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**Web-based Learning:
Moving from Learning Islands to Learning Environments**

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Abstract

Web-based learning, the use of Web-based resources for learning, is becoming more common in educational institutions. However, many Web-based courses do little more than reaffirm traditional teaching approaches of presentation and assessment, resulting in closed learning environments. Current trends in education stress the need for learning that encourages critical thinking and problem solving, collaboration and communication, global awareness and information literacy. Therefore, we need to make Web-based learning more open. Integrating Web 2.0 tools and technology into the learning process is one way to do this. This integration needs to be done carefully, using the new tools to enhance traditional methods of instruction, moving Web-based learning from learning islands to learning environments.

Keywords: Web-based learning, Web 1.0, Web 2.0

Introduction

Web-based learning, either fully online or blended with traditional face-to-face learning, has often taken place in “islands” (Ehlers, 2009, citing Kerres, 2006) or “walled gardens” (Downes, 2007). In these courses, content is delivered using Web portals such as learning management systems or websites. Using such portals, educators can interact with learners and vice versa, but there are few, if any, opportunities for learners to interact with each other or the wider world. However, due to the emergence of Web 2.0 technologies, Web-based courses can now be designed that give learners opportunities not only to consume, but also to produce content that can be shared across the World Wide Web, thereby moving from Web-based learning islands to Web-based learning environments (Ehlers, 2009).

Fortunately, there are a growing number of educators starting to design and deliver online courses built around Web 2.0 technologies. This may be a result of simply wanting to experiment with Web 2.0 tools that they or their students are using outside the classroom. More importantly, it may also be a result of recognizing that learning using Web 2.0 tools encourages critical thinking and problem solving, collaboration and communication, global awareness and information literacy, the so-called “21-st century skills” (Buchem & Hamelmann, 2011, p. 4; Rotherham & Willingham, 2010, p. 17; Dohn, 2009). Unfortunately, despite the efforts of these early innovators and the general enthusiasm towards using Web 2.0 tools in education, their use is still the exception rather than the norm (Bertolo, 2008; Bower et al., 2010; Conole, 2010; Gousetti, 2010). In addition, even when Web 2.0 tools are used, they tend to be added on to courses rather than being integrated; a situation resulting in limited learning improvements (Lim et al., 2010).

So why has adoption of Web 2.0 tools in education been somewhat slow? First, there is the problem of “digital dissonance” (Clarke et al., 2009, p. 57): despite using Web 2.0 tools in their daily lives, both educators and students still haven’t seen the potential of using the tools for learning. Secondly, using Web 2.0 tools for learning is not compatible with current curricula that emphasize knowledge consumption and reproduction of this knowledge in assessments. Finally, even if educators have the opportunity to use Web 2.0 tools for learning, as the learning focuses not just on the product but also the process, assessment presents more challenges (Ehlers, 2009; Gray et al., 2010). But the above problems are not intractable. One way to address the problems is for educators to look at how Web 2.0 tools are integrated in existing online courses.

In this paper, one such course, *web2english*, an online English course that uses both Web 1.0- and Web 2.0-based learning, is featured. First, the paper defines Web 1.0- and Web 2.0-based learning and outlines the differences between the two types of learning. Then, the importance of combining both types of learning in online courses within an instructional design framework is discussed. Next, the need to assess Web 2.0-based learning correctly is outlined. Finally, there is a detailed discussion on how *web2english* has been designed in relation to the above issues.

Web 1.0- and Web 2.0-based learning

In this paper, the term Web 1.0 refers to early stages of the World Wide Web when it was read-only, or mainly non-participatory. Content was added by a few to be accessed, passively, by many (Dohn, 2009; Brown, 2010). Applying this concept to Web 1.0-based learning, content is designed and delivered by educators, either via websites, blogs, learning management systems or simply by email, to be accessed by learners. The benefits of Web 1.0-based learning over traditional paper-based learning are limited; one benefit is convenience of electronic distribution (Arvan, 2009), another is computer-graded assessments and a third is access to a wide range of Web-based resources (Lim et al., 2010). On the other hand, it may be that Web 1.0-based learning does little more than reaffirm traditional teaching approaches of presentation and assessment (Dowling, 2011). The underpinning pedagogy is transmissive (from expert to novice) and learners are mainly using lower-order thinking processes such as

remembering, understanding and applying (Anderson & Krathwohl, 2001). Unfortunately, a lot of online courses follow this model.

Web 2.0 (O'Reilly, 2005) refers to a newer version of the Web where it has developed into a read-write, or participatory, entity. New tools have given all Web users the opportunity to not only consume content but also to produce and share it. In relation to Web 2.0-based learning, knowledge production isn't restricted to educators. Learners, either individually or in groups, can also construct and publish knowledge by using a range of tools such as blogs, microblogs, podcasts, wikis, social bookmarking, shared document/image/video spaces, mindmapping and digital storytelling (Bower et al., 2010; Oliver, 2010). The underpinning pedagogy is co-constructivist and higher thinking processes such as analyzing, evaluating and creating (Anderson & Krathwohl, 2001) are emphasized.

Combining Web 1.0- and Web 2.0-based learning in Web-based courses

It might appear from the above that Web 2.0-based learning is superior. However, there is a need for both types of learning from a scaffolding perspective. According to Walqui (2005, p. 163), scaffolding is the process by which “the learner is assisted by others to be able to achieve more than he or she would be able to achieve alone”. While the Web provides vast amounts of learning material, finding appropriate material can be problematic for learners, particularly those in the early stages of the learning cycle. These early-stage learners need expert guidance to acquire the basic skills or knowledge needed for higher-level learning to take place (Magliaro et al., 2005; Rotherham & Willingham, 2010). This guidance involves educators doing three things for their learners:

1. Creating or recommending appropriate webpages, blog entries or other online material
2. Developing appropriate online assessments
3. Tracking and supporting learner activity

Up to this stage, learning is being transmitted from the teacher to the learner and involves the consumption of Web-based materials; therefore, it can be classified as Web 1.0-based learning. However, once learners have acquired the basic skills set, they can start applying their new skills and knowledge in activities that require higher-level skills such as analyzing, evaluating and creating. These activities may involve publishing to blogs, podcasts or wikis and analyzing and evaluating Web-based resources. Learners are contributing to the Web; hence, the learning can be classified as Web 2.0-based.

