

# Dropbox: A Must for All Teachers

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## Abstract

This research was conducted to find out Japanese college students' perceptions of and attitude toward the use of Dropbox, a free software tool that allows anyone to synchronize files across home and office computers, smartphones, and tablets. A questionnaire, containing seven questions related to students' perceptions and nine questions related to students' attitude, was utilized in this study. Results show that students were split in their perceptions of two variables, while the majority of the students gave favorable perceptions to the other five variables. As regards student attitude, the majority of the students had a positive attitude toward eight variables, while the rest of the students were split in their responses to one variable. Pedagogical implications are discussed and suggestions for future research are encouraged.

As the Web gained in popularity, online teaching and learning began to appear as a reality that would far exceed the metaphor of the virtual environment and its ephemeral quality (Laferriere, Tremblay, Allaire, & Hamel, 2007). The classroom was re-conceptualized first as a network-enabled classroom and, later, as a networked learning community (Laferriere et. al, 2007). Educators are making use of on-line tools to simplify their workload and enhanced the teaching and learning environment at the same time.

In these technologically fast paced days, where change is anticipated, even expected; where computing and communication devices are changed with increasing regularity; the time is ripe for a Cloud based interactive, collaborative arena, offering anywhere storage and access. While Cloud storage facilitates this transfer of documents from one device to another, it also permits, perhaps more importantly, the sharing of the same file between selected groups of people, syncing the files on all devices automatically, allowing for collective development and access of files such as common assessments, documents, etc.

One of these free on-line tools is Dropbox, a company whose software gives users a special folder on their computer that automatically synchronizes with the Dropbox cloud (Walsh, 2012). Using Dropbox, it is possible for a class to become a learning community working together simultaneously, in real-time, with or without face-to-face contact. As our worlds become more complex, locations more dispersed and communication devices more prolific, the need to collaborate with others anywhere, anytime, anyhow is growing exponentially, and this need can be realized through the utilization of Dropbox.

Provenzano (2010) enumerates the many benefits of Dropbox. One is transferring documents. We no longer have to worry about transferring documents from one computer to another. If we create a test at home, we only need to save it to the Dropbox Folder. Once we get to school, we can log-in to Dropbox.com, download the document and use it in class. Two is easy sharing. With Dropbox, we can create folders for each unit we teach and share them with the teachers in our Department from the luxury of our home computer. There is no need for extra steps. Once a folder is shared with other people, they will be able to access it whenever, wherever, they want. Again, teachers are no longer chained to their computers in the classroom and that is a huge plus. Third is creating folders for work and personal use. Sometimes we want to share many pictures from a trip. We can place the pictures in the Dropbox folder and share them with family and friends. Too often, pictures are dispersed over the Internet, but a Dropbox folder can allow many people to actually upload, store and view copies of pictures taken at events in one place. Fourth is iPhone, iPod or iPad access. We can download the Dropbox application and have access to all of the same documents that we would see on the computer on our iPhone, iPod or iPad. We can double check to see what documents we have access to from anywhere in the world. If we decide to make a document accessible to the public, we do not have to wait to get to a computer to do so. We can also take pictures from our camera and post them in the shared folder. Fifth is sharing individual files with anyone we want. If we really do not want someone to look at our entire folder, we can store the document (Word Doc, Picture, Song, etc.) in a public file and it will create a special URL link we can send to anyone we choose.

Prior to the utilization of Dropbox, our university used Google Gmail and an internal share folder. Both systems lacked the functionality of Dropbox. This paper outlines the

usage of Dropbox in an educational setting. It is our purpose to show how Dropbox can facilitate interaction between teachers and students, and between students in an interactive, collaborative, co-operative student-centered arena. This research also focuses on the seven principles of good teaching practice, which can be realized using Dropbox (Electronic Education Environment, 2012). The seven principles are: (1) to encourage faculty-student contact, (2) to encourage student-student cooperation, (3) to promote active learning, (4) to give prompt feedback, (5) to emphasize time on task and reduce wasted time, (6) to communicate higher expectations, and (7) to support diverse student talents and ways of learning. Specifically, the research questions addressed in this study are:

- (1) What are college students' perceptions of the use of Dropbox?
- (2) What are college students' attitudes toward the use of Dropbox?

