, then definitions and finally reflections about the course content are written in the blogs. The students had generally written the course subject before writing their blogs. For
example, one student stated “The course subject in this week was the effect of the instructional materials on the learning process”.

**Teaching Method:** The second mostly cited code in the blogs is the teaching method that was used in the course. Many students reported about the teaching strategies and methods in their blogs. The model and method used in the courses were described in the blogs. One student stated “Our class divided in small discussion groups and our friends found opportunity to collaborate.” Another student emphasized the effect of teaching method on learning by indicating “Using the question-answer method allowed better knowledge retention”. The students also described the model of learning in their blogs. For example, in the online part of the blended learning we prepared lecture notes, slides or videos etc. One student stated this in his blog “... lecture notes, videos, then small group discussion and finally reflection blogs...” So one can get an idea of the teaching model, teaching method and learning materials from the blog.

**General Feelings:** The students wrote down their general feelings about the course in their blogs. Especially they stated how their prejudice became broken and how important the course was. For example, one student says “Firstly I thought we would have a boring and monotone lesson but by the time passed I enjoyed it too much”. Another student stated the importance of the lesson by saying “The Material Design course contains very useful information for future teachers. Teaching method is important in this course as well as its content.”

**Expectations:** The students pointed out their expectations about the course in the blogs. They explained their expectations according to their enjoyment of the course. One student stated his expectation like this “I hope this useful course will be taught by small discussion groups and our friends actively participating”. Another student expressed his expectation about the continuing course by saying “This course is very nice but I wish slides were shorter...”. Therefore the students declared their expectations about the course in their blogs.

**2. Learning Theme:** The second main theme “Learning theme” is the most cited theme in the blog writings. This theme has six sub-themes. One of the sub-theme “Interpretation” is the most frequent theme in all the blog writings. The other themes respectively “Definition, Exemplify, Beliefs on learning, Association and Judgment.”

**Interpretation:** It is important for the students to reflect on their learning, also this reflection is important for considering how they construct their knowledge. Besides, interpreting the information by their words and giving their own examples show how their learning occurs. One student reflects on his learning the following way.

“If the teacher faces a communication problem with his student, there will be a communication problem and the learning don’t take place. The teacher can not send a message to the student. There are lots of obstacles for communication”.

In another example a student reflects on his learning like this:

“If we don’t establish reliable communication, we cannot come to an agreement. Because of this we have to remove all the communication obstacles. Those are the communication problems such as not listening to another person, speaking different languages, a psychological situation and an unsuitable environment. We have to remove all those obstacles”.

When we look at the first quotation we see that the student used a formal language, the second one wrote in informal way. It is the evidence that the students reflected on their learning in their blogs both formally and informally. So that shows us the importance of blogs for learning that can be concluded students learn and reflect differently. Some learns and reflects in formal language, some in informal language.

**Definition:** The students generally learn concepts, principles and theories at the lessons. They mostly interpret what they have learnt, then they tend to give definitions of the concepts in their blogs. In most cases the students provide their own informal definitions to the concepts or principles. For example, one student defined technology as “Technology is the use of the proven and empirical knowledge to solve the human being’s problems”. The other student’s definition is “Technology is the general name for the human being’s equipment”. These are the examples of the students’ informal definitions. But some students wrote down some formal definitions of the concepts. Here is how one student defines technology:

“Technology is the use of the proven and empirical knowledge to solve the certain problem or to reach the certain goals”.

**Exemplification:** When the students reflect on their learning they tend to tell about concepts, principles and theories, then they give the definitions they have learnt at the lesson and finally they provide some examples on the issue which they have learnt.
One of the students gives his own example about communication obstacles.

“The teacher can face a communication problem with the students at the lesson. For example, if a student has a psychological problem or has a prejudice it can cause some communication problem. Besides, if the teacher uses a sophisticated language which is not clear for the student or looks down at the students it also will bring to a communication problem. Simultaneously the physical conditions of the class such as cold, dark, etc. can affect the communication”.

Another student gives his own example on the material usage.

“Diversity should be provided in using teaching materials. For example, the students should use different musical instruments when they are learning music. When the teacher lectures about the states of matter, the students should have hands on activities. Thus the students will correlate concepts and matters.”

If a student gives his/her own examples about the subject learnt, that shows us how the student assimilated the subject and gives us a hint if he reached the learning goals. It also demonstrates how the students constructed their knowledge.

**Beliefs on Learning**: One of the most important things the students stated in their blog writings is giving clues about their learning. In other words they dwelled upon the applications that facilitate, scaffold and motivate them at the lessons. It includes instructional methods and techniques. Here are some examples:

“Small groups, debates and blogs contributed to better knowledge retention and made students be more active at the lessons.

“Participation in small group discussions helped to deliberate the subject”.

“Small group discussions made the lesson more entertaining and facilitated our learning”.

It should be noted that by giving some clues about their learning the students didn’t mention anything about the strategies of facilitating their learning. They didn’t note anything or any technique that they can use to make learning easier. The only one student mentioned about that issue in his writing:

“The methods used at this lesson is good but we have to see and touch the materials we are talking about to learn it better. We have to learn how to use those materials in advance…”

**Association**: The students tend to associate new learning with their previous knowledge. That shows us the learning took place in the lesson. One student associated some concepts he just learnt with multiple intelligence theory and brain-based learning and the other student associated it with new information technologies. Here are some examples.

