Considering the Use of Hot Potatoes in Reading Comprehension, Autonomy in TEFL, and Learning Styles

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Abstract
This article describes the possibility of using the authoring tool called “Hot Potatoes” as a valuable resource in the design of customized exercises and didactic units for reading comprehension courses. In so doing, the authors will also consider the construct of autonomy in the Teaching English as a Foreign Language (TEFL). Specifically, the authors will refer to learner autonomy as a desirable characteristic in students in the formative process of developing their reading skills. In addition, teacher autonomy, a frequently forgotten facet of autonomy, will be discussed. Learning styles and their connection with reading comprehension will also be considered. Finally, the authors will describe some generalities about the teaching of reading, the basic features of “Hot Potatoes,” and some practical ideas about how to use this software in reading comprehension courses.

Key words: learner autonomy, teacher autonomy, Hot Potatoes, authoring tools, reading comprehension, learning styles, materials development

Resumen
El presente artículo describe la posibilidad de usar la herramienta de autor denominada “Hot Potatoes” como un recurso valioso en el diseño de ejercicios y unidades didácticas para propósitos específicos en cursos de comprensión de lectura. Al hacer esto, los autores considerarán el constructo de la autonomía en la enseñanza del inglés como lengua extranjera (TEFL, por sus siglas en inglés). Específicamente, los autores se referirán a la autonomía del estudiante como una característica deseable en el proceso formativo del desarrollo de las destrezas de lectura. Adicionalmente,
One of the main premises of this article emerges from the challenges that teaching reading comprehension in English (or in any other language) poses to language teachers. Among these challenges, the authors consider that getting students to read, finding appropriate reading materials, making these reading materials appealing to students, and helping students realize how they learn are of paramount importance. Reading comprehension requires concentration also, and many times students react negatively when their teacher tells them that they are going to do a reading activity.

To face these challenges, combining traditional approaches to teaching reading comprehension with technological tools may be a very pragmatic decision to make in this sense. Indeed, incorporating technology in reading courses can constitute a suitable way to motivate students to read and foster their autonomy as well as empowering language teachers to produce their own customized didactic materials. In this regard, authoring tools stand out among the different technological resources available for these purposes.

Authoring tools are programs that allow users to create interactive materials that can be uploaded to web pages and used in computer labs. These activities can also be used offline if shared with the students beforehand using flash drives. In connection with this, the authoring tool called “Hot Potatoes” is, in the authors’ opinion, a valuable teaching resource because of its user friendly capabilities, didactic possibilities, and compatibility with various operating systems such as Windows (for which there is a specific installer) and Mac and Linux by downloading Java Hot Potatoes and running it on Java Virtual Machine. Linux users may also consider running Hot Potatoes on a Windows emulator such as WINE (Half-Baked Software Inc., 2013). Hence, this article will discuss how Hot Potatoes can be incorporated in reading courses to promote autonomy in the Teaching of English as a Foreign Language (TEFL) and address students’ learning styles.
Autonomy in English Language Teaching

With the advent of newer technologies and technological devices, autonomy in English Language Teaching (ELT) has gained prominence over the years (Schmenk, 2005). In addition, autonomy has become a recurrent term in emerging educational and language teaching approaches (Zoghi & Dehgham, 2012). Nonetheless, the notion of autonomy should be considered cautiously because one could end up having inaccurate interpretations of it. One of these interpretations is a one-size-fits-all approach to it fostered by globalization, in which language teachers might be tempted to think that there is a standard set of skills, attitudes, and strategies that most students should possess (Schmenk, 2005).

