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Teachers' Perceptions and Students' Attitudes towards the Use of "Socrative Application" as Smart Students Response System in EFL Classroom

Case Study: Master 2 EFL Students at Chadli Bendjedid University

Dissertation submitted to the Department of English in Partial Fulfilment of the Requirement of the M.A. Degree in "*Didactiques de L'Anglais*"

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DEDICATION

We dedicate this work to our families

Abd el Momen and Billel

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ABSTRACT

The integration of mobile technology in English as a Foreign Language (EFL) classrooms is taking place gradually in the realm of education. This exploratory study is interested in teachers' and EFL students' opinions about the use of Socrative application based on mobile devices as a Smart students Response System (SSRS) to promote active learning and interaction patterns. The participants are three teachers from the English department at Chadli Bendjedid University who were approached via a semi structured interview and 47 Master 2 students from the same department were questioned via an online questionnaire. After one month of the integration of Socrative, a triangulation method was used in collecting data in order to empower the qualitative analysis as well as the results obtained. The findings revealed that students and teachers' perceptions and views about Socrative are expressed as positive. It also showed that teachers and students have the ability to implement SSRS in ordinary classrooms due to the easiness of its use and the encouraging implication derived from it. To conclude, this study showed that the integration of SSRS in the English Department is very welcomed due to its practicality.

Keywords: Teachers' and Students' perception, Smart Students Response System, Socrative, EFL classrooms, Active learning.

ملخص

إن عملية دمج تقنية الهاتف المحمول في أقسام اللغة الإنجليزية كلغة أجنبية تأخذ مكانها بشكل تدريجي في المنظومة التعليمية. تهتم هذه الدراسة الاستكشافية بآراء الأساتذة وطلاب اللغة الإنجليزية كلغة أجنبية حول استخدام تطبيق Socrative استنادًا إلى الأجهزة المحمولة كنظام استجابة ذكية (SSRS) لتعزيز التعلم النشط وأنماط التفاعل. بعد واحد شهر من ادماج التطبيق في القسم، تم جمع البيانات من المشاركين وهم ثلاثة أساتذة من قسم اللغة الإنجليزية في جامعة الشاذلي بن جديد تم الاتصال بهم من خلال مقابلة شبه منظمة كذلك استجواب 47 طالبًا مستوى ماستر ٢ من نفس القسم عبر استبيان عبر الإنترنت. أدى استخدام التثليث في جمع البيانات تقوية التحليل النوعي وكذلك النتائج التي تم الحصول عليها. كشفت النتائج أن تصورات الطلاب والأساتذة ووجهات نظرهم تجاه استخدام Socrative تُفهم على أنها إيجابية. كما أظهر أن الأساتذة والطلاب لديهم القدرة على استخدام SSRS في الأقسام الدراسية العادية نظرًا لسهولة استخدامها والآثار المستمدة منها. في الختام، فإن دمج SSRS في قسم اللغة الإنجليزية مرحب به للغاية نظرًا لكونه عمليًا.

الكلمات المفتاحية :اراء الأساتذة و الطلاب، أقسام اللغة الأنجليزية كلغة أجنبية، نظام استجابة الطلبة الذكي، التعليم النشط .

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LIST OF ACRONYMS AND ABBREVIATIONS

App	Application
BYOD	Bring Your Own Device
CALL	Computer-Assisted Language Learning
CD-ROM	Compact Disc Read Only Memory
CTML	Cognitive Theory of Multimedia Learning
EFL	English as a Foreign Language
ICT	Information and Communication Technology
MCQ	Multiple-Choice Quiz
MMS	Multimedia Messaging Service
MS	Microsoft
SSRS	Smart Students Response System
SMS	Short Message Service
TPS	Think Pair Share

General Introduction

Introduction

Technology has invaded the education field and teaching English as a foreign language is no exception. Many countries have invested a lot to develop the realm of education in terms of technology implementation. Students of today are grown up simultaneously with the daily innovations of smartphones and digital devices which they master like experts. This potential should be exploited during the teaching and learning process; therefore, some countries have minimized the cost and seized the opportunity that students already had a digital device which can contribute in enhancing the educational quality. A Bring Your Own Device (BYOD) approach which is based on the use of teachers' and students' devices in the classroom could be implemented in several ways. This latter depends on the adequate software which will be used as a pedagogical tool during and after the course. There are many free Student Smart Response software available on Apple store , Play store and Web-based stores , such as Socrative, Kahoot and Verso that permit students getting easily engaged and motivated in the classroom, and also help teachers to visualize students' understanding. The valuable outcomes that such software offers, boosted our curiosity to canvass the students' attitudes and the teachers' perceptions of Student Smart Response System (SSRS).

This study explores both students and teachers' opinions about Socrative application (Socrative App) as a type of SSRS after implementing it in ordinary classrooms, and then the researchers tend to describe their perceptions which may encourage the integration of SSRS in the English department at Chadli Bendjedid University.

This introductory section of the study contains the statement of the problem, the aim, and significance of the study. It provides the research questions and hypotheses and the research design; it also presents the organization and limitations of the study.

1. Statement of the Problem

Smart student response systems are no longer strange in contemporary classrooms. They allow teachers and students to interact via devices, raise students' engagement, and provide teachers with immediate answers of students. In our context, teachers and students at Chadli Bendjedid University stick to the traditional ways of interaction without attempting to implement such kind of software in language laboratory or even in conventional classrooms; hence, fostering the teaching and learning process via SSRS is totally absent and the perception of teachers and attitudes of students towards such technique is unknown. To fill this gap, we have introduced one of the most prominent SSRS called Socrative in order to grab teachers' and students' attention about this free and handy application and its efficiency in terms of instantiation, time saving and students' participation.

2. Aims of the Study

This study aims at exploring the teachers' perceptions and students' attitudes towards the utilisation of Socrative app in their own devices at the end of the course in a conventional classroom. More importantly, it seeks to raise the awareness of teachers on the potential of students respond systems (SSRSs) as interactive means that facilitate the teaching and learning process in EFL classes. Further, this research work endeavours to pave the path for a future integration of this application at Chadli Bendjedid University.

3. Significance of the Study

The integration of smartphones as a pedagogical tool in classrooms is taking an essential place in educational institutions. Besides the ease use of the mobile based or the web-based application, this latter ensures a full students' engagement, since they must login to interact virtually with the teacher witch consequently leads to an active learning. The use of

SSRS reinforces the traditional teaching and learning practices in terms of monitoring and assessing students in real time.

In near future, this present study may play the role of a pilot case study about the implementation of SSRS at Chadli Bendjedid University, since it deals with one of the prominent and well-known application (Socrative). Not only can positive attitudes and feeling of appreciation on Socrative be a sign of future adaptation of such SSRS at the English department, but the tool can be used in all departments at Chadli Bendjedid University since it supports Arabic keyboard characters.

4. Research Questions

The core motivation of the present study is attempting to measure teachers' and students' perceptions on Socrative app usage; this research, hence, was conducted to find answers to the following questions:

Q1: How do EFL teachers perceive Socrative as a new approach for administrating activities?

Q2: What are EFL students 'attitudes towards the use of Socrative app in their own mobile in classroom?

Q3: How do EFL students perceive the implications derived from the use of Socrative app?

5. Research Hypotheses

In the light of the above research questions, we hypothesize that:

H1*:* EFL teachers discern a positive and welcomed approach towards Socrative app as an alternative way of administrating activities.

H2: EFL students possess a complimentary attitude towards the use of Socrative app in their own mobile since the access to it is easy in and outside the classroom and this, therefore, provide them with instant feedback.

H3: EFL students' perception towards the implications derived from Socrative app is very positive in terms of motivation, enthusiasm and digitized atmosphere.

6. Methodology

To validate the hypotheses and answer the research questions, the current study will follow the exploratory method which tends to investigate the unknown; thus, Socrative app was implemented in Master Two classroom for a period of two months. It was used as a tool of formative assessment in six different modules where teachers and students became familiar with it. During the period of the implementation of Socrative, a scrupulous observation was done on the classroom to measure students' attitudes and behaviours towards the application in real time. After finishing the phase of implementation and as the targeted audience became familiar with the Socrative, an online questionnaire was administrated via Survey Monkey application to 47 students to reinforce the measurement of their attitudes. Moreover, a semi structured interview was conducted with three teachers to measure their perceptions of Socrative app as a pedagogical tool. Thus, this study is conducted by means of triangulation in which mixed tools of collecting data are used.

7. Organization of the Study

The present thesis consists of five parts. The first one introduces the topic, deals with its background, the statement of the problem, the aim and the significance of the study, the research questions and hypotheses, the research design followed by the organization of the study and the limitations. The second part which is the first chapter is devoted to the review of the literature related to the notion of ICT in education and its uses and types, the evolution of Smart Students Responses System; also it deals with the learning theories in relation with SSRS, and introduces the Socrative app as an SSRS and its different related studies. The

second chapter is devoted to the methodology adopted in this research. It presents the research design and the analyses of the data provided from the teachers' interview and students' questionnaire alongside the discussion of the findings. The third chapter provides the implications of the research findings and some recommendations and suggestions. The thesis ends with a general conclusion to the study where a set of summarises of the main findings and ideas for potential future research are presented.

8. Limitations of the Study

This study is limited in terms of Socrative features' exposure to the sample, where the researchers used only Socrative Free Application, also the research covered only the feature of Quiz which contains Multiple-choice quiz, true/false and Open-Ended questions among what Socrative offers like Space Race and Exit Ticket because there was no time to explore all the features due to the pandemic of Covid-19.

Chapter One

Literature Review

Introduction

This review of literature elaborates the era of technological advancement in the field of education and its effectiveness especially in EFL classrooms. It defines the Smart Students Response System (SSRS) and its evolution; also, it tackles the correlation between SSRS and the learning theories and gives a special focus on connectivism. it deals with Socrative Application and states its features. Moreover, it sheds the light on the roles of teachers and students when using Socrative. Finally, it displays the benefits generated from the use of Socrative for both teachers and students.

1.1. Digital Age

The field of education is facing huge shift in which the integration of technologies becomes indispensable not only for the purpose of improving teaching and learning but also to satisfy students of today needs. This transition opens the doors for a new era called the digital age or the information age. According to Akdal (2018) the digital age refers to "The age of widespread use of technological products and networks and technological methods over traditional methods in life practices" (p. 71). The digital age is the portion of time, when people have the ability to transfer information freely and easily by the means of electronic devices (e.g., computers, Smartphones, tablets, …) (Sttati, & Torres, 2020).

The digital age has tremendously influenced education in terms of content display and interactions. Educators tends to use modern pedagogical tools to the detriment of the traditional ones (Thierstein, 2009). Moreover, the information age impacts are well felt in many educational institutions in the everyday life teaching and learning practices (Selwyn, 2011).

Certainly, approaching digitization in the education system has many supporters in the globe, but there are cynics who prefer to remain the traditional methods in classrooms as it is. They claim that the overexposure to technology has a negative impact on children in terms of achievement called the digital anxiety (McChesney, 2013). This latter depends on the adequacy of technologies types used in the classroom that lead to real improvement of learners' level.

1.1.1. Uses of Technology in EFL Classroom

From the beginning of the 21st century, the use of technology has become increasingly widespread; hence, several studies attempt to describe its use. For example, Bruce's and Levin's (2001) study illustrate that technology is a multitasking media. It can be used as a means of inquiry, communication, content constructing and students' assistant. These elements contribute to a positive result in EFL classrooms. Meanwhile, Baylor and Ritchie (2002) noted that teachers' attitude towards ICT is the main factor of educational technology success. Technology is well known by the acronym (ICT) which stands for Information and Communication Technologies. According to Christenson (2010), "ICT refers to technologies that provide access to information through telecommunications" (p. 414).

Plugged classrooms have changed the habits of the teacher who used to practice in an unplugged classroom (Hampel, & Lamy, 2009). Teachers of today incorporate ICT before, during, and after the lessons since it facilitates the process and helps to meet the students' needs. Numerous digital tools are used to improve both teaching and learning productivity; at the same time using a range of electronic tools without a careful selection of the means which goes with the objectives doesn't necessarily lead to efficiency (Hampel, & Lamy, 2009). Moreover, Divaharan and Ping (2010) claimed that on one hand, the professional development of teachers has to focus on the mastery of the ICT skills, and on the other hand, the choice of the appropriate ICT integrated in the course is primordial.

Mclntyre (2011) explored this idea by saying

> Don't simply use the technology as an 'add-on' to the class. There must be a logical reason and purpose for the inclusion of any web 2.0 tools. Integrating the technology appropriately into class activities and assessments to help students achieve the learning outcomes is very important. Make it clear to students how the technology should be used to complete tasks. (p. 4)

What we can extract from the above quotation is that reading course content from teacher's laptop is the same as reading it from papers, since there are no significant outcomes derived from this shallowed use. Ladaci (2017) recommends that an effective use of technology in EFL classroom should be preceded by a suitable training and mastery of the digital aids. Furthermore, "the use of technology in teaching becomes more important in present time because teachers also have to keep with the technological knowledge of their students" (Richards, 2014. p.2).

