FOSTERING AUTONOMOUS LEARNING
WITH THE AID OF ONLINE TECHNOLOGY

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Abstract: *This article discusses some of the ways in which learner autonomy can be promoted with the help of online technology, as represented by WebClass (webclass.co). Although the system is rather teacher-oriented, in that its greatest merit lies in facilitating the creation, organization and assignment of materials and assessments, it also allows students to exercise their autonomy by making the best use of the available resources. Among other things, the system allows students to define their learning goals, communicate with the teacher and other learners, access (and edit) learning materials, take tests/quizzes, and monitor their progress.*

Keywords: learner autonomy, online technology, LMS, WebClass.

INTRODUCTION

Perhaps the principal reason why learner autonomy truly deserves the amount of attention being given to it in language learning research is the fact that "autonomy is a fundamental psychological need – an innate yearning that creates disequilibrium if unsatisfied" (May 2010: 100). An observation to a similar effect has been made by Little (2011), who points out that autonomy is essential for "an integrated sense of self" (p. 25). Generally speaking, to be an autonomous person is to "act freely, with a sense of volition and choice" (Deci, in Little 2011: 25).

Emphasis should be placed at the very outset on the interrelatedness of learner autonomy and teacher autonomy: "it is unreasonable to expect teachers to foster the growth of autonomy in their learners if they themselves do not know what it is to be an autonomous learner" (Little, in Lamb 2008: 278). It is also essential that teachers should be free to exercise their autonomy. In other words, learner autonomy can be promoted only by those teachers who know how to develop autonomously as professionals and are actually free to do so.

In distance (and blended) learning environments, teachers need to consider ways in which their students can learn autonomously using the widely available technologies

(Lamb 2008). This article focuses on one specific implementation of web-based technology and shows how using it can contribute to learner autonomy.

1. LEARNER AUTONOMY

Volition, motivation, and responsibility are among the defining attributes of learner autonomy, which is traditionally referred to as "the ability to take charge of one‟s own learning" (Holec 1981: 3). More specifically, being an autonomous learner involves being (wilfully) responsible for setting one‟s learning goals, for selecting the best methods of achieving them, and for evaluating one‟s success or failure. In Little‟s terms, autonomy is "a matter of the learner‟s psychological relation to the process and content of learning. We recognize it in a wide variety of behaviours as a capacity for detachment, critical reflection, decision-making and independent action" (Little 1994: 81).

For Reinders (2010), reflection and motivation, along with interaction, constitute the "the cognitive, affective and social backbone" (p. 50) of autonomous learning, which develops in the following stages (p. 46):

- identifying needs;

- setting goals;

- planning learning;

- selecting resources;

- selecting learning strategies;

- practice;

- monitoring progress;

- assessment and revision.

As noted by Reinders, none of the above stages is absent from teacher-directed environments, the difference being that autonomous learners are actively involved in every aspect of the learning process. Despite being remarkably learner-centred, learner autonomy as an approach to teaching does not mean letting the teacher sink into oblivion. On the contrary, autonomy is not tantamount to (total) independence: "It is sometimes thought that learner autonomy necessarily entails total independence – of the teacher, of other learners and of formally approved curricula. But this is not so: total independence is not autonomy but autism" (Little 1995: 178). Teachers still have important roles to play, "both as pedagogues and as discipline experts" (Little 2007: 20).

The sections below are devoted to using technology in blended learning environments with a view to facilitating the development of the above-mentioned stages of autonomous learning. The focus will be particularly on the following

aspects of learning: setting goals, selecting (and editing) resources, practising and revising, as well as assessment, including self-evaluation.

2. ONLINE TECHNOLOGY

Internet technologies are rapidly changing the way we learn. In comparison to traditional approaches, they offer more choice and flexibility: we can easily access an almost endless variety of resources, which we can study anywhere, at any time, at our own pace. The range of available technologies is constantly growing and they can be applied to virtually every area of second-language learning: grammar, vocabulary, reading, writing, pronunciation, listening, speaking, and culture (Levy 2009; Warschauer and Liaw 2011).

Rather than reviewing online applications and platforms currently available to learners and teachers (see, e.g., Elliott 2009), in the remainder of this article I describe one particular implementation of web-based technology as used with students of English philology at the John Paul II Catholic University of Lublin and the State School of Higher Professional Education in Zamość, Poland.

