

## Cloud-Computing in EFL Classes

Müfit Şenel<sup>1</sup>, Deren Başak Akman<sup>1</sup>

### Abstract

*The advent of technology in the 21st century has changed most of the traditional educational practices, especially the way tools and materials used to support and enhance learning and instruction. Cloud computing proves to be a highly efficient technology which tends to be integrated into EFL (English as Foreign Language) instruction and makes both teachers and students benefit a lot. Therefore, the cloud computing method in teaching languages could be very challenging and motivating because students learn language faster by speaking and engaging with others as well as they learn how to write and read. This presentation will draw a picture of various cloud-based technologies (blogging, wiki, google and podcasting) being incorporated in the EFL classes. Furthermore, strategies and activities of integrating cloud-based applications will be presented.*

### Cloud-Computing in EFL Classes

In the 21<sup>st</sup> century, traditional educational practices have changed dramatically due to rapid technological improvements. Therefore, both teachers and students are expected to develop a set of abilities to succeed in the Information Age. These 21<sup>st</sup> century skills are listed as follows:

- **Learning Skills-** critical and creative thinking, collaborating and communicating
- **Literacy Skills-** information literacy, media literacy and technology literacy
- **Life Skills-** flexibility, initiative, social skills, productivity and leadership [1]

Therefore, if we want our students adequately prepared for tomorrow's world, technology must become an integral part of classrooms. Educational practices should be connected with technology to succeed as the new generations are born into digital age. Teachers and students are required to be capable of using technological tools for classes to be taught in line with the technological improvements. Teachers have to rethink their instructional goals; identify what needs to be changed in the assessment process and what is needed for learning with digital tools [2].

In that sense the Internet plays a vital role as it provides genuine opportunities to strengthen students' learning experiences, fosters autonomous learning and improves their motivation and engagement [3]. Cloud computing is a general term for anything that involves delivering hosted services over the Internet and a promising computing resource in the 21<sup>st</sup> century. It refers to "the large-scale distributed computing paradigm ... in which a pool of abstracted, virtualized, dynamically-scalable, managed computing power, storage, platforms, and services are delivered on demand to external customers over the Internet" [4]. Khampusaen (2014:101.2) states that "The Cloud' is a metaphor for the Internet while 'in the Cloud' is popularized to refer to software, platforms and infrastructure that are sold 'as a service', i.e. remotely through the Internet" [5]. Armbrust et al. (2009) affirm that cloud computing refers to both the applications delivered as services over the Internet and the hardware and systems software in the datacenters that provide those services [6]. These tools, accessed online anytime and anywhere through a central data center, allow for the creation, editing, and storing of products online. They provide teachers and students the facilities for creativity, innovation, engagement and self-regulation. They can be used to support collaboration within and outside the classroom [6,7].

There are many cloud-based tools/applications ranging from simple web sites to complex and interactive online learning environments. Several of them have free basic versions and allow for online document, spreadsheet, and presentation creation such as Wordpress, Prezi, Edmodo, Slideshare and Google Drive. Many of them provide asynchronous and synchronous collaboration not only within the classroom but beyond the classroom. Thus, cloud computing provides diverse learning environment. The artifacts may be co-constructed, and offer online peer feedback and discussions features [5,8]. Chiu (2014:178) emphasizes two major characteristics of cloud computing: "resource sharing" and "ubiquitous" [9]. Internet-based cloud computing tools such as Microsoft's Onedrive and Google Drive Apps for Education are getting more and more popular in educational setting. When you use the cloud-based tools/applications, you do not have to save your files on a CD or thumb drive to use them on different computers or mobile tools. The data in your files travel with you in the cloud wherever you go. The only thing needed is the Internet connection. You save time and energy.

---

<sup>1</sup> OMU, Turkey



Khampusaen (2014) states that language teachers realize that traditional language teaching ways does not succeed anymore since they are unable to reach the desired goals and cause waste of time and paper [5]. In order to get better learning outcomes, they tend to integrate technology in their language classes. Ease-of-use of cloud computing is becoming a trend among teachers and is resulting in widespread adoption in educational institutions.

### **Advantages of Cloud Computing**

1. Cloud computing provides cost-free or low cost systems to users. Cost of hardware or software purchase is decreased.
2. It is ubiquitous- always available anytime and anywhere. Lesson plans, grades, notes, PowerPoint slides, anything digital that you use in teaching is easily uploaded and accessed anytime.
3. USBs or flash drives would not be needed anymore.
4. Students are engaged in collaborative activities. You can set-up various student groups to work on projects and assignments in the cloud. You can also work collaboratively with your colleagues.
5. Cloud computing applications provide flexibility for all e-learning.
6. It promotes learner autonomy and enhances teaching/learning.
7. It is secure. If something happens to the technology at schools, you can still reach the data you saved or uploaded. Moreover, it is not easily accessible by anyone since it generally requires an ID and a password.
8. The amount of photocopying is reduced significantly.
9. Cloud computing systems are regularly backed-up, so the chances of losing content are quite small.
10. You can save multiple revisions and versions of a document so that you can make changes to a lesson.
11. Cloud computing saves memory space in personal devices [2; 5; 8; 9; 10].