In effect, one can say that today's students are different from students of the near past in terms of digital literacy; also, the use of technology is not exclusive for teachers, many studies have shown that students have positive attitudes toward the use of their own digital tools in EFL classrooms for instance, Hall and Elliott (2003) state that students use their mobiles to access the related information about course yielded by the teacher instantly. Furthermore, Milon and Iqbal (2017) conclude that although students do not use technology in their learning process of the English language but they hold a positive perception of technology effectiveness in enhancing their level. On the other hand, education stakeholders and researchers claim that using ICT in classrooms leads to students' distraction. Coskun and Ozturk (2013) point out that students are not aware of the time wasted and the damage caused by accessing to non-educational material during the learning process for the gamification

sake. More importantly, devices ban in EFL classrooms is suggested to avoid bad learning habits and prevent multitaskers learners from distraction (Conley, 2011).

1.1.2. Types of Technological Tools in EFL Classroom

Different types of ICT tools, facilities and equipment are applied in EFL classrooms to improve students' learning skills such as CD-ROM, recording tape, computer-based learning or web-based learning. Although the variety of the tools used, they are classified from numerous perspectives.

According to Lim and Tay (2003), the types of ICT are segmented into five areas. Each area depends on the utilization of the tools in the EFL classroom as the following:

1) Informative tools such as internet, intranet system, Homepage, etc
2) Resignation devices like CD-ROM, etc.
3) Constructive tools which consist of applications like MS Word, MS Excel, etc.
4) Communicative tools that allow teachers and students to establish an online communication like emails, SMS, MMS, Messenger. etc.
5) Collaborative tools such as forum, Blogs, online competitive activities for groups.

In fact, a bunch of technological tools are used in the field of language education and the rapid development of the tools has led to reshaping the categorisation of the ICT types by many researchers. For instance, based on the ICT tools distinguish features, Lei and Luo (2012) classify them into four main types: (a) educational networking; (b) web-based learning; (c) mobile learning; and (d) classroom equipment. They summarize the above types in table 1 and support each one by authentic example.

Table 1

Types of ICT tools and Examples (Lei, & Luo, 2012, p.77)

Types of ICT Tools	Definition	Example
Educational Networking	Online learning platforms that connect learners using social networking technologies, exhibiting similar functions to sites like Facebook or Myspace	Ning, classroom 2.0. Elgg
Web-Based Learning	A set of online application or services that expand learner's abilities to interact and collaborate with each other in the process of searching, receiving, organizing, and generating educational content	Wiki, blog, podcasting, social bookmarking, virtual worlds
Mobile Learning	Mobile device or technologies used for educational purposes that support different aspects of instruction or make new educational activities available	Smartphone, PDA, GPS (for augmented reality games), interactive response pads.
Classroom Equipment	Stand-alone devices that are used in traditional classrooms to facilitate the interaction between teachers and students in different class activities	Interactive whiteboard, touch Screen computer, Kiosk

From a perspective of classroom environment, the new trend of e-teaching and e-learning come to create a suitable atmosphere depending on the needs of the digital generation. For this reason, Barr and Gillespie (2003) emphasized the necessity of switching form a traditional environment to a modern one by integrating the technologies in EFL teaching and learning process. Computer-Assisted Language Learning (CALL) is a well-known environment, it is defined as "an integrated procedure in which language performance is elicited and assessed with the help of a computer" (Niojons, 1994, p38). CALL which is no longer limited to computer (Hubbard, 2009), is devoted exclusively for learning language and generally used to explore new methods and techniques related to the teaching and learning processes. (Gamper, & Knapp, 2002).

Another type of technologies in terms of environment is called Bring Your Own Device (BYOD). It refers to a model that foster the use of learners' own devise(s) in

classroom in which the devise(s) hold(s) various applications and features for learning purposes (Kong, & Song, 2015). Afreen (2014) defines BYOD the approach where individuals are enabled to access an institution network with their *own ICT device* for the sake of completing their work tasks. Several studies are conducted to examine the effects of BYOD; for instance, Parsons and Adhikari (2016) measured teachers' and students' perceptions of BYOD implementation at a secondary school in New Zealand. The findings indicate that students had a positive change in learning and classroom management, also teachers showed concerns towards the huge changes in approaching teaching by BYOD.

1.2. What is Smart Students Response Systems?

Smart Students Response Systems (SSRS) also well-known as *Clickers* or *Learner Response Systems* are wireless devices such as mobiles and tablets used generally to gather student's response in large classrooms. The aim behind their integration is to monitor and manage students' engagement and understanding (Kaleta, & Joosten, 2007). According to Nielsen, Hansen, and Stave (2013), SSRS are systems that enable students to respond quizzes and multiple-choice questions using a small handheld device. Moreover, SSRS are more used in academic filed as a tool of assessment during lectures and courses because of its capacity of enabling a large number of students to respond instantly without interrupting the teacher. SSRS gives the adequate atmosphere to passive and timid learners to be actively engaged through using their own mobiles while responding (Dangel, & wang, 2008).

SSRS is one of the main technological tools suggested by Mehring (2016) for modern EFL classrooms since it provides an immediate feedback which enables the teacher to gauge students' understanding in real-time and collect and display their responses for the entire classroom.

1.2.1. Evolution of Smart Students Response Systems

Teaching in a large EFL classroom and attempting to keep the students attentive and engaged is a challenging task for teachers; for this reason, Clickers evolved overtime with the emergence of smart mobiles and tablets from the basic electronic devises of the 1960s where SSRS have been used in classrooms, then the late 1990s under CALL approach till nowadays (Judson, & Sawada, 2002). The tool evolved in terms of hardware from a wired to wireless and handheld devices synchronized with the same software. The virtual interaction becomes much easier from distance thanks to Radio Frequency and infrared (Carnaghan, et al., 2011). The basic pedagogical principle of SSRS is that the students wrote their answers on their devises to respond the teacher's task in which the software launch a quick survey to determine what portion of students responded correctly or incorrectly, then the teacher adjust instructions accordingly (Crouch, & Mazur, 2001).

The newest form of SSRS depends on the internet flow. It enlarges the zone of interaction to the highest level of distance and makes it more flexible than ever. Meanwhile the tools cannot be used in isolation, so the connection is crucial (Carnaghan, et al., 2011); also, the cloud feature enables to save and download the results of each assessment individually.

1.3. Smart Students Response System and Theories of Learning

The learning theories as Behaviourism, Cognitivism, and Constructivism were developed long ago before the emergence of the SSRS. The use of mobiles technologies becomes an essential component of daily life learning without being noticeable or recognized as learning at all, for this reason, the connectivism theory of learning emerges silently in the world (De Simone, 2016).

Based on Perez (1995) conclusion that "Man is the product of the reinforcing environmental contingencies" (p.37), many studies attempt to juxtapose Pavlov and Skinner

in classical and operant conditioning with the introduction of technology in the realm of education. According to Sletten (2017), the learning process within SSRS requires students' self-regulation behaviour which correlate with their performance. Furthermore, the notion of learning is represented by a sequence of mechanical actions consisting stimulus – response – reinforcements by the means of technological tools in classrooms (Farhan, Aslam, Jabbar, Khalid, & Kim, 2017).

According to Lajoie (1993), technological tools such as calculators, communications software are considered as a cognitive tool. Moreover, Churches (2009), introduced the Digital Taxonomy which has both the cognitive elements proposed by Bloom, Anderson and Krathwohl and the methods that fit for the modern classrooms. In other words, the Digital Taxonomy suggests not only suitable learning goals to be achieved in a technology-enhanced teaching context but also the necessary instructions when using applications and how realize its full potential. In addition, Pittman (2013) illustrates that selection, organisation and integration are the essential processes must be done by the teachers who adopt Cognitive theory of multimedia learning (CTML) in their classrooms. Teachers have to create an adequate environment for the learners who are exposed to visual and verbal data by the means of multimedia.

In constructivism-learning environment, technology plays an important role in the teaching and learning process. The combination of technology and constructivism changes the teachers' approach from the course design, the method to the assessment. It makes him/her free from the traditional limited tools applied in day-to-day activities (Rakes, Field, & Cox, 2006). The constructivism paradigm as a theory of learning emphasises that learners build their knowledge through experiencing things and reflecting on those experiences, thus experience precedes development (Olusegun, 2015).

Connectivism as a theory of learning comes due to the huge social change influenced by technology. Siemens (2005), suggested a new concept of learning which combines the theories of learning such as behaviourism, constructivism and cognitivism with the technological tools. In this context, Siemens (2005) stated that "Connectivism presents a model of learning that acknowledges the tectonic shifts in society where learning is no longer an internal, individualistic activity" (p.7). The slogan of "*connect to learn"* as a beginning of the connectivism theory was suggested by Polak (2014).

The following table shows some of the very major differences between traditional learning and connective learning.

Table 2

Traditional Learning vs Connective Learning (Adapted from Sawiński, 2010)

Traditional Learning	**Connective Learning**
Memorizing facts, dates, details	Connecting to information sources
Understanding processes and phenomenon	Gathering knowledge in devices
Teaching concepts	Finding (searching) knowledge
Practicing skills	Creating and maintaining connections
Solving different subject problems, both theoretical and practical ones	Perceiving relationship between areas, ideas and concepts
Gaining personal experience	Critical thinking
Solving model tests	Selecting the content of learning and making decision independently

Note. Adapted from https://www.edunews.pl/badania-i-debaty/badania/1077-konektywizm-czyli-rewolucja-w-uczeniu-sie

1.4. Socrative Application as Smart Students Response System.

Many online platforms of SSRS are gaining place in the ground of education system (Jordan, & Mitchell, 2009). Among these platforms we find Socrative software which is, according to Palanca (2020), is an instant response tool designed for effective engagement and quick assessments. It was created in 2010 by Boston-based graduate school students either as web-based (https://socrative.com) or mobile-based. It is a favorable alternative to SSRSs used by teachers and students around the world which provides an instant feedback, real-time interaction and a formative assessment data.

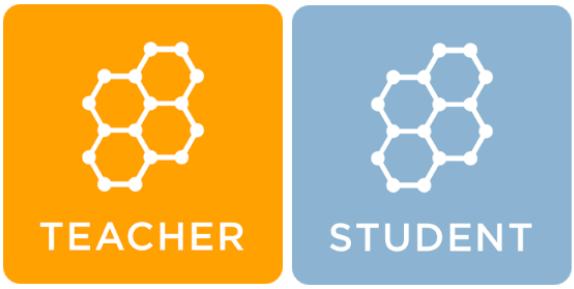


Figure 1. Socrative Icons

1.4.2. Access to Socrative

Socrative can be accessed by all smart devices including computers, laptops, tablets, and smartphones. Socrative access is for free. There is to log sections and applications; teachers use (Socrative Teacher) and students use (Socrative Student). Only teachers need a registration to create an account to login Socrative as a teacher and a customised access for students by a unique identification code which requires just a room name and student's name or just a room name for anonymous customisation set by the teacher. (Tirlea, Elphinstone, Muir, & Huynh, 2018).

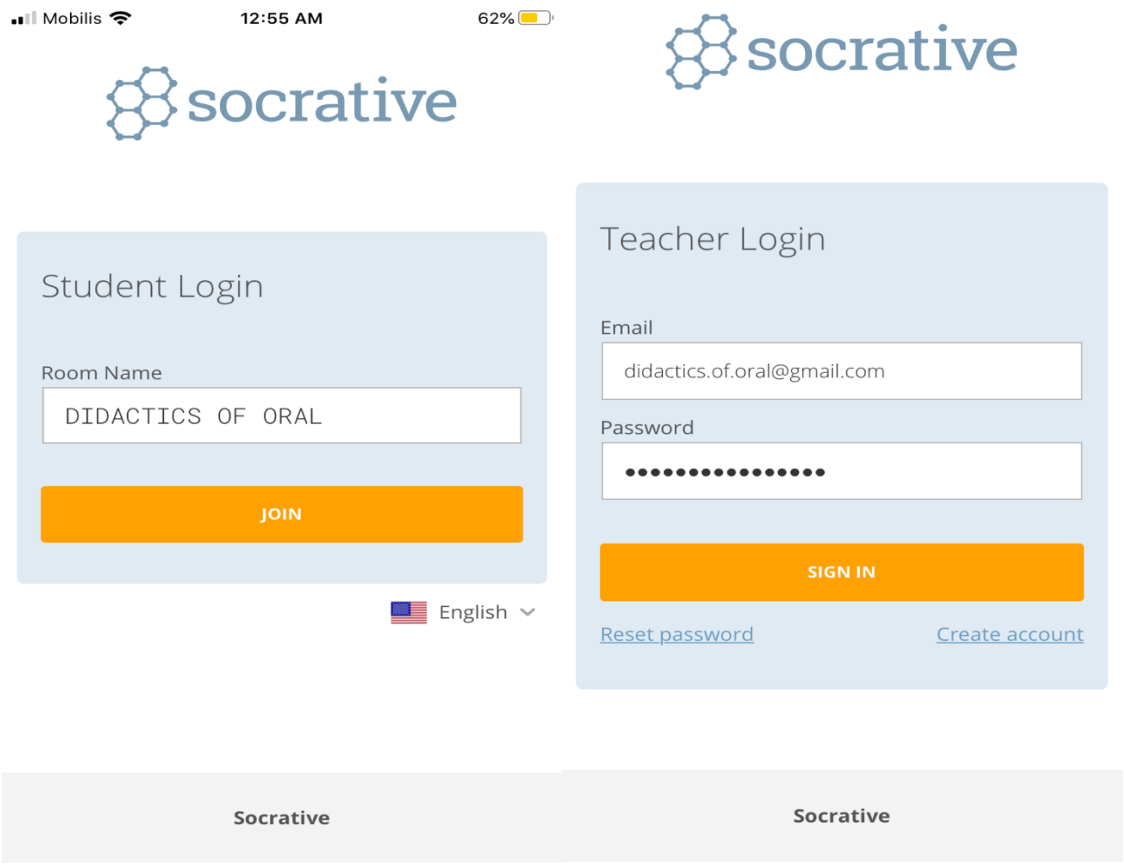


Figure 2. Socrative Access

1.5. Socrative Application Features

The teachers are able to design a variety of question types through the features offered by Socrative, such as multiple-choice question (MCQ), space race as a competitive team work and true/false question closed-ended or open-ended. Socrative enables to set the quizzes options like providing the students with an immediate feedback after each response, also quizzes can be shared among teachers, duplicated and stored. Furthermore, Socrative questions label provides 65 000 characters while answers can have 10 000 characters (Palanca, 2020).