2.1 WebClass

WebClass (Malec 2012) is a homegrown learning management system (LMS)[1] with an architecture based on a MySQL database backend and server-side PHP scripts generating HTML code. The system implements such Web technologies as CSS, Javascript, Ajax, and Flash-based video and audio streaming. Among other things, WebClass can be used to manage learners, create and publish learning content, and administer assessments.

WebClass learners can perform a number of typical online activities, such as the following (all taken from Hockly and Clandfield 2010: 19): finding instructions for tasks, posting answers to tasks, reading feedback on individual and group work/assignments, discussing issues with learners and teacher, picking up messages from teacher, leaving messages for teacher or other learners, finding useful links, listening to audio and watching video, attending text chats with teacher and learners, doing quizzes and polls. In addition to these, they can define their own specific learning aims, edit assigned documents and share them with other learners, upload

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[1] While a „pure" LMS takes care of learner registration and keeps track of the courses completed by each student (William Horton, in Rosenberg 2006: 101), an LCMS (learning content management system) "includes tools for authoring, versioning, and archiving content, features that are less commonly found in a traditional LMS" (Gay *et al.* 2008: 184). A CMS (course management system), on the other hand, is basically a system for developing and delivering individual courses and academic programs. Over time, however, the distinction between these three systems has been blurred and they often share similar features. For example, the Blackboard system is referred to in the literature as an example of LMS, LCMS, or CMS. WebClass is an online platform which integrates selected elements of the systems mentioned above.

files and insert them into edited documents, and self-assess their attainment of each learning objective. They can also view the final results of teacher-administered assessments (with arithmetic and weighted means) and self-assessment, view the (current) final grade at any time throughout the course (monitor their progress) and view the number of unexcused absences. Some of these activities are discussed in greater detail below.

3. FOSTERING AUTONOMY ON WEBCLASS

3.1 Learning objectives

At the beginning of each course on WebClass the teacher defines the learning objectives, to which students can add their own specific learning aims, as shown in Figure 1 (for a Phonetics course):

I. Teacher-defined objectives:

1. Correctly stress multi-syllable words in English.
2. Shift the stress as a result of affixation, e.g. politics vs. political.
3. Alter the stress depending on the syntactic category of the word, e.g. transport (N) vs. transport (V).
4. Correctly stress compound nouns and compound adjectives.
5. Correctly pronounce longer compounds and phrases.
6. Distinguish between one-stress and two-stress phrasal verbs.
7. Read a passage with a regular rhythm.
8. Apply different intonation patterns to statements and questions.
9. Transcribe a passage using IPA symbols.

II. My own learning aims:

I wish to be able to... (one line – one objective)

Pronounce English vowels correctly.
Learn to pronounce the diphthong /eə/.
Improve my phonetic transcription.
Read transcribed texts fluently.

Save

Figure 1. Learning objectives on WebClass

Source: http://webclass.co/aims.php

At the end of the course (or of a shorter unit of instruction), the learners can be asked to self-evaluate their achievement of each objective. They do so on a predefined scale (by moving sliders, as illustrated in Figure 2). Self-assessment is an essential component of learner autonomy. It helps students determine where they stand in relation to the learning goals and reflect on their learning strategies (see, e.g., Gardner 2000). The results of student self-assessment also provide the instructor with useful feedback on the effectiveness of their teaching practices.
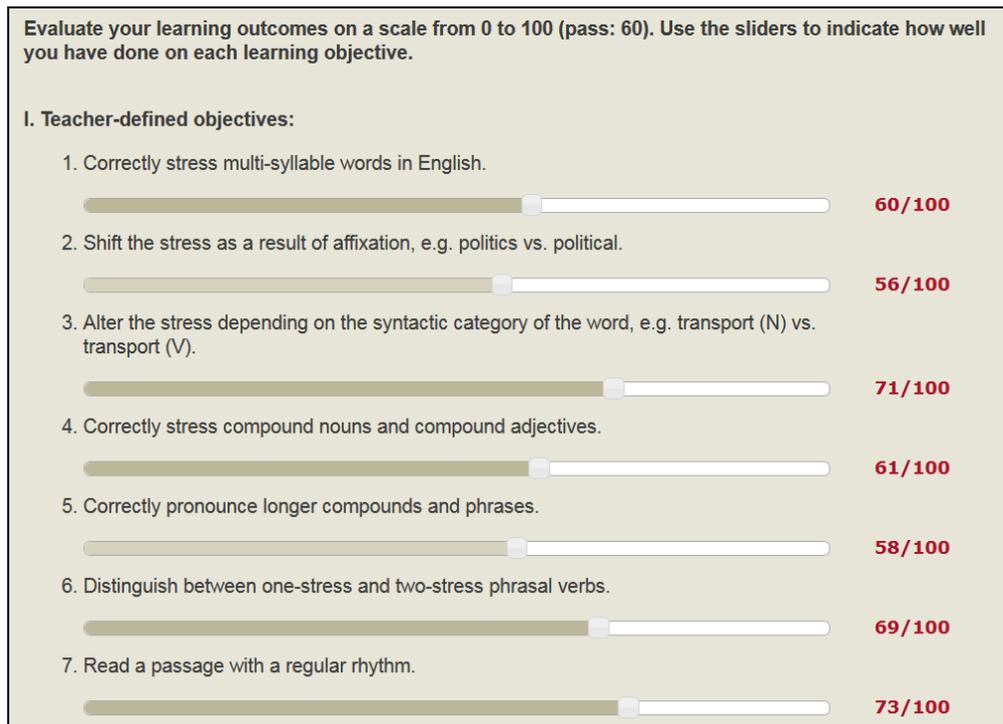
Evaluate your learning outcomes on a scale from 0 to 100 (pass: 60). Use the sliders to indicate how well you have done on each learning objective.

