

---

## PAPERLESS READING IN EFL CLASSROOM

Hera Nopiyanti, Abdul Asib, and Sri Samiati Tarjana

*Universitas Sebelas Maret, English Education Graduate Program*

heranopiyanti2509@gmail.com; abdulasib@yahoo.com; samiati@uns.ac.id

**Abstract:** Since the development of information technology grows rapidly, the educational institutions are offered various media or tools of instruction supporting and enhancing teaching and learning process. The paperless technology is a variety of technology which changes the experience of classroom language from traditional into paperless. This paper aims to explore the paperless technology in teaching reading for EFL students. This technology facilitates the teachers to utilize computer and paper-based reading tasks in realizing the functions of the e-learning environment. It creates the atmosphere of independent acquisition and quality pedagogical strategies which can improve the efficiency of teaching and learning. The use of electronic book completed by hypertext and multimedia tools clearly demonstrated the advantage of this technology compared with traditional textbooks. Paperless technology will not displace traditional print books in the future, but they will become the perfect complement to print books.

**Keywords:** Paperless, reading, classroom, technology, computer, e-learning, print books

---

### INTRODUCTION

Information and technology in this digital age are phenomena of modern society facilitating teaching and learning process. Information technology is new product of modern world, which contributes greatly to education and increases the quality of teaching and learning. Nowadays, the tools and semiotic of the digital society are able to permeate pedagogical practices in this period of computer technology which has been changing metaphorically from the solid culture of the 19th and 20th centuries to the liquid information culture of the 21st century (Area & Pessoa, 2012). The information, communication, and technology (ICT) has been propelling the socio-cultural process everywhere. As stated by Alkan (1997), the development and advancement of technology affect the educational system of the countries. In this case, school as an educational institution in the system will get benefit of innovations of information technology.

According to Bakalo and Shishkovskaya (2012), e-learning environment of an educational institution is a system which equips the students with a new tool for competence formation and development of a modern specialist. As stated by Polat (1999), the e-learning environment is a combination of conditions providing the teaching. This means that the e-learning technology functions in arranging the conditions for independent acquisition and complete mastery of necessary information which can be used at EFL/ESL classrooms. Furthermore, the e-learning environment carries other significant functions: information-methodical, communication-training, motivational and monitoring-evaluation ones. The integration of paperless technology can be implemented in educational process in order to reach the functions of the e-learning environment mentioned above.

In this modern era, most students have addiction to various digital devices such as

personal computers, mobile phones, iPads and tablets. They cannot release themselves from those devices since they offer great features, particularly in obtaining and storing information. Consequently, the teachers as the main facilitators of educational process have to play their role in finding the ways and tools to maximize the potential of those digital devices for the students in the teaching and learning process.

New systems of technology and devices start to become more commonly used and bring benefits for education and instructional activities along with the development of technology in education (Joo & Chol, 2002). Murphy (2003) refers to Internet, computer, television, educational CDs and DVDs, and banks of information as the examples of new systems of technology in education. E-textbooks can be delineated as one of the new technologies in this digital age which have been growing rapidly and provide various possibilities for teaching and learning. Both teachers and learners will get opportunities and challenges in making education more elaborate and technologically-supported.

E-textbooks have replaced the existence of paper books in digital era. Everything related to printed resources, such as course books, newspapers, magazines, and reading books has been changing. According to Armstrong, Edwards, and Lonsdale (2002, p. 217), e-textbooks are “any piece of electronic text regardless of size or composition (a digital object), but excluding journal publications, made available electronically (or optically) for any device (handheld or desk-bound) that includes a screen.” Since the Internet access is being used effectively today to spread the information very fast, individuals are able to get various resources of e-textbooks easily. The Internet is one of rapidly widespread technology, which contributes to the increase of educational and instructional activities (Uzunboylu, 2002).

The paperless classroom technology is a relatively new technology in Indonesia, in which this kind of technology is expected to use only computer-based devices to complete the absence of printed teaching materials. Therefore, this article is aimed to study and show the advantages of “paperless” technology in the form of electronic textbooks compared to the conventional foreign language teaching.

## **BENEFITS OF PAPERLESS READING TECHNOLOGY**

Advanced technology in this modern era offers various potential for teaching and learning. Most people apply new technology appliances as the modes of representation and communication to reorganize experience of social interaction in the classroom in complex ways. Paperless technology presents a wide range of benefits for teaching and learning in reading classrooms. Electronic textbooks as the product of this technology have provided a teaching tool that can assist both teachers and students to conduct teaching and learning activities in the classroom. The awareness of the needs to use electronic textbooks is increasing. As a result, practitioners and researchers embark on a more extensive engagement with electronic textbooks.