It's important to note that learning doesn't necessarily have to move linearly from Web 1.0-based to Web 2.0-based; they can be intertwined. Using Gagne's (1985) nine events of instruction as a framework (see table 1), events 1 and 2, gaining attention and informing users of objectives, can be done via a blog or website. These events are examples of transmissive, or Web 1.0-based, learning. For event 3, where the recall of prior learning is stimulated, Web 2.0-based learning, using tools such as Twitter or Facebook, could be used to create a space for learners to share their prior learning about a topic, co-constructing a larger knowledge resource in the process. The next stages of the instruction cycle, content presentation, practice, feedback and assessment are transmissive, Web 1.0-based learning. In the final stage in the

instruction cycle, enhancing retention and transferring to further learning, Web 2.0 tools could be used by learners to co-construct and share new knowledge.

Table 1. Intertwining of Web-based learning using Gagne’s nine events of instruction

	Instructional Event	Type of learning	Learning tool
1	gain attention	transmissive, Web 1.0	blog, website
2	inform learners of objectives	transmissive, Web 1.0	blog, website
3	stimulate recall of prior learning	co-constructivist, Web 2.0	social networking tool, blog
4	present the content	transmissive, Web 1.0	blog, website
5	provide learning guidance	transmissive, Web 1.0	blog, website
6	elicit performance (practice)	transmissive, Web 1.0	blog, website
7	provide feedback	transmissive, Web 1.0	blog, website
8	assess performance	transmissive, Web 1.0	blog, website
9	enhance retention and transfer to the further learning	co-constructivist, Web 2.0	social networking tool, blog, podcast, wiki, shared document space

Web-based learning assessment

So far this article has outlined how Web-based learning might be a mix of Web 1.0- and Web 2.0-based learning. Web 1.0-based learning can be assessed in traditional ways, for example comprehension quizzes and reproduction of model texts. However, Web 2.0-based learning “raises significant challenges for assessment, posing a barrier to further adoption” (Gray et al., 2010, p. 206) for educators. One of these challenges is that Web 2.0-learning is not only about the final product, but also about the process and social interactions that lead up to it (Ehlers, 2009). Another challenge is privacy, both at an institutional level and private level. Institutions may not be comfortable with assessments being open to public viewing. Similarly, Light (2011) writes that some learners may be very reluctant to publish to a public viewing space, particularly before it has gone through a drafting process and been vetted by the teacher.

However, these challenges are not insurmountable. Rubrics can be designed to grade the process and social interactions of Web 2.0-based learning. In addition, learning management systems traditionally used by educational institutions are starting to add Web 2.0-type tools, so Web 2.0-based assessments can be kept within the learning island. Finally, by using Web 1.0-based formative assessment and constructive feedback, educators can help “perfect”

learners' texts before they are opened up for public viewing, thereby decreasing the chance of learners' work being ridiculed by peers. This approach also has the benefit of making Web 2.0-based learning easier to assess. The "private" text could be marked for content (Web 1.0-based assessment). Once it goes "public", the text could be graded using criteria such as layout, inclusion of multimedia, and correct referencing and hyperlinking.

In the remainder of the paper, I will discuss how an online English course, *web2english*, has been designed using a combination of Web 1.0- and Web 2.0-based learning and assessment, creating a learning environment (rather than a learning island) in the process.

Discussion

The Course Overview



Figure 1. *web2english* course home page

Having a background in TEFL (Teaching English as a Foreign Language), I had been thinking about creating a fully online English course for a number of years but the apparent difficulty and expense of doing this had deterred me. The main problem was how to manage the learning without resorting to an expensive LMS solution or hosting an open-source LMS on a server. However, with the rapid expansion of new, user-friendly Web applications, it became evident that there were tools now available to develop pedagogically-sound online courses easily and very cost effectively. I decided to develop a twelve-week course, with two main objectives: 1) to enable students' English and computer skills to improve, and 2) to show that new Web technologies could be used to successfully deliver and manage an online course, creating an interactive learning environment in the process. The course, *web2english*, was divided into eleven modules: an orientation module and ten learning modules. The orientation module was done in face-to-face mode to ensure that students could master the tools needed for successful participation in the course. Five hours of instruction over one week was allocated for this module. The remaining modules were done in online mode (with a weekly face-to-face study morning for students with no teacher present), with the expectation that

students complete between seven and ten hours of study per module. Figure 2 shows the course schedule.

- module 0 – orientation (Nov 27 – Dec 4)
- module 1 – people and places (Dec 5 - Dec 11)
- module 2 – food (Dec 12 - Dec 18)
- module 3 – season’s greetings (Dec 19 - Dec 29)
- module 4 – new year’s festivities (Dec 30 – Jan 8)
- module 5 – favourite places (Jan 9 - Jan 15)
- module 6 – now and then (Jan 16 – Jan 22)
- module 7 – the future (Jan 23 – Jan 29)
- module 8 – protecting the environment (Jan 23 – Jan 29)
- module 9 – city versus country (Feb 6 – Feb 12)
- module 10 – looking back at your study (Feb 13 – Feb 19)

Figure 2. *web2english* course schedule

The Students

Even though I work in an institute of higher education, it proved difficult to develop a fully online, Web-based course with my students. The main reason was that my students were part of a large course that followed a set curriculum and most online learning activities were expected to be delivered through our learning management system. Consequently, I decided to develop the course using a non-traditional group of students. Six volunteers were recruited from the family of faculty members and friends. These volunteers were housewives, ranging in age from thirty-five to fifty, from Korea (2), Japan, Thailand, China and Columbia. They were definitely not “digital natives” (Prensky, 2001, p. 1). When asked about their computer skills, four felt that their skills were normal, while two felt that they were very bad (in fact, two had not even used Microsoft Word). Their computer usage was low: four used it for less than five hours per week, one between five and ten hours and one between sixteen and twenty hours. They used computers predominantly for internet-related activities such as chatting and talking to family and friends, browsing and sending email, but some activities included watching videos, listening to music and uploading pictures and videos from cameras. When asked why they wanted to acquire more computer skills, it was interesting that five responded that they wanted to be able to learn more. This perhaps indicates that students realize that advances in technology now give them more opportunities for lifelong, informal learning. (See Appendix A for full results of the Pre-course survey on skills and expectations.)