I. Teacher-defined objectives:

1. Correctly stress multi-syllable words in English.

    60/100

2. Shift the stress as a result of affixation, e.g. politics vs. political.

    56/100

3. Alter the stress depending on the syntactic category of the word, e.g. transport (N) vs. transport (V).

    71/100

4. Correctly stress compound nouns and compound adjectives.

    61/100

5. Correctly pronounce longer compounds and phrases.

    58/100

6. Distinguish between one-stress and two-stress phrasal verbs.

    69/100

7. Read a passage with a regular rhythm.

    73/100

Figure 2. Self-assessment on WebClass

Source: http://webclass.co/self-assess.php

3.2 Communication

One-way communication (from teacher to student) includes (automatic) email notifications of new assignments, and teacher feedback on student performance. However, it is rather two-way communication that is vital for autonomous learning (cf. Benson, in Nicolaides 2008: 144). This type of interaction is possible on WebClass thanks to a messaging system, which works in a way that resembles most email clients, with an inbox, outbox, and new message editor (Figure 3). Though not designed to work as a chat room, the system checks for new messages every 5 seconds, which allows for holding conversations in real time.

The functionality of the messaging system can be extended in various ways. For example, students can be asked to send written compositions to one another for peer correction and assessment. They can also create their own quizzes and send the questions to the teacher, who can quickly convert them to test items, using the text-to-items converter (e.g. Malec 2014).
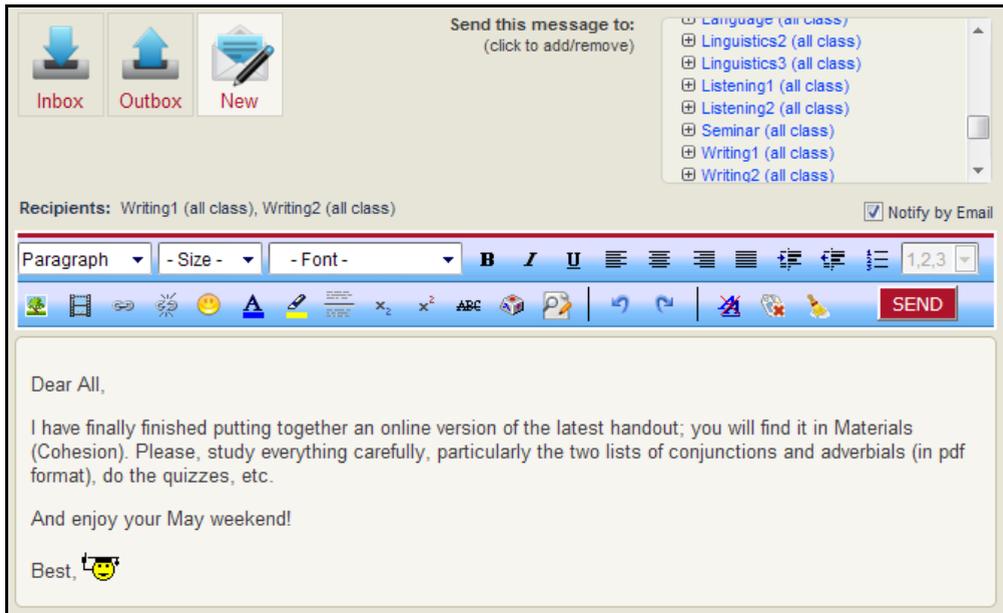
Figure 3. Message editor on WebClass

Source: http://webclass.co/messages/new.php

3.3 Materials

As noted by Reinders (2010), "the provision of a self-access centre or on-line self-access materials" is "[o]ften considered the most common way of implementing autonomy" (p. 44). This is because learners themselves decide which materials to study and how much time to devote to them (Reinders and Lewis 2008).

