ABSTRACT

Growing literature on the impact of new technologies on learning processes suggests that blogs can be effective tools to empower cognition. The chapter describes a line of research which is aimed at exploring the possibility that blogging is related to cognitive skills and can be effectively used in educational settings. In the main study reported in the paper fifty blogs were analysed and classified according to both their content and formal structure. The right (i.e., intuitive-holistic) vs. left (i.e., systematic-analytical) thinking style of blog owners was also assessed, as well as the blog owners’ awareness of the psychological processes, activated by the blog that they had devised, both in their own and in other people’s mind. Results showed that blog owners are able to use effective communication strategies by differentiating the formal structure of blogs according to the content, but they lack metacognitive awareness about the mental processes activated by the blog. No relation between the blog owner’s cognitive style and blog style was found. Implications for the educational use of blogs are discussed. In other two studies such implications were tested in samples of teachers and students. Blogs’ potentialities to enhance metacognitive awareness and control in both teachers and students, as well as cooperative learning in students, were critically evaluated. Altogether, results from this research line provide evidence that blogging can be useful to foster cognitive skills in education by empowering the bloggers’ awareness of the implied mental processes.

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INTRODUCTION: BLOGS AS ENVIRONMENTS FOR PERSONALISED LEARNING

A blog (a portmanteau of web log) is a website where entries are written in chronological order and displayed commonly in reverse chronological order. Many blogs provide commentaries or news on a particular subject; other blogs are personal online diaries. When blogging, users can leave comments, provide information to others by posting messages in form of text or multimedia, and build online discussions among bloggers. Thanks to these opportunities, blogs have been shown to provide a good environment for learning, which can be also used to expand in class discussions with all students. Blogs are perceived by learners as useful tools to share their own experiences and to construct knowledge, to improve problem solving and reflection, and to favour the communication of emotions (Chu, Chan & Tiwari, 2012). Using blogs seems also to promote engagement in collaborative learning (Chu, Chan & Tiwari, 2012). This happens because students’ use of blog is affected by individual differences (related to specific motivation and the level of difficulty attributed to the learning activity), but it does not depend on gender or technical skills (Cakir, 2013). Similarly, the learner’s positive perception about blogs as learning environment is independent of discipline background and frequency of use (Chu, Chan & Tiwari, 2012). Therefore, all students can effectively being engaged in blogging during a learning experience.

A typical blog combines texts and images (sometimes also sounds and music) and includes links to other blogs, web pages and media related to its topic. Therefore, blogs can be conceived as multimedia artefacts and also as hypertexts (Murray & Hourigan, 2008). Such peculiar characteristics make the building and managing of a blog cognitively demanding. The characteristics mentioned above, in fact, “force” people to use specific cognitive strategies whilst constructing and administering their blogs, and this should promote reflection (Blood, 2000; Colombo & Sala, 2011; Wagner, 2003). For example, anyone who builds and manages a blog is asked to make decisions concerning the sections to be included, the number and typologies of the pictures to be uploaded, their layout, the writing style, and so on (Huffaker, 2005). However, such choices should depend not only on the blog’s content, but also on the cognitive preferences of the blog owners. Hence the blog structure, as well as any kind of artefact, should mirror the author’s cognitive style (Henri, 1992; Xie, Ke, & Sharma, 2010).

Thanks to its intrinsic characteristics, a blog is a user-friendly artefact allowing for high levels of personalization and, due to its specific features, it tends to mirror owner’s individual characteristics. In line with this assumption, Guadagno, Okdie and Eno (2008) found that differences in the levels of some personality traits (i.e., openness to new experience and neuroticism) are linked to differences in the likelihood to be a blogger. Likewise, Li and Chignell (2010) provided some evidence that the personality of the blog writer is reflected in the blog style, such in a way that is recognizable by the blog readers too. The way a blog is devised and managed may be also linked to individual cognitive style, that is, the preferred and habitual manner to process information (Antonietti, 2003).

Chapter’s Aims

In order to understand the potentiality for cognitive empowerment related to the use of blogs, it is interesting to assess whether blog owners actually personalise the blog they built by arranging the structure of the blog not only according to its content but also in order to match their cognitive style. In addition, it is worth investigating individuals’ metacognitive awareness. In other words, to what extent are the blog
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