There are two versions of Socrative: FREE and PRO. For the free version, the maximum number of students who can easily be engaged and participate in a single virtual classroom is 50; whereas, Socrative Pro allows 150 students to participate in one public or

private room. Besides, Socrative Pro enables teachers to create multiple rooms up to 20, in contrary to Socrative free where teachers are allowed just for one classroom per account (Alobelo, 2017).

1.5.1. Activities

Socrative app allows teachers to design collaborative activities inside and outside the classroom; as they can create quizzes using the dashboard of the application and choose "Student-paced" or "Teacher-paced"; each one has different options. When teachers click the start button, the activity will begin. The application facilitates teachers' work by keeping their designed activities organized in recent tabs, which are the ones that have been accessed recently and all tabs that include all the quizzes ordered alphabetically (Bharti, 2014).

1.5.2 Quizzes

After creating Socrative accounts, students can log in at any time; in the classroom for example, teachers can design Student Paced quizzes. Students can search for questions, check answers, and read reviews from the teacher with the possibility of editing and going forward and backward through the questions. When students finish the quiz, they submit it to the teacher. After receiving the students' answers, not only their names and scores are visible to the teacher, but also the total score of the class. The instructor ends the activity by selecting "Finish" and students can find their scores as they open the quiz later on (Bharti, 2014).

1.5.3. Reporting

In the past, teachers used to calculate both the individual scores of students and the total score of the class. They also handwrote their reports, which was a complex and time-consuming process. Today, with the appearance of applications like Socrative, teaching became easier as technology shortened time and place; teachers automatically receive reports and access them later at any time in the section of Manage Quizzes if they select "No report". They can email the reports, or download them as they can cancel the operation (Bharti, 2014).

1.5.4. Rooms

To design the quiz on Socrative app, teachers, first, have to create a room in which students can access the questions. They log in into the application by writing their email and password, and then students repeating the same process; they enter their teacher's room code. Teachers can choose the type of questions they want to include in the lesson whether they are quick questions with instant results, or Exit Ticket using three short questions with the ability of editing, importing, duplicating, and deleting quizzes.

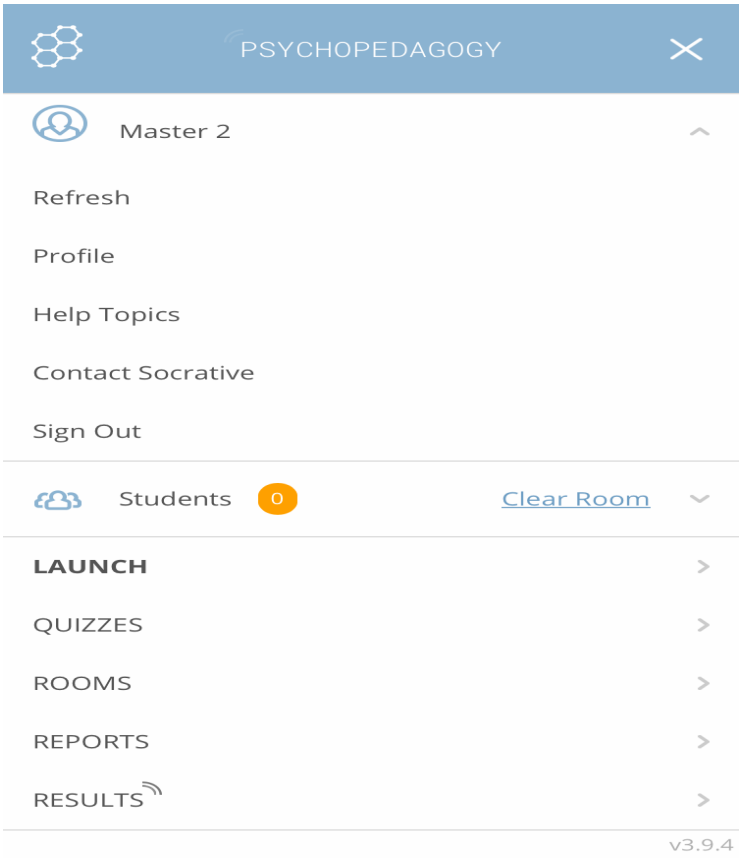


Figure 3. Socrative Room

1.5.5. Space Race Rooms

Socrative app encourages collaborative and interactive learning; this feature enables students to work in pairs or in small groups. The teacher designs the quiz and the teams race

to answer the questions; in other words, the teams compete to be the first to answer. This feature is easy to use; the teacher selects “Space Race in the dashboard, then chose the quiz, numbers of teams, and colors. When teams finish, they submit their answers, and the teacher receives the report. (Bharti, 2014).

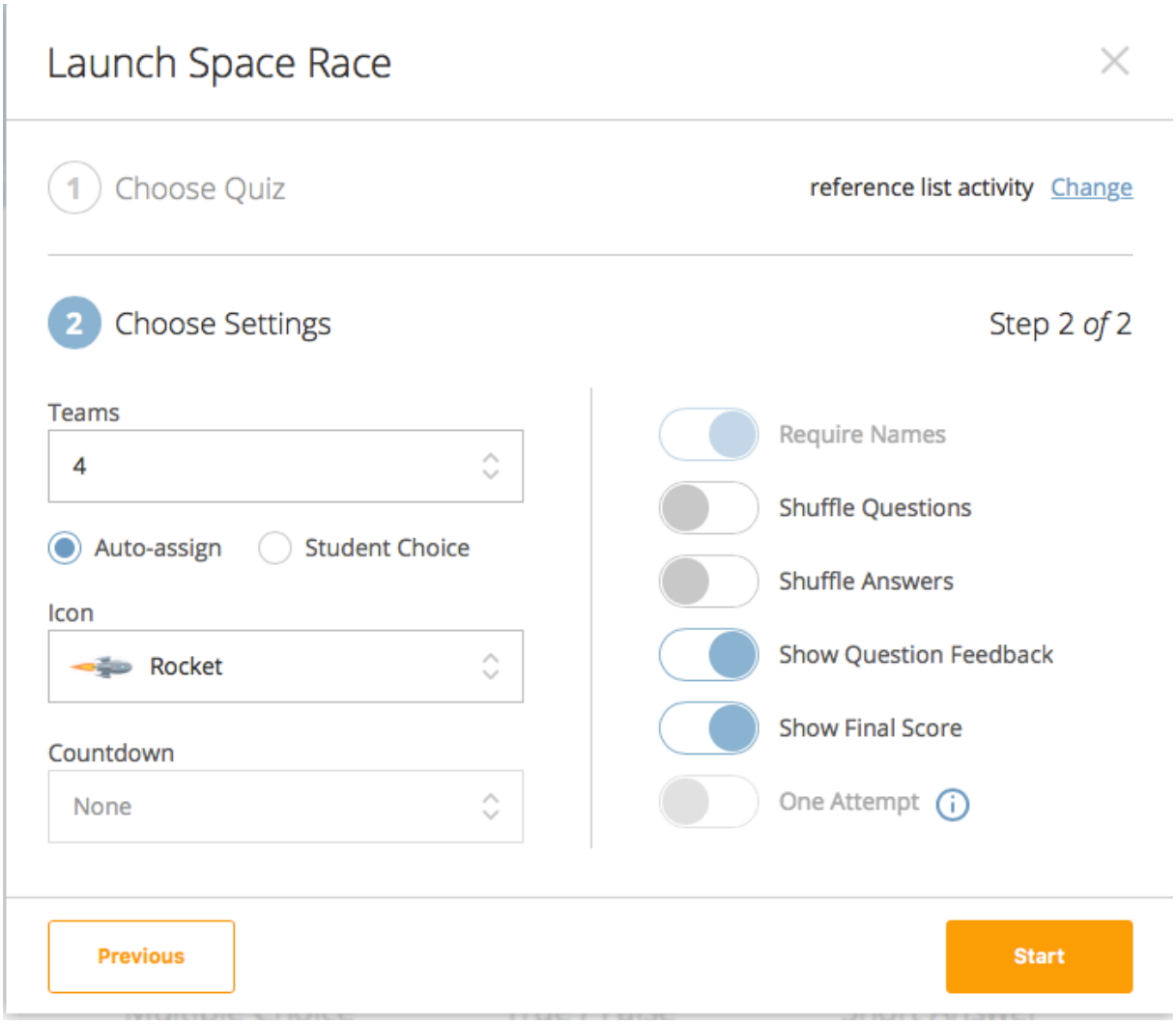


Figure4. Socrative Space Race Room

1.5.6. Results

The traditional approaches to teaching require from teachers to analyse each quiz paper in the class, which is time-consuming and impede the teaching course; teachers will have to focus on correcting papers, and will lack the time to discuss with students and answer

their questions about the lessons. Using Socrative app, the teacher can receive their scores in one click; by selecting the number of the question, the results will be visible and refreshed as students access the quiz again (Bharti, 2014).

1.6. The Role of Teacher when Using Socrative Application

Nowadays, many educators avoid including traditional lecturing tools within the teaching process because it supports passive learning which results negatively in the classroom compared to active learning approaches (Freeman, et al., 2014). Technology in classrooms became a necessity because it helps to search for alternatives of traditional lecturing and develops the training engagement among students, but while technology plays a vital role today in education, its correct use in teaching is not yet discovered. There is a tool called Socrative app that enables teachers to quiz students during a lesson and collect their answers from large groups of learners; it helps teachers to make classroom engagement atmosphere since students are focused within the studied material. Researches that were conducted in this subject area revealed that university students receive better education when it involves technological tools (Trees, & Jackson, 2007). Therefore, technology is required to attain students' needs; there are many universities that prohibit the employment of smartphone in classrooms, yet many researches have revealed that it serves students' needs and functions as a guide during learning.

Dahlstrom (2012) stated that the employment of mobile technologies is very supported by students within the learning environment and thought of as a monitor towards their academic achievement. Likewise, Socrative is a free reachable application to both teachers and students at the same time within the same environment once it is installed on the device (Awedh, Mueen, Zafar, & Manzoor, 2014).

1.7. The Role of Student when Using Socrative Application

Smart Student Response technology is interactive; therefore, it provides shared feedback between teachers and students as both of them can track the learning process. Stowell and Nelson (2007) stated that the implication of this system in their classes helped students to be active learners during the learning process. Students who used this system reported that their motivation increased, and that they learnt how to work cooperatively (Jones, Antonenkot, & Greenwood, 2012), and the system was effective in learning (Auras & Biz, 2007). Students are responsible for feedback as much as teachers; Gagne and Driscoll (1988) stated that it is crucial to realize the academic tasks. Socrative app aims to track learning; it is used to quiz every student in the classroom, and not only the ones who participate verbally. Therefore, students' contribution to the learning process is to provide a feedback of their understanding; and each student answers the questions designed by the teacher to help in decision-making of the next lessons.

1.8. Benefits of Socrative Application

Socrative app helps increasing the cognitive process of students when answering questions designed by the teacher. Using Socrative, students are encouraged to express their opinions and debate about certain topics which increase their critical thinking and build their self-esteem. This application invites students to become a part of lesson planning and knowledge gaining decisions as they participate in their own learning. It contributes to achieve collaboration between students and teachers during the learning process which increases classroom engagement and academic performance. Collaboration between learners and teachers results in a deeper comprehension of the studied material and helps students to welcome new information and attach it to their prior knowledge (Kennedy, & Cuts, 2005). Collaborative learning allows students to attain a great amount of knowledge which enables them to produce new knowledge (Lipponen, 2002).

1.8.1. Benefits for Teachers

Traditional lecturing has failed to achieve classroom engagement because of its passive nature. Biggs and Tang (2007) criticized the traditional lecture as it is a method that involves a large number of students and lacks interaction between teachers and students. However, Socrative app gives teachers the freedom to create student-teacher interaction during the learning process through technology using smartphones, laptops, or tablets. This application is free and does not involve administrational procedures to be used; teachers and students need to have an access to the internet on technological tools that they have to be a part of classroom activities designed via this application.

1.8.1.1. Visualizing Students' Understanding

The active learning in Socrative app encourages students to include critical thinking in their learning process as they are engaged in real tasks. Socrative provides direct feedback right after students provide the teacher with their answers, and supports collaborative work. To increase students' critical thinking, Kim, Sharma, Land and Furlong (2013) designed active learning activities that include three active learning techniques, "small-group learning with authentic tasks, scaffolding, and individual writing" (p. 230). The research revealed an enhancement in the learners' critical thinking which proves the capability of active learning tools like Socrative in boosting critical thinking skills.

