

## ICT Integration in Academic Writing: An Experiment in Blended Learning

**Justin James**

English Language Center  
Nizwa College of Technology  
Sultanate of Oman

### Abstract

The success of *blending internet technology in language teaching* depends on the content and role of the materials used and how they interact with students in their language learning process. The present generation of students, who are called *digital natives* or *net generation* (Educase.edu, 2016) finds anything to do with the internet attractive. The present paper proves that such interests of students can be fruitfully tapped for a variety of language learning purposes. It also proves that the use of Information Communication Technology (ICT) tools in English as a foreign language (EFL) teaching ensures higher degree of learner motivation and participation. This experimental study was conducted with a class of 26 Omani post-foundation Engineering & IT specialization students at English Language Center, Nizwa College of Technology for a period of one semester of their Higher Diploma Course with the basic premise that blending technology in language teaching will be beneficial both for teachers and students. In the first part of the paper the theory and practice of *blended learning* are discussed. The subsequent parts explore how ICT tools like *Quizlet Quiz*, *WebQuest* and *Blog* can be blended in teaching academic writing. The paper also discusses in detail the perceived teacher and learner experiences. It proves that by using internet technology, teachers can avoid monotony in teaching and promote collaborative learning. On the strengths of its findings, the author recommends selective blending of technology in EFL teaching to enhance student's performance in interesting, stimulating and productive ways.

**Key Words:** Academic Writing, Blended Learning, ICT in English, Teaching English with Technology, Technical Communication.

**Cite as:** James. J. (2016) ICT Integration in Academic Writing: An Experiment in Blended Learning. *Arab World English Journal*, 7 (3). DOI: <https://dx.doi.org/10.24093/awej/vol7no3.24>

**Introduction:**

Information Communication Technology (ICT) integration in Academic Writing: An Experiment in Blended Learning was a project done by the author as a part of *Cert ICT: Certificate in Teaching Language with Technology* course offered by Trinity College London. This course was taken with *The Consultant-E: EdTech Training and Consultancy*, Barcelona, Spain during October 2010 - March 2011 and the experiment was conducted at English Language Center, Nizwa College of Technology (NCT), Sultanate of Oman. The purpose of this paper is to share the author's experience with fellow English teachers to encourage them to use technology in teaching. As rightly quoted by Shaban (2013), the use of technology is imperative to cope with the 21st century digital age, in which the learners have different ways of thinking and practices closely connected to technology. This project was designed and executed under the guidance and continuous supervision of the EdTech Training and Consultancy and was commended as *well prepared, well executed and well supplemented with a Quizlet quiz, WebQuest and class Blog*.

In the first part of the paper, ICT in the educational context of Oman in general and in Nizwa College of Technology, in particular, are discussed. After that, the theory and practice of blended learning are explained, followed by a detailed analysis of the three ICT tools used in the class and an analysis of the rhetoric taught based on the lesson plan and intended learning outcomes. The second part of the paper presents perceived learner experiences and reflections of the teacher. The final part of the paper gives some practical suggestions for integrating ICT in English Language Teaching.

**1. ICT in the Educational Context of Oman: An overview**

In Oman, the introduction of ICT in schools and colleges is a recent phenomenon which is approximately a decade old, before which teachers were mostly using some simple audio-visual aids and a very few multimedia equipment in teaching. The teaching aids used ranged from charts and tape recorders to slide transparency projectors. By the end of the 20th century, tape recorders were slowly replaced by CD players and transparency slide projectors by multimedia overhead projectors. The actual advent of ICT in teaching in the Omani educational context happened at the beginning of the 21st century when computers came to schools and colleges. Though the number of computers installed in schools and colleges was low, they brought a considerable change in the way teaching and learning took place. By 2005, most of the higher educational institutions provided computers with an internet connection to their teachers and this move brought a sea of changes in the teaching practices at colleges. The Ministry of Education launched an Educational Portal in 2007 and introduced ICT in schools for the benefit of the Omani student community. The ICT mission outlined by the ministry is:

The Ministry of Education leads the mission to prepare a generation capable of carrying the nation's economic and social development duties. It gears all facilities, curricula, evaluation systems and high quality working force to serve all pupils in various education sectors along with deployment of modern technologies proportionate to *Digital Oman Community Strategy*. It also works to orchestrate all efforts exerted by the private sector and the community to serve education, devising the way to consistent modernization contiguous with civilised nations (Educational Portal-MoE, Oman, n.d.).

The educational portal includes a variety of e-services for students, teachers, parents and employees. It has different features useful for student registration, students' reports, attendance, timetables, and communication tools such as forums, chat rooms and Short Message Service (SMS). Moreover, it has an e-learning system with interactive content plus virtual classroom, distance learning, mobile learning and student evaluation features.

The objective of the e-learning portal of Omani Ministry of Education in ICT application is outlined in the ITU News (2011) case study of the following:

An overriding objective of the portal is to provide interactive teaching tools and to support improvements in evaluation and assessment, as well as teaching methods and curricular development to create a high-quality education system. The portal's electronic teaching programmes will train teachers on how to develop self-learning skills among their students, and will enable interested members of the public to extend their educational opportunities through distance learning and virtual classrooms (Case Study: ICT applications in Oman, 2011).

However, there are many challenges in making this ICT objective produce fruitful pedagogical outcomes. "The main obstacles are the need for necessary infrastructure, availability of trained human resources, the constraints posed by social and cultural factors, and developing a suitable e-curriculum" (Case Study: ICT applications in Oman, 2011). From this, it is quite clear that the use of ICT in education is in its very early stages of implementation and development. Also, it gives a clear picture of the challenges teachers and students face in using ICT for their teaching and learning purposes.

