

Use of Social Software to Address Literacy and Identity Issues in Second Language Learning

Jill K. Hutchinson

Author

Jill Hutchinson completed her MEd at the University of Calgary with a specialization in Second Language Teaching. Correspondence regarding this article can be sent to: jkhutchi@ucalgary.ca

Abstract

The emerging trend of social software technology can address many different second language (L2) learner needs through authentic social interaction and a variety of scaffolding processes. Social software connects education with real-life learning and interests, and engages and motivates students. It can facilitate learning environments that are more learner-centred, informal and collaborative. Increasingly culturally and linguistically diverse classrooms and uneven access to technology are revealing educational inequalities for English Language Learners (ELLs) (Pruitt-Mentle, 2007). In a review of the literature, the author explores how social software tools, through the lens of socio-constructivist theory, can support literacy development and improve linguistic power relationships, building self-esteem and encouraging positive educational and identity experiences for L2 learners. Recommendations for future research on social software use focusing on issues of appropriateness and responsible use for L2 learners, acceptance of social tools and technology accessibility, are presented.

Résumé

La nouvelle tendance de la technologie des logiciels sociaux répond à plusieurs besoins différents d'apprenants de langue seconde (L2) grâce à une interaction sociale authentique et une variété de processus d'échafaudage. Les logiciels sociaux font le pont entre l'éducation et l'apprentissage et les intérêts dans la vie réelle; ils stimulent également l'engagement et la motivation des élèves en plus de fournir des environnements d'apprentissage qui sont davantage centrés sur l'apprenant, plus informels et plus collaboratifs. Les salles de classe de plus en plus culturellement et linguistiquement diversifiées ainsi qu'un accès disproportionné à la technologie révèlent des inégalités en matière d'éducation pour les apprenants de l'anglais (Pruitt-Mentle, 2007). Dans ce document, l'auteur explore, à travers le prisme de la théorie socio-constructiviste, comment les outils logiciels sociaux peuvent favoriser le développement de la littératie et améliorer les rapports de pouvoir linguistiques, contribuer à la construction d'une estime de soi positive et encourager les expériences éducatives et identitaires positives pour les apprenants de L2. L'article émet des recommandations pour la conduite de recherches futures sur l'utilisation des logiciels sociaux en se concentrant sur les questions de leur pertinence et de leur utilisation responsable par les apprenants de L2, de l'acceptation des outils sociaux et de l'accessibilité de la technologie.

Introduction

This review of the literature is a study of the role of social software in enhancing the development of literacy skills and positive identities in second language (L2) learning. The relationship between second language teaching and technology is examined, along with recent developments in how technology supports learning and which pave the way for changes in the education system to recognise the importance of a more learner-centred and collaborative approach. For the purposes of this paper, the term ‘second language learner’ refers to any students who are studying an additional language, including English language learners (ELLs). The context is K-12 education, but is not restricted to the classroom since there is increased recognition that learning can be both formal and informal.

In *Educational Technology: A Definition with Commentary* (2008) by Januszewski and Molenda, educational technology is defined by the Association for Educational Communications and Technology as “the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources” (AECT, 2008, p.1). For the purposes of this paper, the focus is on the chapters ‘Facilitating Learning’, ‘Improving Performance’ and ‘Values’ in Januszewski and Molenda’s (2008) book. The rationale behind this choice is to examine aspects of student learning and how social software, as an emerging trend, may be increasingly beneficial to second language learners; however, value considerations are a crucial part of determining the appropriateness and success of social software for this purpose.

Social software technology seems to play a positive role in improving linguistic power relationships and in developing interactive writing abilities. Social software can engage and motivate students, and forge a connection between education and real life as students use it in their social lives. Research has shown that social software tools provide a range of valuable learning experiences for students and address many different learner needs, particularly for language development. Given the broad area of the topic, and the emerging trend of social software, it is not possible to review all of the relevant literature in one paper. It is intended that this overview supports future research by establishing links between the themes explored and by making several recommendations.

