

## Using Mobile Application to Promote Autonomous Learning for Syntax Subject

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**Abstract.** This is a descriptive qualitative research aiming at exploring the use of mobile apps to promote autonomous learning for students of English Education study program in Syntax subject. Syntax is given in the fourth semester and the lesson objective is students are able to analyze sentence construction in their correct structures. There are three mobile apps used namely Quizlet, Socrative, and Sli.do. They are used randomly based on certain subtopic in the semester. Purposive sampling is applied for data collection. The data are then analyzed using content based analysis. It is found out that the use of mobile apps is able to promote students' autonomous learning since they are eager to dig more and learn further to find materials for their subject namely Syntax. They are challenged to find answers to some problems given by the lecturer. They become more creative in presenting ideas as well as doing tree diagram analysis on sentence constructions.

**Keywords:** autonomous learning, content based analysis, mobile application, syntax

**Abstrak.** Penelitian ini merupakan sebuah penelitian kualitatif deskriptif yang bertujuan untuk mengeksplorasi penggunaan aplikasi seluler untuk meningkatkan pembelajaran otonom bagi siswa program studi Pendidikan Bahasa Inggris di mata kuliah Sintaksis. Sintaksis diberikan pada semester keempat dengan tujuan agar siswa dapat menganalisis konstruksi kalimat dalam struktur yang benar. Ada tiga aplikasi seluler yang digunakannya itu Quizlet, Socrative, dan Sli.do. Aplikasi-aplikasi tersebut digunakan secara acak berdasarkan subtopik tertentu. Purposive sampling diterapkan untuk pengumpulan data. Data tersebut kemudian dianalisis menggunakan analisis berbasis konten. Ditemukan bahwa penggunaan aplikasi seluler mampu mempromosikan pembelajaran otonom siswa karena dapat meningkatkan keinginan mahasiswa dalam menggali lebih banyak dan belajar lebih jauh untuk menemukan materi untuk subjek mereka, yaitu Sintaksis. Mereka ditantang untuk menemukan jawaban atas beberapa masalah yang diberikan oleh dosen. Mereka menjadi lebih kreatif dalam menyajikan ide-ide serta melakukan analisis diagram pohon pada konstruksi kalimat.

**Kata kunci:** analisis berbasis konten; aplikasi seluler; otonomi pembelajaran; sintaksis

## INTRODUCTION

Nowadays, technology is developing in various aspects of life. This development offers opportunities and challenges especially in education. The new tools and devices found stimulate a new culture of learning English language skills since it provides numerous ways of teaching methodology and technique.

Today's students have not just changed *incrementally* from those of the past, nor simply changed their slang, clothes, body adornments, or styles, as has happened between generations previously. A really big *discontinuity* has taken place. One might even call it a "singularity" – an event which changes things so fundamentally that there is absolutely no going back. This so-called "singularity" is the arrival and rapid dissemination of digital technology in the last decades of the 20<sup>th</sup> century (Prensky, 2001).

Our students today are all "native speakers" of the digital language of computers, video games and the Internet. While the rest of us who were not born into the digital world but have, at some later point in our lives, become fascinated by and adopted many or most aspects of the new technology are, and always will be compared to them, Digital Immigrants (Prensky, 2001).

The importance of the distinction is this: As Digital Immigrants learn – like all immigrants, some better than others – to adapt to their environment, they always retain, to some degree, their "accent," that is, their foot in the past. The "digital immigrant accent" can be seen in such things as turning to the Internet for information second rather than first, or in reading the manual for a program rather than assuming that the program itself will teach us to use it. Today's older folk were "socialized" differently from their kids, and are now in the process of learning a new language. And a language learned later in life, scientists tell us, goes into a different part of the brain.

This is one opportunity that teachers can take, using the characteristic of the students to create a better method in teaching. In fact, the teacher's main role in teaching language has shifted to facilitating and guiding learners to achieve the learning objectives. However, a large number of learners prefer having teacher present, especially when dealing with syntax.

As in some ways, learners still find difficulties in analyzing sentence constructions. They need to have other resources besides the teacher himself.

In the field of language learning, there is much concern about what techniques can be employed by teachers in order to help those students who are unable to develop skills to learn, to assess and to control their own learning (Ustunloughlu, 2009 as cited in Masouleh and Jooneghani, 2012: 835).