Combining Web 1.0- and Web 2.0-based learning and assessment in *web2english*

Table 2. *web2english* design framework (using Gagne’s [1985] nine events of instruction)

	Instructional Event	Type of learning	Learning tool
1	gain attention	transmissive, Web 1.0	<i>web2english</i> blog
2	inform learners of objectives	transmissive, Web 1.0	<i>web2english</i> blog – main page and course outline page
3	stimulate recall of prior learning	co-constructivist, Web 2.0	<i>Edmodo</i> social learning platform
4	present the content	transmissive, Web 1.0	<i>web2english</i> blog, <i>Edmodo</i> , <i>elllo.org</i> and British Council websites
5	provide learning guidance	transmissive, Web 1.0	<i>Edmodo</i>
6	elicit performance (practice)	transmissive, Web 1.0	<i>Classmarker</i> and <i>Edmodo</i>
7	provide feedback	transmissive, Web 1.0	<i>Classmarker</i> and <i>Edmodo</i>
8	assess performance	transmissive, Web 1.0	<i>Edmodo</i>
9	enhance retention and transfer to the further learning	co-constructivist, Web 2.0	<i>Blogger</i> , <i>Twitter</i> , <i>MyPodcasts</i> , <i>Google Docs</i>

The Web now offers a wide range of easy-to-use tools that can be utilized as part of the teaching and learning process. However, this ability to quickly produce Web content can result in key stages of the instructional design process being omitted, leading to a mixed-bag of online materials with limited educational value (Dowling, 2011; Lim et al., 2010; Sharma & Barrett, 2007). Therefore, Web-based learning should be built around proven instructional design frameworks. In the case of *web2english*, this framework was Gagne’s (1985) nine events of instruction (see table 2 above).

Event 1 – gain attention: *web2english* was built around a WordPress blog (see figure 3). This blog acted as the portal from where students could access all course materials. The main page of the blog contained a list of posts, with the current learning module on top. By making this post “sticky” (i.e., pinning it to the top), the current learning module could be highlighted, thereby gaining the attention of students. Page tabs at the top of the blog also acted as attention getters as they could direct students to course outline, course schedule and, very importantly, assessment rubrics.

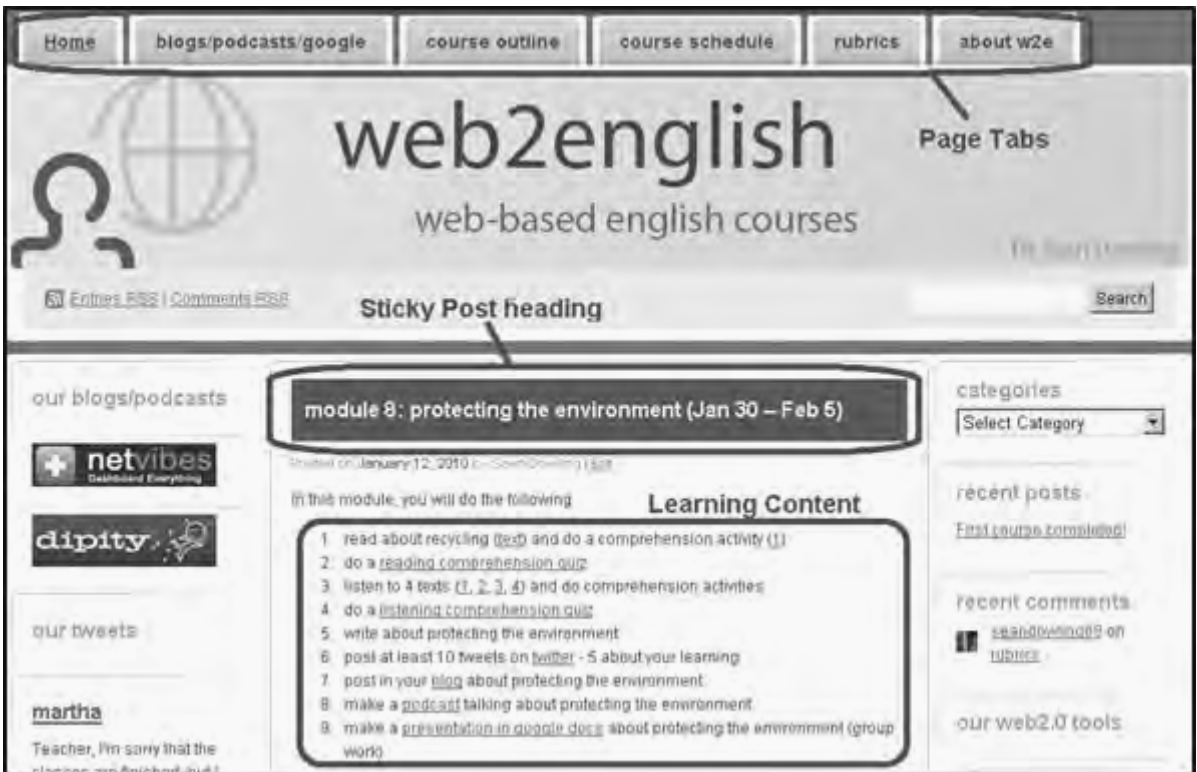


Figure 3. web2english course schedule

Event 2 – inform learners of objectives: Learners were informed of course objectives on the course outline page (see figure 4). In addition, the required learning activities for each module were accessible from the main page (see figure 3 above) and from the course outline page (see figure 5). Finally, the rubrics for each type of learning activity were displayed on the rubrics page (see figure 6).

course outline

Outline: This course lasts for 12 weeks. It is done mainly online, but learners are encouraged to arrange face-to-face "study mornings". There are two main learning objectives to the course: 1) to improve your English language skills, 2) to improve your Web 2.0 skills. To achieve these objectives, you will need to do activities on your own, in pairs and in groups and post all your work in an online environment for everyone to share.

Learning Objectives:

1. to read and understand pre-intermediate level web-based texts;
2. to listen to and understand pre-intermediate level web-based texts;
3. to identify information in texts that can be used in your own written or oral texts;
4. to publish your work in a number of formats (blogs and microblogs, shared files, podcasts);
5. to read and comment upon the work of classmates;
6. to listen to and comment upon the work of classmates;
7. to work as an individual and in groups to publish texts;
8. to competently use a variety of Web 2.0 tools ([google docs](#), [twitter](#), [blogger](#), [mypodcasts](#), [edmodo](#)),

Figure 4. Course outline

module 8 – protecting the environment

1. reading: recycling ([text](#)) and comprehension activity ([1](#))
2. [reading comprehension quiz](#)
3. listening: 4 texts ([1](#), [2](#), [3](#), [4](#)) and comprehension activities
4. [listening comprehension quiz](#)
5. writing: protecting the environment
6. [twitter](#): post at least 10 tweets – 5 about your learning
7. [blog](#): protecting the environment
8. [podcast](#): talk about protecting the environment
9. [presentation](#): protecting the environment (group work) [[back to top](#)]