Themes in the literature

The following themes in the literature will be explored:

- The relationship between second language learning and technology;
- Social changes and the changing role of technology in second language learning;
- Social software and second language learners.

The relationship between second language learning and technology

L2 learning environments need to resemble conditions of first language (L1) acquisition, although there is a difference between ‘acquisition’ and ‘learning’, where meaning has to be processed and negotiated via the communicative act (Krashen, 1981). For second language acquisition (SLA), activities should include large amounts of comprehensible input and motivate students to read extensively and practice their language skills (Pruitt-Mentle, 2007) and learning strategies in the second language (Lai & Kritsonis, 2006). Language anxiety

has a significant impact on L2 users' success and motivation. Students with lower levels of anxiety about L2 learning have stronger native language skills and greater L2 aptitude (Ganschow, Sparks & Javorsky, 1998). Understanding of other cultures requires frequent opportunities to interact meaningfully with native speakers, understanding of personal identity issues and transfer of knowledge between languages. There has been a shift in focus to recognise the L2 learner is also a L2 user, reflecting on their learning process, language use, and changing personal identity and this offers valuable insights into L2 acquisition (Dewaele, 2005). Today's globalized and multilingual environments mean that language users need to be supported in continued language development (Byrnes, 2006).

For Cummins (2000), technology plays a critical role in promoting academic language learning for diverse language learners and he highlights that educational goals need to consider how information technology (IT) will be used for social purposes. By extending access to people and information resources, IT provides multiple perspectives, practice of collaborative problem solving, and encourages reading and use of language for authentic purposes (Cummins). The computer is now an essential part of second language teaching, providing both independent and collaborative learning opportunities, through interdisciplinary and multicultural learning (Lai & Kritsonis, 2006). Individualized technology-learning environments offer more independence, motivation and more flexibility for learners to work at their own pace and to access information in different ways, which helps to reduce anxiety and build self-esteem (Lai & Kritsonis).

Social changes and the changing role of technology in second language learning

The role of technology in L2 learning started in the 1960s and 1970s with a behaviourist model for computer-assisted-instruction (CAI) with drill and practice exercises, which was shown to be not so effective for improving achievement for language learners (Lacina, 2004/05). In the 1980s and 1990s, cognitive approaches favoured students using language in meaningful ways to construct their own knowledge (for example, text-reconstruction software); in contrast, more recently, socio-cognitive approaches emphasize the social aspect of language acquisition, necessitating authentic social interaction and tasks, hence the support for use of the Internet in language classrooms (Warschauer & Meskill, 2000). The history of Computer-assisted Language Learning (CALL) reflects these stages and now social software is the emerging trend in CALL research and L2 instruction. The design of CALL takes into account SLA and learning theories, and CALL is seen as a tool to facilitate language learning, either interactive or individualized, and which can use or be independent of the Internet (Wikipedia, 2010).

Changing demographics and social and economic trends have led to increasingly culturally and linguistically diverse classrooms and uneven access across schools to technology, raising concerns about educational inequalities for ELLs (Pruitt-Mentle, 2007). Cummins (2000) points out that "language and literacy are implicated in relations of power" (p. 539) and sees the transformative power of IT in collaborative learning environments to promote social equality by increasing the critical literacy and language awareness skills of ELLs to help them achieve personal goals and effectively contribute to society. Technology can influence the acquisition of literacy and language in different mainstream subjects using constructivist approaches (Meskill and Hilliker, 2005).

Robinson, Molenda and Rezabek (2008) explain that "facilitating learning puts the emphasis on the learners and their interests and abilities (or disabilities)" (p. 17), with learners defining their learning problem and controlling their internal mental processes, and teachers supporting this process. This is a constructivist view and shows teachers and learners as collaborators in the learning process and implies the need for student

motivation (Robinson et al.). Consequently, constructivist theory can act as a lens by offering new insights into effective language learning approaches.