1.8.1.2. Meeting the Student's Needs

Learners perceive knowledge in different ways (Meyers, & Jones, 1993). People are born curious as observed in children who seek an understanding of their environment. Hence, it is required from educators to encourage students' journey in discovering knowledge and provide them with different learning strategies that serve their needs and help them to absorb the studied material joyfully based on their prior knowledge (Dewey, 1899). Using Socrative app, students in general, and those who are shy in particular are encouraged to have a voice in

the classroom about the content of the lesson. Teachers could also share answers of students anonymously to encourage hesitant learners to share their ideas without having to face fear or anxiety if their answers were incorrect. Johnson (2005) stated that the use of SSRS like Socrative app serves the new generation that has already been familiarized with the use of technology on a daily basis if students used it efficiently.

1.8.1.3 Electronic Grading

Since Socrative is a formative assessment application that tracks students' learning process inside and outside the classroom, homework can be assigned to learners to be asked about the studied material, and teachers can provide feedback once students answered the quiz, suggesting correct answers (Leong, 2014). Yet, some students require more motivation, guidance, and systematic learning than others. To achieve that, teachers can use web-based homework platform like Socrative which provides students with electronic grading and feedback (Demirci, 2010). Students can keep trying until they answer correctly, given a feedback on their answers in each attempt. This tool serves as an alternative to classroom instructions; it allows students to study the material with the respect of the amount of time they need to increase their understanding of the lesson. For classroom quizzes, at the end of the session, teachers can be provided with an Excel report sent through email; the report has both each student's answers and the overall work.

1.8.1.4 Efficiency

The large use of SSRS in the past by using clickers resulted in classroom engagement (Blasco-Arcas, Buil, Hernández-Ortega & Sese, 2014) which led to find an alternative that matches the new generation educational needs by using smart technology products. The main advantage of Socrative app is that quizzes can be re-designed and shared by students and teachers which open the door for collaborative work. Socrative can measure students' interaction in the classroom, and decide the planning of the next teaching sessions. The

elements that characterize Socrative app from the traditional lecturing tools are the direct feedback and the flexibility of questions that can lead to classroom discussion and, therefore, increase critical thinking. Kolb (2011) wrote that the use of smartphones allows immediate feedback and improves collaboration inside and outside the classroom resulting in a development of critical thinking skills.

1.8.1.5 Sharing Quizzes

Socrative app is a platform in which teachers design quizzes and assigned works for students. It enables them to create many different questions; they could be true/false questions, multiple choice, and short answer questions. Teachers can provide explanation of lessons and correct answers which can be later shared with students. Socrative provides a variety of tasks controlling the pace of work and the type and number of questions which are unlimited with the possibility of preserving quizzes. Furthermore, teachers can collaborate with other educators and share what they have prepared with them simultaneously in different environments without the violation of their work. Teachers who use Socrative platform recommend it for educators who want to increase classroom engagement (Nawalaniec, 2015).

1.8.2 Benefits for Students

Socrative has been appraised by many teachers in the world for its role in formative assessment in classrooms. It has also received positive reviews from students as it helps them to engage in the classroom and interact with teachers. Introvert students for example, will find it difficult to share their ideas with the classroom, but when they use Socrative, they are able to articulate their thoughts without hesitation; giving them an opportunity to be visible and active learners. Prince (2004) said that active learning is one of the most effective approaches to motivate students to use critical thinking and creativity. Applying active learning in the classroom will motivate students to use their cognitive skills and go beyond memorization (Anderson, & Krathwohl, 2001).

1.8.2.1 Students' Engagement

Some scholars suggested that using Bloom's Taxonomy in the classroom will stimulate students' thinking and help them to perceive the lessons meaningfully, which will lead to better understanding and more engagement (Weigel, & Bonica, 2014). As Socrative determines the mastery of a task, it is easy for the teacher to decide where students are in the pyramid, and whether they are ready to move to the next task. Receiving this information about students helps the teacher divide them into groups based on their abilities of understanding since humans tend to learn differently as Meyers and Jones (1993) declared, which allows them to engage better according to their common differences. Lee and Oh (2014) conducted a quasi-experimental study using a quiz similar to Socrative app called Bell. The results showed that reading skills using clickers can be improved as well as the other language skills since cognitive thinking is activated and classroom engagement is achieved. Another comparative study was conducted using Socrative app in a Grammar session; results showed that students were engaged more in collaborative activities.

1.8.2.2 Students' Motivation

Technology has changed the world since it appeared; it has been efficient in every aspect of life. Its use in education is inevitable and its great contribution facilitated the ways to reach knowledge. Using technological devices today has become a necessity for effective learning and teaching. Today's learners are people who were born in a period of big technological development; therefore, technology is a part of their daily life and cannot be ignored in achieving almost every task. For this reason, using devices like smartphones to motivate students to learn and enjoy the learning process is very recommended; as it helps to draw learners' attention to the material and to improve individual and group learning through interacting in discussions (Duncan, Hoekstra, & Wilcox, 2012).

1.8.2.3 Practicality

Since Socrative app is a student response system, it requires Internet connection; however, due to the technological development today, it is possible to access it easily as many universities have Wi-Fi connections. The application is accessible to everyone, and addressed to students and teachers; and this latter can create quizzes and share the name of the room with students so they can answer. After getting the results, teachers can follow up the students' development during the learning process. Kolb (2011) said that smartphones, being needed devices, students carry them everywhere they go, even to school, and teachers need to take this opportunity to increase their level using technology. Its use indicates high quality education as it facilitates and strengthens the learning and teaching processes (Çakır, &Yıldırım, 2009).

1.8.2.4. Students' Self-assessment

Feedback is necessary in the teaching process (Gagne, & Driscoll, 1988); delivering a lesson and designing activities are important but insufficient without giving feedback to the learners. Socrative app allows students to check the right answers in the quizzes designed by their teachers. It is an important step in the learning process for students to know their weaknesses and revise their incorrect answers. Socrative helps shy students who are afraid to ask the teacher about the lesson to receive the information they need to fill their knowledge gaps (Reilly, & Shen, 2011). It also saves the time of the session, especially in large groups classroom as teachers can easily know the number of students who did not understand the delivered material. Dangel and Wang (2008) pointed out that students became more focused on comprehension due to interactive response systems like Socrative application.

Conclusion

As a conclusion, this chapter stated and reviewed the literature on the digital age in general and how it influenced the realm of education; the importance of implementing technology in ELF classrooms in order to satisfy nowadays student's needs. After that, we have targeted the use of Smart Students Response System as a modern pedagogical tool which replaced the ancient tools of assessment; its efficiency, popularity and combination with fundamental and new learning theories. More specifically we have introduced Socrative application as model of SSRS and its features and practicality.

Chapter Two

Methodology, Data Analysis and Discussion

Introduction

In this chapter, we are concerned with the practical part supporting the review of literature tackled in the first chapter. It presents the methodology adopted to answer the research questions. It constitutes the research design, the procedures and the means of research. It also seeks to analyse both quantitative and qualitative data gathered by means of a questionnaire and an interview. Finally, the last part is concerned with a discussion of the results obtained in regards with the research questions and hypotheses.

2.1. Research Location

The research was conducted at Chadli Bendjedid University- El-Tarf in eastern Algeria. The implementation of Socrative occurred in an ordinary classroom (room 16) in an attempt to show the independency of the tool from language laboratories in terms of equipment and internet.

2.2. Population and Sampling

In the sample composition process, a non-random choice method was used in which the most common criterion for choosing the subjects that make up the sample was based on their kind of phones (smart phones), also their accessibility to the internet. The participants were teachers from the English department at Chadli Bendjedid University who were designated to teaching Master Two level in the academic year of 2019-2020 and Master 2 students from the same department who are considered as prospective teachers in the near future. In general, they presented similar and shared characteristics of digital native generation and their ages were on average between 23 and 30 years old. Initially, it was contemplated that the study would cover six teachers and 60 students enrolled in the subject. However, data could only be collected from three teachers and 47 students; this means a

statistically representative sample size for a confidence level of 50% for teachers and 78% for students.

2.3. The Research Instruments

In order to consolidate the findings**,** the technique used to collect data is based on triangulation where the following instruments were used: an interview with teachers and a questionnaire with students.

2.3.1. Interview

To gather teachers' perception towards Socrative app, this study used a semi structured interview. The researchers used an electronic recorder to capture all thoughts of the interviewee about the subject. The interview consists of nine open-ended questions (see Appendix A). The onset of the interview was about the participants' career in the education field. More intensive questions were followed with the intent to collect data about their perception of Socrative app. Two interviews were conducted face to face and one via Messenger due to the Covid-19 circumstances. NO interview was conducted without a prior verbal confirmation and acceptance of the interviewee.

2.3.2. Questionnaire

The questionnaire used in this study was adopted from the first edition of a questionnaire recently designed by Quiroga, Fernández, Escorial, Merino, and Privado (2016). It is used to assess the application of Socrative and the experience that students acquired with its use (see Appendix B). The instrument is made up of 17 items measured on a five-point Likert scale and organized into two dimensions: the first dimension (items 1 to 6) to collect data about the students' experience with Socrative in terms of the accessibility and the second dimension (items 6 to 17) to know the implications derived from the use of the application. The items focused on measuring the students' perceptions of the learning process through Socrative, the academic performance and the social aspect of a digitized world. The

instrument administration process started with a pilot questionnaire and it was considered appropriate to facilitate the collection of data using Survey Monkey application which is an accredited application for creating online surveys because it saves the address IP of the respondents, so no one can respond more than one time from the same device.

2.4. The Research Design

This research used a non-experimental exploratory design. It is based on the integration of Socrative app in the first place to investigate, discover then describe Chadli Bendjedid University EFL Teachers' and Students perception towards the Smart Students Response system. A qualitative approach was employed in this study because the phenomenon being studied is mainly about opinion. A quantitative tool was used in order to represent qualitative data. In other words, we quantified qualitative data, in addition to the pure qualitative tools as the interview using an explorative case study. Thus, we intend to unravel complex perceptions and attitudes relating to the use of Socrative app in the context of formative assessment, students' engagement, motivation and learning.

2.5. The Research Procedures

The researchers adopted the Socrative app as an educational resource to support teachers' formative assessment. The integration of the tool took place during the academic year 2019/2020 for one month. During this period, various practices were carried out with different educational guidelines and purposes.

During the first implementation of the application, the teachers had an overview about Socrative teacher, while the students have seen a demo about Socrative students' application. The activities that were programmed to use Socrative in class include different evaluations implemented at the end of the lesson, in which the evaluation of the topic was put into

practice through a test. The students responded individually or in pairs. A series of questions were previously designed by the teachers and the researchers on the Socrative platform.

The questions presented in variant ways in terms of their formulation. They consisted of true/false questions, multiple-choices and open-ended questions. All the activities focused on the fundamental theoretical concepts that students had to master from the subjects.

The Socrative platform recorded the responses selected or written by the participants instantly. It offers the teachers, in the first case, a report of the results obtained, which ultimately allowed observing individual and group progress (see Appendix C and Appendix E) regarding the level of knowledge in a subject as well as the whole class understanding in Excel format (see Appendix D).

2.6. Data Analysis

After the fieldwork phase, the collected data was analyzed, organized and arranged by a data matrix made in the Survey monkey application, where the data is treated statistically.

2.6.1. The Analysis of Teachers' Interview

A content analysis approach was followed to decipher teachers' responses to the interview's questions. The questions were designed to provide deep and accurate information about teachers' perception of Socrative and SSRS in general. The interview consisted of nine questions that seek for teachers' perception in all aspects of the Socrative teacher application from its use to its implications. Moreover, two questions are aimed to investigate whether teachers are going to use and recommend Socrative application in the near future. The semi structured interview was set out with three participants among those who experienced the application during the period of the implementation.

In response to the first question, "How familiar are you with Smart System Response?" All the respondents (100%) stated that they are not familiar with Students Response System in general whether Socrative app or another system.

One interviewee said, "*Yes, think I am not that familiar. I have heard about similar system from one of my students, but I have never used it.*". While another one said, "*in fact, I have heard about it from you.*". Another participant stated, "*not really. This is very new*."

When participants were asked: if designing a good quiz via Socrative app will visualise students' understanding of the course or not, all of them said "yes" explaining that Socrative enables the teachers to see the instant students' feedback on the screen, figure out the weaknesses, and adjust and reexplain the instruction, accordingly.

One participant stated, "*yes, I strongly agree with the idea; Socrative app let you know if students had assimilated the course. It shows the points that they did not understand*." While another one declared that "*it is going to give me a feedback about what they understood or the deficiencies and the areas that haven't been tackled well during the class. It is going to give me a feedback in real time and I am going to manage and reexplain what has not been understood by students. Furthermore, it enables the teacher to know student's attitudes towards him when they use pseudonym in responding the quiz.*"

The three interviewees had a similar perception of Socrative time saving in grading. In their responses to the question, "How useful did you find Socrative in terms of grading time saving?" all participant agreed that Socrative is a very practical tool.

One participant stated, "*Socrative is time saving especially in correcting the answers*." and another participant said," yes*, it saves time. It is very practical and it is going to help us a lot.*"

In response to the fourth question, "in general, do you think that Socrative should be encouraged at Chadli Bendjedid University specifically in EFL classrooms? Give your

reasons." All the participants agreed that modernization of the University by using technology in general and SSRS represented by Socrative as a model in specific is a must.