Figure 5. Learning activities within a module

rubrics	
<p>Assessment: writing (10 points)</p> <p>First draft (7 points)</p> <ul style="list-style-type: none"> • 1 point: posted on time in edmodo • 1-6 points: IELTS public writing bands 1-6 <p>Second draft (3 points)</p> <ul style="list-style-type: none"> • 1 point: posted on time in edmodo • 1-2 points: corrections made 	<p>Assessment: twitter – tweets on twitter (10 points)</p> <ul style="list-style-type: none"> • 10 points: posted ten tweets, on at least five different days Five tweets must be related to students' study/learning
<p>Assessment: reading - ClassMarker quizzes (10 points)</p> <ul style="list-style-type: none"> • 1-2 points: posted on time (2), one day late (1) • 1-8 points: number of correct questions 	<p>Assessment: podcast - make on mpodcasts (10 points)</p> <ul style="list-style-type: none"> • 1 point: posted on time • 1 point: included title • 1-6 points: IELTS public speaking bands 1-6 • 2 points: commented on 2 other students' podcasts
<p>Assessment: listening - ClassMarker quizzes (10 points)</p> <ul style="list-style-type: none"> • 1-2 points: posted on time (2), one day late (1) • 1-8 points: number of correct questions 	<p>Assessment: group presentation on google docs (10 points)</p> <ul style="list-style-type: none"> • 1-2 points: completed on time (2), one day late (1) • 1 point: opening slide modified correctly • 1-5 points: 5 bullet points on each slide • 1-2 points: pictures included with references
<p>Assessment: blog – post on blogger (10 points)</p> <ul style="list-style-type: none"> • 1 point: posted on time • 1 point: title included • 2 points: content formatted correctly • 1 point: picture included • 2 points: commented on 2 other students' blogs • 2 points: comment quality 	

Figure 6. Assessment rubrics

Event 3 – stimulate recall of prior learning: Until now, learning has been transmissive, or Web 1.0-based, with all content being generated by the teacher; there has been no learner input. However, to stimulate recall of prior learning, and to give the learners an opportunity to interact with each other, a more constructivist, or Web 2.0-based, activity was needed. This could perhaps have been done via the blog, but it would have been difficult to provide enough detail and interaction for each learning module. Therefore, the social learning platform, Edmodo, was used to develop this type of activity.

Edmodo allowed a learning space to be provided for the teacher and students to interact with each other and with the course content, giving students an opportunity to contribute to their learning in the process. For example, warm-up activities that stimulated recall of prior learning, such as polls and open-ended questions, were added before the main content was presented (see figures 7 and 8). These polls and questions were created by the teacher, but students were encouraged to add comments. These learner-generated comments would add to the learning resource and give students more learning opportunities.

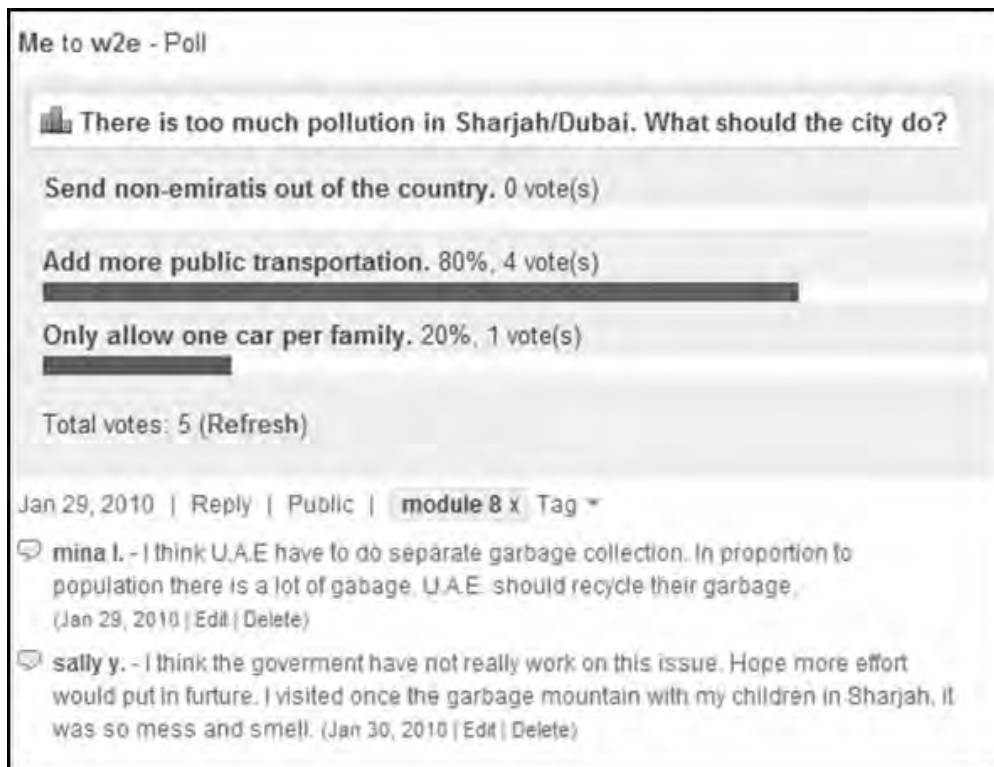


Figure 7. A poll

Me to w2e - Note

Protecting the environment is a big concern now. What do we need to do to protect the environment?

Use "Reply" to send your answer.

Jan 29, 2010 | Reply | Public | **module 8 x** Tag ▾

🗨 **Miho S.** - Everyone need to realize about how we can protect our earth. Try not to use too much electricity, separete gabage, bring your own shopping bags and so on... It's not convinient way to live but really need to do them. (Jan 29, 2010 | Edit | Delete)

🗨 **mina l.** - I agree with miho when I wash the dishes I use the flour instead of soap. Don't use disposable things. We can do so many things in our life! (Jan 29, 2010 | Edit | Delete)

🗨 **siranee d.** - In this country if just people think about using a shopping bags and have a smaller cars. It's will helps environment a lot. Very interesting Mina what flour that you use for wash the dishes. (Jan 30, 2010 | Edit | Delete)

🗨 **Martha C.** - We need to learn more about that and to start this education in the school when we are child. (Jan 30, 2010 | Edit | Delete)

🗨 **sally y.** - Now the big sales is on in different stores in shopping mall. I think if people can control themself to do a less shopping which will help to protect our enviroment. Do you agree with me? (Jan 30, 2010 | Edit | Delete)

Figure 8. An open-ended question

Event 4 – present the content: The first-stage learning content was Web 1.0-based. Content was initially presented on the portal. However, to add detail, learning modules were broken down into individual activities on Edmodo. The content consisted of readings from the British Council’s Learn English website, listenings from the <http://ello.org> website (see figure 9) and some grammar input necessary to complete a writing activity (see figure 10). To complete the activities successfully, students only needed to apply lower-level thinking skills such as remembering, understanding and applying. They needed to remember the key grammar inputs, understand the reading and listening texts and grammar and then apply their new knowledge in a writing activity.