Constructivism values social interaction in the learning process, promoted by Vygotsky, with the assumption “that knowledge is constructed by learners as they attempt to make sense of their experiences” (Driscoll, as cited in Robinson et al., 2008, p.33). Constructivism differs from cognitivism essentially in the subjective nature of this knowledge (von Glaserfeld, as cited in Robinson et al.). Driscoll highlighted these essential constructivist elements: learning in relevant environments, social negotiation opportunities (collaboration), the need for multiple perspectives/representations, encouragement of ownership of learning and self-awareness (reflection). Practices include scaffolding, modelling and mentoring (Dennen, as cited in Robinson et al.). The relevance of cognitivism is that it highlights message design issues such as structuring knowledge and emphasising key points with advanced organisers, chunking, and helpful visuals (Silber & Foshay, as cited in Robinson et al.). Also, linking new knowledge to prior knowledge and assimilating and strengthening retention and transfer of this new knowledge are recommended by Foshay, Silber and Stelnecki (as cited in Robinson et al.). An eclectic approach which focuses on learner-centred education is favoured for facilitating learning; APA’s principles have recently been influential and are significant for this paper, particularly the construction of knowledge, the context of learning, effects of motivation on effort, social influences on learning and learning and diversity (as cited in Robinson et al.).

Molenda and Robinson (2008) explain “educational technology’s distinctive ethical concerns focus on the processes of creating instructional materials and learning environments and on relations with learners during the use of those materials and environments” (p.245). They continue that critical theory highlights the need for sensitivity to power relationships in learning environments and that learners need to share this power; behaviourist learning theory shifted the focus from the group to the individual and cognitive and constructivist approaches also emphasise that the learner is unique. Facilitating learning is about the intended audience: students are the “the core of our activities as educational technologists” and to truly facilitate learning Robinson et al. (2008) emphasise that “we must acknowledge the diversity of the individual” (p.42).

Ubiquitous computing and social software offer new learning opportunities and are driving changes in the organization of the education system (Attwell, 2007), which are not only technological, but also social, with the learner at the centre (Ebner, Holzinger & Maurer, 2007). For schools to be learning communities they need to support the goal of facilitating learning and by using a systems theory approach educational technology helps organisations improve performance by recognising and treating key factors (Molenda & Pershing, 2008).

Educational technology empowers learners, and teachers, through user-centred design (Molenda & Robinson, 2008). The significance of social software is that it adapts to its environment and facilitates the trend of ‘open content’, in which learners become the producers of their own learning materials (Attwell, 2007). This shift in the learning production process can be with or without the collaboration of the instructor (Molenda & Pershing, 2008) and the Horizon Report (Johnson, Levine, Smith & Stone, 2010) explains that collaborative technologies reflect current trends for collaborative student work and challenge our roles as educators. Collaborative learning can be computer mediated or computer supported (CSCL), the latter being the most favoured (Robinson et al., 2008) with wireless handheld devices enabling this method to evolve in different ways (Roschelle & Pea, as cited in Robinson et al.).

The fusion of formal and informal environments also enhances learner decision making (Hall, 2009). Educational technology has not paid much attention to informal learning, but with learning occurring in a

variety of situations, informal learning is emphasised (Attwell, 2007). Consequently, the danger that young people may see school as “irrelevant to their identities” (Attwell, p. 4) might be reduced with meaningful and relevant informal learning such as searching, on-line groups, email and bulletin boards. The significance is that through controlling the range of tools used, users can develop their own identities (Hall): it is the “ability to create, to share ideas, to join groups, to publish – to create their own identities which constitute the power and the attraction of the internet for young people” (Attwell, p. 4). Informal learning is covered in the definition and is recognised as an important area for educational technologists with technologies and media extending learning opportunities; since the Web motivates individuals and enables them to meet “‘experts’ in the community” educational technologists need to build awareness of the educational potential of such resources (Robinson et al., 2008, p. 40).

