

# **GENERATION Y, LEARNER AUTONOMY AND THE POTENTIAL OF WEB 2.0 TOOLS FOR LANGUAGE LEARNING AND TEACHING**

Liam Morgan  
University of Technology  
Australia

## **Abstract**

This paper critically examines the concept of learner autonomy in the context of a model of language teaching and learning that seeks to exploit the potential of Web 2.0 tools. The development of Web 2.0 tools in language teaching and learning has the potential to greatly enhance the opportunities available for students to make meaningful use of their target language in real time contexts and increasingly, students are turning to the web for their own, independent, language learning. The paper draws on survey and interview data from a group of Australian undergraduate students to establish their needs in terms of developing autonomous learning skills and dispositions.

## **Introduction**

This paper critically examines the concept of learner autonomy in the context of a model of language teaching and learning that seeks to exploit the potential of Web 2.0 tools. Increasingly, students are turning to the web for their own, independent, language learning and the amount of material available to them has increased exponentially over the past decade. The pedagogical developments leading from of the Common European Framework for Languages have placed a much greater emphasis on self-assessment and self direction (Little, 2005). Alongside this, the development of Web 2.0 tools has the potential to greatly enhance the opportunities available for language students to make meaningful use of their target language in real time contexts and to publish their own work online.

## **Background**

The impetus for this paper comes from close observation of undergraduate students over the course of four semesters. These students were engaged in the study of German and the majority of them undertook study in Germany in their fifth semester as part of a dual degree that included international studies. They were highly motivated and from day one they were, as a group, somewhat

concerned about developing the required language skills prior to their in-country stay.

It is striking that the beyond the classroom experiences of these language learners is vastly different from those of students learning a German as a foreign language even twenty years ago. The most important difference lies in the free access that current students have to authentic German. Less than a generation ago, learners such as these would have relied on intermittent short-wave access, some TV language learning programs and the occasional old newspaper for their out-of-classroom access to authentic German. For current students, at the end of the first decade of the third millennium, there exists a plethora of opportunities to see, hear and read German that is authentic and accessible to them. Internet radio, newspapers, news bulletins spoken slowly for learners, German lessons on YouTube, TV, movies and local German radio gave them the opportunity to be fully immersed in the language beyond the classroom. Increasingly, students are turning to the web for their own, independent, language learning.

In addition to these offerings, the development of Web 2.0 tools in language teaching and learning has clearly demonstrated the potential to greatly enhance the opportunities available for students to actively develop listening, speaking, reading and writing skills in their target language. These possibilities fit in very well with the aims of communicative language teaching and the emphasis this method places on output and the meaningful use of meaning focused language. It is also very much congruent with the development of higher order thinking skills such as analysing, evaluating and creating (Churches. 2010).

Web 2.0 tools give power to the user. This means that students have control over the content and over the choices that they make in relation to what is preserved and what is discarded. Students can upload videos in the target language or make blog posts in the target language and the end product is very much theirs. Rather than just passively using the web to source information, Web 2.0 users are able to run rich Internet applications in their browsers. These applications, such as blogs, wikis and aggregators, have a participative element, which encourage users to add, edit or simply rehash content (mashups) (Newstead, 2007).

Web 2.0 tools are also very much about harnessing collective intelligence (O'Reilly, 2005). The interactivity and space they provide for users' comments is a very important link to the development of pragmatic knowledge in another language and feedback plays a big role in this. For language teaching and learning, this means that Web 2.0 not only provides for meaningful input but also for student output and interaction with more competent speakers of the language. This opportunity to make meaningful use of the language is critical to the development of language. As Swain (2000) has observed, output requires deeper language processing and greater mental effort than input: "Output may stimulate learners to move from the semantic, open-ended, strategic processing prevalent in comprehension to the complete grammatical processing needed for accurate

production.” Effective language teaching now means making effective use of these tools and empowering students to use them beyond the classroom. This empowerment is as much about language learning strategies as it is about procedural ICT knowledge (Chappelle, 1998).

## Questions

The important questions to ask then are: what kinds of skills do students need to cope with the kind of linguistic smorgasbord that would have been unimaginable 20 years ago? What kinds of knowledge, skills and dispositions enable students to maximise the advantage of material available beyond the classroom? How can the teacher assist them to focus on what they know, and not be intimidated by what they do not? How can they be empowered to use Web 2.0 tools in creative and spontaneous ways?