### ***1.2. ICT in Nizwa College of Technology***

NCT introduced the Moodle Learning Management Program in the year 2007 under a centralised policy of the Ministry of Manpower, which was implemented in all the Colleges of Technology in the country. As a result, Educational Technology Center (ETC) was established, and a qualified ETC head was appointed. It marked the advent of ICT at the college. The college teachers were given required training from time to time. Moodle (Moodle LMP, 2011) version 2.3 was installed in the Linus Fedora Core Version 16.0 as an intranet application and connected to the Language Labs in the English Language Center. Two language labs with 25 computers each were set up at NCT. In addition to these two labs, 40 computers were made available for students at the Self Access Center. Students could sign in using the unique, individual intranet passwords assigned to them. Moodle was used as an interactive interface between students and teachers. Most assignments and home works were made available on moodle on the college intranet. Students were assigned individual system IP address for security reasons.

## 2. Background and Rationale

ICT integration in Academic Writing proved to be a fruitful venture in teaching Post-Foundation Writing courses at the English Language Center of NCT. Technical Communication is an academic, content-based Writing course for Higher Diploma level students of Engineering and IT specializations. The class consisted of 26 students during the winter semester of 2011 (January-April). The students had completed the four semester long foundation program and had passed institutional TOEFL before taking up the Technical Communication course.

The class was divided into five groups: 4 groups of 5 boys each and one group of 6 girls for the successful completion of the planned ICT tasks. This experiment was conducted with the belief that, to use Kruk's (2014) remark, blending internet technology "in foreign/second language education offers a unique opportunity for interaction which can be a valuable substitute for a real experience" (p. 52).

### 2.1. Blended Learning Theory and Practice

According to Sharma and Barrett (2007), blending (internet) technology in teaching "... is commonly applied to a course where all learners meet with the teacher in a f2f class, in which the course includes a parallel self-study component as a CD-ROM or access to web-based materials" (p. 7). Sharma and Barrett further state that blending technology in an f2f class adds variety and value to the lessons. They also underline that if there is a connection between the lesson content and technical materials included, it will create enthusiasm among the learners. In blended learning, students are allowed to make use of their gadgets even during f2f class hours to tap the internet resources successfully according to their need, and they love to do it. It is not an exaggeration if we say that blended learning can exploit the best of a f2f class as well as the internet technology and can motivate students by bringing in authentic materials into the classroom. However, the success of blending involves selecting the technology compatible to the course taught.

### 2.2. The Syllabus and Learning Outcomes of the Technical Communication Course

The Syllabus of the Technical Communication course included writing *extended definitions, describing charts, comparing charts, and writing persuasive essays*. The lesson on writing an Extended Definition was found perfectly suitable for introducing ICT tools. Writing is usually considered monotonous by students, so the introduction of new ICT tools was a welcome change for them as they were good at using computers and the internet. The following ICT tools were integrated to this lesson: Quizlet Quiz, WebQuest and Blog. The expected learning outcomes were:

- a. Students should learn to write an extended definition of a technology/machine/simple electronic devices etc.
- b. Students should learn to use the rhetoric they developed in the lower levels as tools to write an extended definition.
- c. They should learn to use a teacher prepared WebQuest to collect information relevant to the writing task.
- d. They should learn to post on blogs, to read and comment on posts of their classmates.

### 2.3. Quizlet Quiz

Quizlet is an online learning and testing tool that can easily be incorporated in ELT.

Quizlet had started ten years ago (October 2005) when Andrew Sutherland created a tool to help him study for a high-school French vocabulary quiz. He aced the test, so his friends asked him if they could use the tool too. Quizlet has grown as a learning platform a lot since then (Quizlet in Education- Quizlet, 2011).

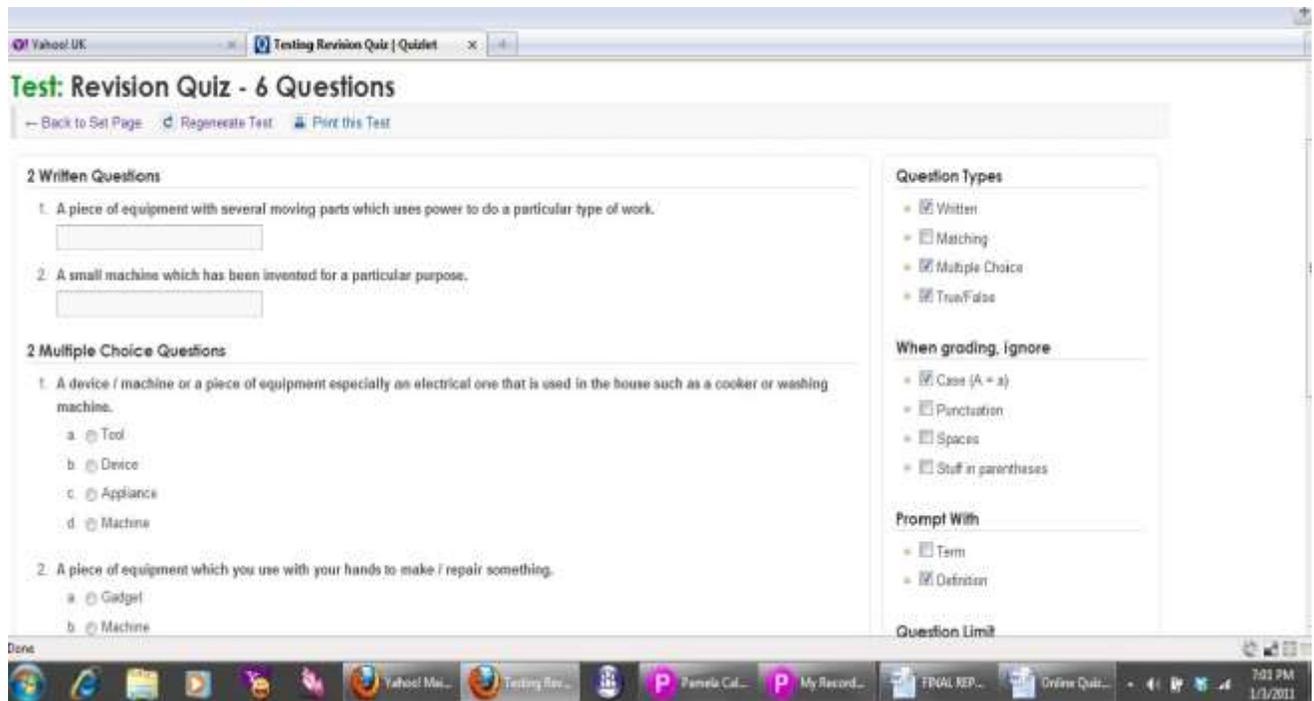
Ever since, it has grown to be a much sought after online learning resource for teachers and students. Teachers can upload pictures, diagrams, and maps, record audio messages or lectures and upload them, create many online classrooms at a time and get faster feedback from the site administrators in case of any issues. Using Quizlet, teachers can see how their students are studying and progressing. Therefore, Quizlet can be easily incorporated in any ICT-based lesson. Quizlet study and game models can be used in teaching vocabulary and for reinforcing the vocabulary by using flashcard multiple choice quizzes. Quizlet Flashcards can be created online, and the link can be posted on a Learning Management Program like Moodle, or it can be shared via e-mail or blog. In addition to the quizzes created by their teachers, students can access other quizzes created by millions of users around the world and learn from them. A student can access Flashcards simply by clicking on the provided link and do the Quiz online. They can see the result of the quiz immediately, and if they have not been successful in answering all the questions correctly, they can redo the quiz till they get all the answers correct. "Quizlet users have created over 140 million study sets, so you can often find what you need without creating it yourself. Quizlet features six individual study game modes!" (How Quizlet works-Quizlet, 2012) as shown in Table 1:

**Table 1 Quizlet Study and Game Models**

Quizlet study and game models	Description of the models
<b>Flashcards</b>	Flashcards recreates traditional flashcards virtually. You can also <u>shuffle your cards.</u>
<b>Learn</b>	Learn prompts as you type correct terms or definitions, track your right and wrong
<b>Speller</b>	The Speller uses Quizlet's automated audio system to read the content to you. Type
<b>Test</b>	Test formats your study set into a randomized practice test with up to <u>four question</u>
<b>Scatter</b>	Scatter is a race against the clock to match the terms with their definitions. <u>The fastest time gets the trophy!</u>
<b>Gravity</b>	Gravity presents you with terms crashing down as asteroids. Type the definition to

**Note:** This table is modelled on Andrew Sutherland's Quizlet study and Game models (Quizlet, 2012).

The Figure 1 is the screenshot of the Quizlet Quiz (Quizlet Flashcard Quiz, 2011) that was made as part of this ICT teaching experiment:



**Figure 1** Screen Shot – Quizlet Quiz

## 2.4.

### WebQuest

Dr. Bernie Dodge, professor of Educational Technology at San Diego State University, developed the concept of WebQuest while teaching a class of teacher trainees in 1995. He wanted to give his student teachers a format for online lessons that would make the best use of their students' time and nurture their higher-order thinking skills at the same time. Dodge states that WebQuest is an easy and less time-consuming method of browsing and reaching relevant material. He claims that:

The amount of information available to everyone will grow at an accelerating pace; much of it will come directly from a growing number of web sources without filtering or verification. What this means is that students will need to be able to grapple with ambiguity. They will need to commit themselves to a lifelong process of learning, honouring multiple perspectives and evaluating the information they lay their hands on before acting on it. Therefore, a teacher-prepared online tool can be very beneficial to students in saving their time and work efficiently on their lessons (WebQuests: Explanation, 2012).

WebQuest was developed as an inquiry-oriented online tool for learning. Using WebQuest, teachers can develop classroom-based activities, in which most or all of the

information that students need and use comes from the World Wide Web. The length of a WebQuest can be as short as a single class period or as long as a month-long unit. It can involve group work, with work distribution among students who take on specific roles to complete the task assigned in the lesson. A WebQuest is built around resources that are preselected and hyperlinked by teachers. As a result, students can spend their time in using information, not in looking for it and thereby saving a lot of time.

WebQuests can be used along with other educational technologies. WebQuests help in developing the skills of inquiry and constructivism. They can also incorporate cooperative and collaborative learning when students work on projects in groups. These concepts can play a constructive role in Teaching with WebQuests. In addition to these, "By using multimedia, WebQuests also help with the multiple intelligence works. Alternative kinds of assessment can be used to judge the results of WebQuest projects. And, WebQuests are one way to use the Internet in education (WebQuests: Explanation, 2012). WebQuests are tools; not educational theories, that is why we can use them virtually in any classroom with computer access.

There might be some concerns about using WebQuest like the amount of time involved in creating a WebQuest. However, we must remember that although it takes a lot of work and time, teachers won't have additional lesson plans to prepare while the students are working on the WebQuests and for a year from now the lessons will all be set. After a year, teachers may need to adjust their WebQuest a bit, but the second time it is much easier. Another important point teachers should remember is that WebQuest is a new way of learning for students, so they should design their WebQuests very well. "A good WebQuest should make students take information in and transform it using their judgement and creative problem-solving techniques" (WebQuests: Explanation, 2012). According to Dodge, there must be six essential components in a WebQuest to make it clear and doable for students. They are: Introduction, Task, Process, Resources, Evaluation, and Conclusion as shown in Table 2.