Social software and second language learners

Ethics demands that educational technologists are aware of up-to-date and best practices in their field (Molenda & Robinson, 2008) and this would imply emerging trends such as the use of social software. “Through technologies that provide access to more people and that promote learning more effectively” educational technology provides better facilitation of learning (p. 247); it also has a “commitment to make judgements of appropriateness of technologies on the basis of the needs of specific learners in specific circumstances” (p. 253). Humane instruction is relevant, respectful of human values and it includes more appealing materials and opportunities for student reflection; combined with reducing learning time, and increasing learning effectiveness, these are ways in which educational technology can improve the performance of teachers and designers (Molenda & Pershing, 2008).

For all learners, we have seen how technology supports, motivates, and improves performance, creating more humane instruction. However, using social software tools from a socio-cultural perspective has unique attributes that are especially important for facilitating learning and improving performance for second language learners by addressing literacy and identity issues in language learning. Examples of Web 2.0 social software tools are: web logs (blogs), wikis, multimedia tools, sharing applications for bookmarking (Delicious), surveys, or photos (Flicker®), instant messaging (skype™) and collaborative graphic organizers (Kidspiration®).

Facilitation of learning suggests that learning environments need to consider the context, cultural and societal aspects of the setting (Robinson et al., 2008). Appropriateness of resources can cover issues such as developmental levels of learners and objectives, but also sensitivity to learners’ interests, cultural backgrounds and experiences and also equality of power, authority and access “and equalization of opportunity for disadvantaged learners” (Molenda & Robinson, 2008, p. 254).

Collaborative power relations address social and identity issues inherent in language and literacy acquisition. Black (2005) studied interactions regarding fanfiction writing and peer reviews in a fanfiction community. Her results show that digital communications promote affiliation with written interactions in English by providing a safe environment for ELLs to participate meaningfully, by offering multiple ways for ELLs to establish their legitimacy as fans, by enabling them to act as cultural experts and to construct identities as successful and valued writers and readers in that community, which may be different to their identity in their classroom (Black). In web-based gaming environments, students can assume an online identity and interact in the other language (Stevenson & Liu, 2010). Blogs enhance L2 writing skills through meaningful tasks and extended readership, encouraging “individual (and less frequently, group) authorship that is relevant to a larger, interactive community” (Sykes, Oskoz, & Thorne, 2008, p. 532). They are different from essays directed at a

narrow audience, and “provide students with a sense of authorial purpose” (Fidalgo-Eick, as cited in Sykes et al., p. 532).

Use of social software appears to promote student independence and self-reliance and build self-esteem, encouraging ELL student interactivity and fostering improvements in motivation, academic achievement and student behaviour. Online discussions and surveys, for example between students and groups of students, allow learners to independently scaffold and take responsibility for their learning, varying it according to their needs and proficiency. Patten and Valcarcel-Craig’s (2007) study of Apple iPod shuffle use shows that iPods offer a motivating and student-controlled way to learn, increasing ELLs’ self-esteem. Wikis emphasise sharing of power with teamwork and consensus building and all participants have an equal opportunity to contribute (Leuf & Cunningham, as cited in Lee, 2010). Confidence is built through the development of self-reflection skills, the organisation of thoughts, and strategies to enrich content (Lee).

Molenda and Pershing (2008) emphasise that educational technology improves the performance of individual learning with a focus on worthwhile goals, and offers experiences that lead to deeper understanding and are applicable to real-life situations, including methods of assessment where students can apply their learning more authentically. “Promoting transfer is a value that is emphasised in educational technology” (Molenda & Robinson, 2008, p. 249). IT can create inquiry-based collaborative learning communities where the focus is on deep learning, where learners relate new knowledge to previous knowledge using reflection and critical thinking skills (Weigel, as cited in Molenda & Pershing).