It is important to approach the challenge of answering question such as these from the perspective of the learner and in doing so it is useful to consider whether there is a disjuncture between students in class experiences and their learning beyond the classroom. Bereiter's (2002) assessment of current classroom practices is still salient: “The knowledge age has not yet come to the schoolhouse.” It is a judgment that is echoed in the stark assessment offered by the *Horizon Report* (2009):

*Students are different, but a lot of educational material is not. Schools are still using materials developed decades ago, but today's students come to school with very different experiences than those of 20 or 30 years ago, and think and work very differently as well. Institutions need to adapt to current student needs and identify new learning models that are engaging to younger generations.*

## Elements of a Theoretical Framework

In this section of the paper I will outline three aspects of the theoretical framework that guided this research and the analysis of the data. Three concepts form the foundation of this framework: the mathetic; learner autonomy; self-efficacy. These concepts were employed in the research design and in the analysis of data.

### The Mathetic

Benson's (2007) review of trends in the literature on learner autonomy underscores the concept that autonomy is an attribute of the learner rather than of the learning situation. Having a framework that places the learner at the center of things is therefore an important part of discussions about autonomy and Web 2.0.

Seymour Papert's (1993) notion of "mathetic" provides such a framework. This term is all about the 'art of learning' but unlike didactics, it places the learner and his/her perspective at the centre of all considerations, rather than the teacher. According to Papert, the development of learning skills requires time, explicit talk and "cultivation." Time is needed, because heuristic learning, discovering connections and reflecting on them takes time. Talk is necessary as learners come together and discuss, often Socratically, the significance of what they have learned. This is related to the idea that our thinking skills originate in conversations where we learn to reason, to evaluate, to join in creative play and to provide relevant information (Wegerif, 2002). Cultivation is necessary as learners learn that learning is highly associative and that they require patience to watch learning reach a critical point from which progress is rapidly accelerated. All this takes place in an environment where the classroom is seen as just one other learning possibility among several.

The mathetic principle requires us to listen to the learner voices (Benson & Nunan, 2005) and to provide a space where learners can articulate their ideas about their learning beyond the classroom. To gain an understanding of the step-by-step process of the learners' mastery of content and mastery of the tools it is important to make the links between Web 2.0 and learning explicit and to devote time to "learning conversations."

### **Learner Autonomy**

Discussions of learner autonomy often begin with the definition of autonomous learners by Holec (1981) with its emphasis on participation, control and evaluation. According to this definition an autonomous learner holds responsibility for all the decisions concerning all aspects of the learning, i.e.:

- determining the objectives
- defining the contents and the progressions
- selecting methods and techniques to be used
- monitoring the procedure of acquisition properly speaking (rhythm, time, place, etc.)
- evaluating what has been acquired.

This definition may represent a goal towards which teachers and learners can work, but it provides very little help in relation to the kinds of processes that achieve these goals.

There is, as Little (2004) points out, an important distinction to be made between learner autonomy and self-directed instruction. Learner autonomy touches on notions of the self and the development of dispositions and as such cannot really be reduced to a catalogue of learnable skills. This is one reason why the assumption that the proliferation of technology will lead automatically to the development of autonomous learners is erroneous. The research that forms the basis of the UK *Impact Report* underscores this point. This report, while

acknowledging the autonomising effects of working independently with a computer, gives little or no credit to the classroom for these processes.

The clear message that emerges from several contemporary researchers emphasizes the importance of having autonomous teachers leading the learner-centred processes that develop autonomy in students. It is therefore much more useful to think not of autonomy per se, but rather the process of autonomisation and the role that technology can play in this. Benson (2007), Nunan (1997), and Reinders (2010) place emphasis on autonomy as a process and conceptualise a number of distinct phases that begin with awareness raising. For the current project, Winne and Hadwin's four phases (cited in Reinders, 2010) provide a good starting point for conceptualizing the development of learner autonomy in language classrooms. These phases include: 1.) defining tasks; 2.) setting goals and planning; 3.) enacting study tactics and strategies; and 4.) metacognitively adapting studying.

It is a model that recognises the fact that autonomy does not simply develop in isolation. It is complex mix of disposition, knowledge and skills and it requires guidance. As these authors point out, it is one of the great misconceptions of learner autonomy that it is about learning alone. In fact, as Benson (2001) makes clear, it is also about *interdependence* and building the skills of learners to reflect on their own learning.

### **Self-efficacy**

Learners often find it difficult and sometimes even frightening to be responsible for their own learning. How learners see themselves, their dispositions towards their work, form crucial elements in building an understanding the processes of autonomisation. Therefore, the final element of the conceptual framework is the idea of self-efficacy. Perceived self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives (Bandura 1997). Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective, and selection processes: building self-efficacy; modeling; mastery and persuasion.

When the link between autonomy and self-efficacy is made clear, it is easier to see the reason why many researchers in this area emphasise the importance of teacher autonomy as a co-requisite for learner autonomy. This can be seen as directly related to the role of effective modeling of those practices that are associated with the development of learner autonomy. Hui (2010) and Lamb (2008) both see a direct link between the development of autonomy in learners and the demonstration of it by teachers. This link in turn may also relate to the poor uptake of technology in schools and universities over the past five years (Morgan 2009) as well as the mismatch between student expectations and the reality of the classroom (JISC, 2008).