Event 5 – provide learner guidance: Learner guidance came in three distinct formats. First, as searching the Web for appropriate material is a difficult task, Web-based content was selected for students that would match their learning level. Second, the interactive space provided by Edmodo was used for asking for help. When having difficulties, students could send notes

directly to the class or teacher. A notification immediately appeared on my computer via my email account. Provided I was using my computer at the time, I could provide the student with almost instant feedback. Figure 11 shows a good example of how a note has been used by a student to help someone and contribute to the learning environment in the process. Finally, learner guidance, in the form of grammar notes and modeling (figure 10), was provided to students before they started the writing activities.

module 8 reading (10 points)
Turned in (6) DUE: Jan 31, 2010
You will need to do the following:
1) Go to <http://www.britishcouncil.org/learnenglish-central-magazine-recycling02.htm>;
2) Read the text;
3) Do the comprehension activity at <http://www.learnenglish.org.uk/CET/flashactivities/magazine-recycling-03.html>;
3) Go to <http://www.classmarker.com> ;
4) Do the quiz "module 7 - reading - recycling"
Jan 29, 2010 | Reply | Public | **module 8** x **reading** x Tag = | More =

module 8 listening (10 points)
Turned in (6) DUE: Jan 31, 2010
You will need to do the following:
1) Click on the four links below and do the listening activities;
<http://www.elllo.org/video/0976/V976Ecoproblems.htm>;
<http://www.elllo.org/english/NewsCenter/N19-Fire.html>;
<http://www.elllo.org/english/Mixer/29-World.html>;
<http://www.elllo.org/english/0751/Q757-Tim-Energy.html>;
2) Go to <http://www.classmarker.com> ;
3) Do the quiz "module 8 - listening - environmental problems"
Show Less
Jan 29, 2010 | Reply | Public | **listening** x **module 8** x Tag = | More =

Figure 9. Reading and listening activities

In this module, you must use MODAL VERBS like MUST, NEED TO, SHOULD, CAN, etc.

Modal verbs are always followed by another verb.


"You must drive slowly because ..."
 "He should get up early because ..."
 "Children need to sleep for 10 hours because ..."

MUST is the strongest modal verb.
 NEED TO is also strong.
 SHOULD, CAN are less strong and are more for advice.

Show Less

Jan 29, 2010 | Reply | Public | **grammar** x **module 8** x Tag ▾ | More ▾

module 8 writing - first draft (7 points)

 Turned in (6) **DUE Feb 2, 2010**

You need to do the following:

- 1) write about protecting the environment (100-150 words).
- 2) you should use the MODALS (see grammar point above).
- 3) use "because" to say why you must/should/need to/can do something.
- 3) turn-in by the due date.

You can start the essay something like this:

"In this essay I will write about protecting the environment. There are many things that we can do to protect the environment. First ... / Next ... / Then ... / After that ... / Finally ..."

Show Less

Jan 29, 2010 | Reply | Public | **module 8** x **writing** x Tag ▾ | More ▾

Figure 10. Extra grammar support and writing activity

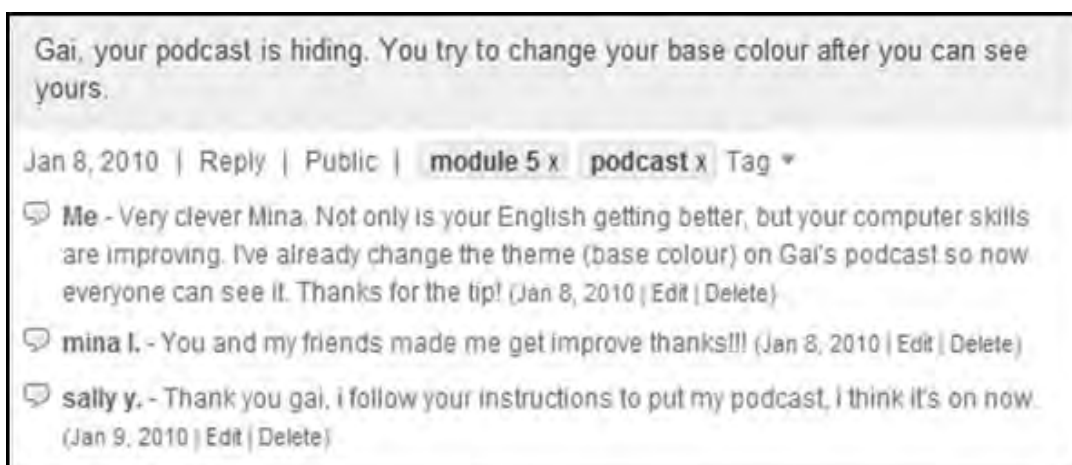


Figure 11. Students and teacher fixing a problem

Event 6 – elicit performance (practice): Performance was elicited in three ways. First, students listened to a number of listening quizzes on *elllo.org* before they attempted a final, graded quiz. Second, students produced a piece of writing (see figure 11 above) related to the reading and listening texts that they had completed earlier. Finally, they had to produce an audio recording (podcast) of their written texts.

Event 7 – provide feedback: For the Web 1.0-based learning in the course, feedback was provided in a number of ways. The first was to use listening quizzes on <http://elllo.org> which provided automatic feedback. The second was to use Classmarker, a Web-based tool, to create simple comprehension quizzes for the reading and final listening activity. The listening quiz consisted of multiple-choice questions, so feedback was instant. The reading quizzes were open-ended, so needed to be manually marked. This enabled more detailed feedback to be provided to students. Feedback was also given to students after they completed the first draft of the writing activities.

Event 8 – assess performance: In the early-stages, or Web 1.0-based stage, of the learning cycle, there were two types of assessment: 1) reading and listening comprehension quizzes delivered via Classmarker, and 2) first and second drafts of the writing activity.

It's important to note that up to now, most of the learning, feedback and assessment has followed traditional transmissive teaching methods. Even though the learning has been Web-based, it has been Web 1.0-based and the learning environment wasn't very open. There has been some learning content created by students, but most of the learning content has been created or selected by the teacher. Similarly, there has been some communication between students, but most of the communication is top-down, from teacher to students. In order to open up the learning environment and provide additional learning opportunities, it was necessary to give students the opportunity to co-construct and publish content to a wider audience. Event 9 of the instruction cycle was used to do this.