Autonomy could also be misconstrued as anarchy in education since students may be expected to decide on their own learning without any kind of teacher guidance, thereby undermining teachers as facilitators (Zoghi & Dehgham, 2012). The word “autonomy” has also been used to refer to “learner autonomy,” in which students are expected to assume responsibility for their own learning; still, teachers should be autonomous as well (Shen, 2011). Autonomy in TEFL is a very broad concept that pertains not only to students but also to teachers if better English language learning is to be promoted. As put by Thanasoulas (2000), “autonomy is a process, not a product. One does not become autonomous; one only works towards autonomy.” This means that true efforts are needed if true autonomy is to be achieved by both learners and teachers. Consequently, learner and teacher autonomy will be both dealt with in turn.

Learner autonomy

According to Zoghi and Dehgham (2012), “learners should be both independent and dependent when exercising their autonomy” (p. 23). From this idea, it is possible to conclude that a fair balance of student autonomy from and dependence on the teacher would ideally guide learners towards self-discovery and meaningful learning in language courses. When fostering learner autonomy in language courses, teachers should bear in mind that students may come from very different backgrounds. Thus, the teaching/learning process should be negotiated to help learners achieve the most learning gains in accordance with their individual potential and capabilities (Schmenk, 2005).

For learners to attain true autonomy, teachers should provide them with scaffolding so that little by little they are better equipped to succeed academically and excel in life; the philosophy behind learner autonomy deals with moving from a transmissive to a dialogic paradigm in education (Zoghi & Dehgham, 2012). Both students and teachers share responsibilities for the development of successful educational processes, yet teachers should always play a leading role in these processes. In this sense, Reeve, Jang, Carell, Jeon, and Barch (2004) found a correlation between autonomy supportive behaviors used by teachers and greater student engagement (p.165). It is even possible to say that students
will be autonomous to the extent their autonomy is stimulated by their teachers. In addition, Jones (2001) used the term “teacher-directedness” to refer to this; students will be autonomous if they have a pro-autonomy teacher.

**Teacher autonomy**

As mentioned previously, autonomy is a general construct that does not merely refer to “learner autonomy.” Cárdenas (2006) defined an autonomous teacher as “a person with capacity for self-directed teacher-learning or for professional development” (p.189). This means that an autonomous teacher always seeks professional growth and makes sure to learn more to improve his or her professional practice, yet this is not always the case. As put by Shen (2011), “teacher autonomy has been seriously neglected” (p. 27). Many times teachers have to face administrative constraints, or they get used to teaching in exactly the same way. Nevertheless, the fact that now different learner-centered approaches have emerged does not mean that teachers’ responsibilities have disappeared. Promoting learner autonomy should not be understood as the disappearance of teachers’ leadership in teaching/learning processes (Thanasoulas, 2000); the role of the teacher has been refocused. Teacher autonomy is about teachers’ making informed decisions to improve their professional practice and foster student learning (Shen, 2011).

A very important facet of teacher autonomy is that of materials development. As stated by Richards (2006), “[e]ffective instructional materials in language teaching are shaped by consideration of a number of factors, including teacher, learner, and contextual variables” (p. 1). Teacher autonomy in this regard implies being aware of one’s own teaching style, students’ learning styles, teaching contexts as well as the syllabus one is working with to develop materials that cater for students’ needs and that are consistent with a teacher’s teaching style. In the teaching of reading comprehension in English, adopting and even adapting existing materials may not meet the criteria mentioned above. Following this line of thought, Richards (2002) also said that teachers should play an active role in materials and curriculum development. Considering this, it can be argued that it is fundamental for teachers to empower themselves in any of their teaching situations to address their students’ needs by designing suitable materials for them.