One participant stated, "*100% I agree, we have huge number of papers that must be corrected in more than one module, sometimes I complain. Socrative has a lot of advantages preparing the questions, correcting and grading in a short a time. and it is really fan for me and for the students as well.".* Another participant said, "I *highly recommend this. First of all, we are in the age of technology, all students and teachers have smartphones. So, it is more appropriate to modernize our teaching methods."* While another participant stated that all types of technologies must be encouraged at Chadli Bendjedid University emphasising that "it *should be encouraged along with other technologies tools inside the University. The world is breathing technology also we teach a digital native generation, we have to encourage that and work on it. Technology powers a plethora of knowledge to every individual by just using clicks."*

Moreover, participants were asked if Socrative is capable to engage all students including those who never participate in the classroom during a formative assessment. Hence, 100% of the respondents agreed that Socrative is an engaging tool.

One participant stated, "*I agree with that some students are shy they have anxiety and they cannot speak in the class, so it is better for them to answer using Socrative. Even if they are not timid, the application is motivating. It makes students more engaged.".* Another participant argued, *"Having a huge number in the classroom is one of the drawbacks of the traditional method, so Socrative gives the chance for everyone to participate. It is a very positive point within Socrative app."*

However, one participant added that the word "ALL" is sceptical and no one guaranty that they will be all engaged stating that "students *like the idea of using their cell phones in the class, so they will be engaged by responding the quiz and we can check that in concrete results submitted by Socrative via email. Students will be habituated for a quiz in each session, but here the word "ALL." Remains sceptical because no one guaranty that they will be all engaged.".*

When participants were asked to react on the statement: 'By using Socrative application, the formatting of the question will be easier than using Microsoft word. All participants had similar opinions. One participant stated, "*yes, I remember myself designing a quiz through Socrative. The quiz itself gives you options and it is better than Microsoft word usage.*". Another participant said, "of *course, yes, I strongly agree with the statement, Socrative is well categorized, we don't have to draw, write and print like Microsoft Word. We just need a smartphone."* Further, the third participant stated, "Yes*, I think it's much easier than Microsoft word, it doesn't take time. Some teachers are not good in typing using word, so it's going to help them. With Socrative you can use your cell phone to design a quiz and no need for a printer."*

In response to the statement: "In the near future student smart response system will replace the traditional techniques of formative assessment," all the participants are looking for the integration of technologies in general and SSRS in specific at Chadli Bendjedid University.

One of the interviewees stated, "we *hope in the near future that we get an agreement with the department why not. The new minister said we should modernize teaching and find ways to improve high education teaching."* Another participant said, "I *hope if the university provides the WIFI in classrooms to boost the internet instead of using the 3G."* However, one participant stated, "we *hope so, of course we look for the integration of technology in our*

classroom; it is very welcomed, but I think it is not going to replace the traditional techniques. It is a dream. I don't need a policy to use it. The teacher must be creative. we may die and we may not integrate technology if we wait for a policy."

Most of the participants really demonstrate their appreciation to the use of Socrative even outside the classroom when they were asked to react to the statement: "By using Socrative app, extrinsic assignment will be much easier for teachers in terms of answers collection, time and location."

One of the participants said, "yes*, it is practical in terms of collecting homework anywhere and at any time".* Another participant stated*, "I wish I used it before, because the time and the location really do matter in administrating and receiving homework. Socrative is practical and interesting."* Besides, a participant argued*, "when* and where ever they are, *Students can answer and send me their feedback. Socrative can be used either for my course or for homework assignments."*

For the last question, there was unanimity among all the respondents that Socrative is highly recommended and should be strongly implemented at Chadli Bendjedid University. One interviewee stated, "*I will recommend it for myself first, because it is very engaging, fan and practical; it is free we don't have any problem in using it.*" Another interviewee said, "yes, I am going to tell teachers that there is something practical and interesting." The third one commented, "*yes, why not; it is something new and something good because it is practical, time saving and engaging."*

2.6.2. Students' Questionnaire Analysis

A) The First Dimension: Students' experience with Socrative.

A reliable analysis based on weighted average as represented in the mean coefficient ($\overline{x}$) in the table below. A Likert scale points (1-5) were distributed as the

following: Strongly agree (1point)/ Agree (2points)/ Neutral (3points)/ Disagree (4points)/ Strongly disagree (5 points).

The table and the graph below focused on the data collected from the first dimension of the questionnaire referring to the students' perception of the learning experience in the practices developed with Socrative.

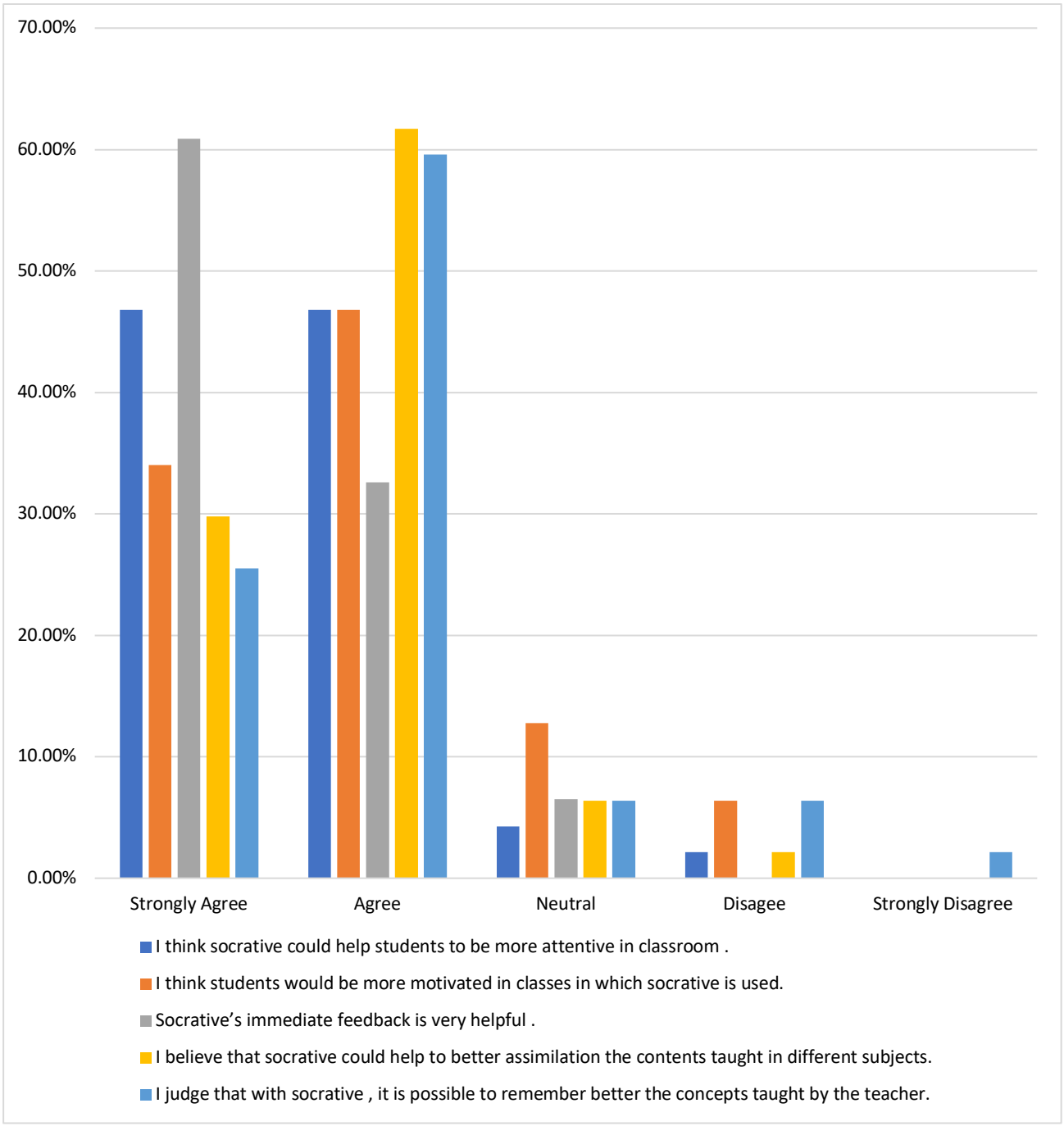


Figure 5: First Dimension: Students 'Experience with Socrative

Table 3

The Ratio of Students' Experience with Socrative.

Items of the First Dimension	$\bar{x}$
1. I found it easy to login into Socrative students' room	1.53
2. I think that Socrative has refreshed my memory on the topic I learned in the classroom	1.49
3. In general, I can say that the first contact with Socrative has been satisfactory	1.57
4. Overall, Socrative student is easy to use	1.55
5. In general, the use of Socrative student in my mobile is motivating itself	1.81

According to the results presented in Table 3, it can be stated that the respondents perceive that Socrative application is easy to use (item 4, $\bar{}$= 1.55 and item 1, $\bar{}$= 1.53) although there is minor difficulty in accessing the application via 3G network perceived by (2.13%) of the respondents.

A second aspect that defines Socrative app from the perspective of its users in terms of self-experience is the potential of motivating capacity (item 5, $\bar{}$ =1.81); most of participants are convinced that this application by itself is motivating, although few of them are neutral (14.89%) or disagree with the statement (2.13%). Item 3 ($\bar{}$= 1.57) reflects the level of students' satisfaction with Socrative in the first contact. However, only (10.64) of the respondents remain neutral and did not demonstrate any satisfactory feelings.

B) The Second Dimension: The Implications Derived from the Use of Socrative

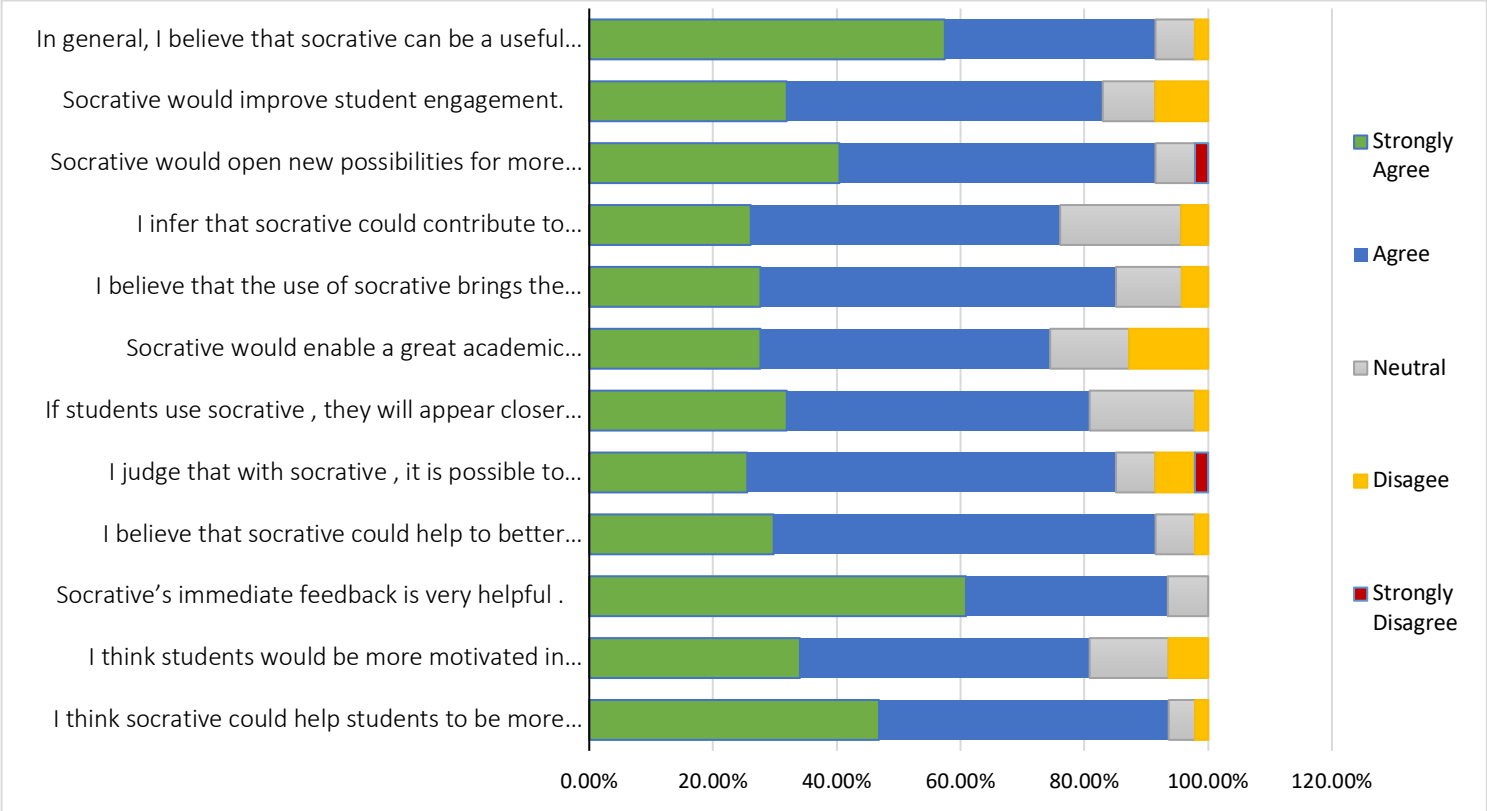


Figure 6: Second Dimension: The Implications Derived from the Use of Socrative.