## **Methods**

### **Participants**

49 participants from a private university in Kansai region in Japan were involved in this research. They were first, second and third year students who major in English language education. Some students had used Dropbox in their courses before, and for some, the current course, was the first time to use Dropbox in a class.

### **Instrumentation**

The statements in the questionnaire reflect the seven principles of good teaching cited by the Electronic Education Environment (2012). The seven statements in Section 1 relate to the students' perceptions of the use of Dropbox in their course. The nine questions found in Section 2 inquire about students' attitudes toward the use of Dropbox. Section 3 consists of questions about students' personal information such as gender and number of years of learning English.

Responses to Section 1 and Section 2 were scored from 1 ("Strongly Disagree") to 7 ("Strongly Agree") on a Likert scale. For ease of interpretation, the data were collapsed into a three-point scale. For instance, data for "Strongly Agree" and "Agree" were merged and labeled as "Agree."

The questionnaire was translated into Japanese and checked for clarity and

accuracy by a Japanese teacher of English. Then it was administered to a test group of university students to ensure its comprehensibility. Considering the feedback of the students, it was revised and finalized.

The questionnaire was made available at SurveyMonkey. The link to the questionnaire was sent to respondents through e-mail.

## Results

Table 1. Students' perceptions of the use of Dropbox

Effects of the use of Dropbox	Agree		Neutral		Disagree	
	f	%	f	%	f	%
Teacher-student contact	19	39	9	18	21	43
Active learning	28	<b>57</b>	7	14	14	29
Student-student cooperation	23	47	8	16	18	37
Prompt/timely feedback	27	<b>55</b>	11	22	11	22
Time on task and reduces/decreases wasted time	26	<b>53</b>	12	24	11	22
Higher expectations or goals	25	<b>51</b>	8	16	16	33
Skills and ways of learning	25	<b>51</b>	10	20	14	29

n(total number of respondents) = 49, f(frequency)

Except for the two variables, the results in Table 1 show that 50% or more of the students had favorable perceptions as regards the use of Dropbox. The students were split in their perceptions as regards the two variables, that is, Dropbox encouraged teacher-student contact (Agree = 39%; Disagree = 43%), and student-student cooperation (Agree = 47%; Disagree = 37%). The rest of the variables which received positive perceptions from students are: Dropbox promoted active learning (57%); it provided prompt/timely feedback (55%); it emphasized time on task and reduced wasted time (53%); it communicated higher goals or expectations (51%); and it supported student skills and ways of learning (51%).

Table 2. Students' attitudes toward the use of Dropbox

Effects of the use of Dropbox	Agree		Neutral		Disagree	
	f	%	f	%	f	%
Teacher-student contact	25	51	10	20	14	29
Active learning	26	53	11	22	12	24
Student-student cooperation	27	55	9	18	13	27
Prompt/timely feedback	31	63	9	18	9	18
Time on task and reduces/decreases wasted time	27	55	9	18	13	27
Higher expectations or goals	28	57	8	16	13	27
Skills and ways of learning	25	51	10	20	17	29
Easy to use	22	45	10	20	17	35
Readily accessible	27	55	6	12	16	33

n(total number of respondents)= 49, f(frequency)

The data in Table 2 shows that, except for one variable, specifically, Dropbox was easy to use, 50% or more of the students had a positive attitude toward Dropbox or the use of Dropbox. Students had a positive attitude toward the effects of Dropbox or the use of Dropbox, namely: it encouraged teacher-student contact (51%); it promoted active learning (53%); it encouraged student-student cooperation (55%); it provided prompt/timely feedback (63%); it emphasized time on task and reduced wasted time (55%); it communicated higher goals or expectations (57%); it supported student skills and ways of learning (51%); and it was readily accessible (55%).