According to Vassiliou and Rowley (2008), electronic textbooks are digital objects with textual and/or other content, which arise as a result of integrating the familiar concept of a book with features that can be provided in an electronic environment. They are available on platform of online education for students arranged by e-learning content service provider. This technology can never replace the fundamental function of teachers irrespective of the extent of technological advancements. The complicated and complex task of teaching elementary-age

pupils still need teacher's deep knowledge of the children's mental capacities as well as their emotional requirements of adapting to the surrounding. Moreover, only teacher who has the knowledge, passion, and enthusiasm of providing feedback, direction, and encouragement.

Paperless reading is technology carrying modern teaching and learning environment to enter a new paradigm to keep pace with the emerging green environment trend. Carley (2014) exposed the advantages of the paperless reading technology in classroom, as follows:

- Flexibility and adaptability of the lessons

Students can start, complete, check, and mark their works directly at any time convenient for them, nurturing them to become independent learners in the near future. Furthermore, technology is able to record, organize, and then report the information of teachers' instructional decision in various formats and also to make documentation of students' progress efficiently.

- The availability of various resources

Unlimited number of people can use the same source of information. Electronic textbook as the product of technology provide programs to enable learner to highlight text sections, take notes, and create drawing within the book. These facilities can develop students' comprehension and attention to instructional process.

- Effort and time minimization

Students are able to send their home tasks on-line, saving paper and time. Some electronic textbooks have program of interactive dictionaries providing just in time learning, which allow learners to select any word within the electronic textbooks. Then, the learners will get definition of the word instantly, have the definition read aloud, or request an instant translation to another language.

- Cooperative students' work

By the use of chats, forums, team projects, etc., the technology can create interactive and cooperative students' work.

- Self-assessment and self-control

Self-checking, self-test, self-testing, self-verification provided by technology allow students to become independent learners.

- Sustainable Resources of Knowledge

Paperless reading technology can contribute to the continuous effort through maximizing the availability of knowledge while reducing the numbers of trees cut down to produce printed books.

## **CONSIDERATIONS WHEN IMPLEMENTING PAPERLESS READING TECHNOLOGY**

Teachers are often dependent on text books or paper books. When electronic books supersede the existence of those paper books, students can get newest information they need in the Internet. Furthermore, publishing houses can sell their published books in electronic versions, which are easier, cheaper, eco-friendly, and more convenient to buy. Thus, educational organizations need to consider the use of paperless educational technology in instructional and learning process of EFL classroom. They need to think about the principle of pedagogical applicability relating to the use of information-communication techniques in education. As stated by Reeves (1994, p. 5), most teachers have final

judgment that “reasonability of computerization is determined by the level of the achievement of pedagogical, methodical and economic efficiency compared with the traditional forms of education.” Based on that statement, in applying modern technology of information and communication for education activity, every teacher should consider several things, as follows:

- Teacher should understand their technique of application.
- Teacher should have satisfactory and clear methodical grounds of such integration.
- Teacher should be able to vary and adapt the existing techniques of information technology taking account his/her specific training course.

Paperless technology in teaching EFL classroom has different techniques of foreign language teaching. The techniques include structural techniques which are audio-lingual method and interactive techniques which could be communicative language teaching, community language learning, language immersion, etc. The objectives of these teaching techniques are to offer the best quality of English knowledge and to increase the students’ motivation by getting rid of drags because of dependency on the place, time, and paper textbooks in learning English. The technology of paperless will create the transition from the dependent character to the autonomous character of students in self-study environment.

The paradigm of paperless classroom uses information education technology by intensifying the individualization of teaching and changing the interaction between the students and the teachers into information search partners and up-to-date information transformation. Using this paradigm “...the traditional paradigm as the paradigm of knowledge transfer should be turned to the paradigm of knowledge processing and construction” (Sidorenko, 2010, p. 117).

The paperless classroom offers several ways to create digital foreign language reading. The success of paperless reading is determined by some criteria. Firstly, digital devices with the Internet access should be available for the participants of educational process. Secondly, it is important to make the platform for publication, storage, and exchange information of teaching and reading materials. The use of blogs and Moodle (Modular Object Oriented Developmental Learning Environment) can be the samples of platforms. Not only free of charge, blog is also easy to create and allows both students and teachers to perform educational activities. It contains various teaching, applied sources, and instrumental media, and communication which allow teaching interaction of educational participants separated by space and time. Then, Moodle offers preference of the quality change of electronic text book content. The various resources of Blog and Moodle provide possibilities to serve reading material for foreign language teaching and learning in comprehensible, interesting, and computerized environment in order to achieve communicative approach.