### **Some Widespread Cloud Apps for Teachers**

Using cloud computing to store files has many advantages as cited. These tools allow you to reach your files from any computer or mobile device with Internet connection and the files never disappear even though you lose your mobile device or your computer crashes. They are still there 'in the cloud'. Considering these benefits and taking the needs of "Y" generation into consideration, many language teachers have started to use these tools/applications in their classes. Here are some of them:

#### **OneDrive**

OneDrive is Microsoft's cloud tool. It is pre-installed on Windows 10 and 8.1. Yet, anyone can use it on the Web, by downloading a desktop app for Mac and earlier versions of Windows, or the OneDrive Android, iOS, Windows Phone and Xbox apps. You can access and share files and photos on PC, Mac, Android and iOS. It keeps your files and photos organized. Once you save your photos in OneDrive, they are automatically tagged based on visuals. Thus, you can easily find the photos you are looking for. Not only photos but also videos, other documents or any kind of file can be stored in OneDrive and they are accessible from any Windows PCs or mobile devices. Since it organizes your files by type for you, you can easily find what you need. Moreover, it works closely with Microsoft Office apps, such as Word or PowerPoint. When you open any of these applications, you can see a list of recently saved documents in OneDrive. If you have an Office 365 subscription and open a document saved in OneDrive, you can collaborate on it in real time with other people. These real-time notifications let you know when a document is being edited and by whom. If you have a Microsoft account, you get 5GB of free storage and get extra space when you pay for it [11, 12].

#### **Dropbox**

Dropbox is a web-based file syncing app and provides 2 GB of file storage without any charge. If you want more storage, you can get it with monthly payments. When you install the app on a device, it creates a folder there, and keeps the files in that folder in synch with any other Dropbox installations you have on other computing devices. You can store any kind of file in Dropbox, by either uploading to the website or adding it with the desktop apps and can get to your files at any time from Dropbox's website, desktop applications for Mac, Windows and Linux or the iOS, Android, BlackBerry and Kindle Fire mobile apps. Dropbox is a reliable in the cloud storage; it is easy to install and use. You can send



videos quickly, share large files with anyone even though they do not have a Dropbox account but larger files can take several hours to upload, depending on your connection speed. You can work on the slides together with you teammates without sending emails back and forth. Once you edit the file in a shared folder, everyone gets the update automatically [12,13,14].

### **Amazon Cloud Drive**

Amazon Cloud Drive is an online storage service with a focus on photos and is supported on Internet Explorer version 9 and higher, Safari 6 and higher, Firefox, and Chrome. It is intended for personal use- not for professional or enterprise use- and provides easy access to the documents, spreadsheets, music, photos and videos stored in Cloud Drive. It has apps for iOS and Android with automatic upload so videos and photos you take with your phone get saved to the cloud right after you shoot them. If you are an Amazon Prime member or have a Fire device, you get unlimited space for your images for free. Otherwise, you need to pay \$12 per month for the storage. However, unlike other cloud storage services, this app does not let you view your files from a folder on your computer. It does not file-syncing. You can only share files, not folders. You can upload individual files but if you want to view them or make changes, you need to go to Amazon's website. Moreover, this storage service lacks some important features like file versioning or scheduled backups. You can only view and manage files from the Cloud Drive website, but you cannot upload files larger than 2GB there. The desktop app does not work with your file system, you can only use it upload or download files [12,15].

### **SoundCloud**

SoundCloud is the world's social sound platform where you can create sounds and share them everywhere. It lets people record and upload sounds and share them privately with their friends or publicly to blogs and social network such as Facebook [16].

### **Google Drive**

Google Drive is a file storage and synchronization service from Google that allows users to store and share files, edit documents, spreadsheets, and presentations with collaborators. It offers 15GB of free storage space and encompasses Google Docs, Sheets, and Slides. They are a suite of free web-based software within Google Drive service. This office suite allows collaborative editing of documents, spreadsheets, presentations, drawings, forms in real-time [17,18]. Google Docs is free and it was especially built for schools, universities and non-profit organizations allowing users to share a variety of Word spreadsheet, presentation and other documents in a collaborative manner. It can be used "for rosters, course management, collaborative project work and homework submission" [19].