**Table 2 Components of a WebQuest**

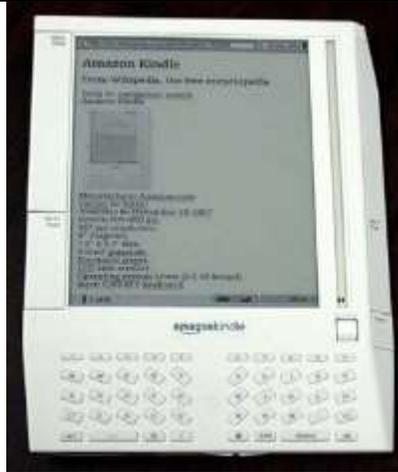
<i>Components of a WebQuest</i>	
<b>1. Introduction</b>	<ul style="list-style-type: none"> <li>• It Provides background information and an overview of the learning goals to students.</li> <li>• It should make the activity desirable and fun for students by setting motivational scenarios.</li> </ul>
<b>2. Task</b>	<ul style="list-style-type: none"> <li>• The task is a formal description of what students should accomplish by the end of the WebQuest.</li> <li>• The task should be interesting and doable. First, the teacher should find resources for a particular topic on the Web and then devise an activity for the students incorporating the information from these resources</li> </ul>
<b>3. Process</b>	<ul style="list-style-type: none"> <li>• It provides a clear description of the steps learners should go through in accomplishing the task, with relevant web links embedded in each step.</li> </ul>
<b>4. Resources</b>	<ul style="list-style-type: none"> <li>• It consists of a list of the resources that students will need to complete the task. This list can be given in a separate section, or the resources can be embedded within the process section to be accessed at the appropriate time.</li> </ul>

<p><b>5. Evaluation</b></p>	<ul style="list-style-type: none"> <li>It provides the rubric which will be used for evaluating students' works. The standards set should be fair, clear, consistent, and relevant to the tasks set.</li> </ul>
<p><b>6. Conclusion</b></p>	<ul style="list-style-type: none"> <li>This step allows for reflection by students and summation by the teacher. Setting aside time for discussion of possible extensions and applications of the lesson honours the constructivist principle: "We learn by doing -- but we learn even better by talking about what we did." During the concluding section of a WebQuest, the teacher can encourage students to suggest ways of doing things better or different to improve the lesson.</li> </ul>

**Note:** This table is modelled on the WebQuest formulated by Dodge (WebQuest, 2012).

Figure 2 is the WebQuest (WebQuest on Kindle, 2011) that was developed as part of the lesson on writing an extended definition on Amazon Kindle:

<p><b>Web Quest on an Extended Definition</b></p>		
<p>Web Quest Topic: Amazon Kindle</p> <p><b>1. Introduction:</b> <a href="#">Amazon Kindle</a> (n.d.)                  Amazon Kindle is a portable wireless reading device. It is a device used to read digital copies of books, newspapers, magazines, and blogs. The device uses a digital screen to show an image of a printed page. You can read more about it from <a href="#">Wikipedia information on Kindle history</a>.</p>		
<p><b>2. Task:</b> Writing an Extended Definition on <i>Amazon Kindle</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> All the students in a group can get together outside class hours to pool the information collected and decide on what is to be used in an essay of 1000 words.</li> <li><input type="checkbox"/> After the discussion, each group must write an extended definition collectively and post it on the class blog <a href="#">Tec Comm 2011</a>.</li> </ul> <p><b>3. Process</b>                  Make a plan for your extended definition after reading the short introduction on Kindle. You can refer to the sample plan you prepared on HD TV in the class.</p> <p><b>4. Resources</b>                  When the plan is ready, you can visit the following sites to collect relevant information. Click on these links to go to the sites:</p> <ul style="list-style-type: none"> <li>a. <a href="#">Features</a> and Types of Kindle (Top ten Kindle features, 2010).</li> </ul>		



- b. [Advantages and Disadvantages](#) of Amazon Kindle (2009).
- c. Look at the [features of Kindle](#) (Amazon Kindle, n.d.).
- d. Kindle - the future of [book reading](#) (n.d)



### 5. Evaluation

*You can evaluate your composition in 3 ways when you post it on the Blog:*

1. Read other postings, compare yours with them and improve yours (Self-evaluation).
2. Request others to comment on your writing and learn your strengths and weaknesses (Peer- evaluation).
3. You can see teacher's comments about all the postings and understand the ratings (Teacher- evaluation). Rating points are: *Exemplary/Good/Acceptable/Unacceptable.*

### 6. Conclusion

- The deadline for your posting is 26/02/2011.
- Do not copy, paste information from the sources. Present the information in your words.
- Record your experience in doing this WebQuest through e-mail

**Figure 2** WebQuest used in the class

### 2.5. Blog

Social software like blog helps students and teachers to communicate and collaborate online. "A blog is essentially a web page with regular diary or journal entries". Blog is a short term for web log. It has certain features that help students to use it as a tool for language learning. Dudeney & Hockly, (2007, p.86) outline the features of a blog as follows:

- They can be set up and used by teachers/or learners.
- They can be used to connect to other communities of learners, for example to a class in another country.
- The ideas and contents can be generated and created, either individually or collaboratively.

A blog is generally created by one person who regularly posts "... comments, thoughts, analyses, experiences of daily life or any other form of content (that consists of) text, pictures, photos or audio and video" (2007, p. 87). The blog created for educational purposes is called Edu Blog. There are three kinds of Edu blogs that are: Tutor Blog, Student Blog and Class Blog. An Edu Blog can be created by a teacher, a learner or by a group of students or class.

In a Tutor Blog, a teacher can post lesson notes, assignments, supplementary materials, study tips, review class work and provide extra links that support and enhance learning. Moreover, learners can be asked to post their home works or assignments periodically, and the teacher can evaluate and post his comments about them.