That is why learners should have self-direction, an independency to control their own learning, to seek for what they need in accomplishing their objectives of learning. It's time to design a system that takes into account students' interests, learning styles, cultural identities, life experiences, and personal challenges, to design a system that not only sets all students up for success but that is also equitable and meets their unique needs (Kaput, 2018). Therefore, this paper describes the use of mobile applications in enhancing students' autonomous learning skills for Syntax subject.

## **Problem Statements**

Thus the researcher formulates the problem statements as follows:

1. Does using the mobile applications promote the autonomous learning process?

2. To what extent do the learners rely on the lecturers in addition to the usage of mobile applications?
3. What learning satisfaction is gained by ESL learners using mobile applications?

### **Research Objectives**

Based on the problem mentioned above, the objectives of the research are:

1. To find out how the usage of the mobile applications promote the autonomous learning process.
2. To find out in what extent do the learners rely on the lecturers in addition to the usage of mobile applications.
3. To find out learning satisfaction gained by ESL learners using mobile applications.

## **LITERATURE REVIEW**

### **Syntax**

The learning of a language is known as linguistics. Linguistics involves many topics of learning a language, including the study of syntax. In Linguistics, the study of syntax involves learning how to structure sentences in a certain language (Smith, 2015).

Semantics is the study of the meanings of words in a particular language; it is quite easy to learn them due to the presence of translator dictionaries. The purpose of various words in a sentence also falls under semantics, but the structure of a sentence that will communicate an idea to other people accurately is very important. The study of syntax in linguistics is quite challenging since the learner has to know how to put words in a sentence to make it sensible and avoid ambiguity (Smith, 2015).

To be complete, every sentence should have a subject, a verb and a complete idea. The most simple sentence creates meaning with only a subject and a verb or verbphrase, and that structure of a sentence is about Syntax.

At first, syntax may be frightening and sometimes it is difficult initially to understand the structure of a text, the real subject, verb, and object; the agreement between each components; and else.

This is why syntax is put in the fourth semester, the students are believed to better understanding since they also have already got introduction to linguistic in the second semester.

Being able to analyze sentence construction in their correct structure is considered as an important thing to be mastered. As the choice of the topic on syntax is influenced by the difficulty that is experienced while learning a foreign language (Smith, 2015).

Syntax is the first attempt to understand language. Students may have already know the meaning of *like*, *curtain*, and *black*. In Indonesian they may say “*Saya suka korden hitam*” and translated it into *I like curtain black*. This sentence is not acceptable as when one would try to figure out its meaning, it might come out ambiguous. Syntax soundness in a sentence makes the sentence easier to understand for the reader and the listener and the message is passed on to the reader without any confusion. Thus, people learning languages should take into consideration the use of syntax (Yule, 2006).

Syntax also enables learners to construct sentences that show recursion which is important in the construction of grammatically correct sentences (Yule, 2006). It enables the construction of one sentence from many phrases that relate to one subject or object.

A good example is in the description of the location of an object. *The sweet is on the floor, the sweet is near the door, and the sweet is in the kitchen*. These phrases should be combined to construct a complex sentence that the reader or listener should understand. The prepositional phrase has to be repeated in the complex sentence, and the words must be well arranged to make sense.

Recursion and proper arrangement of the words will change the sentence as, ‘The sweet is on the floor, near the door, and in the kitchen’. The insertion of a sentence within another sentence also requires proper arrangement of the words to make a grammatically correct and logical sentence (Yule, 2006).

In the study of a language, syntax skills are very important since they help the learners to understand the structure of the language in a systematic and structural way. A learner who does not understand the syntax aspects of a language finds it difficult to understand the sentences written or spoken in the particular language. It is essential that students learn syntactic properties of the language before moving to the next stages (Kim & Sells, 2007).

### **Mobile Application**

Mobile application or well-known as mobile app is an application software that is specially designed to be run on the mobile devices such as smartphone or tablet computer. We can find many mobile apps in app stores such as Play Store or App Store.

Mobile applications (mobile apps) are software programs designed to run on mobile platforms such as Android (Google), iOS (Apple) and or Windows. According to (Son 2016), language learning applications are defined as applications dedicated to the learning (and teaching) of languages which can be used in and out of the language classroom. These applications can be developed as native apps, web apps and hybrid apps. Son (2016) further mentioned that these are Instructional apps, which are explicitly designed with language learning and teaching in mind.