Event 9 – enhance retention and transfer to the further learning: Up to now, students had used grammar and model texts to produce their own written texts. The learning guidance, feedback

provided by the teacher and the drafting process had helped students “perfect” these texts. They were now ready to be published for peer review and become additional learning resources in the process. Several studies have shown the effectiveness of peer review for enhancing student learning (Rieber, 2006; Liang & Tsai, 2010). Knowing that texts will be reviewed by peers motivates students to produce better texts in a timely fashion. In addition, peer-produced texts have similar content; in the case of *web2english* texts, grammar and vocabulary. Therefore, reviewing peer texts enhances retention of key knowledge.

The first Web 2.0 publication tool used by students was their blog. The blogging activity was not about producing a grammatically correct piece of text (this had already been done in the previous writing activity) but was about using the features of a blog correctly. Students were expected to correctly format the text and insert pictures in the blog. In addition, social interaction was an important criteria; students received marks for the quantity and quality of their comments about their peers’ blog postings. Figures 12 and 13 show the assessment rubrics for the blogging activity and an example of a blog posting and comments.

<p>Assessment: <i>blog</i> – post on <u>bloggger</u> (10 points)</p> <ul style="list-style-type: none">• 1 point: posted on time• 1 point: title included• 2 points: content formatted correctly• 1 point: picture included• 2 points: commented on 2 other students' blogs• 2 points: comment quality
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Figure 12. Blog post assessment rubrics

Protecting the environment

In this essay I will write about protecting the environment. There are many things that we can do to protect the environment. First, we must drive a small car because it can help save petrol. We should use a bucket when we wash our car. Next, we need to eat everything and not throw food away. Think about people in some country where they don't have enough food to eat. Then, we should use shopping bags or reuse the old plastic bags. Also, if we can reuse bottle or papers, we should do it. In my country, we can sell old newspapers, plastic bags, and bottles back to companies. Then, the companies reuse them.




Even if you can save electricity and water, you can also help the environment too. At my house we switch off and unplug everything if we don't use them. Finally, try to separate the garbage and put the garbage in the right place. If we do all these things, the environment will get better.

7:18 PM [3 comments](#)

4 comments:

[mina](#) said:
Yes, when we wash our car we must use a bucket. Today I will start turn off the switch and unplug. It is good idea as well.

[February 3, 2010 9:46 PM](#)
[misook](#) said:
Gai, your essay is wonderful. If We all do that we will be able to protect our environment!

[February 4, 2010 1:22 AM](#)
[miho](#) said:
I always take shopping bags for shopping, but I have never seen other people bring their bags in this country. But recently shop keeper remember my face and my light blue shopping bag because they never stop me and help me now.

Figure 13. Blog post and comments

The next Web 2.0-based learning activity, making a podcast, followed a similar process to the blog posting. Students made an audio recording of their written text, posted it to their podcast and then made comments on those of their peers. However, there was a significant change in the assessment procedure. Instead of awarding points for the formatting of the podcast, points were awarded for the quality of narration of the podcast. Students' reading, listening and writing skills had all been assessed in previous activities. But the other traditional language skill, speaking, had not been assessed. Adding the above text narration activity enabled, albeit superficially, students' speaking skills to be assessed. Figures 14 and 15 show the assessment rubrics for the podcast activity and an example of a podcast and comments.

Assessment: *podcast* - make on [mypodcasts](#) (10 points)

- 1 point: posted on time
- 1 point: included title
- 1-6 points: [IELTS public speaking bands 1-6](#)
- 2 points: commented on 2 other students' podcasts

Figure 14. Podcast assessment rubrics

Friday, Feb 19, 2010

Mina's learning experiences in this course!

Download this episode (4 min) 

Posted by minachar73 at 2:46 PM | [4 comments](#) 

Mina's learning experiences in this course!

4 Comments:

martha said...
You have learned much in this course. I like how you read.
12:04 AM

Miho said...
Your English accent has improved a lot!!! Easy to listening. Well done Mina!
5:30 AM

gal75 said...
Very clear and easy to listen to Mina. I really like you voice.
8:30 AM

misook said...
Your voice was husky. It seems you had no sleep.
But I think that your reading and pronunciation are wonderful!

Figure 15. Podcast and comments

While the blogging and podcasting allowed students to produce and share learning materials, these materials were being produced individually (although the comments and replies to comments are good examples of co-constructing knowledge). The final learning activity involved using Google Docs. Google Docs allows students, who are in different locations, to work on a shared document (e.g., spreadsheet, presentation, form). In *web2english*, students used Google Docs to co-construct presentations. These presentations consisted of individual pages with data, in bullet points, from their earlier written texts. Images, with correct referencing, were also added to the pages. Figures 16 and 17 show the assessment rubrics and an example of pages from a presentation.

Assessment: *group presentation on google docs (10 points)*

- 1-2 points: completed on time (2), one day late (1)
- 1 point: opening slide modified correctly
- 1-5 points: 5 bullet points on each slide
- 1-2 points: pictures included with references

Figure 16. Presentation assessment rubrics

Protecting the Environment

Miho
Mina
Martha
Gai
Misook
Sally

Protecting the environment by Sally

First: Stop using the cheaper batteries

Next: Try to drive slow

Then: Do less shopping

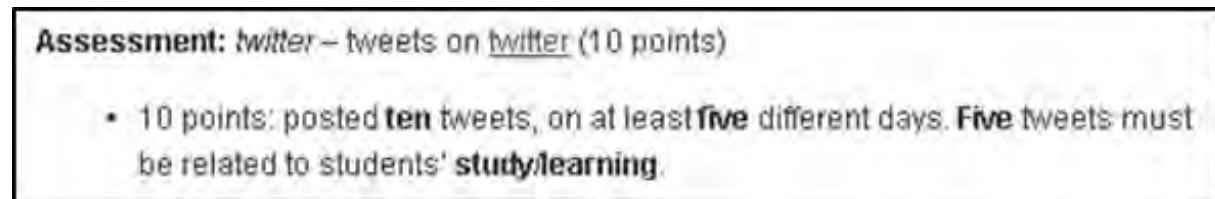
After that: Try to not using disposal plates and cups

Finally, Should not buy aerosol cans and refrigerator which contain CFC

Figure 17. Presentation contents page and page from presentation

One of the perceived problems with online courses is the lack of interaction between participants. *web2english* attempted to address this problem in a number of ways. Spaces for student interaction were provided by using Edmodo in the early stages of learning and by blogs, podcasts and Google Docs in the latter stages. While these tools gave students opportunities for interaction, these learning interactions were not on a daily basis. To give students more opportunities for daily interaction, one other Web 2.0 tool, Twitter, was used.