Social software responds to socio-constructivist learning by involving authentic learning and activities students find interesting (Lacina, 2004/05). Students of Spanish viewed their wiki use as enjoyable, rewarding and preferable to traditional word processing as it gave a greater sense of community; using Hispanic cultural topics of personal interest made it relevant, authentic, and engaging (Lee, 2010). Language learners need feedback and interaction in new language, that is input and access to foreign culture, and this is provided by collaborative Web 2.0 tools where the purpose is to “share and learn new languages through social interaction” (Stevenson & Liu, 2010, p. 233) via video, text and audio chat. Foreign language learning sites with social networking features (e.g., Palabea, Livemocha™, Babbel) offer real-time, direct, native speaker contact and an alternative to visiting the country (Stevenson & Liu).

Language and literacy skills are fostered and made relevant through collaborative work, including electronic literacy. Electronic literacy is an important way for ELLs to demonstrate other abilities and knowledge; it scaffolds their language development, and is a way for them to negotiate their English-language identities, independently online (Meskill & Hilliker, 2005). Technology acts as cultural, linguistic and social ‘bridges’ for ELLs and supports the acquisition of multiliteracies, linguistic proficiency and critical thinking skills for ELLs (Chatel, 2002). Learning is scaffolded. Software such as internet chat sessions, discussion boards, and Web quests, and also structuring and concept-mapping software used by the teachers such as Kidspiration® and Storybook Weaver® offer student-controlled scaffolded learning and instant feedback (Lacina, 2004/05). The fanfiction community provided access to literacy learning and practice in areas where schools have been unsuccessful; the linguistic hybridity of this learning environment addressed the ELLs’ second language acquisition needs and scaffolded the development of their literacy skills (Black, 2005). The multimodal means of representation and communication, constructive native speaker peer feedback and encouragement enabled the ELLs to create more sophisticated work, where an emphasis was on communicative function over grammatical form (Black).

Web 2.0 tools support the development of plurilingual competence, building awareness of linguistic aspects such as syntactic accuracy and rhetorical style, and also “of the use of written language and visual expression as forms of representation that are rooted in, often pluralistic, linguistic and cultural conventions” (Sykes et al., 2008, p. 530). Blogs develop “intercultural competence development” as learners read blogs written by individuals around the world (Sykes et al., p. 533). Wikis build understanding of the complex L2 writing process: synchronous and nonsynchronous collaboration (Sykes et al.) and web-based voice applications (skype™) add richness and complexity to collaborative student work (Oskoz & Elola, as cited in Sykes et al.).

Wikis have a positive impact on the development of students’ collaborative writing skills in L2; they are nonlinear and multidimensional using drafting, revising, editing and publishing skills (Lee, 2010). The social-constructivist approach means that wikis play a valuable role in L2 knowledge construction: peer feedback scaffolds the L2 writing process since students help each other organize the content but also make error corrections for language accuracy (Lee). “Learners use the L2 as a cognitive tool to interact, negotiate, and construct meaning with others in a socially situated activity” (p.260). and this negotiation of language skills and structures in context leads to better understanding and use of vocabulary and grammar (Lee) Blogs improve students’ reading and writing, in both L1 and L2 (Ducate & Lomicka, as cited in Sykes et al., 2008). Social bookmarking enables the sharing of information among users, but its benefits appear to be greater when used with other tools such as blog and wiki projects (Sykes et al.).

The diversity of learning preferences is considered. One of the ways that educational technology looks to improve performance is to emphasise a broad range of types of learning and outcomes to be considered by planners (Molenda & Pershing, 2008). The diversity of knowledge and learners’ skills and attitudes, is based on Gardner’s theory of multiple intelligences, and Bloom’s taxonomy of learning objectives, which highlights skills in cognitive, affective and psychomotor domains (Molenda & Pershing). Romiszowski (as cited in Molenda & Pershing) added the interpersonal domain. Storytelling and its processes as a way of sharing experiences and values, nurtures social and emotional well-being and promotes literacy skills in children; blogs are good for ELLs because they have the opportunity to look words up and refine their writing before sharing (Farmer, 2004). Scaffolding the use of technological resources by children for storytelling addresses their different learning styles and helps ELLs to be successful storytellers in different ways with audio-visual aids and graphic organizers (Farmer). Self-supported and peer group learning (Attwell, 2007) and support for different learning styles means that learners develop their own approaches in meaningful situations and the process of modelling their learning helps them develop their critical literacy skills (Hall, 2009).