The most cited definition of Mobile learning is using mobile technologies to facilitate and promote learning anywhere and at anytime (Chuang, Hwang, & Shih, 2010). Wexler et al. (2007) defined mobile learning as “any activity that allows individuals to be more productive when consuming, interacting with, or creating information, mediated through a compact digital portable device that the individual carries on a regular basis, has reliable connectivity, and fits in a pocket or purse” (p.21). (Ramamurthy & Rao)

However, Aljuaid, Alzahrani, and Islam (2014) cited from Ramamurthy & Rao considered it as learning procedures held outside of the traditional classroom and through learning devices (computers, tablets, iPads, palm tops, and mobile phones); people keep continuing their learning activities (p. 1).

Nowadays, there are many software developers who try to make educational software because they found it will be helpful for everyone who tends to be autonomous learner. People can learn anything anywhere from their smartphone or tablet computer easily by installing the software.

In this research, the researcher uses 3 kinds of mobile apps as the teaching media to teach English Syntax. The three of them are Quizlet, Socrative, and Sli.do. They can be used to help students to promote autonomous learning. They have different features that are useful for teaching and learning process.

### **1. Quizlet**

Cited from the official website, Quizlet is the world's largest student and teacher online community. Every month, over 50 million active learners from 130 countries practice and master more than 300 million study sets of content on every conceivable subject and topic. Quizlet was started 10 years ago when Andrew Sutherland created a tool to help him study for a high-school French vocabulary quiz. He aced the test, so his friends asked him if they could use the tool too.

Quizlet has a mission to help students (and their teachers) practice and master whatever they are learning. Quizlet provides engaging, customizable activities with contributions from people everywhere. Quizlet is used by more than 50 million students and teachers each month, on iOS and Android apps. It is found in classrooms in rounds of Quizlet Live, as part of study sessions at home, and in the hands of learners studying for everything from spelling tests to college-level science classes to professional certifications.

### **2. Socrative**

An UK CELTA trainer, Lindsay Warwick give opinion on Socrative that it is a formative assessment tool which allows a teacher to check understanding of all students during a lesson, rather than just those they nominate or who put up their hand. It's designed for use in class, in real time. There are four key features:

Quiz – this allows teachers to create multiple-choice, true/false or short-answer question quizzes that they can save and use again. In class, the teacher launches the quiz and students complete it in real time on their devices.

Space Race – students complete a quiz, but this time they compete against each other to get a spaceship from one side of the screen to the other.

Quick Question – the teacher asks a multiple-choice, true/false or short-answer question orally or writes it on the board. Students use Socrative to choose the correct answer.

Exit Ticket – students reflect at the end of a lesson. There are two inbuilt questions (How well did you understand today's material? and What did you learn in today's class?).

### **3. Sli.do**

This app is an interactive Q&A and polling app for conferences and events. It allows people to send questions to speaker and panelists, upvote the best question, participate in live polls, send tweets with the event hashtag, easily browse the event agenda, create a personalized event schedule, and network with other delegates.

It can be used for student and teacher to make a group discussion about current issues related to the education. This will help them to ask the question freely because they can ask as an anonymous person and the other can respond to the question. This app refers to a room discussion that has its own code for every room discussion, so people can share the code and the other can join the room discussion by entering the code.

### **4. Autonomous Learning**

Autonomous learning or as we know as self-directed learning, is the ability to take responsibilities to learn by themselves. According to Van Lier (1996), autonomous learners need to make significant decisions about what, how and when to learn. Accordingly, Palfreyman and Smiths (2003) maintain several arguments may be used in favor of developing autonomy in language learners: for example, that autonomy is a human right; that autonomous learning is more effective than other approaches to learning; and that learners need to take charge of their own learning in order to make the most of available resources, especially outside the classroom (p. 1).

However, a gradual move from teacher-centered or teacher-directed teaching to learner-centered or learner-directed learning is essential in order to develop learner autonomy in the ESL classroom (Dam, 1995).

As Sheerin (1997, cited in Thanasoulas, 2000) succinctly puts it, teachers have a crucial role to play in launching learners into self-access and lending them a regular helping hand to stay afloat.