### **Information Literacy — ICT skills**

It is important that educators move beyond seeing ICT skills in terms of procedural knowledge. Autonomous learners need to be able to make judgments about the appropriateness of different technologies and link these to particular tasks relating to their language learning. Morgan (2009) discusses a taxonomy of technologies that can be applied to different areas of language learning:

- technologies that enhance practice in the language;
- technologies that enhance simulated meaningful use of the language;
- technologies that enhance real-life and/or real-time communication.

Developing the skills in learners to recognize these differences is an important part of raising their awareness of the kinds of thinking they need to do when planning their own learning. Biechle (2004) discusses what she terms *Medienkompetenz*, a useful term that takes into account a broader range of technologies and includes things such as multimedia CDs and DVDs. Biechle sees the concept of *Medienkompetenz* as having the following dimensions:

- cognitive skills,
- analytic and evaluative skills,
- reflective skills, and
- procedural skills.

In the learning environment of the second decade of the 21<sup>st</sup> century, it seems essential that development of truly autonomous learners requires attending to the development of a deeper understanding of the potential of a range of technologies that can be used for learning and maintaining a language. Applying Web 2.0 tools for the purposes of learning a language requires more than a catalogue of computer skills. It requires reflexive, analytic and metacognitive skills that need to be developed. The prevalent assumption that 20–30 year olds already possess these skills in abundance is erroneous.

### **Generation Y**

The students in this study are all at undergraduate level and all fall within the 21–25 year age range. They are members of the so-called generation Y and therefore supposed to be “digital natives” (Perensky 2001). The characteristics often attributed to them as a group include:

- optimism
- team orientation — can prefer peer input rather than academic staff
- poorly developed critical skills
- familiar with technology
- multitasking

- reliance on web for information
- lowest satisfaction of all generations with student experience.
- high expectations.

Needless to say, the real picture is somewhat more complicated. In one Australian study, Skene et al. (2007) undertook a survey of first-year students' experiences and expectations of the IT environment within their university as part of a broader pilot project to explore use of a range of web tools to promote engagement with a student cohort dominated by Gen Y-age students. This research revealed a cohort that was "literate but not necessarily employing ICTs as part of their learning" (p. 7).

Similar findings were reported by the second phase of the British *Great Expectations* Study (JISC, 2008). This project examined the views on ICT of 1,111 first-year students studying in higher education institutions. The results showed that over 80% of respondents "regularly" engaged in social networking, instant messaging and accessed university systems. A little over 50% engaged in using wikis/blogs/online networks. Only 32% "regularly" participated in online discussion groups or chat rooms. Morgan (2010) found that although students possessed the basic skills required, they were not applying these in a consistent manner to their learning beyond the classroom and this was linked to the lack of modeling of such practices in classroom time. The picture that emerges from such studies indicates that the potential of ICT for learning beyond the classroom is still not being realised.

## The Current Study

Within the theoretical framework explained above, the present study consisted of two sections. The first section consisted of a survey that sought to audit the existing Web 2.0 skills of a group of undergraduate students. This was done to establish the knowledge and skills that students had in relation to Web 2.0 applications. The second section of this study then focused on a two phase diary entry that first asked the same group of students to predict what strategies they would employ beyond the classroom to continue their learning of German. Seven weeks later, students were asked to reflect in writing on how successful these strategies had been. The students were given input sessions on aspects of learner autonomy which represented awareness raising. They were also given focus points that consisted of the four macro-skills: reading, speaking, listening, and writing.

### Method

**Subjects.** The students in this sample comprised a class in of third year undergraduate students who were undertaking studies in German for the first time: 36 students agreed to participate in the study, 92% of them being between 18 to 25 years of age.

**Instruments.** An initial survey instrument in the form of a questionnaire was developed in order to assess the ICT competencies of the students and the uses they were already making of Web 2.0 tools for their language learning. This questionnaire was composed of several sections. The first obtained some demographic information about the respondents relating to age and the amount of time spent in face-to-face lectures. The second examined their current ICT usage. The third section looked more closely at their ICT usage in the context of language learning.

The second data set was collected three weeks after the initial survey and was based on an analysis of the guided learning diaries of the same group of students.

**Procedure.** The students completed the questionnaire in class time and the diaries were collected and analysed in two stages, once in the third week of the semester and once after week 8. Students received a lecture on learner autonomy and various Web 2.0 applications, such as Voicethreads were modeled for them. In these diaries students described the learning strategies that they would apply to material they could access beyond the classroom. They were asked to list these strategies around the headings Listening, Speaking, Reading, and Writing. After seven weeks, they then had to reflect on how effective these strategies had been. The results were analysed using a combination of axial coding and thematic analysis (Corbin & Strauss, 2007) to ascertain if there were any changes in their uses of Web 2.0 technologies.

