The Most and the Least Enhanced Speaking Skill (Fluency, Accuracy of Grammar, and Accuracy of Vocabulary) by a Web 2.0-Enhanced Project-Based Learning Instructional Program of the Jordanian EFL Female Eleventh Grade Students

Abstract:
The present study attempts to find out the most and the least speaking skill (Viz. Fluency, accuracy of grammar, and accuracy of vocabulary) that was enhanced by a web 2.0-enhanced project-based learning instructional program. The study followed the experimental design pre-post test. The participants of the study were (21) female Jordanian eleventh grade students who studied English language as foreign language (EFL). They were purposefully selected from a school in Jordan. The instructional program was designed based on the use of project-based learning procedures that were enhanced by the use of web 2.0 tools specifically a weebly website, a Facebook messaging group, some YouTube videos, Wikipedia, some blogs and related websites. Students were asked to create and develop websites on the Internet using weebly. Through the website development process, the students worked in groups to discuss topics and also to present the web pages of the websites orally after developing them as the final products of the project. After that, the students were tested using the speaking post-test to find out the development for each speaking skill. After the appropriate statistical analysis, it was found that the three speaking skills were developed, and the most speaking skill enhanced by the instructional program was fluency, and the least enhanced skill was grammar.

Key words: Speaking Skills, Project-based learning, Web 2.0, Instructional Program

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Introduction and Background

Speaking is a means of communication through which students are able to express thoughts, feelings, and ideas. For Burns and Hills (2013), "speaking is a complex mental process combining various cognitive skills virtually simultaneously, and drawing on working memory of words and concepts, while self-monitoring" (p. 232). It is also a dynamic, demanding process (Goh, 2007) and purposeful skill (Richard, 2008).

Speaking fluency and accuracy is important to establish a successful communication (Brown, 2000, Burns, 2012; Omaggio, 2001). Strivastava (2014) stated that "Accuracy refers to the ability of the learner to produce grammatically correct sentences. The learner should not only know correct grammatical rules of the language, but also able to speak and write accurately" (p. 55). While, fluency "refers to a level of proficiency in communication. It is the ability to produce written and spoken sentences with ease, efficiency, without pauses or a breakdown of communication" (p. 55).

To speak an FL accurately and fluently seems to be the main objective in FL learning (Burns, 2012; Strivastava, 2014). Thus, the success in learning speaking means to produce FL speakers who do not only speak the language fluently, but also speakers who produce less mistakes and errors in grammar, vocabulary, cohesion, and coherence (Brown, 2000; and Kumar, 2013). In other words, students need both accuracy and fluency to reach an outstanding level of speaking performance. Unfortunately, this objective is not achieved by the large number of FL learners, it can be said that a few FL learners can speak the FL fluently and accurately.

There is a widespread agreement among researchers that speaking is a challenging skill (Bahrani and Soltani, 2012; Natain and Newton, 2009; Wallace, Strai, and Walbery, 2004). Communication problems appeared when learners failed to express their intended meaning in an FL or they do not understand words and their forms and meanings (Fitriani, Aprillraw, Wardah, 2015).

Students face two problem in speaking: linguistic and psychological problem (Fitrainan et al., 2015). For many researchers, the affective factor may be the responsible for hindering the FL students from speaking in the formal settings. This factor is related to emotions, self-esteem, empathy, anxiety, attitude, and motivation, shyness, low confidence, anxiety, fear and lack of desire (Natian and Newton, 2009). Moreover, differences between languages such as Arabic and English language (Bni Abodo and Bereen, 2010), lack in practice, and fear to be judged by others can also be factors that prevent students from speaking (Fitriani et al., 2015). As sharing the same context of learning an FL, Jordanian students face serious problems in the oral communication (Al Jamal, 2007; Yaseen, 2018).

Teaching students to speak entails teachers to think of preparing opportunities for students to develop their speaking skills, and as Guetall (2008) suggested "students' speaking skills develop best in motivational atmosphere where a dynamic-interactive learning is highly valued to encourage learners to feel safe, comfortable and relaxed with little or no exposure to the target language" (p. 18). For Bailey (2005), using communicative activities in an FL classroom can enhance students' engagement in speaking lessons. Klippel (1983) proposed to utilize message-oriented activities, learner-centered activities, and activities that promote active learning, cooperation and empathy. Kumar (2013) suggested to offer EFL learners opportunities to speak the language in and out an FL classroom.