### Discussion

Results reveal that the majority of students had positive perceptions of and attitude toward Dropbox or the use of Dropbox in their classes. Both perceptions and attitudes of students were positive for the use of Dropbox in encouraging active learning. Creating assignments that require students to apply real world knowledge and events, involve discussion, and critical thinking about past experiences all contribute to increasing active learning (Electronic Education Environment, 2012). In our classes, Dropbox provided a venue where our students uploaded articles and other additional reading assignments beyond textbooks.

As far as the capability of Dropbox to provide prompt or timely feedback, it

received favorable perceptions and attitudes from the majority of the students. It is important to respond to student inquiries and requests as soon as possible, including the grading of assignments. Doing so makes a large difference in the motivation and involvement of students (Electronic Education Environment, 2012). This is where Dropbox comes in. We returned graded assignments/tasks to students quickly and privately using Dropbox.

Perceptions and the attitudes of more than half of the students were also favorable for the capability of Dropbox to emphasize time on task and reduce wasted time. Electronic Education Environment (2012) points out that encouraging student to use technology will reduce wasted time and help to increase the quality of work and time spent completing the tasks. Dropbox allowed our students to access files anywhere, any time. It also allowed them to submit their assignments online, saving time and resources.

We have to ensure that students are aware of what is expected of them and the work they submit. This was realized through using Dropbox, which enabled us to communicate our goals and expectations. It is through Dropbox, where we uploaded the assignment rubrics that clearly communicated assignment goals. It is also here where we uploaded the formatting standards for students to view and refer to when working on their assignments. We also posted directions on the Dropbox class file, to provide additional information about the lesson's content, or an assignment's requirements. It is also on Dropbox where students saved their individual and group assignments.

It is a fact that students learn differently and should be given the opportunity to express their unique talents, and strengths throughout the course in various ways. This was realized using Dropbox in our classes. Dropbox allowed the posting of class notes, lecture guides, and other study materials for students who learn best on their own. It also allowed our students to submit a variety of file types for flexible assignments beyond traditional term papers.

As far as the capability of Dropbox to promote student-student contact and teacher-student contact, the results show that students were split in their responses. Although the students were assigned into groups to collaborate and create synthesized responses to upload their tasks as one file, some students complained about others' free-riding in group activities. This can be prevented by detecting free-riding early in the group, so that measures can be taken to get the whole group involved in the project again (Börjesson, et. al., 2006). The capability of Dropbox to encourage teacher-student

contact yields the same results. Communication between faculty and students is an important factor in a student's motivation and involvement in the course, and the contact does not have to be in person. However, the findings show that students seemed not to understand this idea, which could have been prevented by clarifying this concept with the students at the beginning of the course and through follow up in the middle and at the end of the semester. In our courses, we uploaded files like course syllabi, reading assignments, essay prompts, and other course files for students to access from anywhere. We also uploaded graded assignments in the form of rubrics which students could view privately. These processes increased teacher-student contact even if it was not in person.

Finally, the findings on students' attitudes reveal that only one variable did not get the favorable responses from the majority of the respondents, that is, Dropbox was easy to use. The concept of Dropbox is simple, but students may experience complications, especially if they are technically-challenged users, such as those who are yet to appreciate the differences between files and folders (Buckler, 2012). This problem was remedied by asking the technically adept students to help their classmates. Another factor that might have contributed to the difficulty in using Dropbox was the Internet connection (Mitchell, 2012). The WiFi connection at our university occasionally dropped unexpectedly for no obvious reason, which can be frustrating.

## Conclusion

Based on the results, it can be concluded that the use of Dropbox, focusing on the seven principles of good teaching, was perceived positively by the majority of the students. Moreover, these students had favorable attitude towards its use in their courses. Student's attitude toward the use of Dropbox will affect the learning outcome. A positive attitude, as evident in this study, is one that can give hope and purpose to teaching and learning. As educators we should take advantage of these positive perceptions and attitudes when designing our classroom that integrates the use of Dropbox, which takes into account the seven principles of good teaching.

As this study covered only 49 students who major in English Education, it is hoped that other researchers will replicate this study to gather more data to validate the findings.

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