**Learning Styles**

Nowadays, students’ personal differences and their potential effects on the learning process and the final outcomes of it have become one of the most widely discussed topics in foreign language teaching. Some individual variables, such as personality, metacognitive skills, and vocational interests could explain students’ varied performances and attitudes towards the subject matter. No two
learners may be considered as having the same way of learning and sensing the world. There are different ways to classify students according to their learning styles as synthesized by Sadeghi (2012):

Cognitive learning styles include: Field-independent vs. Field-dependent; Analytic vs. Global; and Reflective vs. Impulsive. Sensory learning styles may be divided into two other sub-categories: a) perceptual learning styles: Auditory learner, Visual learner, Tactile learner, Kinesthetic learner, and Haptic learner; b) Environmental learning styles: Physical vs. Sociological learner. Personality learning styles comprise: Extroversion vs. Introversion; Sensing vs. Perception; Thinking vs. Feeling; Judging vs. Perceiving; Ambiguity-tolerant vs. Ambiguity-intolerant; and Left-brained vs. Right-brained learners. (p. 117)

These learning styles can be defined as the different methods students use for sensing, analyzing, perceiving, and understanding information and knowledge. These styles are not exclusive; they are part of a continuum, and they interrelate to one another. Such studies as that of Solvie and Kloek (2007) have demonstrated a relationship between learning styles and the presentation and understanding of content, and in this sense, technological tools could be beneficial because they could be a means for the students to become aware of their preferred learning style and address it more efficiently while doing a reading activity.

Technology aligned with learning styles can engage students and support their learning, especially when students are able to work outside the language classroom with learning objects designed with authoring tools. One goal of using technology to support the teaching/learning process is to seek ways of reaching students’ learning styles to help them connect with the content as they explore theory and practical application of reading (or, in general, language learning) strategies and activities. In this sense, Martín (2004) contended that when students work with materials designed with authoring tools, they not only are expected to work automatically but also reflexively. Thus, if students are provided with appropriate teacher guidance aided by technology, they can discover their preferred learning style, be more autonomous, and moderate their learning.

With the teacher’s support, students may even identify other learning styles they may have and expand their learning style repertoire (Martín, 2004), which in turn will lead to more learning gains. This could be done by explaining to the students that they should analyze how they learn, how they think, and in general how they address a problem to find a solution for it. Teachers should help students read (and learn) more metacognitively since they are indeed more experienced language learners. Erben, Ban, and Castañeda (2009) explained this in the following way: “The metacognition of the [English language learner] is controlled by the surrogate who has the ability to perform and complete the task strategically” (p. 52). A word of caution is needed here, however: Teachers should not impose their preferred learning styles. They should design activities that address different learning styles.
Teaching Reading Comprehension in English: A Challenge

Reading in English or in any other language is a necessary life skill, yet one of the greatest challenges of teaching reading comprehension is motivating students to read. As considered by Harmer (2001), “[r]eading is not a passive skill” (p. 70). However, when it comes to giving reading activities to students in the class, many times it is possible to see that students get bored or tired of reading because the material is not interesting for them, consists of long passages, or takes such a long time to be read that students start feeling drowsy. Indeed, there are many other reasons why students do not have a successful reading process. Nuttall (2000, p. 35) listed the following:

- Negative expectations
- Unsuitable tasks
- The wrong procedures
- Expecting them to run before they can walk
- The wrong texts

In addition, among the principles for teaching reading delineated by Harmer (2001), engaging students to read is crucial. Nonetheless, even when the reading material is interesting for the students and the teacher plans different activities to study this material, students eventually get tired of working with the traditional paper-based approach, a situation which constitutes a great challenge for language teachers. Even so, this does not mean that language teachers are expected to devise teaching strategies from scratch or feel discouraged about their current teaching techniques. Indeed, using traditional approaches to teaching reading comprehension aided by technology can be of great help to face the aforementioned challenge.

Teaching reading using technology: Considerations of digital vs. printed texts

Reading digital as opposed to printed text offers readers very practical options. Reading material printed on paper may be rather static even though it can be conceded that there will always be interactions between a reader and a text, be it printed or digital. Nonetheless, a digital text can provide readers with many more interaction options than a printed text. In this sense, Schcolnik and Kol (2006) referred to such options as changing font size and color, highlighting text, annotating, hyperlinking, searching for words in the text, using online dictionaries, and having a text be read aloud by a text-to-speech program. As a result, these additional capabilities can make texts more reader friendly and appealing to students, and they might potentially assist the students in their reading comprehension.