Table 4

The Ratio of the Second Dimension

Items of the Second Dimension	$\bar{x}$
6. I think Socrative could help students to be more attentive in classroom.	1.62
7. I think students would be more motivated in classes in which Socrative is used.	1.91
8. Siccative's immediate feedback is very helpful.	1.46
9. I believe that Socrative could help to better assimilation the contents taught in different subjects.	1.81
10. I judge that with Socrative, it is possible to remember better the concepts taught by the teacher.	2.00
11. If students use Socrative, they will appear closer to the current digitized world.	1.89
12. Socrative would enable a great academic interaction between students themselves (cooperative learning)	2.11
13. I believe that the use of Socrative brings the formal teaching- learning context closer digitalized word.	1.91
14. I infer that Socrative could contribute to improving the academic performance of students	2.02
15. Socrative would open new possibilities for more active learning.	1.72

16. Socrative would improve student engagement.	1.94
17. In general, I believe that Socrative can be a useful tool for the learning process.	1.53

The second part of the questionnaire was designed to know the estimation that students would give about the use of Socrative in learning situations and the evaluation of their knowledge. In this sense, the results showed in Table 4 consider the three theoretical areas that best explain this dimension; that is, the broadest of their experience of use.

Firstly, it is worth highlighting the impressive benefit offered by the tool for students to promote certain cognitive activities associated with their learning process, such as feeling more motivated (item 7, $\bar{}$= 1.91), paying more attention in class (item 6, $\bar{}$= 1.62), assimilating the contents of a topic easily (item 9, $\bar{}$= 1.81), and remembering course basic concepts (item 10, $\bar{}$ = 2.00)as it reflects the mean of memory refreshment (item 2, $\bar{}$ = 1.49) in the first dimension which can ultimately be translated into the possibility that students can demonstrate good academic performance (item 14, $\bar{}$= 2.02).

Secondly, Socrative was perceived by students as a resource that increases academic interactions in the classroom; thus, improvement among the students themselves (item 12, $\bar{}$= 2.11) due to the instant feedback feature provided by Socrative which empowers and consolidates students' knowledge and increases their pairs interactions (item 8, $\bar{}$= 1.46).

Lastly, as a pedagogical tool, Socrative has the ability to transform the image of learning by bringing it closer to the digital society in which students operate (item 11, $\bar{}$= 1.89), also it opens more digitized scenarios to the formal context that students are already familiar with (item 13, $\bar{}$= 1.91). In students' opinion about Socrative, it not only makes learning more active (item 15, $\bar{}$= 1.72), but also enables them to have greater control over their learning for the sake of greater engagement (item 16, $\bar{}$= 1.94) and improvement of the learning process (item 17, $\bar{}$= 1.53).

2.7 Findings and Discussion

The most relevant findings of this study are in line with the definitive results of the works of Quiroga et al. (2016), who suggest the implementation of the SSRS as a support system for learning and the evaluation of knowledge in the teaching methodology due to its numerous benefits and pedagogical implications. The researchers had proposed a set of hypotheses to be proved or rejected by the sample after analysing the collected data.

As a first hypothesis, the researchers assumed that the perception of the teachers towards the use of Socrative as an alternative tool in administrating activities is positive and welcomed. The findings of this research work proved that this hypothesis is true. Most of the teachers at Chadli Bendjedid University are veterans; they taught and learnt through the two epochs (traditional and digital), but they did not use or heard about SSRS before. However, they tend to be innovative and creative as much possible as they can. They believe that integrating technology in EFL classrooms is a must in order to keep up with the digital native generation and the modernized realm of education. All the teachers who participate in this study showed their eagerness to use SSRS in their classrooms for its practicality; they recognize the benefits of using Socrative app in terms of visualizing understanding, time saving, students' engagements and the easiness of its use. Hence, they are hoping for having a new policy decision which encourages the use of technology in classrooms by providing the adequate materials: WIFI, tabs…...etc for both teachers and students. However, one participant confirmed that there is no need to wait for a policy or materials because in EFL classrooms integrating technology can be done by teachers' own means, since it necessitates just a smartphone and internet. Thus, all the participants are welcoming the integration of Socrative and SSRS in their teaching agenda. Furthermore, they will urge their colleagues and other departments to use the Socrative app in their teaching practices.

The results obtained from the first dimension in the students' questionnaire confirm the related hypothesis which claims that EFL students' attitudes towards the use of Socrative application in their own mobile in the classroom are positive and easy to get access to. The findings show that the perception of the targeted EFL students at Chadli Bendjedid University about Socrative app is positive in the terms of easiness and motivation. Moreover, this application offers students the opportunity to feel motivated and satisfied.

It is worth highlighting that Socrative app provide more personalized learning experience where students can be actively involved in controlling their learning through a programmed set of questions that can provoke cognitive challenges (Kim, Rueckert, Kim, & Seo, 2013); besides, the new educational experiences that are emerging thanks to the use of mobile devices are not only mitigating the problems that affect classroom management, such as the overcrowding of students, the low participation rate and the lack of motivation (Blasco-Arcas, Buil, Hernández-Ortega, & Sese, 2014), but also seem to be covering the needs that today's students have been demanding in terms of learning (Blasco, 2016).

In an attempt to answer the third question reflected in the second dimension of the questionnaire, it had been hypothesized that EFL students' perception towards the implications derived from Socrative app is very positive in terms of motivation, enthusiasm and digitized atmosphere. Hence, according to the findings, EFL students strongly believe that the functionalities and the supports provided by the use of mobile devices in the classroom makes it possible to conveniently connect the digital world in which students live with the formal university context where they learn. Moreover, the results show that Socrative makes students more attentive, autonomous and aware of their ability to supervise and self-regulate their own learning; therefore, the third hypothesis is also confirmed.

In general, the perception of EFL students at Chadli Bendjedid University about Socrative app is positive according to all the evaluated aspects; i.e., easiness, motivation, engagement, and active learning besides its valuable utility during the learning activity.

All in all, the findings have led to following conclusions: this study reinforces the relationship between mobile technology and learning in Chadli Bendjedid University classrooms; the use of mobile devices in the classroom is not only covering the BYOD model, but it also provides teachers with the ability and the flexibility to generate new scenarios for the benefit of the learning process. In this sense, the areas of interest related to the design of activities supported by mobile devices Socrative app will bring new challenges and future lines of research.

Finally, one may say that teachers' perception and students' attitudes of Socrative app in terms of pedagogical practice is very positive because of its significant consequences in teaching methods and assessment. Thus, its use is not only improving students' participation and promoting active practices that facilitate learning processes, but is also conceiving evaluation as a permanent process of monitoring learning which implies that the educational needs of students can be better served.

Conclusion

The core motivation of this research is trying to uncover teachers' perceptions and students' attitudes towards the use of Socrative app in EFL classrooms. This study adopted a mixed method in which data were collected from a sample of 47 students and three teachers from the Department of English at Chadli Bendjedid University. In this chapter we covered the research design, the sample population, and the research instruments which are used to collect and analyse the data. Indeed, the interpretation of the results and the findings were discussed divulging that the three put forward hypotheses are valid.

Chapter Three

Implications and Recommendations

Introduction

This chapter presents some implications for policy makers as well as pedagogical implications and recommendations according to the findings of this study. In order to raise the awareness of teachers on the potential of SSRS as an interactive means that facilitate the teaching and learning process in EFL classes at Chadli Bendjedid University, the researchers provided some suggestions for EFL instructors and students along with recommendations for future studies.

3.1. Implications

Based on the findings of the study, the results encourage the implementation of Student Response Systems in EFL classrooms. The following subsections present practical implications for policy makers and teachers to help achieve academic success.

3.1.1. Implications for Policy Makers

The main duty of policy makers is to provide teachers with the best possible solutions to today's obstacles in teaching through research to reach decisions that serve the needs of the educational system. It is also important to understand the 21st century students; however, educational policy makers in Algeria have not fully included technology in classrooms. This research presents actual insights on the use of technology by teachers in EFL classrooms; and the outcomes of this study demonstrate a call for spreading awareness about updating teaching methods, implementing technology, and modernizing classroom practices for the sake of optimizing students' academic achievements.

3.1.2. Implications for EFL Teacher

EFL teachers at Chadli Bendjedid University, as it is the case in most Algerian universities, follow traditional ways of teaching that hinder them from keeping pace with the global development in this digital era. This suggests following new teaching procedures that include the implementation of SSRSs to enhance the interaction between teachers and students, using affordable tools such as smart phones and free applications like Socrative. To achieve this interaction, pedagogical practices concerning the use of this application are suggested in what follows.

3.1.2.1. Using Socrative App in Checking Students' Understanding

The main goal of teaching is to achieve students' understanding of the material, but sometimes, as teachers focus on completing the syllabus, it can be difficult to explore the points students did not understand in a short amount of time; and for this reason, testing students regularly can be not only exhausting, but also time-consuming. Moreover, relying on tests to measure students' understanding does not allow the teacher to explore their strengths and weaknesses as it will show only the final result and not the source. The ideal time to check students' understanding is when the lesson is being delivered because after tests, they will not be interested. Since time is a challenge for teachers, SSRS can help them organize the sessions; instructors can, also, prepare different questions on the main points of the lesson and before moving to the next element, the teacher asks the students to open the application and enter the room in which the teacher designed the questions to be answered. The teacher can check the answers immediately and when he/she discovers the points that are not yet understood by a number of students, he/she then explains them without mentioning names or having students raise their hands to ask as some of them can be shy.

3.1.2.2. Using Socrative App in Asking Diagnostic Questions

When asking students about the lesson using Socrative app, the most important thing is the way of asking the question; perhaps multiple-choice questions is one of the best ways to gauge their understanding of the covered material since open-ended questions can cause anxiety when the lesson is new to them. Furthermore, making quiz games can lighten the atmosphere of the classroom. The type of multiple-choice questions should be diagnostic so that teachers can identify students' mistakes and misconceptions about the delivered material as each answer will indicate something about their understanding and reveal a specific misconception. A correct answer will show that the student understands that element because of different reasons, but a wrong answer will show why the student received that specific knowledge which would help the teacher to diagnose the misconception and explain the lesson in ways by which students can understand and fill the knowledge gap.

3.1.2.3. Using Socrative App as a Revision Tool

One of the common challenges in teaching is when students cannot remember the previous lessons, and it can be risky to ignore the gap of knowledge and move to a new lesson or postpone the explanation to the revision session; for this reason, asking questions about the previous lesson at the beginning of a new session before delivering the next material is important to avoid any misconceptions or ambiguity. By using Socrative app, the teacher can prepare questions about the last lesson as long as they do not take the time of the session and when students answer; the teacher clarifies concepts, illustrates with examples, or provides them with sources to read more on the topic. This teaching routine allows students to answer questions without any anxiety or pressure of having correct answers.

3.1.2.4. Using Socrative App in Asking Students to Discuss Answers

When teaching is teacher-oriented, the chances of exploring students' weaknesses are lower because of the lack of interaction between each other and with the teacher. However, if

it is excessive, it will result in a noisy classroom; therefore, instructors should know how to direct the energy of the learners and create balance in speech. Socrative app helps to organize a well-adjusted environment of communication and includes the use of three skills simultaneously. The teacher invites for two students or two groups to debate in a specific topic; while the debate is still going, students write their opinions in the room that the teacher created in the app to avoid interruptions, or vote for the group that they agree with on the provided arguments by each group.

3.1.2.5. Using Socrative App in Consulting Feedback

Students should help teachers to create a successful interaction with them by providing feedback; however, many students are too shy to ask their teacher to change a teaching method or a certain behaviour, but when using Socrative, they can write whatever they want to add or suggest without the appearance of their names if the room is set anonymous. This helps the teacher to revise the teaching approaches he/she follows, consider the suggestions of students, and plan ahead the next session according to students' feedback.

3.2. Recommendations for the Educational System

3.2.1. Allowing the Use of Smartphones

Using smartphones in classrooms has always been linked to the risk of students' distraction from schoolwork and cheating. However, if properly managed, smartphones can be beneficial tools to increase the chances of effective learning because if the pressure of school restrictions is reduced, students will become less stressed and it will be easier for the teacher to track their negative behaviours when he/she is walking around and monitoring attitudes. The use of smartphones in classrooms should be limited to academic purposes only; using educational apps that can help students organize their ideas, share them with their classmates to create an atmosphere of debates and discussions. These apps can maintain

students' productivity even outside the classroom, as most of them have assignment reminders that they themselves can set or receive from the teacher.

Students sometimes cannot understand the teacher as his explanation might not be suitable for their learning styles; for this reason, students should be allowed to use the Internet to read about the lesson in other sources. The educational system' duty is to provide the most effective approaches and tools to facilitate learning, and without doubt, technology has the ability to modernize education and help both students and teachers reach satisfying levels of knowledge exchange since smartphones are the perfect alternative for other devices like laptops that can be unaffordable.

