DROPBOX AS AN ENABLER OF LANGUAGE LEARNING

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Traditional education is nowadays replaced by modern forms of teaching and learning tailored to suit a variety of needs and organized so that knowledge can be delivered and gained in a shorter time than before. Many businesses became interested in providing employees with courses tailored to meet their needs and developed computer networks; it become obvious these networks put a number of problems related to cost and feasibility. Therefore, learning began to use public or private services that had advantages related not only to their reduced cost, but also to their capacity to store and share information. ESP courses followed the trend and began to use services such as Google Apps, Google Cloud Platform and Amazon Web Services. This paper presents the advantages of cloud-computing for language learning, using the example of Dropbox as a method of personal cloud storage and a means to share course outlines, bibliography and academic requirements.

Key words: e-learning, cloud-based learning, dropbox

1. INTRODUCTION

The increasing popularity of mobile devices and the need to have information available anyplace and anytime has led to changes in the way in which teaching and learning are performed. The change is driven on the one hand, by the trend to use such devices for personal fun, but also for research and business, and on the other, by the teachers' need to achieve better management of the time allocated for classes. The result is that teachers partially extract learners from everyday classes and expose them to activities that can be performed anywhere because they use information and materials provided via online services.

Using storage spaces outside those provided by the faculties and giving students more freedom in solving the activities will reduce not only the time spent by them in the classroom on certain activities, such as reading and listening, but also increasing the time for more productive activities like those related to speaking. The possibility to store materials outside the classroom, in a place that can be easily accessible to students and teachers alike, drives communication to a new level thus improving the learning of a foreign language.

2. CLOUD-COMPUTING

Cloud-computing has become increasingly popular as it offered a multitude of opportunities: web storage, computation, memory etc. The term was coined in 2006 and promoted by the IT industry since then. It can be defined as: *"it has clusters of distributed computers (largely vast data centers and server farms) which provide on-demand resources and services over a networked medium (usually the Internet)"* [1]. It benefits from cyber-infrastructure and it is based on *"virtualization, distributed computing, grid computing, utility computing, networking, and Web and software services"*. [2]

Some of these platforms offer multiple tools that are available upon payment of a fee,

others are free of charge with less opportunities of storage or creation of content. It is an evolving paradigm so it offers rapid solutions to arousing problems. [3]

The advantages of cloud computing are numerous:

- Accessibility,
- Low cost for the use of software,
- Scalability – ability to have seasonal access to some software if need be,
- Use of software also in the absence of extended faculty hardware,
- Expertise from those that provide the cloud services,
- Possibility of the cloud to be private, public, hybrid or community depending on the interest of the users,
- Less people used for maintenance,
- Easy to use by the end users.

Other important characteristics:

- Broad network access – the ability to be accessed through a multitude of platforms.
- Resource pooling – serving numerous customers with physical and virtual resources such as storage, memory, processing, etc.
- Rapid elasticity – the ability to scale on demand.
- Measured Service – the cloud system automatically controls the resources. [4]

Cloud computing comes with three models that exist separately or in combination:

- IaaS (infrastructure as a service), such as Amazon Web Services, which provides storage, networks, firewalls, etc.
- PaaS (platform as a service), permits application development. The most popular is Google AppEngine with its pre-built application platform.

- SaaS (software as a service), which provides already developed online software solutions.

Even if cloud-computing means much more, it is very popular among people as a storage and sharing place for files, music, documents, pictures, videos, thus becoming a very useful tool for foreign languages teachers.
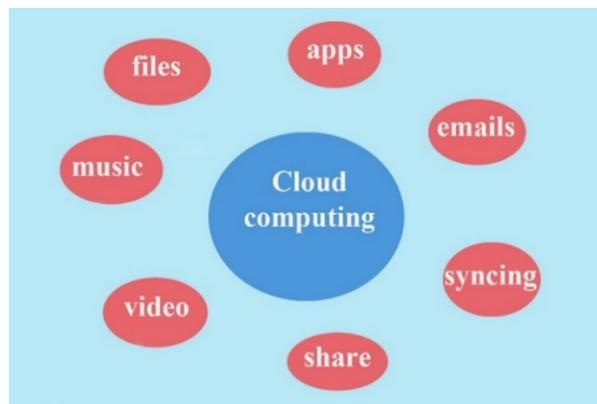

Fig. 1 – Cloud-computing and services.

Some of the cloud-services come in three variants, free, paid and business, offering different facilities for each type of plan according to the needs and the budget. Among the free versions some of the most popular are the following:

- Google Drive, which offers 15 GB free storage space together with Backup and Sync desktop app, but also with the tools for word processing and presentations. To those that already have a Google account, it gives the possibility to save the email from Gmail. [5]
- pCloud, offering 10 GB free storage space, but also sharing and desktop and mobile apps.
- Microsoft OneDrive, with only 5 GB free space, but with the possibility to modify files without downloading them.
- Dropbox with only 2 GB free space, but it is a very useful service

for those interested in collaborative working with its group workspace called Dropbox Paper. The same as Microsoft OneDrive, Dropbox allows users to modify files without downloading them.

3. DROPBOX FOR SPECIALIZED ENGLISH LANGUAGE LEARNING

Currently, there are many ways to store and share files. One of these ways is by using Dropbox, as a method for personal cloud storage**.** Because it gives teachers the tools to create files there, it can be considered an IaaS element, but it also connects users together and gives them the possibility to store files that can be accessed via desktop and mobile devices.

In what follows, we will look into some of the advantages of this method, as resulted from the personal experience we have had so far with successive groups of military and civilian students, taking the 12-week post-graduate course on Critical Infrastructure Protection (CIP) in "Carol I" National Defence University of Bucharest. There has been one session per year, between October-December; the number of students per group varies between 10-15. The data collected in this paper refer to the period 2016-2019. Moreover, some of the shortcomings of the method we have encountered will also be mentioned.