If you have a Google account, you already have an access to Google Drive. You just have to enable the service. While you can access your files from the Drive Web site, you can also download the Drive desktop app for Mac and PC. When you organize your files in the desktop app, they will sync with the cloud so you can get to them anywhere. Once you drag and drop files into the Drive Website they are automatically uploaded. You can also preview attachments from Gmail in Google Drive, and save those files to your cloud just with a few clicks. You can upload your videos and photos to your Drive and the app can automatically back up your photos. One negative side is that your Gmail account shares the space with your Drive; therefore, if your e-mail account is overfull, you get less storage space in your drive. Moreover, if you use Google Drive tools to create presentations or documents, you must export your files to edit in another program [12].

### **Conclusion**

The buzzword "the cloud" keeps getting popular in the Information Age classrooms. One of the most powerful benefits of a cloud app is ubiquitous access- you can access from multiple devices. They are either free or have free basic versions and provide unlimited storage places for monthly/annual payments. One of the main benefits of these apps is their collaborative function. Students will be more capable of thinking critically if they work collaboratively. This collaboration increases learners' motivation and engagement in learning. Cloud-based tools/applications bring flexibility and new opportunities to improve education.

### **References**

[1] <https://k12.thoughtfullearning.com/FAQ/what-are-21st-century-skills>



- [2] Koubek, K. & Bedward, J. C. "Effective cloud-based technologies to maximize language learning", In Moelle, A. J. (ed.) *Learn languages, explore cultures, transform lives*. 2015 Report of the Central States Conference on Teaching of Foreign Languages, 2015, pp. 133-153.
- [3] Liu, S. H. & Lan, Y. "Social constructivist approach to web-based EFL learning: Collaboration, motivation, and perception on the use of Google Docs", *Journal of Educational Technology & Society*, Vol. 19, No. 1, 2016, pp. 171-186
- [4] Foster, I., Zhao, Y., Raicu, I. and Lu, S. "Cloud computing and grid computing 360-degree compared", Grid Computing Environments Workshop, Austin, Texas, USA., 2008, <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4738445>
- [5] Khampusaen, D. "A language classroom in the cloud: Could learning without teachers happen?" *The Fourth International Congress on Interdisciplinary Research and Development*, 30-31 May 2014, Thailand.
- [6] Armbrust, M., et al. "Above the clouds: A Berkeley view of cloud computing", 2009, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.149.7163&rep=rep1&type=pdf>
- [7] Donna, J. D. & Miller, B. G. "Using cloud-computing applications to support collaborative scientific inquiry: Examining pre-service teachers' perceived barriers to integration", *CJLT/RCAT Vol. 39*(3), 2013, pp. 1-17.
- [8] PDST Technology in Education. "Cloud based tools & applications for learning, 2015, <http://www.pdsttechnologyineducation.ie/en/Technology/Advice-Sheets/Cloud-based-Tools-and-Applications.pdf>
- [9] Chiu, F. "The application of a cloud-based student, teacher, and parent platform in English as a foreign language education", *TOJET*, 13, 3, 2014, pp. 178-87.
- [10] Lili, Z. "Integrating cloud computing into EFL instruction: Blogging, wiki and podcasting", *IJIPM*, 6,1, 2015, pp. 30-36.
- [11] <https://onedrive.live.com>
- [12] Mitroff, S. "OneDrive, Dropbox, Google Drive and Box: Which cloud storage service is right for you?" 2016, <http://www.cnet.com/how-to/onedrive-dropbox-google-drive-and-box-which-cloud-storage-service-is-right-for-you/>
- [13] <http://www.dropbox.com>
- [14] Walsh, K. 4 "Powerful Free Cloud Apps for Teachers", 2012, <http://www.emergingedtech.com/2012/03/4-powerful-free-cloud-services-for-teachers/>
- [15] <https://play.google.com/store/apps/details?id=com.amazon.drive>
- [16] <https://soundcloud.com/>
- [17] <http://www.gcflearnfree.org/googledriveanddocs/1.2>
- [18] Firth, M., & Mesureur, G. "Innovative uses for Google Docs in a university language program", *The JALT CALL Journal*, 6(1), 2010, 3-16.
- [19] Arrowsmith, P. "Practical benefits of using Google Docs in EFL writing classes", 2013, [http://ci.nii.ac.jp/els/110009886804.pdf?id=ART0010412419&type=pdf&lang=en&host=cinii&order\\_no=&ppv\\_type=0&lang\\_sw=&no=1460723793&cp=](http://ci.nii.ac.jp/els/110009886804.pdf?id=ART0010412419&type=pdf&lang=en&host=cinii&order_no=&ppv_type=0&lang_sw=&no=1460723793&cp=)