Twitter is an example of a microblog. Whereas blogs and podcasts can give a picture of a person's life or learning over time, microblogging is more concerned with what a person is doing at one particular moment in time, such as going to a concert, having a coffee with friends or attending a lecture, and the need to get this information out to an audience in real-time (Kanter, 2008). To assist with this quick publishing, microblogs encourage the sending of very short texts; for example, Twitter restricts posts to a maximum of 140 characters. Twitter was used in *web2english* for this immediacy. A Twitter community was set up at the start of the course, consisting of seven members (six students and the teacher). In each module, students were expected to produce ten tweets (posts), on five different days. Half the tweets were general; the other half were reflections on their learning (see figure 19). Assessment was based on quantity rather than quality (see figure 18), in the hope that students would produce more tweets. Students could view each other's tweets via Twitter or from the *web2english* blog and respond, or retweet, to each other's tweets. During the 12-week course, students produced 572 tweets, an average of 48 per week, or 8 per student per week.



Assessment: twitter – tweets on [twitter](#) (10 points)

- 10 points: posted **ten** tweets, on at least **five** different days. **Five** tweets must be related to students' **study/learning**

Figure 18. Twitter assessment rubrics



Me and girls went to watch tennis match. Kids were excited about getting autographs. I like Irish village. Very nice atmospehre.
9:03 PM Feb 15th via web

This time classmarker were bit difficult fo me, 2 of the reading questions are not clear for me and I couldn't hear last bit of listening.
10:22 PM Feb 14th via web

Figure 19. Two tweets in *Twitter*

Even though the above Web 2.0-based learning was very student-centred, it should be noted that each activity was formally assessed by the teacher. Despite views that Web 2.0-based assessment is problematic (Ehlers, 2009; Gray et al., 2010), the above assessments show that this doesn't have to be the case; provided Web 2.0-based assessment focuses on Web 2.0-based learning skills, assessment of Web 2.0-learning should be relatively straightforward. In *web2english*, during the Web 1.0-based stage of learning, the content, grammar and vocabulary of the texts were assessed. Therefore, during the Web 2.0-based stage of learning, the teacher was able to focus assessment on key Web 2.0 learning skills such as blending of multimedia, social interaction and co-construction of knowledge.

Conclusion

One of the goals of the *web2english* course was to show that new Web technologies could be used to successfully deliver and manage an online course, creating an interactive learning environment in the process. On completion of the course, it was clear that this goal had been achieved. The post-course survey indicated a high degree of student satisfaction with the course; students found it easy to use, thought that it was interesting and fun, felt that both their English and computing skills had improved and believed that learning online was a good way to learn (see Appendix B for full details). In addition, by allowing students to co-construct a variety of learning resources, it allowed their learning to be more open, creating a learning environment rather than a traditional learning island.

web2english also demonstrated how Web-based courses might be designed to overcome the problem of the slow uptake of Web 2.0 tools in education. It showed how to integrate the Web 2.0 tools used by educators and students in their daily lives, for example blogs, microblogs and social networking platforms, into the learning process. Moreover, it demonstrated that the curriculum change needed for successful integration on Web 2.0 technologies doesn't need to be radical; good Web-based courses should include a combination of Web 1.0-based learning, where teachers use traditional pedagogies to instruct their students and scaffold their learning using Web-based resources, and Web 2.0-based learning, where teachers guide their students to co-construct and publish learning resources. Finally, *web2english* shows that assessing the process and social interactions of Web 2.0-based learning is not overly problematic, provided that the assessment focuses on the key Web 2.0 skills and not traditional Web 1.0-based learning skills.

Even though *web2english* appeared to be successful, there are some issues that need to be addressed. As the learners were not enrolled in a particular educational institution, it allowed for flexibility in course design. This may not be the case in a more formal learning environment where curriculum and assessment tools are more rigid. In addition, the course was limited to only six students. In traditional learning environments, where cost is an issue, classes will be larger. Managing the social interaction of large classes may become problematic. However, despite these potential problem areas, it's clear that Web-based courses that carefully integrate Web 2.0-based learning have the potential to open up learning islands into learning environments, giving students opportunities to develop 21st century skills in the process.

About the Author

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References













- Anderson, L., & Krathwohl, R. (2001). *A Taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York, NY: Longman.
- Arvan, L. (2009). Dis-integrating the LMS. *EDUCAUSE Quarterly Magazine* 32, 2. Retrieved September 16, 2011 from <http://www.educause.edu/EDUCAUSE+Quarterly/EDUCAUSEQuarterlyMagazineVolum/Di sIntegratingtheLMS/174588>.
- Bertolo, E. (2008). Web 2.0: Unlearned lessons from previous virtual learning environments. *Bioscience Education e-Journal* 11. Retrieved September 16, 2011, from <http://www.bioscience.heacademy.ac.uk/journal/vol11/beej-11-7.aspx>.
- Bower, M., Hedberg, J.G., & Kuswara, A. (2010). A framework for Web 2.0 learning design. *Educational Media International* 47, 3, September 2010, pp. 177-198.
- Brown, S. (2010). From VLEs to learning webs: The implications of Web 2.0 for learning and teaching. *Interactive Learning Environments* 18, 1, 1-10.
- Buchem, I., & Hamelmann, H. (2011). Developing 21st century skills: Web 2.0 in higher education – a case study. *eLearning Papers* 24, 1-4. Retrieved May 10, 2011, from <http://www.elearningeuropa.info/files/media/media25535.pdf>.
- Clarke, W., Logan, K., Luckin, R., Mee, A., & Oliver, M. (2009). Beyond Web 2.0: Mapping the technology landscapes of young learners. *Journal of Computer Assisted Learning* 25, 56-69.
- Conole, G. (2010). Facilitating new forms of discourse for learning and teaching: Harnessing the power of Web 2.0 practices. *Open Learning* 25, 2, June 2010, 141-151.
- Dohn, N.B. (2009). Web 2.0-mediated competence: Implicit educational demands on learners. *Electronic Journal of e-Learning* 7, 2, 111-118.
- Dowling, S. (2011). Digital learning spaces: An alternative to traditional learning management systems? *Proceedings of the 4th Annual Conference on e-Learning Excellence in the Middle East*, Dubai. Retrieved September 9, 2011, from http://seandowling68.files.wordpress.com/2010/12/digital_learning_spaces_sdowling.pdf.
- Downes, S. (2007). E-Learning 2.0: In development. Retrieved April 12, 2011, from <http://www.slideshare.net/Downes/elearning-20-in-development>.