Electronic text books developed on the basis of hypertext are suggested to use as the main reading material of paperless education. E-books through e-learning resources are created and developed to improve the quality of the foreign language teaching in reading classroom. Electronic text books established by technology of hypertext provide some advantages. They are possible to structure and arrange the learning information in

hierarchical manner of text unloading. They contribute to the implementation of the visualization principle in non-linear learning information presentation. The information visualization allows the learners to study different concept, notions and subjects by using video materials and graphic images. This technology is clearly able to increase learner's interest and encourage them in learning new material. Furthermore, the learners get the opportunity to increase their own individual track of material acquisition.

## CONCLUSION

The result of paperless reading technology in EFL classroom reveals that this kind of technology provides a number of advantages. First of all, by means of this technology, the students are more active in educational process, since it provides easiness to find educational information and to discover images and videos. Then, it creates interactive communication and a variety of forms and modes of behavior with the e-learning environment. It also offers flexible technique in training with a computer. And then, it is possible to adjust and control learning rate and intensity, achieve the load, optimization, information intensity, and update information. Since the technology of paperless reading develops teachers' creativity in searching new techniques of training and technologies freely, it can enhance the potential of the teachers. Moreover, this technology can improve students' motivation in learning a foreign language and realize the combination of classroom and extracurricular activity on the interactive basis. Finally, the quality of all educational participants can be improved as a result of the technology application.

Paperless Reading technology based on electronic text books is not the panacea of education but only a tool contributing to the modernization and enhancement of technology which is efficient for educational process. With the help of computer and Internet access, paperless technology brings the changes of instructional strategies in EFL reading classroom and ultimately improves the efficiency of teaching and learning. The technology will be beneficial to liberate the heavy labor of teachers in facilitating reading material and enables the students to easily master English reading skill. As stated by Heick (2012, p. 1), "There is more information available to any student with a smartphone than an entire empire would have had access to three thousand years ago." Consequently, the primary purpose of teacher in this modern era, is to teach students to apply as much as possible information technology for efficient solution of the learning problems.

## REFERENCES

- Alkan, C. (1997). *The investigation of the comparison of Computer Assisted English Language Learning and teacher centered English language learning*. Master's thesis, Dokuz Eylul University Institute of Social Sciences
- Area, M., & Pessoa, T. (2012). From solid to liquid: New literacies to the cultural challenges of Web 2.0. *Comunicar*, 38, 13-20.
- Armstrong, C., Edwards, L. & Lonsdale, R. (2002). Virtually there? E-books in UK academic libraries. *Program: Electronic Library and Information System*, 36(4), 216-227.
- Bakalo, D. I., & Shishkovskaya J. V. (2012). *Informacionno-obuchajushhaja sreda vuza v kontekste Internet-obrazovanija* [Information learning environment of the educational institution in the context of Internet-education]. *TSPU Bulletin*, 4(119), 64-67.

- Carley, H. (2014). Going green: The paperless classroom. *Global Issues in Language Education. Newsletter Issue, 91*, 10-13.
- Heick, T. (2012). *How 21<sup>st</sup> century thinking is just different*. Retrieved from <http://www.teachthought.com/learning/how-21st-century-thinking-is-different/>.
- Joo, Y-J. Bong, M., & Choi, H. J. (2002). Self-efficacy for self-regulated learning: Academic self-efficacy and internet self-efficacy in web-based instruction. *Educational Technology Research and Development, 48*(2), 5-17.
- Polat, E. S., & Buharkina M. Yu. (1999). *Sovremennye pedagogicheskie i informacionnye tehnologii v sisteme obrazovanija* [Modern pedagogical and information technologies in educational system]. Moscow: Akademiya Publishers.
- Reeves, T. C. (1994). *Evaluating what really matters in computer-based education*. Retrieved from <http://eduworks.com/Documents/Workshops/EdMedia1998/docs/reeves.html>.
- Sidorenko, T. V. (2010). *Samostojatel'naja rabota studentov tehničeskogo vuza v professional'no orientirovannom obuchenii inostrannomu jazyku: uslovija optimizacii* [Self-directed students' learning in a technical educational institution in profession-oriented English teaching: optimization conditions]. *TSPU Bulletin, 1* (91). 127-130.
- Uzunboyly, H (2002). *Web destekli ingilizce ogretiminin ogrenci basarisi uzerindeki etkisi* [Effect of web-based english teaching on student achievement]. Doctoral thesis, Ankara University.
- Vassiliou, M., & Rowley, J. (2008). Progressing the definition of e-book. *Library Hi Tech, 26*(3), 355-368.