Issues to consider and recommendations

As has been seen, the use of social software tools in second language learning can be beneficial, but there are specific issues that need to be considered. These issues relate to social software use, but also to the integration of technology in educational practices and they indicate areas where more research is needed.

Risks for teachers and students surround the lack of clarity about privacy and teacher jurisdiction issues in complex online contexts, and clearer codes of conduct are recommended to support teachers in educational contexts (Foulger, Ewbank, Kay, Popp & Carter, 2009). Concerns about Internet bullying and exam cheating online reveal the need for children to be taught about the responsible use of these tools; a central issue for schools is how to support children while protecting them from harm or abuse and inappropriate content (Sharples, Graber, Harrison, and Logan (2009). Hall (2009) also raises concerns about identity presentation and

formation in such communities. Today's learners are flexible in their learning styles to accommodate using different technological tools, including Web 2.0 applications, however, learning styles are still a significant consideration when choosing the type of social software to use (Saeed, Yang & Sinnappan, 2009). Another important consideration is that the use and acceptance of social tools, is slower than the changes in Web 2.0 capabilities (Ebner et al., 2007). Questions also surround how the use of social software applies to different age groups and the extent to which such tools should be used in K-12 education and for which social purposes.

Using any technology raises accessibility issues. The lack of available technological equipment in many schools and the lack of teacher training, both ongoing and in the form of professional development, inhibit the successful use of technology and these issues are cited frequently (Chatel, 2002; Farmer, 2004). In addition, students and teachers need stronger basic technology knowledge (Lai & Kritsonis, 2006). For effective linguistic support for ELLs using technology in regular classrooms, teachers need a solid grounding in second language learning methodology (Meskill & Hilliker, 2005; Lacina, 2004/05; Pruitt-Mentle, 2007).

More research is needed into how users use social networking sites for collaborative learning and social interaction and also into the educational value and technical usability of these sites (Stevenson & Liu, 2010). In addition, more research is needed about the role of wikis in L2 collaborative writing and also how levels of language proficiency impact their effectiveness (Lee, 2010). Users want the purpose of language learning social networking sites to be learning a language, not building relationships, and this needs to be clear; also access to more traditional learning and preparation before using these sites may be preferred (Stevenson & Liu). Peer feedback and collective scaffolding may lead to aggressive attitudes and feelings of discomfort; this can result from the loss of content without consensus, dependency on others that can lead to problems if others delay writing and difficulties in sharing ownership (Lee). Students favour teacher feedback and are reluctant to edit peer work so they need guidance and clear rules from the teacher about the editing process and the effective use of feedback (Lee); concern about the quality of user content also suggests a need for teacher input (Stevenson & Liu).

Conclusion

Social software, as an emerging trend, has tremendous potential for all learners in both formal and informal educational settings. For second language learners these tools can provide valuable learning opportunities to interact and use language in authentic situations. For ELLs in particular, the advantages for improving literacy development, confidence and self-esteem are great as these communities enable them to assume online identities and display other skills. The collaborative opportunities that social software tools offer for accessing, creating and sharing resources and knowledge, and communicating with many different people around the globe are counter-balanced by issues relating to the potential dangers of working in public spaces online and the lack of sufficient research about the effectiveness of social software for L2 learners. Educational institutions need to work out how to integrate their use in a safe way, perhaps through locally-networked use in schools by teachers and students, and by agreeing on codes of conduct for them to follow. Social software can provide many avenues for continued language and learner-centred development. Educational technologists need to ensure that these meaningful and relevant practices are accessible and used to promote learning about critical literacy and identity issues, which are so important for contributing to social equality.

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