Teaching speaking in Jordan is based on the conventional method. Unfortunately, there could be less opportunity for students to speak English language for communication. Thinking of more students-oriented approaches rather than depending on teacher-oriented approaches may offer students opportunities to be self-confident to speak for meaningful purposes. Thus, collaboration on interesting topics and producing new and creative products may estimate students' willingness to use the language meaningfully.
One of the learning methods that could offer opportunities for enhancing speaking skills is project-based learning (PBL) (Behtash and Sarlak '2017; Yung and Puakpong, 2016). Its history rooted in the field of social sciences that strongly believed in social interaction and its advantage in promoting learning (Du and Han, 2016). PBL defined as "student-centered instruction that occurs over an extended time period, during which students select, plan, investigate and produce a product, presentation or performance that answers a real-world question or responds to an authentic challenge" (Holom, 2011, p. 1).

PBL has been reported to promote language teaching and learning by offering authentic and meaningful learning context to improve the FL skills (Brown, 2016; Shafaei and Rahim, 2015; Thomas, 2000; Yang and Puankpong, 2016). Thus, PBL requires students to communicate authentically to complete a set of activities and as a result, students are passing through a range of opportunities to use the language in a natural context. Besides, the processes and product of PBL encourage the development of the comprehensible output (Kettanun, 2015).

The flexible nature of PBL could accept the latest advancement in technology (Solomon, 2003). Many researchers considered the enhancement of technology to PBL as a valuable aspect of preparing students to 21st century skills included communication skills, thinking skills, and doing research in an independent learning environment (Devkota, Giri, and Bagule, 2017; Ravitz, Hixon, English, and Margendoller, 2012). Devkota et al. (2017) claimed that utilizing PBL blended with technology was superior to traditional teaching because of its contribution to students' improvement as global citizens who would benefit from the technology resources in their progress in learning knowledge and skills.

In the same spirit, web 2.0 appeared as a powerful tool in language teaching and learning which contribution could not be avoided (Luo, 2013; Wang and Va'sques, 2012). Web 2.0 is considered a new version of using the web which is different from the latest use of web 1.0 where users were merely allowed to read using the web (Ebner, 2007). For Franklin and van Harmelen, (2007) "Web 2.0 encompasses a variety of different meanings that include an increased emphasis on user generated content, data and content sharing and collaborative effort, together with the use of various kinds of social software, new ways of interacting with web-based applications, and the use of the web as a platform for generating, re-purposing and consuming content" (P, 4). Web 2.0 applications are varied to include Blogs, Wikis, Tagging and social bookmarking, multimedia sharing, audio blogging and podcasting, and syndication (Redecker, 2009). For Balattener and Lomicko (2012), web 2.0 applications are significant to language learners because “With blogs, wikis, forums and social networking sites (SNSs), the new generation of students can express themselves in various ways that are electronically intertwined” (p. 1).

Despite the paucity research on the integration of web 2.0 and PBL, it is claimed that such integration could be effective because both can construct a learning environment that could foster students' skills and knowledge. For Elam and Nesbit (2012) "The remarkable milestones that have been achieved with the combination of Web 2.0 and PBL have made it possible for EFL learners to not only study alone, but has opened a line of communication where students can share their experience and work collaboratively in real-time. Students can communicate either on a one-to-one or a many-to-many basis any time from school, home or work" (p. 117).

For the researcher's best knowledge, the research on the effectiveness of PBL and web 2.0 to teach speaking skills is scarce in the Jordanian context. So, there is a need to support teaching and learning the speaking skills in Jordan with experiences of learning for improving students' speaking, and consequently fosters Jordanian students' communication in English language effectively and efficiently which is one important goal in teaching English language in Jordan. Thus, the current study was worth conducting because it attempted to put on insights on the
enhancement of speaking activities in the Jordanian textbook, *Action Pack11*, through the web 2.0-enhanced PBL.