The second kind is a Student Blog. In a blog created by a student, he/she can post personal details, additional writing exercises on lessons learned in the class, make regular comments on the current affairs, do research on a relevant topic and present fruitful information on it or post photos, audios and videos of learning interest.

The third type is a Class Blog. It can be either created by the tutor or a student leader or a group of students. This blog is used as a common platform of written communication among the class members. The shared topics can be of varied interests. For example, a discussion of a film, articles on specific topics, current affairs or class projects, etc.

An advantage of asking students to post their writings on a blog is that the quality of the work done by students will be much better than the regular assignments they do in the class. As Dudeney and Hockly (2007) rightly remark,

learners tend to want their written work in a blog to be as accurate as possible, given that the blog is publicly accessible, and the teacher needs to be prepared to give learners plenty of time for writing, revising, and redrafting and checking postings before they are added to the blog (p.90).

Thus, tutors can encourage students to prepare their text on word processing programs like Microsoft office, review the work in progress (self or peer reviews), then copy and paste it

on the blog page to make their writing flawless. In this way, tutors can ensure quality in students' contributions.

Finally, students' posts can be interestingly evaluated as a part of the assessment or just to encourage them to write better and more. Teachers can create interesting criteria adding some new components to the traditional evaluation criteria used for marking paper-based writings. The tutor can give credits to "the visual nature of this electronic medium, such as the effective use of visuals, or visual presentation overall, and other areas like the length of postings and awareness of audience" (Dudeney & Hockly, 2007, p. 90) along with the credits for content, organization, grammar and mechanics. However, if tutors plan to evaluate students' works, they should familiarize students with the criteria beforehand. It will help to enhance the quality of students' contributions.

Figure 3 shows the screenshot of the class blog (Blogger.Teccomm2011, 2011).



**Figure 3** Screenshot of the class blog

### 3. Reflections on the lesson

#### 3.1. Planning the lesson

Planning an ICT-based lesson was a real challenge in the present context. It was a challenge because it involved selecting suitable ICT tools, blending the tools in the delivery of the current lesson and using them suitably to achieve the learning outcomes outlined in the course.

In the first place, delivering a content-based lesson to the students in the present context was a challenge by itself. The reasons were their limited general knowledge, limited vocabulary, and low level of proficiency in English language. Therefore, getting them to write an extended definition of machines, devices and technologies proved to be a difficult task. Even Higher Diploma level students had to be provided with required vocabulary, sentence patterns, sample compositions and also the content for their writing exercises. However, ICT tools helped

in providing these materials to students in an unconventionally easy and attractive way. [Quizlet Quiz](#) (Quizlet Flashcard Quiz, 2011) provided them with the required vocabulary, [WebQuest](#) (WebQuest on Kindle, 2011) made them collect information about the selected topics and class [Blog](#) (Blogger.Teccomm2011, 2011) encouraged collaborative learning by way of peer evaluation, comparing their composition, etc.

The immediate target outcome was to break the monotony of photocopies, pens and papers in the writing classroom by using innovative ICT tools. The intended long-term outcome was using ICT-based blended learning techniques to develop independent learning and to create awareness in students about the usefulness of technology in learning.

After enough brainstorming, a detailed step-by-step lesson plan was prepared, outlining all the activities of teachers and students inside and outside the class. The lesson involved the use of computers, internet, smart board and LCD projector. Hence, problems that might crop up during the lesson were thought of, and a plan B was prepared to overcome such problems. Alternate materials were prepared and the subsequent class was kept open for completing the lesson. In short, lot of reflection, research and homework had to be done during the planning stage.

### 3.2. Structure and Content of an Extended Definition Lesson

**Table 3 Structure and Content of an Extended Definition Lesson**

Structure	Content
Introduction	<ol style="list-style-type: none"> <li>a. A brief definition of the term/object (a formal sentence definition)</li> <li>b. Overview of the tools/rhetoric used in the body</li> </ol>
Tool/Rhetoric 1 (Body paragraph 1)	<ol style="list-style-type: none"> <li>a. Heading to state the tool being used</li> <li>b. Explain the term/object using the tool</li> <li>c. Provide supporting details and examples</li> </ol>
Tool/Rhetoric 2 (Body paragraph 2)	<ol style="list-style-type: none"> <li>a. Heading to state the tool being used</li> <li>b. Explain the term/object using the tool</li> <li>c. Provide supporting details and examples</li> </ol>
Tool/Rhetoric 3 (Body paragraph 3)	<ol style="list-style-type: none"> <li>a. Heading to state the tool being used</li> <li>b. Explain the term/object using the tool</li> <li>c. Provide supporting details and examples</li> </ol>
Conclusion	<ol style="list-style-type: none"> <li>a. Give opinion about the term/object defined</li> <li>b. Give pertinent suggestions</li> </ol>

**Note:** The Extended Definition tools/rhetoric expected to be used by students were Definition, Description, Division and Classification, Process, Causes/Effects and Problem/Solution.

### 3.3. Lesson Plan

Table 4 shows the lesson plan that was prepared for the systematic delivery of the lesson in f2f classes. The procedure and the aims/learning outcomes of the lesson are discussed in detail.