On the other hand, there are students who prefer to read printed materials for various reasons: They may be tactile learners who like to feel the paper in
their hands, they may like highlighting the text using different colors, or they may like writing marginal notes as they read. These students’ preferences can also be taken into account in the design of digital reading activities. The text to be read can be made available for students in a conventional file format such as PDF that they can print.

In this regard, even if the students are reading the printed version of a text to do a reading activity on the computer, this will not affect their performance in it. Indeed, this may resemble real life situations; university students, for example, are often required to do bibliographic research and write reports, so even if they read printed materials, they will need to type their reports on the computer. At present, technology certainly plays a role in most reading comprehension processes.

In connection with the use of educational technology to teach reading, Erben, Ban, and Castañeda (2009) argued that

the more a teacher employs instructional technology in the classroom, the less teacher-centered and the more student-centered a classroom will become. Technology-enhanced classrooms have been found to promote discovery learning, learner autonomy, and learner-centeredness. (p. 81)

Therefore, it is advisable for language teachers to be on the lookout for technological options (such as the one that will be dealt with below) to complement traditional approaches to teaching reading, foster students’ learning, and seek professional development and empowerment.

Using Hot Potatoes in reading courses

Different freeware and open source authoring tools are currently available online. Authoring tools can be defined as programs that allow users to create interactive teaching materials with different kinds of media using predetermined templates (Níkleva, & López, 2012). Among the currently existing authoring tools, “Hot Potatoes” stands out because of being highly user friendly, customizable, and compatible with various operating systems; it even comes with its own tutorials and sample exercises for users to start learning to develop activities with it. Hot Potatoes is made up of six different exercise creating tools which can be used to develop interactive activities (Half-Baked Software Inc., 2009). Each program will be briefly described below:

- **JQuiz**: This program creates multiple choice and short answer quizzes. It can also create multi-select items and hybrid questions, which combine the multiple choice and short answer capabilities.
- **JCloze**: This program is suitable for creating cloze and fill-in-the-blank exercises. The blanks generated by this program can also be substituted for a dropdown menu with all the options that students are expected to
enter, or users can insert a word bank to help students complete any
given activity.
• JCross: This program creates crossword puzzles that can be generated
by typing words and creating a crossword grid manually or automatica-
ly at the user’s convenience.
• JMix: This program creates exercises in which students are required to
unscramble a sentence by either clicking on or dragging and dropping
its words.
• JMatch: This program creates matching exercises. It has three formats,
standard, drag/drop, and flashcard. The first two formats are convenient
for individual work, and the last one for teacher-led activities.
• The Masher: This program creates units by combining different exercis-
es developed with some or all of the previously described programs. This
program also adds the necessary hyperlinks to connect all the activities,
and it also creates a unit menu on the first page of a unit. Then, a unit
created with The Masher can be converted to a zipped or SCORM pack-
age which can later be uploaded to web pages, Moodle-based platforms,
and wikis, sent via e-mail, or used and/or shared with the students us-
ing a memory stick.

Technical (and didactic) recommendations for using Hot Potatoes in reading courses

Various ways of working with materials created with Hot Potatoes can take
place in a language course according to the experience of the authors of this ar-
ticle. These ways of using Hot Potatoes will be described going from simple to
complex. At this point, it is important to point out that any activity developed
with Hot Potatoes is exported to HTML (web page) format, which means that
students could open Hot Potatoes activities on any computer as long as it has a
browser. This same characteristic makes it possible for activities to be done off-
line if shared previously with the students.