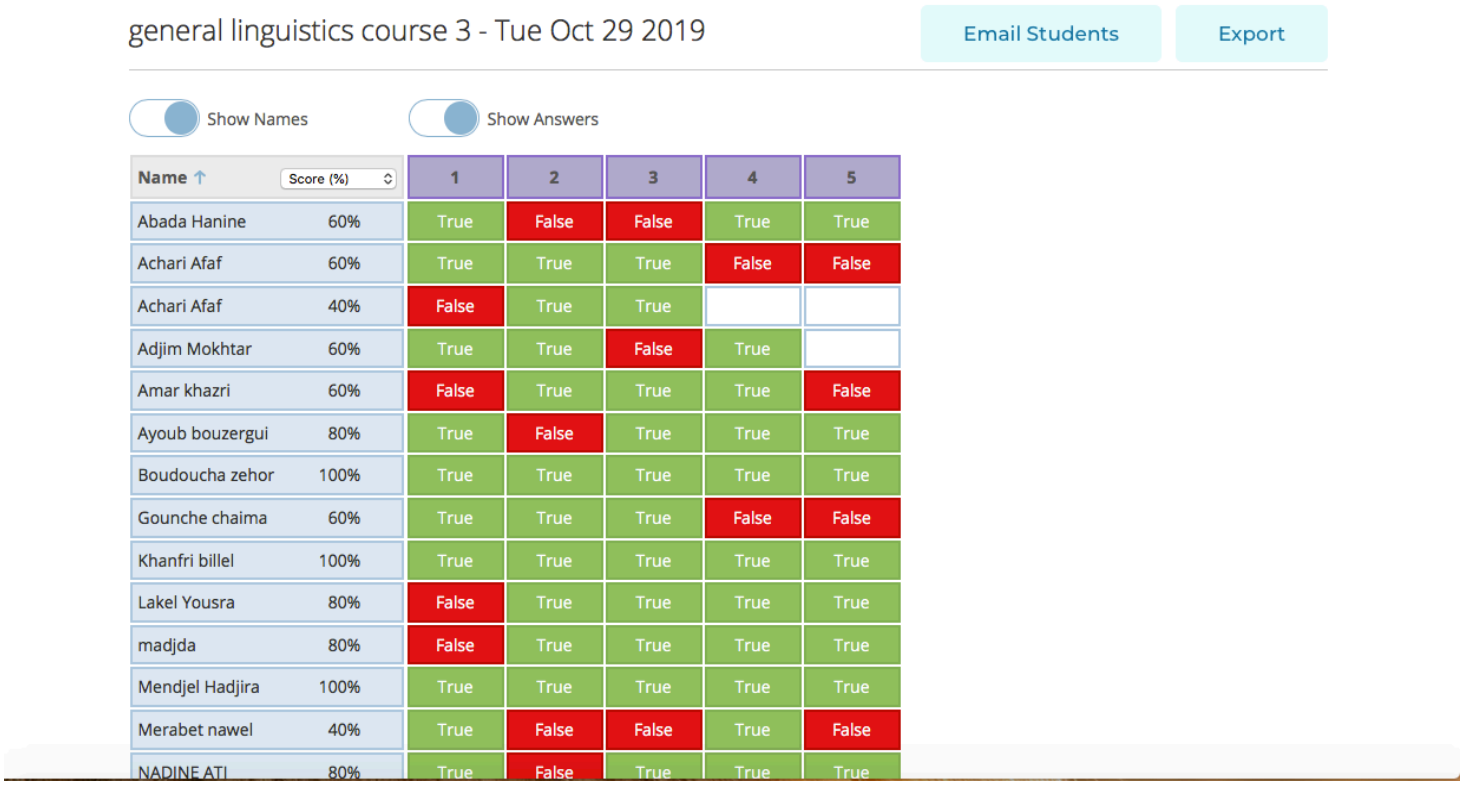
3.2.2. Aligning Technology Use with the Curriculum

Technological advancement through time has proved that it is not an option, but rather a necessity as it is involved in every aspect of life; in the field of education, teachers around the world started using it to facilitate the learning process for students and manage their classrooms as instructors which normalizes the use of technology to the new generations and prepare them for a digital future. For this reason, teachers should be encouraged to adapt with innovation and being creative in their teaching methods. In Algerian classrooms, the use of technology is limited to overhead projectors, which can be boring if the teacher is the only monitor of the lesson, and interaction between students is absent. Teachers need to find a middle ground where their current pedagogy aligns with using technological devices to help all types of learners to learn effectively whether they were visual, auditory, or kinaesthetic. Teachers can also benefit from quizzes that help them to decipher students' understanding where they are in the learning process of the delivered material through apps like Socrative. In EFL classes for example, teachers can use social media to organize live sessions with foreigners to encourage students to speak and enhance their language skills.

3.3. Suggested Activities when Using Socrative App

3.3.1. Think Pair Share (TPS)

It is a great classroom activity for collaborative learning; the teacher starts by asking a question about a specific topic that is related to the lesson. To be more organized the teacher can write the question in the room he/she created in the Socrative app and then each student answers the question based on their background knowledge or what they learnt from lessons. The teacher can use open ended questions if there is enough time to read all the arguments, or he/she can create a multiple-choice question. After reviewing the answers of students, the teacher pairs students with each other each two students or small groups discuss their answers or even debate, and when the time of discussion is over, the teacher asks them to share their ideas on the topic with the whole class. TPS is one of the most effective, yet easiest activities that helps the teacher to understand students' level of knowledge and engages learners who can be distracted while listening to the teacher only.



Name	Score (%)	1	2	3	4	5
Abada Hanine	60%	True	False	False	True	True
Achari Afaf	60%	True	True	True	False	False
Achari Afaf	40%	False	True	True		
Adjim Mokhtar	60%	True	True	False	True	
Amar khazri	60%	False	True	True	True	False
Ayoub bouzergui	80%	True	False	True	True	True
Boudoucha zehor	100%	True	True	True	True	True
Gounche chaima	60%	True	True	True	False	False
Khanfri billel	100%	True	True	True	True	True
Lakel Yousra	80%	False	True	True	True	True
madjda	80%	False	True	True	True	True
Mendjel Hadjira	100%	True	True	True	True	True
Merabet nawel	40%	True	False	False	True	False
NADINE ATI	80%	True	False	True	True	True

Figure 7. Quiz Instant Results on Teachers 'Screen

3.3.2. Students Designing Quizzes for Each Other

Teacher-oriented teaching is a traditional method that neglects students' opinions, additions, and arguments on lesson delivery, which can be misleading to the teacher as he/she could not know if students are following and understanding each point. For this reason, the teacher in this situation, can pair students and ask them to design quizzes on the app for each other on the create quiz box and correct the wrong answers under the supervision of the instructor using the app or through face to face interaction. If the teacher repeats this activity during the sessions, students will become more attentive.

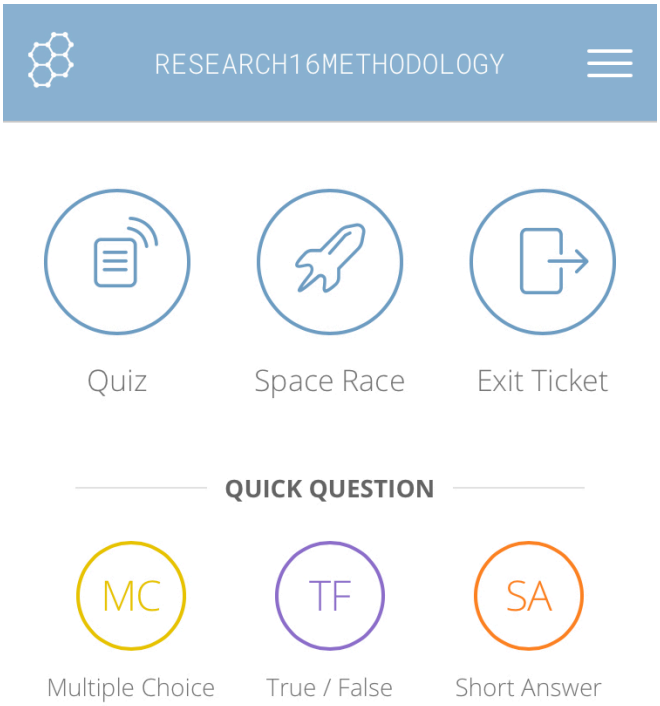


Figure 8: Designing Quiz in Socrative

3.3.3. Space Race Activity

Socrative app creates a cooperative learning environment that results in interaction and knowledge exchange; however, the teacher should also use it to create healthy and friendly competition between the learners to encourage them to work harder. Space Race activity is similar to a Trivia game; the teacher prepares questions about the lesson, and then divides students into groups or pairs to compete on the first winner team. When students race to get the right answers, the classroom's atmosphere will be a mix of learning and fun; and if rewarded with grades, students' motivation for studying will be highly increased.

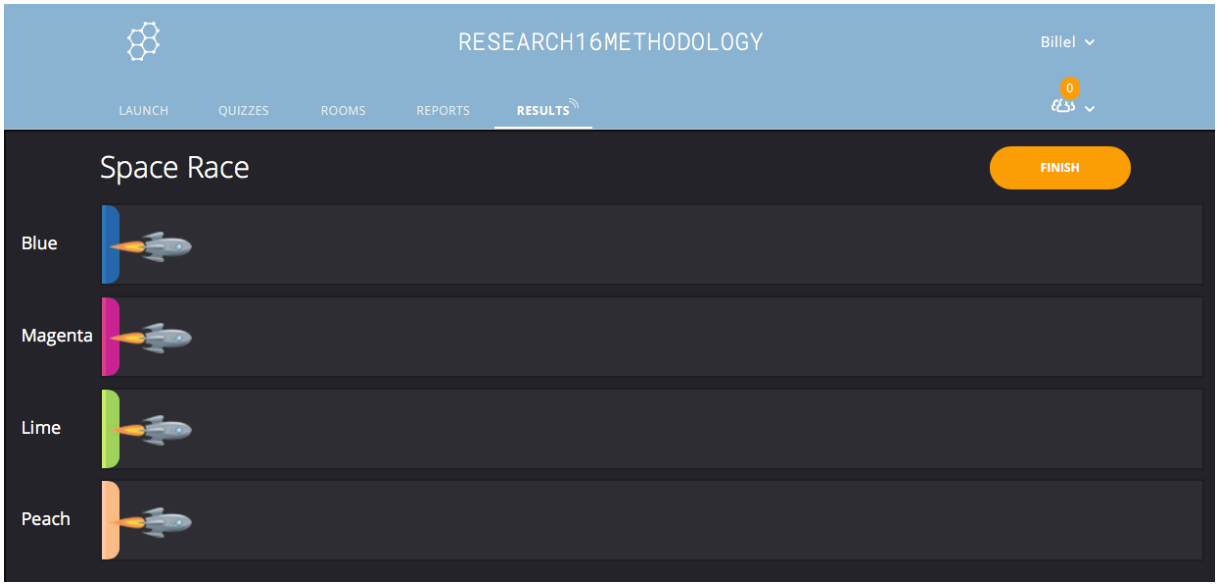


Figure 9: Socrative Space Race

3.3.4. Voting on the Winner

The main advantage of Socrative app is that it is flexible; it allows the teacher to use his imagination to create fun activities that will keep students engaged. Gamifying learning decreases the stress of feeling obliged to understand the lesson, and directs the focus towards enjoying the course. Debates are a great tool to teach students the art of speech and critical thinking; the teacher or students in this activity can chose the topic as long as learners find it interesting and worth debating over. The teacher invites two students or two groups to the board; the two teams start stating their arguments and after each argument from both teams, their classmates vote on the team they agree with the most. The selection of the winner is achieved by voting on the app; if the teacher has enough time to expand the debate, he/she can ask students why they voted to agree with each team.

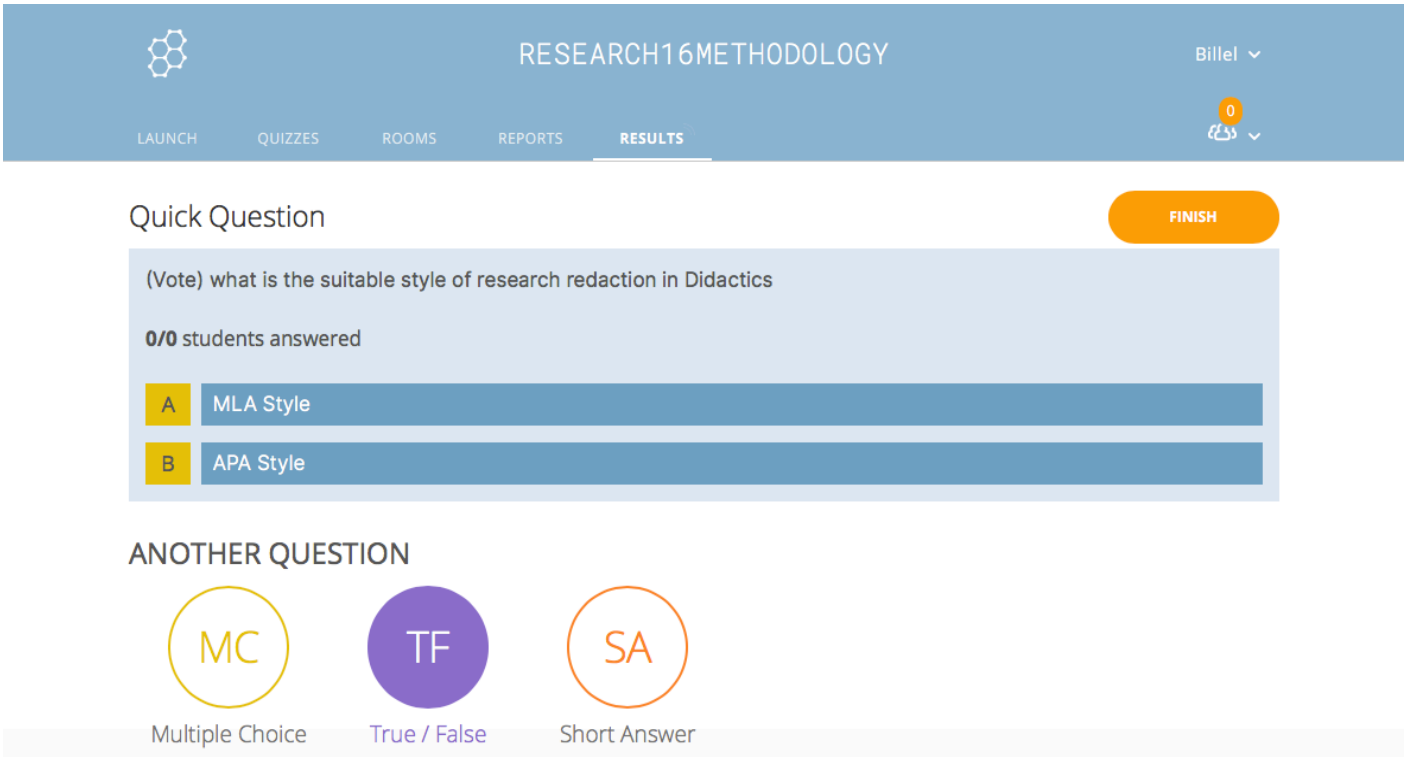


Figure 10: Socrative Voting Poll

3.3.5. Socrative Exit Ticket

Teachers' progress in teaching does not only require collecting and applying the best approaches, but also learning to communicate with students and gathering their feedback on their ways of teaching, which enables them to decode students' levels of understanding, and their learning styles to master teaching. Socrative Exit Ticket is an effective tool to gauge learners' knowledge about the lesson after being delivered; at the end of the session, the teacher uses the last five minutes to quiz students and collect any suggestions that can improve the delivery of the material. The teacher can ask them to solve a question, how they felt about the presentation, and what they learnt from it.