**Table 4 Lesson Plan**

Stage	Procedure	Aim	Time
1.	<b>Review:</b> What is a definition? Three types of Definition and how the Extended Definition ( <b>ED</b> ) of Nano Technology was written (Instruct students to take the Quizlet Quiz before the deadline)	Students jog their memory + prepare themselves to write an Extended Definition ( <b>ED</b> )	10 Minutes
2.	<b>Pair Work:</b> Students read the table and recollect the rhetoric they've learned before, which are going to be used as tools for ED. Students are asked to give some topics that they wrote while learning these rhetorics.	Students are made to understand that their previous knowledge used in writing ED. Example topics are asked for ensuring their understanding of the tools.	15 Minutes
3.	<b>Plan:</b> (pair work) Students are given the topic HD TV and are asked to brainstorm and make a plan for their ED on it. They refer to the model plan in the handout. Each pair is asked to say one of the tools chosen by them and Teacher writes the plan of the Extended Definition on the White Board.	Students brainstorm, choose, discuss and arrive at a common plan for the Extended Definition, which will help them to plan individually at a later stage.	20 Minutes
4.	Students read the ED essay on Greenhouse Effect.	Students understand how Extended Definition gives a clear insight into a topic.	15 Minutes
5.	Teacher issues Assignment topic (HW) – Write an ED on Kindle. Teacher displays the task description posted on Moodle and explains the steps, i.e. understanding the topic, planning the ED, collecting information, writing the ED, in a group and how to post it on class Blog. The teacher shows the hyperlink given in the home work description on Moodle and explains how they take them to the relevant sites quickly.	Students see the WebQuest and understand how to use it to collect information easily and quickly.	20 Minutes
6.	The teacher explains the process of pooling information, discussing in their groups and writing the ED, editing it and posting it in the class Blog.	Encourage students to use a class blog and use it as a discussion forum.  Students understand the Blog as	

	<p>The teacher explains the advantages of posting the ED on the Blog and demonstrates how comments can be written right below the post.</p> <p>Students get feedback on their work from peers (peer evaluation).</p> <p>Students get to read peer compositions and improve by comparing and contrasting with others postings (self-evaluation).</p> <p>Students can see teacher's feedback on all compositions (Teacher feedback)</p>	<p>an effective tool for collaborative learning and a place for showcasing their written compositions.</p>	<p>20 Minutes</p>
--	---	--	-----------------------

### ***3.4 Plan B: Anticipated problems and proposed solutions***

#### *a. Anticipated Problems*

- i. Slow speed of Internet making access difficult while teaching
- ii. Power failure
- iii. Equipment failure
- iv. Students' inability in using ICT tools

#### *b. Proposed Solutions*

- i. Use screenshots of the intended activities from the websites
- ii. Use local server/e-learning portal on the college website for student activities
- iii. Use photocopies of the required materials (handouts with screenshots of the WebQuest and Class Blog)
- iv. Tutorials to assist / enable students to use ICT tools

## **4. Reflections on Teaching**

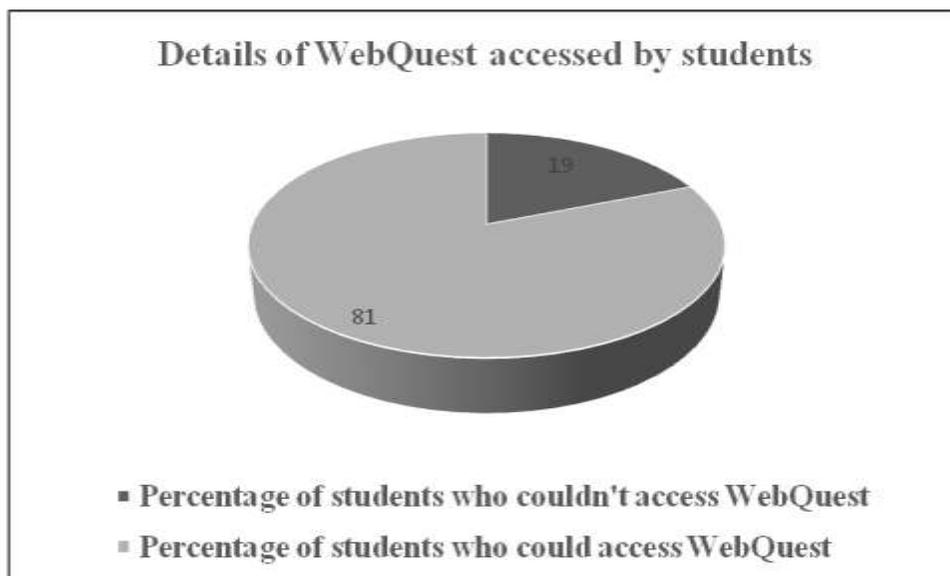
### ***4.1. The main lesson***

Students found writing Extended Definition an interesting exercise as they were applying the writing tools they had learnt at lower levels. They were excited about using the ICT tools for completing their homework. Students were asked to complete the WebQuest and prepare an outline for the Extended Definition before the subsequent class.

### ***4.2. The follow-up class***

Six out of 26 students had not done the WebQuest while others had completed the WebQuest successfully, had collected the required information, and had even prepared an outline for their Extended Definition. The feedbacks on the completion of WebQuest were collected from the intimation received from Moodle, intranet messenger. The moment a student accessed the WebQuest through the link uploaded on Moodle an automatic Moodle generated message was received by the tutor. From these messages, the tutor could find out the number of students who

had accessed the Webquest. From the messages, it was understood that one group could not access the WebQuest during the stipulated time. As shown in *Figure 4*, nineteen percentage of students i.e., (six out of 26) students could not access the WebQuest. Moreover, students shared their experiences of using the WebQuest in the oral feedback session conducted in the following f2f class.