**Problem of the Study**
Teaching and learning the speaking skill has been one of the most important goals in FL teaching and learning due to its strong relation to achieve successful communication. However, it has been stated by the research that learning speaking may be the most difficult skill in the language teaching learning (Bahrani, & Soltani, 2012; Burns & Hills, 2013; Heriansyah, 2012; Leong & Ahmadi, 2017; Dincer, Yesilyurt, & Goksu, 2012). Fitriani et al., (2015) emphasized that "speaking skill in second or foreign language is a challenge for the learners, because to speak a foreign language such as English requires more than knowing grammar but also the use of English in a real context" (P. 4). Also based on experience, as an English language teacher for fifteen years, the researcher has noticed the difficulty faced by Jordanian EFL students to speak English fluently and accurately. Thus, in an FL context like Jordan, there may be fewer opportunities to speak English because the classroom is basically the entire place to practice the English language and it seems that Jordanian EFL students face difficulties when they communicate orally in English (Bani-Abdo and Bereen, 2010; Bataineh, Al-Bzour & Baniabelderahman 2017; Yaseen, 2018). Therefore, thinking of communicative activities that provide students with authentic and meaningful opportunities to enhance their speaking accuracy and fluency may be a priority in the Jordanian context.

Thus, designing activities based on PBL supported by web 2.0 may offer such opportunity to improve speaking fluency and accuracy because it required students to work collaboratively in groups and present their work orally in an enjoyable environment of learning intertwined with the purposeful use of web 2.0. In a web 2.0 enhanced PBL program, students engaged in an authentic environment utilizing their critical thinking skills, communication skills, collaboration skills, oral presentation skills, creativity, and innovation.

In this study, creating a project went beyond designing posters or writing research to include participating in the digital world (i.e. developing websites) through which students could prove their knowledge and skills on the one hand, and prove themselves as autonomous learners who were responsible for their learning and that may offer a context of learning through which students increase their ability to speak English fluently accurately. In this regard, the findings of the research has supported the effectiveness of PBL and web 2.0 to offer insights into EFL (Elam &Nesbit, 2012; Vasiliou, Loannou, Arh, Zphiris & Klobucar, 2013).

**Purpose of the Study**
The current study aimed to find out the most and the least affected speaking skill by the proposed instructional program.

**Question of the study**
What is the most and the least speaking skill that was enhanced by the instructional program as can be seen from the performance of the eleventh-grade students on the speaking test?

**Significance of the study**
To the best of the researcher's knowledge, this study is among the first studies on the use of web 2.0-enhanced PBL on the speaking skills (Viz. Fluency and accuracy of vocabulary and grammar) which are very significant and demanding skills in the EFL context. The current study is also significant for teachers who intend to use the procedures of PBL combined with the purposeful use of web 2.0 applications in improving English language speaking skills. The findings of the study are hopefully useful for the design of communicative activities based upon the use of PBL and web 2.0 applications.

**Review of the Related Research**
To the best of the researcher's knowledge, the studies on the use of web 2.0-enhanced PBL in speaking skill is scarce, so it could be beneficial to highlight some studies on the effectiveness of
PBL, web 2.0 applications, besides the found studies on web 2.0-enhanced PBL. Thus in this par of the study some studies were mentioned in the effectiveness of PBL on speaking, some studies on the effectiveness of web 2.0 in speaking, and some other studies in the integration of PBL and web 2.0.

AlSaleem (2018) examined the role of Facebook in enhancing the oral communication skills. The participants were all the students at the Centre of language at Yarmouk University-Jordan. The instruments used were a questionnaire, observation checklist, and oral communication rubric for a pre-post tests. The results indicated that Facebook activities enhanced the development of oral communication.

Essien (2018) investigated the effectiveness of PBL on students' English skills and their perceptions of PBL. The participants were 81 students from the faculty of Education, Suan Sunandha Rajabhat University, Bangkok. The study employed a qualitative and quantitative research method in which pre-post-tests and a questionnaire were used. The results showed that students' English skills were improved among them students' speaking skills. Further results indicated that the students preferred to include PBL in their learning English skills because they appreciated it as a useful method to improve their English language skills.

Behtash and Sarlak (2017) investigated the effectiveness of PBL on improving speaking ability (fluency, vocabulary, grammar, pronunciation and organization) of Iranian EFL students. The participants were 45 elementary students who were divided into control and experimental groups. The researcher used pre-post-tests to collect the data. The results showed that PBL was an effective method that improved vocabulary, grammar, fluency, pronunciation and organization. A further result showed that through the interaction in groups, students were encouraged not only to speak on a FL, but also encourages them to self-correct their mistakes.