## Results

The survey results confirmed a number of basic assumptions about students and their use of ICT. The results also provided information relating to factors that need to be considered if Web 2.0 technologies are to be introduced successfully and fully integrated into language teaching and learning at university level.

Of the students surveyed, 100% own their own computer, 47% spend more than 2 hours online each day and 53% of students spent from 1–2 hours online each day. Students were demonstrating a mastery of Web 2.0 applications such as uploading video and publishing updates on Facebook. Most students reported spending time developing social networks through chat and tending Facebook or Myspace pages through the uploading of photos. While 95 % of students said they maintained a social network space — requiring skills such as editing, up-loading and downloading. About half accessed the Internet with their mobile phones on a regular basis compared with 24% of staff surveyed. In terms of applying these skills for educational purposes, it would appear that beyond Google, Wikipedia and the downloading of articles from the Internet, students in general did not, at the time the survey was taken, make use of Web 2.0 skills for the purposes of language learning. Only 10% of students maintain a blog that could be linked to academic work and only 56% reported using a blog or a wiki as part of their assignment work. Only 21% of students reported accessing sites in a language other than English. These findings are consistent with larger Australian studies by



Kennedy, Dalgarno et al. (2007) and Kennedy, Judd et al. (2008). That is that by and large, university students possess the skills and knowledge necessary to perform the tasks associated with Web 2.0. It is in the area of reflecting on the educational potential of these knowledge and skills that the students need development.

### **Thematic Analysis of Learning Diaries**

The main themes that emerged from the analysis of the learning diaries included:

- increased awareness of the potential of ICT and multimedia technologies
- increased metacognitive awareness
- developing strategies to deal with the unfamiliar words and structures
- development of evaluative skills in relation to web-based resources
- increased confidence (self-efficacy).

#### **Increased awareness of the potential of ICT and multimedia technologies.**

One of the most consistent themes to emerge from the diaries was the students heightened awareness of what was available in terms of ICT and multimedia and being able to make judgments about their effectiveness. The following excerpt is representative of the insights gained by the majority of students:

I have been listening to German Podcasts on the way to and from uni everyday. It has been very helpful as some are done by people who have learnt and, some by people who are German. They helped me in many areas including pronunciation and listening and where one of my most effective techniques. However, I did find that it was hard to find ones that followed our learning path.

**Increased metacognitive awareness.** Almost every diary indicated that students were engaged in planning their learning, organizing their resources and making decisions about the particular strategies that helped them most.

As I covered in the Learning Vocabulary section, associating colours with masculine, feminine and non-gendered words was effective in helping me memorise nouns. When it came to learning irregular grammatical constructions I felt it was best to memorise such structures by taking note of various sentences in diverse contexts.

**Increased confidence (self-efficacy).** Students' diaries provided a number of examples. The following excerpt exemplifies the growth in confidence on the part of the students taking part in this exercise. The confidence with which students were able to locate and make judgments about particular online resources grew over the seven weeks. The following student's comments provide a very good



what they do not? How can they be empowered to use Web 2.0 tools in creative and spontaneous ways?

The results highlight the importance of explicit teaching. The learner diaries raised the awareness of the students about their autonomisation as learners and set them on a path along which 'school knowledge becomes action knowledge' (Little, 2000, p. 22). The diaries provided a space for the students to reflect and articulate. The project also highlighted the importance of separating out the procedural skills and knowledge that are a big part of ICT use from the analytical, evaluative and reflective skills required for the development of learner autonomy. It also highlighted the importance of confidence — of being prepared to take risks and not being fazed when things don't go according to plan. The issue of lack of ICT skills did not arise in the results of this study — the ability to locate and evaluate resources that were linguistically appropriate did. The initial ICT skills audit showed that the majority of these students did possess the basic skills required to maximize the use of Web 2.0 for their language learning. What was missing for them was the modeling of the ways in which to do this and the self-confidence to take the risks associated with publishing online in a foreign language.

For the teacher, the best ways to develop these skills would seem to involve explicit talk and the encouragement of self-monitoring through exercises such as the learner diary or regular assignments that require students to set their own learning goals. As the results of this research showed, the very act of articulation is a highly effective tool to develop learner autonomy. Modeling of the use of ICT in the classroom is a vital ingredient in turning students attention to the realizing the potential of their existing ICT literacies. The results of this project also highlight the usefulness of seeing learner autonomy as a multi-dimensional; multi-phased process. The development of confidence and risk taking when dealing with unknown words, structures or situations form a very important part of this but they need time and reassurance to develop. Making the link between Web 2.0 literacy and autonomous learning was something that the students in this project had not been asked to consider before. The results indicate that students are capable of making this connection themselves, but require explicit teaching if this potential is to be realized to its fullest extent.

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