“If a teacher………… uses the principles of multiple intelligence theory and brain-based learning theory at his lessons, master learning will occur.”

“Technology is an essential element of the 21st.century. Developments in technology have caused tremendous changes in the life quality. Knowledge society took the place of the industrial society. Yet can we use this technology appropriately? The teacher must bring or use this technology for better understanding”.

**Judgment**: The students have come to some judgments after the course and demonstrated this in their blogs. For example, one student after learning the importance of the teaching material design stated that “…for me the effect of using the teaching material in class is equal to a teacher.” Another student stated after learning technological pedagogical content knowledge “…for me the pedagogical knowledge is more important than the other domains of knowledge. When the teacher knows the content, but he doesn’t know the pedagogy it will be of no sense.” So we can conclude that the students constructed their own knowledge and beliefs about the subject and published these in their blogs.

3. **Personal Thoughts Theme**: The students wrote down their own thoughts about the course and the teacher in their blogs. Three themes emerged in this category. These themes are (1) Emotions (2) Prior knowledge and (3) Interestingness respectively.

**Emotions**: The students indicated their prejudices and fears about the course in this theme. They wrote about a teaching style, teacher’s manner etc. in their blogs. Here are some examples:

“I had some prejudices about this course before. I thought the course would be boring, the teacher would read from books and the students would listen.”

“I was8 scared before the lesson because of its being some parts online but later….”

“I was so prejudiced about the lesson. I didn’t think we would have this kind of discussions…”

“I was disturbed before the lesson because we would use computers. But by the time passed and doing all my homework I felt comfortable and excited. I
think it is a good decision to get this course in the curriculum. I am sure I will learn many things in this course."

**Prior Knowledge:** The students also dwelled upon their prior knowledge about the subject and its change after the lesson. Some of the students pointed out their prior knowledge about the course as below.

“I didn't have any knowledge about the subject”.

“We use technology in every part of our life. But when the teacher asked me “What is technology?” I realized it was challenging for me to answer”.

“We knew about the importance of using materials at lessons but after the lesson we realized that it was not enough for us.”

**Interestingness:** One of the students explained the most interesting thing in the course.

“The most interesting thing I learnt in this lesson was the tongue can be accepted as a technology. I really didn't expect this.”

It is evident that the students’ writings in the blogs can enrich teachers with ideas on designing a course and improving teaching strategies. In this sense blogs can be used as a feedback instrument.

**Discussion and Conclusion**

Blogs can act as constructive repositories of the students’ reflections, creating a platform to discuss the students’ own learning strategies in their own voices. Concurrently, they can provide teachers with insights on the individuals’ understanding of the key concepts and the opportunity to intervene if so wished (de Andrés Martínez, 2012). The use of blogs can inform how much the students understand what they have learned and this contributes to improved teaching (Mansor, 2011). In this study we have concluded that blogs can be used for students to reflect on the learning theme, to explain ideas, to give information about their own learning and expectations. In this study blogs provided private spaces to the students where they could present personal information such as emotions, prior knowledge and interestingness. The students describe, explore and express their own ideas and feelings in this private space without needing input from other students consistent with literature (Ducate & Lomicka, 2008; Henri & Pudelko, 2003).

The study proved that blogs could be used as a feedback instrument. The students stated their thoughts and expectations about the course in blogs. It allows receiving the students’ feedback to the teachers in order to redesign their courses according to the student reactions if necessary.

The students generally focused on three things in their blog writings. These were the course subject, a teaching method and learning at the lesson. They dwelled upon the subject, the teaching method and their reflections respectively in their blogs.

This study proved that blogs could be used as a learning instrument. In most cases the students reflected their development in the blogs. The students wrote in their own words and thus constructed their own knowledge. It proves findings by Anderson, Rohrer, Taylor, and Trimarco (2006) that students do not repeat the same things in their blogs rather they have used their own words. Students redefined the concepts, through their own words, they learnt in the lesson. As well the students provided their own examples about the subject in their blogs. That shows us the constructivist nature of the blogs. Students mentioned the subject, the teaching style, their feelings and expectations about the course in their blogs. It allows for a teacher to receive his/her students’ feedback to review the lessons.

Blogs have great potential to promote the acquisition of reflective skills and to provide evidence to assess such skills by recording, rereading, rewriting and rethinking past experiences and expectations (Bourner, 2003; Xie, Ke, & Sharma, 2008). Besides, the course students also gave information about themselves for the course. They stated their own thoughts, their prior knowledge, and interesting things. This will give an insight for teachers into how students learn more effectively.

In conclusion it should be stated that blogs could be used as a strong learning tool for many courses at any level especially in the blended learning format. Some studies (Lin & Hooft, 2008) concluded that to increase students’ learning satisfaction, instructors in blended learning courses should design more learning activities using social software like blogs. Blogs can be a source of information to get feedback about the students and a teaching process as well as the subject itself.
References


