

# [Using technology tools and media in education](https://assignbuster.com/using-technology-tools-and-media-in-education/)

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The paper " Using Technology Tools and Media in Education" is an excellent example of a term paper on education. Today, in the 21st century, substantial empirical research has shown that the only way to improve student learning and training is to move away from teacher-centered, standardized paradigm predicated upon time-oriented student progress to the learner-oriented, customized paradigm predicated upon attainment-based student progress (Aslan & Reigeluth, 2013). Research-based innovations, according to these authors, are key enablers of this transformation by their capacity to allow students and teachers to communicate both synchronously and asynchronously with peers around the world. This paper reviews several pertinent issues related to using technology tools and media. In the recent past, breakthroughs in research-based innovations have been reported in the literature, particularly in the context of educational technology. For instance, the Electronic Learning Organizer is a cloud-based innovation that is changing the education landscape by assisting language instructors to develop and share digital learning objects and activities for learners across the world. Although this research-based innovation is still under construction, available literature demonstrates that it is being successfully used in South America to assist instructors to create the learning objects or assemble them from a pool of learning objects developed by other instructors (Aslan & Reigeluth, 2013). Another research-based innovation is known as Lore, which uses a Face-book-oriented platform to provide an enabling environment through which instructors and learners can communicate, follow one another, and undertake class-related activities and lectures (Aslan & Reigeluth, 2013). In addition to providing students and learners with social interaction capabilities, this innovation allows students not only to upload documents, share calendar and use a grade book option but also develop and fully operationalize a course website with assignments, syllabus and discussion tools. The third-based innovation is the Chromebook, which employs the Google Chrome operating system (OS) to provide an enabling environment through which instructors and learners can learn, create, and collaborate right away. When used in learning environments, these laptops have distinct advantages over other applications, especially in terms of cost, functionality, control settings and restrictions, as well as maintenance (Aslan & Reigeluth, 2013). Learning theory may refer to a conceptual framework that describes the process of how humans absorb, process and retain information using approaches such as cognitivism, behaviorism, humanism, constructivism, and connectivism. Constructivism, for instance, can be applied to assess how the technology in question is assisting learners to actively construct their own knowledge and meaning from their interactions and experiences with the technological application. In this context, constructivism can be applied to evaluate if the use of a particular technology is taking place in authentic and real-world environments and if content and skills are understood within the framework of the student’s previous knowledge (Attwell & Hughes, 2010). Instructors can also apply the situated learning theory particularly within vocational education and work-based learning to assess if a particular technology has the capacity to generate knowledge or assist learners in acquiring or transforming such knowledge through the predominant social interactions within school-based learning environments or communities of practice (Attwell & Hughes, 2010). Lastly, instructors can employ activity theory in evaluating and using technology as it “ contextualizes the interaction between humans and computers with the activity systems in which it takes place, recognizing the mediation of instruments and tools, rules and division of labor” (Attwell & Hughes, 2010 p. 20). Owing to the fact that this learning theory assists in studying human activities as developmental processes, it can be employed to evaluate how a particular educational technology has succeeded to change learners toward the attainment of the desired educational outcomes. Technology continues to play a substantial role in developing new and improved models of teaching and learning in ESL environments, with available literature demonstrating that it provides more advantages than disadvantages within these contexts (Yunus, Nordin, Salehi, Sun, & Embi, 2013). Among the benefits, there exists compelling evidence demonstrating that technology attracts students’ attention due to the use of various applications, hence reinforcing the students’ motivation and will to learn and improve their reading abilities. This attentiveness is further reinforced by the fact that technology provides learners with the capacity to search more about the reading topics, with the view to fully understanding the text. The second benefit of using technology is nested on the fact that it provides the capacity to enhance synchronous and asynchronous communication and learning among ESL students, with the view to assisting them to internalize the use of language in real-life communication situations. The third benefit concerns the fact that technology assists students in ESL learning environments to enhance their vocabulary knowledge and promote meaningful learning (Yunis et al., 2013). The drawbacks of using technology in ESL learning environments include (1) difficulties in integrating the mass of materials offered by various technology tools and applications into a comprehensive second language curriculum, (2) incapacity of teachers to exercise classroom control as students get too excited when technology is used in ESL environments, and (3) lack of ICT knowledge among ESL students and insufficient technology tools (Yunis et al., 2013). There is no doubt that technology can be employed in the United States and elsewhere as an effective tool for teaching ESL students to develop language skills. For example, instructors can employ computers to provide a language-rich environment which facilitates students’ interaction with each other and increases verbal exchange for learning through communication. Owing to the fact that technology fosters language development by providing students with an opportunity for engaging in interactions, it is possible to use technological applications to promote verbal communication and the acquisition of English in ESL settings (Zha, Kelly, & Park, 2006). Another proposal is for the instructors to use technology (e. g., computers and software, visual blackboards) to promote vocabulary development in ESL settings since such platforms not only allow students to become dynamic learners in a one-on-one environment but also incorporate various learning strategies including the use of visual clues. Lastly, technology can be used to enhance the reading ability and comprehension of ESL students by using software applications with the capacity to increase the interest level of students while keeping the text simple and easy to read, and also with inbuilt capacity to provide immediate feedback for reading instruction (Zha et al., 2006). This discussion demonstrates the fundamental importance of technology in contributing to the paradigm shift that is required to enhance learning and teaching experiences in ESL environments. As more research-based innovations in educational technology find their way into the market, it should be the primary task of teachers to adopt and implement beneficial technologies to improve the learning and teaching experience in ESL contexts, and also encourage students to make use of these applications for their personal and educational development.