Probably, giving students a "helping hand" may put paid to learner autonomy, and this is mainly because teachers are ill-prepared or reluctant to take students away from teacher dependence. Kumaravadivelu (2006) holds Meaningful (liberatory) autonomy can be promoted in the language classroom by, among other things:

1. Encouraging learners to assume the role of mini-ethnographers to investigate and understand how, for instance, language as ideology served vested interests.
2. Asking them to reflect on their developing identities by writing diaries related to the social world.
3. Helping them in the formation of learning communities where they develop into unified, socially cohesive, mutually supportive groups seeking self-awareness and self-improvements.

Providing opportunities for them to explore the unlimited possibilities offered by online services and bringing back to the class their own topics for discussions, and their own perspectives on those topics. (p. 178)



Cited from Ramamurthy, a study was conducted by Rahamat, Shah, Din and Aziz (2011) on Students' Readiness and Perceptions towards Using Mobile Technologies for learning the English Language Literature component. This study investigated the effect of ten Teaching English as a Foreign Language (TEFL) oriented features of mobile phones in the English language classroom on the achievement of foundation-year students in King Abdul Aziz University (KAU) in General English. The study also explores students' attitudes toward this new method of teaching. The study used an experimental design where the control group was taught through the strategies used in ELT, whereas the experimental group was taught through the same strategies in addition to using mobile phones.

Afendi Hamat, Mohamed Amin Embi, and Haslinda Abu Hassan (2013) surveyed the level of lecturers' readiness for mobile learning at Universiti Kebangsaan Malaysia (UKM). Survey questionnaires were distributed to 374 lecturers in the age range of 25 to 50. The findings revealed that although 79% of the respondents have never employed it as a teaching method, 85.7% of them believe that mobile learning would be useful for their students. Indeed, 85.7% of them think that mobile learning will enhance their students' learning experience.

The findings revealed that, since the school system does not allow mobile phone use in school, an alternative way of using mobile phones for learning purpose is needed. Indeed, participants had positive attitude to the idea and they agreed that receiving messages from their teacher would have a positive impact on their learning.

## METHOD

The method used in this research is qualitative-descriptive analytic. The participant of the research is forty (40) students, in the age range from 19 to 21 years old who were in the 4<sup>th</sup> semester of English Education in Universitas Jenderal Soedirman taking Syntax subject.

The method of collecting data in this research is by using questionnaire and interview. The technique of collecting the data are; promoting the students to use some mobile apps in their classroom activities, observing the students' behavior while doing the activities, giving questionnaire and doing interview to collect the valid data, and analyzing the data to get the conclusion of this research.

The questionnaire was distributed to all students in the forth semester after they finished the learning process, while the interview was done to strengthen the data that had been gathered.

**Table 1** Cross Tabulation of Age and Gender

Age		18-20	21-23	Total
Gender	Male	8	-	8
	Female	30	2	32

Total		38	2	40
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Table 1 shows the cross tabulation of age and gender. A total of 9 male and 35 female students participated in this research. The majority of the students were from age range of 18 to 20 (9 male and 33 female students). A total of 2 students from age range of 21 to 23.

## RESULTS AND DISCUSSION

Mastering a language requires learning skills. As for English, it is always been referred to the four skills that are reading, listening, speaking, and writing. However, nowadays learning skills go beyond the four skills since they focus on how learners learn and have critical thinking, creative thinking, communicating and collaborating to fulfill the world of work demand of experts who can work effectively and respectfully in diverse teams (Trilling & Fadel, 2009).

According to Bruner (1996), learning is a process which requires learners to construct new ideas or concepts based in their current and past knowledge. Therefore, the activities given should help learners able to think creatively, while the problem-based learning helps them think critically. This requires learners to be reflective by identifying possible solutions to problems given (Koschman et al., 1996 in Ramamurthy and Rao, 2015).

Little (1991) stated that learner autonomy and teacher autonomy are interdependent, and that teachers wishing to promote greater learner autonomy need to "start with themselves", reflecting on their own beliefs, practices, experiences and expectations of the teaching/learning situation.

In second language education, Learner Autonomy involves second language learners gaining awareness of their own ways of learning such as learning styles and learning strategies, so that they can utilize their strengths and work on their weaknesses (Benson, 2007, cited in Jacobs and Farrell(2010, p. 18).