4. ADVANTAGES OF USING DROPBOX

The main usage of Dropbox is backing up one's files online, which means that – apart from storing the files (i.e., documents, videos, graphs, PPT presentations) – the teacher can share the latter with students and co-workers, as well as retrieve and manage these files. All the user needs is any Dropbox application for smart-phones, which one can download and utilize on any smartphone running Android, iOS, and even on Blackberry. In short,

Dropbox is very **accessible**, insofar as it can be used on the iPhone, the iPad, and on Android devices. It is thereby a great example of mobile learning.

Another main advantage of Dropbox is its cost: it is **completely free**. There are no upfront charges or any additional charges once you start using the service. When you register for a Dropbox account, you automatically get 2 gigabytes (GB) of storage space, which is a good amount of storage space. However, there are methods that you can use to increase the space without paying any money. These methods include sending fan mail about Dropbox, connecting your Dropbox to social media as well as inviting family, friends and other people to join Dropbox. [7]

One tip we used on how to **earn more space** [8]: the Dropbox referral program will give you 250Mb of additional space for every new user that takes up your invitation to download Dropbox. However, it also gives the new user an extra 250Mb of space. You could start a 'sign up and pass it on chain in your school so that all of your staff have at least 2.25Gb of storage space to use, while many will have more.

A very strongpoint to consider is that Dropbox is **user-friendly**. It takes a few minutes to learn how it works; additionally, it can be accessed by Internet connection, or by downloading the application on the smart-phone or PC.

The design of Dropbox is a **versatile** one, in the sense that it allows the user's access the latest version of every file. Therefore, by using the application, you bypass the need for a browser.

In addition, we noticed that once we got Dropbox and started to use it on a regular basis, we soon got to love how easy and **convenient** a system it is to use. No more need to email ourselves files, buying CDs/DVDs, or trying to take the flash drive to the classroom, because all we needed to do was to save our file(s) on Dropbox. Another important aspect

which makes it worth the while is that even if we were away from our Dropbox computers, we could still logon to our account online and access the files on the computer, download them, and use them for our immediate purposes.

On the other hand, **sharing** files – as previously mentioned, is made very easy. All you have to do is place the files in a folder that is designated for sharing with specified users or the general public.

In addition to this, Dropbox is an ideal platform for **backing up information**. In the unpleasant situation that your computer crashes or your smart-phone is lost, you can easily use Dropbox to access all the files that were in, without losing any.

Fig. 2. Dropbox features.

5. ADVANTAGES OF USING DROPBOX, AS SEEN FROM OUR EXPERIENCE

Our common practice was to begin using Dropbox during the first week of each session of the course, in order to share the course outline, the bibliography and the academic requirements. Later on we stored there the students' performance records, the feedback on their projects, presentations and assignments, etc. By the end of the course, we could notice that all students were using Dropbox on their own for several purposes, e.g. to store homework, assignments and projects there for easy access, both at their workplace and from home.

CIP Students also used Dropbox on their phones to review handouts and presentations sent by their teachers. Some also began to sync their files (all were unclassified) across multiple computers outside of the university. Students used Dropbox to submit assignments and store their e-portfolios. Once they finished an assignment, they could share the file with the teacher by sending her a link. The teacher could then read the file, highlight and leave comments on it, and save the annotations for the student to read later.

Another strong point in favor of this method – as we have experienced it – is that it fosters student-student interaction insofar as exchanging ideas or useful materials are concerned. In other words, uploading materials in the dropbox is a tool and enabler of cooperative learning, i.e., learning from each other.

Moreover, and derived from the above, it is our students' general opinion that Dropbox stimulated their creativity and initiative, because the teacher's role as sole provider of information fades off in this way. In addition, by allowing the students to recommend and upload useful materials, bibliography, etc., they feel empowered and responsible for the overall success of the course. Noteworthy is the fact that the papers and projects produced by each group member, as well as the feedback received are there for everyone to access and learn from them.

All in all, as some authors pointed out [6], Dropbox is more of a mega-utility than a simple tool. It grants you the invitation and freedom to think up new ways to use it, in and out of the classroom.

6. DISADVANTAGES OF DROPBOX, AS SEEN FROM OUR EXPERIENCE

One of the flaws of this service is that the administrators (or developers) who maintain the service have the **right to delete information** from free, inactive accounts. In other words, if you store information on Dropbox and abandon the account for a few months, it is unlikely that you will get it after you log back on. [9]

Also, there are serious **concerns about the security** of Dropbox. As hands-on experience shows, cases of servers being hacked and information stolen have been reported. Moreover, it is only natural to wish any sensitive information you have stored in Dropbox remained secure. Currently, the encryption used to secure user data on Dropbox is only known to the developers. Users are not allowed to perform encryption on their information before uploading it on Dropbox. [10]

7. CONCLUSION

Cloud-computing offers a multitude of services that can be used by both private users and businesses. By providing access to services that exist irrespective of hardware and by offering scalable solutions to several users, it has become increasingly popular in the years that have passed since its launch in 2006. Among its advantages are its accessibility, its low cost, the possibility to make it private, public, hybrid or community depending on users' interests, the access to a number of tools, the possibility to benefit from the expertise and experience of those providing the services, etc.

One of the most popular cloud-services is Dropbox. It is very user-friendly and accessible, providing users with a multitude of tools to use for editing, sharing and backing-up information. Being popular and used for storing and sharing personal files, it is also a proper choice to ESP teachers even if there may be concerns about the security. That is why, although Dropbox is an amazing and extremely useful method to store and share

files online, in practice we maintain it ~~is~~ for casual files and not very sensitive ones.

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