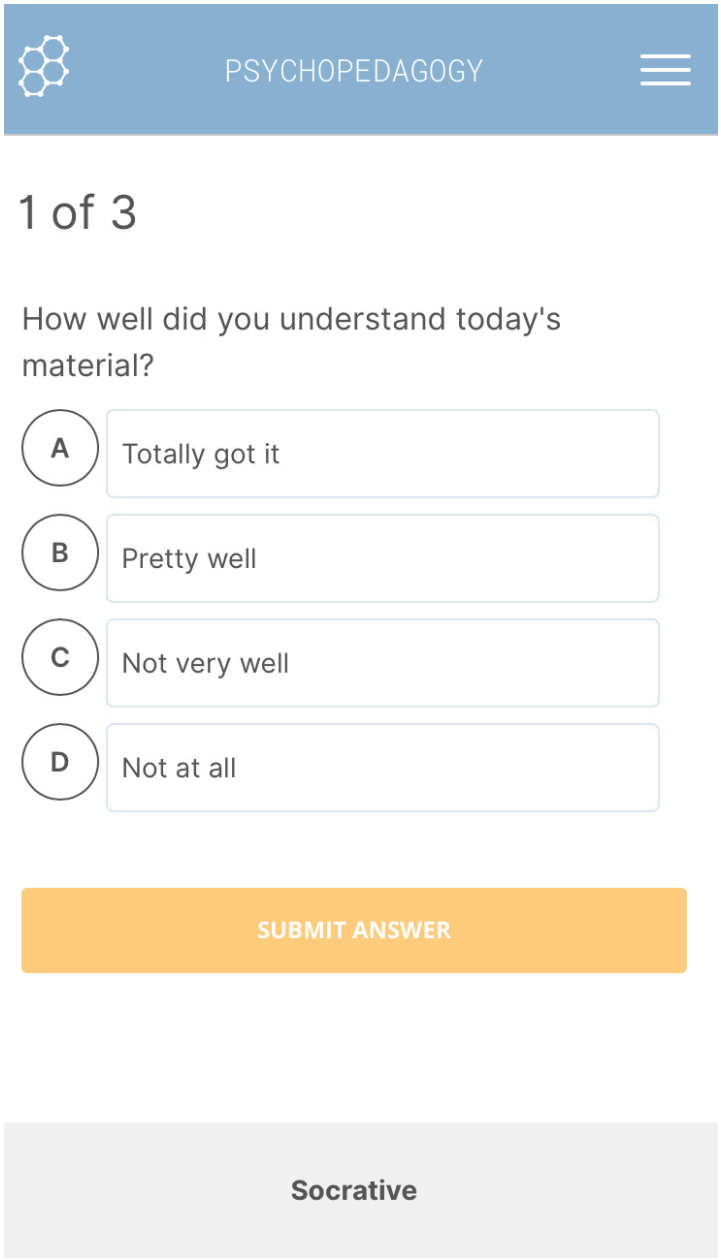


Figure 11: Socrative Exit Ticket

3.4. Recommendations for Further Studies

According to the outcomes of the present study which is exploring the teachers' perceptions and students' attitudes towards the utilisation of Socrative application, the following recommendations for further studies are provided:

-Exploring Socrative app' s potentials in improving students' understanding of the delivered material.

-Exploring the effect of Socrative app on academic success and examination.

-Increasing the sample size to explore the app's utility in large classrooms.

-Exploring the effect of Socrative app after long periods of usage on students' academic success.

-Discovering the effect of Student Response Systems on students' learning experiences.

Conclusion

In this chapter, the researchers presented implications for policy makers and teachers in an attempt of enhancing teaching in Algerian EFL classrooms through the incorporation of technology. Recommendations for the educational system were provided as well, along with some suggested Socrative activities for teachers to encourage student-centred teaching and improve interaction between teachers and learners.

General Conclusion

The fundamental aim behind this research is to get insights into digital age learning and advocate modernization to the teaching /learning arena at Chadli Bendjedid University. It is very important for university teachers and students to be up to date and follow innovations in the educational field such as Smart Response System. Before implementing such system, the opinions of the education agents about the application must be fully understood. For this reason, this study investigates teachers' perceptions and students' attitudes towards the use of Socrative application as an SSRS model. The research was conducted with Master 2 students and EFL teachers who explored Socrative during a period of implementation of one month which enable them to be familiar with the application before extracting their opinions.

The data was collected using mixed method for the sake of reinforcing the results of the study and, thus, confirming or disconfirming the put forward hypotheses. Accordingly, the research results revealed that teachers have a very positive attitude towards innovation in general and SSRS Socrative in particular. Teachers of English department at Chadli Bendjedid University demonstrate their willingness for the integration of technology in ordinary classrooms without the need for Language Laboratory. Likewise, the research findings showed that students of today, who are considered as digital native students, exhibit a positive attitude after using Socrative in five modules; hence, the study discloses the huge interest and zeal of students in learning via digitization.

Furthermore, this research affords a set of recommendations and suggestions in order to pave the path to future integration of SSRS at Chadli Bendjedid University which will help teachers in their teaching process, especially in the phase of formative assessment; in addition to some practical suggestions of Socrative activities that can be used in classrooms to approaching the line between teacher-oriented teaching and students-centeredness.

Eventually, further research proposals have been offered as this study will be the starting point for exploring Socrative application and its efficiency from an experimental perspective.

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Appendices

Appendix A

Teachers' Interview

Interview protocol

Dissertation: Teachers' Perceptions and Students' Attitudes towards the Use of "Socrative Application" as Smart Students Response System in EFL Classroom

Demographic Information (optional)

Interviewer: _____
Interviewee: _____
Date: _____
Location: _____
Time of Interview: _____
General Education Subject(s) Taught: _____
Highest Degree Earned: _____

Procedures

1) Ask for permission to record the interview: Part of the interview process includes audio recording so the data may be reviewed. Do you give consent to be audio-recorded during this interview session?

2) Review the purpose of the study): To explore teachers' perceptions of the use of Socrative application after the implementation period.

3) Play a short video retrieved from YouTube about Socrative application to refresh teachers' memory.

4) ask the questions.

1) How familiar are you with Smart Students response?
   Probes: meeting, scientific conference, other institutions, other apps then Socrative.

2) Do you think that designing a good quiz will really visualise students understanding?
   Probes: figure out the weaknesses, reexplain the wrong answerer instantly or during the nest session.

3) How useful did you find Socrative in terms of grading time saving? probes: the email, global scoring percentage.

4) In general, do you think that Socrative should be encouraged at Chadli Bendjedid University specifically in EFL classrooms? Give your reasons**.**

   Probes: modern educational tool, easy to use, valid.

5) Considering the concept of students' engagement, do you find Socrative capable to engage all students including those who never participate in the classroom during a formative assessment?

6) React on the statement:' By using Socrative application, the formatting of the question will be easier than using Microsoft word.

7) React on the statement: 'In the near future student smart response system will replace the traditional techniques of formative assessment. **probes**: new policy

8) React on the statement: 'By using Socrative application, extrinsic assignment will be much easier for teachers in terms of answers collection, time and location.
   Probes: even when the student is absent, he can supply his answer electronically

9) Are you going to recommend Socrative or similar app for other teachers or department?

Appendix B

Students' Questionnaire

1) Kindly, rate the following statements about the use of Socrative application.

	Strongly agree 1	Agree 2	Neutral 3	Disagree 4	Strongly disagree 5
I found it easy to login into Socrative student room	○	○	○	○	○
I think that Socrative has refreshed my memory on the topic I learned in the classroom	○	○	○	○	○
In general, I can say that the first contact with Socrative has been satisfactory	○	○	○	○	○
In general, the use of Socrative student in my mobile is motivating itself	○	○	○	○	○

2) Kindly rate the following statements about the implications derived from Socrative student.

	Strongly agree 1	Agree 2	Neutral 3	Disagree 4	Strongly disagree 5
I think Socrative could help students to be more attentive in classroom.	○	○	○	○	○
I think students would be more motivated in classes in which Socrative is used.	○	○	○	○	○
Siccative's immediate feedback is very helpful.	○	○	○	○	○
I believe that Socrative could help to better assimilation the contents taught in different subjects.	○	○	○	○	○
I judge that with Socrative, it is possible to remember better the concepts taught by the teacher.	○	○	○	○	○
If students use Socrative, they will appear closer to the current digitized world.	○	○	○	○	○
Socrative would enable a great academic interaction between students themselves (cooperative learning).	○	○	○	○	○

	Strongly agree 1	Agree 2	Neutral 3	Disagree 4	Strongly disagree 5
I believe that the use of Socrative brings the formal teaching- learning context closer digitalized word.	○	○	○	○	○
I infer that Socrative could contribute to improving the academic performance of students.	○	○	○	○	○
Socrative would open new possibilities for more active learning.	○	○	○	○	○
Socrative would improve student engagement.	○	○	○	○	○
In general, I believe that Socrative can be a useful tool for the learning process.	○	○	○	○	○

Appendix C

Socrative report (Global)

RESEARCHMETHODOLOG... socrative 10/30/2019

research methodology course 2 Total Questions: 4

Most Correct Answers: #4 Least Correct Answers: #3

1. Epistemology refers to:

35/38 A acceptable knowledge in a field of study.

3/38 B sofware package

2. Which of these is a philosophical concern for fact or reality and a rejection of the impractical?

3/38 A unrealism

35/38 B realism

3. parametric refers to nominal and ordinal

15/38 A True

23/38 B False

4. qualitative data tends to explore : how and why things happened

37/38 A True

1/38 B False

Appendix D

Whole Class Excel Report

research methodology course 2
Wednesday, October 30 2019 10:35 AM
Room: researchmethodology

Student Names	Student ID	Total Score (0 - 100)	Number of correct answers	Epistemology refers to:	Which of these is a philosophical concern for fact or reality and a rejection of the impractical?	parametric refers to nominal and ordinal	qualitative data tends to explore : how and why things happened
Achari Afaf	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Adjim Mokhtar	-	75	3	sofware package	realism	False	True
Amar khazri	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Anouar	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Atallah Nadia	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Atallah nadia	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Ayoub bouzergui	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Bouchachi fatma zohra	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Boudoucha zehor	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Bouhara,Inesse	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Chayma ch	-	50	2	acceptable knowledge in a field of study.	unrealism	True	True
Fatmadahmani	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Gasmi rania	-	50	2	acceptable knowledge in a field of study.	unrealism	True	True
Gounche chaima	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Halimi Amira	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Hamaizi nada elyasmin	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Hassaine ines	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Hind Bentrad	-	75	3	sofware package	realism	False	True
Ilhem debbabi	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Khanfri billel	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Mattalah taous	-	75	3	acceptable knowledge in a field of study.	unrealism	False	True
Mehdaoui amina	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Mendjel hadjira	-	75	3	acceptable knowledge in a field of study.	realism	False	False
Meriem	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Nadineati	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Nawel merabet	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Rehab Slimani	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Researchmethodology	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Said zarouri	-	75	3	sofware package	realism	False	True
Saker yaqoub	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Salhi maroua	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Salim	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Sidali boumahni	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Trad Rayen	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Youbi abdelmoumen	-	75	3	acceptable knowledge in a field of study.	realism	True	True
Yousra Lakel	-	100	4	acceptable knowledge in a field of study.	realism	False	True
majda	-	100	4	acceptable knowledge in a field of study.	realism	False	True
sabah sghir	-	100	4	acceptable knowledge in a field of study.	realism	False	True
Class Scoring		85.5%	3.42	92.1%	92.1%	60.5%	97.4%

Appendix E

Individual Report

Adjim Mokhtar

RESEARCHMETHODOLOG...

10/30/2019

research methodology course 2

75% (3/4)

✗ 1. Epistemology refers to:

(A) acceptable knowledge in a field of study.

(B) sofware package

✓ 2. Which of these is a philosophical concern for fact or reality and a rejection of the impractical?

(A) unrealism

(B) realism

✓ 3. parametric refers to nominal and ordinal

(A) True

(B) False

✓ 4. qualitative data tends to explore : how and why things happened

(A) True

(B) False