However, according to Jacobs and Farrell (2010), focusing on learner strategies is important in second language education because research has indicated that our students can actually learn how to successfully manipulate their own strategy use.

**Table 2** Characteristics found in the students

No	Details	Number
1	Challenging and interesting (some video materials)	22
2	Creating autonomous learning	10
3	Helpful in finding some materials and examples	8
Total		40

Table 2 depicts smartphone use in developing students' creativity, critical thinking, and collaborative learning.



We found out that there are 22 students believe that using smartphone in learning is challenging and interesting. Since it was not only the teacher who provided the materials for their teaching and learning process, students were also had the opportunity to browse as much as they need. They could also share any materials they found in the internet to their friend. The materials were not limited in books or journals, but also video, pictures, articles, they found interesting and helpful for the learning syntax process.

Ten (10) students agree that using the applications in the smartphone help them in being an autonomous learner. They were free to choose and to dig more of any knowledge in accordance with syntax subject as much as they want. Whenever there was a discussion in the group, they were asked to have as much evidence as they could get to prove their argument. Here they searched more and more things related to the topic that was discussed in the group. In addition, when they found that their friends got some difficulties, they were able to collaboratively helping the other in solving the problem given based on certain topic.

In addition, eight (8) students stated that using smartphone application in learning syntax was helpful as they could find some materials and examples. In example, students were asked to break down the sentence structure of a complex sentence. They were able to find other examples to help them solve the problem they face. By having more references about how the structure of the complex sentence and how to separate between one phrases with the other phrases they had more and complete understanding of how those things work.

All those things help them in thinking critically and creatively when solving a problem. Moreover, they also work collaboratively with their partner and friends to learn and evaluate each other.

**Table 3** Students' Preference of the Mobile Phone Application

No	Application	Number
1	Socrative	20
2	Quizlet	10
3	Sli.do	10
Total		40

Table 3 shows that 20 students believed that Socrative is more interesting and helpful than the two other applications that are Quizlet (10 students) and Sli.do (10 students).

Based on the analysis, most of the learners agreed that they realize their own effort plays an important role in their success of learning Syntax. Some strategies that were used are by promoting Sli.do, Socrative, and Quizlet to the learners.

Socrative helps them with different features. They don't need to make an account, just launch the app and enter the code given by the teacher to join the class. In Socrative, there are many features that help the learners to learn autonomously. They have to do the quiz

provided by the teacher, and the result can be downloaded by the teacher too as teacher's portfolios.

Quizlet allows teachers and learners to collaborate and share the ideas together. It covers 130 countries all around the world. So, the larger network of people around the world allows them to collaboratively discuss the issues on many things such as teaching and learning process or teaching method, while the learners also can do the same thing with other learners or even teachers.

While Sli.do, learners are able to make a group discussion with the others and they discuss the issues related to the teaching and learning process. They just need to access mobile application and enter the class code given by the teacher. All learners who had already joined the group are free in giving opinions and answering questions. Here, they had to hold on their opinion as logic as they could, whether by browsing what they need or else. That is why they are able to develop their critical thinking and communication skills.

So, from the application of these three apps, we can see the changing of students' attitude in positive ways.

At first, students seemed to be reluctant toward the lesson. They were afraid to give answers from the questions given about the materials. They tended to be passive in class during the teaching and learning process.

In the beginning of the semester, they were given the learning objectives and some syntax references. In addition, an introduction into the three mobile apps was done massively. It was done to make them understand about what they should do during the semester and what the goal of the lesson.

On the teaching learning process, the classroom was set as interactive as possible in which the lecturer gave quizzes and polling using different mobile apps. The teacher also set the classroom activities as fun and comfortable to the students, so they would be more active and interactive during the lesson. It also allowed the collaborative learning between student to student and student to teacher.

The students' attitude toward the method was also evaluated by asking their opinion after using the apps as their teaching media to learn syntax. Their opinions were asked by giving them questionnaire and live interview.

## CONCLUSION

In this globalize era, people cannot be separated from technology and sophisticated device. The device that is mostly used in our daily life is smartphone. It can be very helpful in every way for people if they use it wisely. In this case, smartphone can be used for educational propose by using such educational mobile apps. They promote learners to self-directed in which helping them to broaden the brain capacity to face the 21<sup>st</sup> century world.

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