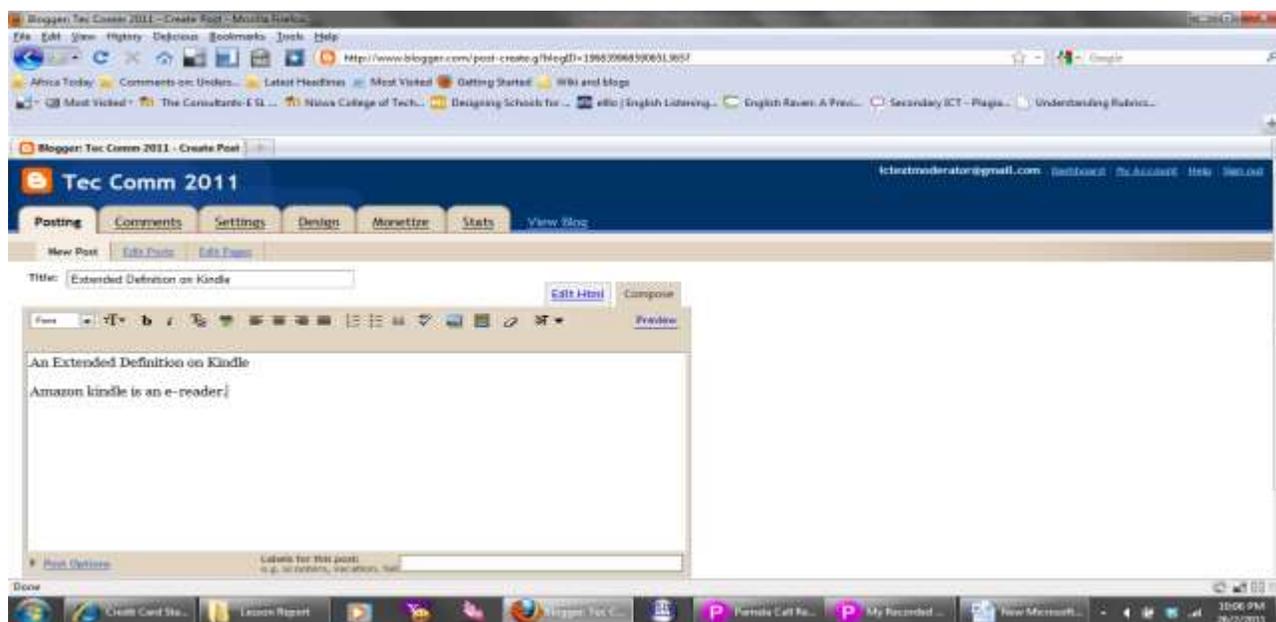


**Figure 4** Details of the WebQuest access by students

Students' feedback on WebQuest was very positive from which it was gathered that they used to spend a lot of time searching for information, despite using search engines. They had to look into many sites before getting enough information, but the WebQuest task made their search easy with the hyperlinks leading to the appropriate specific information required for their writing task.

After checking the outlines and giving necessary guidelines to write the Extended Definition, the steps involved in Blog Postings were demonstrated. Unfortunately, the Class Blog [Teccomm2011](http://Blogger.Teccomm2011) (Blogger.Teccomm2011, 2011) could not be accessed due to the slow speed of the internet during the class. During the time of this experiment, the internet speed available was only 2MB, while the required speed was 4MB. Therefore, the internet speed became very slow when all the systems were booted simultaneously in the language lab. It made the use of intranet and Moodle difficult for the students and teachers. As there was no time to allow the delay, screenshots were used to explain the steps. It is a real issue that teachers have to consider while planning any internet-based activities especially in places across developing countries where high speed internet connectivity is not fully ensured.

**Figure 5** and **Figure 6** are examples of screenshots used in the class to describe the process of making Blog postings (Blogger.Teccomm2011, 2011):



**Figure 5** Entering Written Text on the Blog



**Figure 6** A Teacher's posting on the Blog

## 5. Perceived Learner Experiences

It was evident that students' natural interest in browsing the internet could be fruitfully tapped for learning purposes. True to the words of Sharma & Barrett (2007), anything to do with the internet is a great attraction for students as they are digital natives i.e. they are born with the advantage of internet technology. Students were eager to use the ICT tools, and their enthusiasm and participation were very high compared to non-ICT lessons.

WebQuest helped students to complete the writing exercise within the stipulated time. It was evident from the oral feedback of students that they used to struggle to complete

assignments on time because they used to take a long time to identify relevant information on the internet and then to write an essay. They expressed happiness over WebQuest helping them do a quick and focused search. WebQuest equipped them with enough information to engage in group work and collaborative writing confidently both in the f2f class and outside as “A collaborative and co-operative writing process can help a group learn to work together and gain fresh insight into the topic from the process” (Clarke, 2008, p. 275).

The class blog became a good medium of communication among students. Many of the students, especially girls, who were shy to express their views and participate in discussions in mixed gender classrooms, wrote comments (sometimes without revealing their names) about their classmates’ posts. They posted questions to clarify their doubts and also shared information and concerns about their courses on the blog. They benefited from the comments and suggestions of their peers. Peer evaluation inspired the less motivated students to write and to post their writings. Figure 7 shows the screenshot of the Extended Definition on Amazon Kindle written and posted by a group of students in the Class Blog (Blogger.Teccomm2011, 2011):



**Figure 7: Screenshot of a blog posting by students**

## 6. Overall Teacher Experience

ICT tools were successfully blended and used in teaching a Technical Communication lesson to Higher Diploma students at NCT. Moreover, these students were successfully introduced to such beneficial technologies. All the tasks designed for the class were completed successfully by four out of five groups, i.e. eighty percentages of students successfully used the ICT tools for learning. Even the other twenty percentages of students gave acceptable reasons

like not having internet access at home, the slow speed of internet at college language labs and self-access center for not being able to complete the task on time.

The experiment helped identifying and understanding the potentials of internet technology in avoiding monotony in teaching, ensuring better learner motivation and participation, and promoting shared/collaborative learning, etc. Hence, it was decided that the blog would be continued throughout the semester to understand its pros and cons thoroughly. Also, WebQuest was made an integral part of all the difficult, time-consuming assignments given to students that included research and literature review at the post-foundation level. Finally, it was understood that blending internet technology in an f2f class is more learner-centered and less teacher fronted and therefore more learning-oriented.