The simplest way of using Hot Potatoes in a language course is to work
with individual activities (e.g., a multiple choice quiz, a crossword puzzle, a
matching exercise, among others). A language teacher can create an individual
activity and take his or her students to a computer lab to do it. This activity
can be uploaded to a web site or e-mailed to students before class. If the connec-
tion to the Internet failed by any chance, the teacher could have a copy of the
activity on a memory stick and share the file with his or her students. If it were
impossible to have access to a computer lab but still possible to get access to one
computer and a video projector, the language teacher could project the activity
on the board, tell the students to get in groups, assign different numbers to the
students, tell them to make sure anyone in the group can answer the questions
or do the tasks found in the activity, and call the students’ numbers randomly so
that they can take turns going to the computer and doing the activity, thereby
fostering cooperation and students’ sense of achievement.
Another way of using Hot Potatoes is developing a didactic unit (i.e., a set of different activities interlinked together) for students to work on it in a computer lab or at home as homework or additional practice. This unit can be converted to a zipped package and uploaded to a web site. In fact, creating zipped packages is a capability included in Hot Potatoes (Half-Baked Software Inc., 2009), so a teacher only needs to make sure his or her students know which piece of software they need to use to unzip the unit and work on it. Moreover, a free option for a language teacher to have a personal web site to upload materials is Google Sites. This app does not require any kind of specialized training in web design, is very user friendly, and can be combined with other Google Apps (Farooqui, 2008). Again, if resources are limited and only one computer can be brought to the classroom, the procedure described in the previous paragraph could be considered as well.

A third way of working with Hot Potatoes could be taken into consideration if one’s educational institution has its own course support Moodle-based platform. If this resource is available, a language teacher could talk to the webmaster or technician of his or her workplace to see if the institution’s Moodle-based platform has the Hot Potatoes Quiz Builder capability enabled (Rice & Smith, 2010). Thus, a teacher could use this built-in capability to design interactive activities right on Moodle (Rice & Smith, 2010, p. 20). Another possible option is to design a SCORM package with The Masher and add it to Moodle as a resource (Half-Baked Software Inc, 2009, p. 5). Either way would create fully functional and accessible activities for the students.

**Hot Potatoes activities and their connection with learner autonomy**

Up to this point, the reader may be wondering how Hot Potatoes activities could be related to learner autonomy; the connection is simple. To explain this, it is relevant to make a comparison first. With traditional paper-based reading materials, students go over the text their were given, answer the questions (or any other activity) that the teacher assigned, and wait for the teacher to check the answers. This is generally the end of the activity if the students do not have any questions. On the other hand, when students do a Hot Potatoes activity, the program gives them immediate feedback in the form of a grade and marks which answers are incorrect.

The authors of this article have noticed that this challenges the students to read carefully and do the activity again and again until they get a grade that they are satisfied with. This is unlikely to happen with paper-based exercises because the main source of feedback is the teacher, and students find it inconvenient to delete what they wrote to give a different answer. It is even possible to argue that when you write something on a piece of paper, there is a sort of implicit idea that it should remain unchanged. Also, many times there are students who are unsure about an answer they wrote, and they will not dare to ask the teacher a question because they want to save safe; they do not want their
classmates to know they have trouble doing the activity. With Hot Potatoes, this is not the case. If students are working individually, they can correct themselves and learn from their mistakes without being ashamed, and they can do the activities at their own pace. Hot Potatoes allows students to solve problems on their own. Here it is important to remember that practice makes perfect, and that is exactly what Hot Potatoes does for the students. This program makes them practice autonomously.

Conclusion

It can be conceded that teaching reading comprehension will always be a demanding task for language teachers. Nonetheless, the use of free authoring tools such as Hot Potatoes opens new doors to teachers as they empower themselves to create and design materials suited to their students’ needs, thereby promoting learner and teacher autonomy. As stated before, this is not about creating completely new techniques for teaching reading to students; traditional reading comprehension exercises can be adapted to the formats that Hot Potatoes offers and be more appealing to and useful for students. Furthermore, using Hot Potatoes in language courses has many advantages, among which the authors would like to highlight the following:

• The use of technology increases students’ motivation because different learning styles can be stimulated by it.
• Given that activities designed with Hot Potatoes are exported to HTML format, it is possible to edit their source files to make the activities more customized. Indeed, there are tutorials to do this on the Hot Potatoes web site (Half-Baked Software Inc., 2009).
• In connection with the previous idea, with some basic HTML programming skills, Hot Potatoes allows the use of video and audio files, so it could also be used to train students’ listening comprehension skills in oral courses.
• Reading courses can become more attractive due to the non-traditional approach given to the course by the teachers.
• Learners’ autonomy is reinforced by creating in students a sense of challenge and self-recognition of their own achievement level as Hot Potatoes gives immediate feedback on the answers given.
• Teachers’ autonomy is welcome and empowered by the use of an innovative teaching tool because Hot Potatoes lets teachers be creative and design interactive customized materials for the students.
• Through the use of this tool, teachers can motivate reading course students by giving them varied exercises that require different levels of understanding of a written text in order to complete them.
• The use of this free authoring tool does not imply any out-of-budget expense. It is easy to install and does not require users to conform to a
specific operating system since it could be used with Windows, Mac, and Linux (Half-Baked Software Inc., 2013).

- There are different communities and teachers on the Internet that offer tutorials, innovative ideas, technical support to work with Hot Potatoes, and sample materials that teachers can use as examples to design their own activities.
- The text of the buttons and text boxes in any Hot Potatoes activity can be edited freely, which means that users can design activities in different languages. Hot Potatoes also support Unicode data (Half-Baked Software Inc., 2009). This means that exercises in Asian languages could also be created because Hot Potatoes allows the use characters from these languages.
- It is possible to insert an “onscreen keyboard” in JQuiz and JCloze for students to write non-Roman characters (Half-Baked Software Inc., 2009) in case students are working with a computer with a different keyboard language configuration.
- Hot Potatoes has an export-for-printing capability which allows users to easily convert their digital activities into printed handouts in case technology should fail or a more traditional class format is sought.

In order to give a fair review about Hot Potatoes, the authors would also like to refer to some drawbacks about using it:

- Hot Potatoes gives immediate feedback to the students based on the possible answers predetermined by the designer of an activity, and students sometimes complain that an answer which they know is correct was considered wrong by the program. In this regard, it is important to remember that Hot Potatoes can only do what it is programmed to do; it cannot think by itself. Therefore, it will never substitute the critical mind of a teacher.
- Hot Potatoes still needs some debugging. Sometimes after exporting an activity to HTML format, portions of text are duplicated, especially when using Jcloze, so the activity has to be exported to HTML again.
- When designing gap-fill activities in which the students have to write apostrophes, these typographical signs may not recognized by the program. This can also be due to the fact that students are using single quotation marks instead of apostrophes, which Hot Potatoes will interpret as different symbols and consider an answer containing them wrong.
- If a zipped package with a Hot Potatoes unit is uploaded to a wiki or a similar web site, sometimes students forget that they need a packer program to unzip the unit, and they tell the teacher that he or she uploaded a corrupted file.
- It is not advisable to open Hot Potatoes activities with Internet Explorer since it blocks the content of the activities as a security measure, and the students have to allow the blocked content every time they open a
new activity, which is annoying and frustrating if they do not know how
to do it. However, most other browsers (if not all) will not cause this
inconvenience.
• If you embed videos in Hot Potatoes activities, the videos might not play
on some computers because a certain plug-in is missing, and if the stu-
dents do not know how to install it or do not have the user rights to do
it, the activity will inevitably be useless.
• Unscrambling exercises designed with JMix can only include one sen-
tence, which makes this program the least useful of the Hot Potatoes
suite.
• Hot Potatoes is freeware, not open source software, and as such, its
source code is not accessible to the general public, which might hinder
its faster improvement and debugging.

Note
1. This article is a revised version of a paper presented at “III Congreso Internacional de
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Bibliography