On WebClass, teachers can create and share materials, and then make them available to either all or selected students in a class. Materials are created using a Javascript HTML editor. Besides basic text formatting, the editor allows for the insertion of hyperlinks, images, sound files, and PDF documents. A video can be added either by pasting an embed code, e.g. from YouTube, or by uploading a Flash file and inserting it into the document. Since Flash files can also contain PowerPoint presentations, quizzes, crossword puzzles, and the like, the possibilities of enriching online documents with interactive elements are almost unlimited.

Figure 4. Part of an online document with learner notes and modifications (highlighting and a box containing an example, followed by a link to Wikipedia)

Source:
http://webclass.co/materials/handout.edited.php?handout_id=132

The same possibilities exist for learners, who can modify the documents available to them, for example by highlighting words and phrases, adding text and changing its size, adding links, etc. (see Figure 4).

Learners can also upload their own files (e.g. images) and insert then into the edited documents. In addition, such documents can be shared with other learners.

3.4 Practice and assessment

Simple quizzes created using standalone programs (such as the iSpring Quizmaker[2]) can be uploaded to the server (as .swf files) and easily included in a learning document (an example is given in Figure 5). Such quizzes are best suited to practising small portions of material covered in the lesson currently being studied. They can provide learners with immediate feedback, yet no results are saved for future access.

In addition to such quizzes, WebClass allows instructors to develop online tests whose results are stored in the database, available to be retrieved at any time following the test administration. Such tests can contain a number of different item formats, for example multiple choice, multiple correct, true/false, matching, cloze, multiple-choice cloze, gap-filling, transformations, error correction, short answer, extended production. Moreover, test takers can submit audio responses (to either written or audio prompts).

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[2] http://www.ispringsolutions.com/ispring-quizmaker

Figure 5. A quiz included in an Irish lesson (as a Flash object)

Source: http://webclass.co/materials/handout.php?handout_id=830

Depending on the options selected by the instructor, learners can receive (simple/automated and/or elaborated) feedback on their test performance (see Figure 6). The provision of regular constructive feedback on students" progress towards the learning objectives is one of the touchstones of assessment *for* learning (e.g. Cauley and McMillan 2010; see also Malec 2015). Just like the results of self-assessment, instructor feedback on test performance can give autonomous learners valuable information on the effectiveness of their learning methods.

Figure 6. Automated feedback on a phonetic transcription test

Source: http://webclass.co/tests/test.results.php?test_id=1318

At any time throughout the course, learners can view tabulated reports of results with the final semester grade calculated automatically on the basis of the arithmetic or weighted mean of all test scores, including (optionally) results obtained from self-assessment and teacher-marked assignments.

CONCLUSION

Modern technologies in general and the Internet in particular have an unlimited potential for expanding choice. Given that being an autonomous person is inextricably linked with a sense of choice, the role of Internet technology in fostering autonomy cannot be overestimated. However, apart from choice, autonomy also involves volition and freedom (cf. the quotation from Deci in the Introduction). Thus, to be an autonomous learner means to be willing and free to make decisions about one''s own learning. But this, in turn, is only possible when teachers are autonomous themselves, in the sense of being capable of, and free to, make decisions about their professional development. While it is learners who select from a range of resources, it is teachers who decide what the pool of resources actually contains. On WebClass, technology brings learner and teacher autonomy together: the teachers'' task is to provide stimulating materials and high-quality assessments, whereas the learners''task is to make the best possible use of them.

In summary, WebClass allows autonomous students to define their learning objectives, contact the teacher and other learners, study and modify the materials, upload their homework, as well as take tests/quizzes and view the marking and feedback. Learners can also self-assess their progress towards (or achievement of) the learning objectives on a predefined scale. Finally, they can privately access tabulated reports containing the results of assessments with the final semester grade.

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