### **7. Practical suggestions for integration of ICT in ELT**

Teachers should be provided with the required equipment, training, and technical support to encourage them to use the innumerable resources that are available through the internet technology. Creating awareness and providing training will encourage them to identify the relevant tools and integrate them into their teaching plan systematically.

Teachers should identify the ICT tools, which are directly helpful for the students in learning specific lessons, and they should introduce them as a part of the lesson as exemplified by the use of Quizlet Quiz, WebQuest, and Blog in this paper. Such practices will encourage students to use technology for learning. Once students start using these resources, they would further explore and learn to use them on regularly. Rewarding students for using such tools in different ways can also be encouraging and helpful.

Class blogs should be created, and students be enrolled at the very beginning of a semester (in the introductory week of the course) as an open forum. Doing this will encourage them to communicate with their classmates and slowly the communication could be steered towards collaborative learning.

### **Conclusion**

As Clarke (2008) rightly remarks, learning has always involved the use of practical assignments in producing an intended learning outcome, and it has been found very effective; as also confirmed by the experiment shared in the present paper. In the backdrop of this concept, this paper shares and confirms Shaban's (2013) view that ICT-blended approach to teaching and learning enables students to enjoy immediate individual feedback, work independently as well as in groups, and gain a sense of accomplishment, which enhances their academic performance. Thus, if the new technology leads to better learning outcomes, then, to use Sharma & Barrett's (2007) view, this is a good thing for the teachers and learners (p. 132). As technology will continue to play a vital role in our lives, the future of teaching and learning process will be more exciting, productive and rewarding. On the strengths of its findings, this paper claims that integration of ICT and innovative experiments with blended learning could be fruitfully used as a good means of achieving intended learning outcomes and making teaching and learning more viable, relevant, learner-fronted, productive, interesting, and stimulating.

**About the Author**

**Justin James** is the *E-Learning Coordinator* at English Language Center, Nizwa College of Technology. He trains teachers at the center in teaching English using technology. He specializes in teaching English language skills through Information Communication Technology.

**Acknowledgement:**

I wish to acknowledge that this paper drew heavily on the materials and facilities available at English Language Center, Nizwa College of Technology. I offer my sincere thanks to Mr. Sultan Al-Dighaishi, HoD, ELC, NCT for his constant encouragement and support. This note of thanksgiving would be insincere if I fail to appreciate the great help that I received from Dr. Vijay Singh Thakur, Chair, Department of Languages and Translation, Dhofar University and Mrs. Lalitha Justin, Lecturer, ELC, NCT.

**References**

- Advantages and disadvantages of Amazon Kindle. (2009). Available at <http://www.articlesbase.com/computers-articles/advantages-and-disadvantages-of-the-amazon-kindle-dx-1133043.html>
- Amazon Kindle. (n.d.). Retrieved from [http://en.wikipedia.org/wiki/File:Amazon\\_Kindle\\_3.JPG](http://en.wikipedia.org/wiki/File:Amazon_Kindle_3.JPG)
- Blogger.Teccomm2011. *blogspot.com*. (2011). Retrieved from <http://teccomm2011.blogspot.com/>
- Clarke, A. (2008). *E-learning skills*. New York: Macmillan.
- Dudeny, G. & Hockly, N. (2007). *How to teach English with technology*. Harlow: Longman, Pearson Education.
- Educause.edu. (2016). *Educating the net generation*. *EDUCAUSE.edu*. Available at <http://www.educause.edu/research-and-publications/books/educating-net-generation>
- Educational Portal-MoE. (n.d.) Available at <http://home.moe.gov.om/english/module.php?module=pages-showpage&CatID=22&ID=190>
- How Quizlet works. (2012). *Quizlet.com*. Available at <https://quizlet.com/help/2444083/what-is-quizlet>
- ITU News Case Study: ICT applications in Oman. (2011). *Itu.int*. Available at <http://www.itu.int/net/itunews/issues/2011/01/50.aspx>
- Kindle the future of book reading. (n.d). Available at <http://www.scribd.com/doc/3933552/Kindle-The-future-of-book-reading>
- Kruk, M. (2014). The use of internet resources and browser-based virtual worlds in teaching grammar. *Teaching English with Technology Online Journal*, 14 (2), 51-66. Available at <http://www.tewtjournal.org/VOL%202/ARTICLES3.pdf>.
- Moodle LMP. (2011). *Nizwa College of Technology, Sultanate of Oman*. (2014). Retrieved from <http://www.nct.edu.om/moodle/login/index.php>
- Shaban, A. El. (2013). Software review of U.S.A. Learn. *Teaching English with Technology Online Journal* 13 (2), 83-97. Available at <http://www.tewtjournal.org/VOL%2013/ISSUE%202/ARTICLE5.pdf>.
- Sharma, P., & Barrett, B. (2007). *Blended learning: Using technology in and beyond the language classroom*. Great Britain: Macmillan.
- Top ten Kindle features. (2010). Available at <http://www.rayfowler.org/2010/03/31>
- Quizlet in Education. (2011). *Quizlet.com*. Available at <https://quizlet.com/everywhere>

Quizlet Flashcard Quiz. (2011). Retrieved 15 June 2014, from

<http://www.nct.edu.om/moodle/login/index.php>

WebQuests: Explanation. (2012). *Thirteen.org*. Available at

[http://www.thirteen.org/edonline/concept2class/webquests/index\\_sub3.html](http://www.thirteen.org/edonline/concept2class/webquests/index_sub3.html)

WebQuest on Kindle. (2011). Retrieved 20 June 2014, from

<http://www.nct.edu.om/moodle/login/index.php>