- Ehlers, U-D., (2009). Web 2.0 – E-Learning 2.0 – Quality 2.0? Quality for new learning cultures. *Quality Assurance in Education*, 17, 3, 296-314.
- Gagne, R. (1985). *The conditions of learning (4th ed.)*. New York, NY: Holt, Rinehart & Winston.
- Gousetti, A., (2010). Web 2.0 and education: Not just another case of hype, hope and disappointment? *Learning, Media and Technology* 35, 3, 351-356.
- Gray, K., Thompson, C., Sheard, J., Clerehan, R., & Hamilton, M. (2010). Students as Web 2.0 authors: Implications for assessment design and conduct. *Australasian Journal of Educational Technology* 26, 1, 105-122.
- Kanter, B. (2008). *Mobilizing generation 2.0: A practical guide to using Web 2.0*. San Francisco, CA: Jossey-Bass.
- Kerres, M. (2006). Potenziale von Web 2.0 nutzen. In Hohenstein, A., and Wilbers, K. (Eds.) *Handbuch E-Learning*, München: DWD.
- Liang, J-C., & Tsai, C-C. (2010). Learning through science writing via online peer assessment in a college biology course. *The Internet and Higher Education* 13, 4, 242-247.
- Light, D. (2011). Do Web 2.0 right. *Learning and Leading with Technology*, 10-15.
- Lim, W-Y., So H-J. & Tan S-C. (2010). eLearning 2.0 and new literacies: Are social practices lagging behind? *Interactive Learning Environments* 18, 3, 203-218.
- Magliaro, S., Lockee, B., & Burton, J. (2005). Direct instruction revisited: A key model for instructional technology. *Educational Technology Research & Development*, 53, 4, 41-55.
- Oliver, K. (2010). Integrating Web 2.0 across the curriculum. *Tech Trends* 54, 2, 50-60.
- O'Reilly, T. (2005). What is Web 2.0? Design patterns and business models for the next generation of software. O'Reilly: Spreading the knowledge of innovators. Retrieved September 16, 2011 from <http://oreilly.com/web2/archive/what-is-web-20.html>.
- Prensky, M. (2001). Digital Natives, Digital Immigrants. *On the Horizon*. 9, 5, pp. 1-6. Retrieved September 16, 2011 from <http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>.
- Rieber, L. J. (2006). Using peer review to improve student writing in business courses. *Journal of Education for Business* 81, 6, 322-326.
- Rotherham, A., & Willingham, D. (2010). “21st-century skills” – Not new but a worthy challenge. *American Educator*, Retrieved April 11, 2011 from <http://www.aft.org/pdfs/americaneducator/spring2010/RotherhamWillingham.pdf>.
- Sharma, P. & Barrett, B. (2007). *Blended Learning – Using technology in and beyond the language classroom*. Oxford, UK: Macmillan Education.
- Walqui, A. (2006). Scaffolding instruction for English language learners: A conceptual framework, *The International Journal of Bilingual Education and Bilingualism* 9, 2, 159-180.

Appendix A: Pre-course survey on skills and expectations

(Administered during the pre-course orientation period.)

1. Before the course, how good was your English?		Response Percent	Response Count
very good		0.0%	0
good		0.0%	0
normal		33.3%	2
bad		16.7%	1
very bad		50.0%	3
2. Why do you want to learn English?		Response Percent	Response Count
To get better at English to use outside the house		83.3%	5
To get better at English so I can help my children		66.7%	4
To meet people		50.0%	3
To communicate better with my husband		50.0%	3
To get a job		33.3%	2
3. What English do you want to learn on this course?		Response Percent	Response Count
how to speak better		66.7%	4
how to write better		83.3%	5
how to read better		66.7%	4
how to listen better		33.3%	2
how to use grammar properly		50.0%	3
4. Before the course, what were your computer skills like?		Response Percent	Response Count
very good		0.0%	0
good		0.0%	0
normal		66.7%	4
bad		0.0%	0
very bad		33.3%	2
5. Before the course, how many hours a week did you use a computer?		Response Percent	Response Count
0-5 hours		66.7%	4
6-10 hours		16.7%	1
11-15 hours		0.0%	0
16-20 hours		16.7%	1
20+ hours		0.0%	0

6. Before the course, what did you use on the computer for?		Response Percent	Response Count
to chat with friends or family (using Messenger, etc.)		50.0%	3
to talk with friends or family (using Skype, etc.)		66.7%	4
to use the internet		66.7%	4
to send email		83.3%	5
to save photographs, videos or music		33.3%	2
to use a word processor like Microsoft Word		16.7%	1
to study		33.3%	2
to listen to music or watch movies		50.0%	3
7. What do you want to learn computer skills?		Response Percent	Response Count
To help my children		50.0%	3
To be able learn more		83.3%	5
To get a job later		16.7%	1
To get in touch with more people		16.7%	1

Appendix B: Post-course survey results

10. Please answer these questions about web2english. Create Chart Download						
	Agree strongly	Agree	Neither agree nor disagree	Disagree	Disagree strongly	Response Count
web2english was easy to use.	60.0% (3)	20.0% (1)	20.0% (1)	0.0% (0)	0.0% (0)	5
I had many problems using web2english.	0.0% (0)	0.0% (0)	20.0% (1)	40.0% (2)	40.0% (2)	5
web2english was interesting.	80.0% (4)	20.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	5
web2english was fun.	80.0% (4)	20.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	5
My reading skills got better.	60.0% (3)	40.0% (2)	0.0% (0)	0.0% (0)	0.0% (0)	5
My writing skills got better.	40.0% (2)	60.0% (3)	0.0% (0)	0.0% (0)	0.0% (0)	5
My listening skills got better.	60.0% (3)	40.0% (2)	0.0% (0)	0.0% (0)	0.0% (0)	5
My speaking skills got better.	20.0% (1)	80.0% (4)	0.0% (0)	0.0% (0)	0.0% (0)	5
My grammar got better.	20.0% (1)	80.0% (4)	0.0% (0)	0.0% (0)	0.0% (0)	5
My computer skills got better	80.0% (4)	20.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	5
I learned a lot of new words.	40.0% (2)	60.0% (3)	0.0% (0)	0.0% (0)	0.0% (0)	5
I learned a lot from my friends.	40.0% (2)	60.0% (3)	0.0% (0)	0.0% (0)	0.0% (0)	5
I learned a lot about the world and my friends' countries.	20.0% (1)	80.0% (4)	0.0% (0)	0.0% (0)	0.0% (0)	5
The study mornings were a good learning opportunity.	60.0% (3)	40.0% (2)	0.0% (0)	0.0% (0)	0.0% (0)	5
Learning online is a good way to learn.	80.0% (4)	20.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	5
The teacher was very helpful.	50.0% (2)	50.0% (2)	0.0% (0)	0.0% (0)	0.0% (0)	4
I would learn more if I met the teacher more often.	20.0% (1)	40.0% (2)	40.0% (2)	0.0% (0)	0.0% (0)	5

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