Sun, Lin, You, Shen, Qi, and Luo (2017) investigated the effectiveness of social networking sites (SNS) via mobile phones in improving Chinese elementary students' speaking skills. The researchers utilized a quasi-experimental research design to conduct the research. They chose 72 first grade students who were asked to do oral assignments. They use pre-post-tests. The results revealed positive differences in the fluency, accuracy and pronunciation skills which highlighted the role of SNSs in developing students' oral performance.

Dewi (2016) examined the effectiveness of PBL techniques through group work on the development of the speaking achievement at a class at SMKN 1 Banda Aceh. The researcher employed an action research design, used observation sheets, pre-post-tests, and a questionnaire, and chose 19 students for applying the study. The findings showed that students' speaking achievement was improved. Further finding indicated that students had positive responses toward speaking through the use of PBL techniques.

Farouck (2016) investigated the effectiveness of PBL in a web 2.0 environment in the speaking skill of university Japanese EFL and their students' willingness to communicate. Students were grouped into pairs, and they were asked to interact online through web 2.0 outside a classroom. In the classroom, they were asked to engage in communication with class partners. The researcher used questionnaire and students' presentation reports to collect the data. The results of the study found that PBL increased the students' oral communication and decreased anxiety, as well as, enhanced students' abilities to speak English.

Anuyahong (2015) studied the effectiveness of project-based approach on enhancing English speaking ability and students' satisfaction toward the study. The sample consisted of 60 students who were chosen randomly from undergraduate first year students at Thai-Nitchi Institute of technology. The researcher used these instruments: lesson plan, a project evaluation form, English speaking pre-post-tests, a satisfaction questionnaire, and students' self-assessment. The results showed that students' speaking achievement was improved because their self-confidence to speak
English in a real situation was high. Moreover, the results showed that students were satisfied with the use of project-based approach to enhance their speaking.

Afaki and Alharthy (2014) investigated the role of social networking sites SNSs on learning English language skills. The researchers employed an experimental method and selected 70 students at a college level to conduct the study. Based on using pre-post-tests and a questionnaire as the instruments of the study, the results showed that SNSs were effective in learning and teaching a FL. SNSs offered students with opportunities to collaborate online beyond the walls of the English classroom, which was considered an important issue in developing FL skills.

Al-Massadeh and Al-Omari (2014) investigated the effectiveness of a proposed project-based program on Jordanian students' oral performance and their attitude toward these skills. The subjects of the study were 80 tenth grade students from a public school in Amman. They used an oral-performance pre-post-tests, oral performance scale, and attitude survey to collect the data. The results showed that students' oral performance in English was improved as a result of using a project-based program.

Chang (2014) examined the role of Facebook communication to promote PBL in China. The researcher utilized a case study design and chose six undergraduate students who were studying applied linguistics to participate in the study. The students were asked to complete a project using English language as a medium of communication and interaction on Facebook. The researcher used open-coded and content analysis to determine communication patterns used by the learners. The findings of the study indicated that Facebook interaction worked positively in completing the projects.

Cheong, Tandon, and Cheong (2014) studied the effectiveness of social-network sites integrated with PBL in China. The participants of the study were six students. The researchers utilized a case study design with face-to-face interviews and e-mail interviews as the instruments of the study. The findings indicated that social-network sites were supported the environment of PBL because they were easy to use and useful in sharing resources.

Castaneda (2014) studied the contribution of PBL to the enhancement of the English language skills and to certain human values development. 17 eighth grade students took part in the study from a public institution of Boyaca, Spain. The researcher employed a qualitative research design with semi-structured interviews and artifacts as the instruments of the study. The findings showed that PBL enhanced students' language skills. The speaking skill was enhanced through the processes of PBL. The students believed that PBL enhanced their self-confidence, cooperation, and tolerance.

Maulany (2013) examined the effectiveness of PBL on the development of the speaking skills (fluency, vocabulary, comprehension, pronunciation) of students in a primary school in Bandung. The researcher also attempted to identify the aspects of speaking skills that could be the most in benefiting from PBL, as well as, the speaking activities that might be mostly used by the students. The participants were 18 students in a primary school. The researcher used participant observation in eight meetings with students and two pre-post speaking tests. The findings of the study indicated that PBL was effective in improving the speaking skills. Moreover, the results showed that speaking skills that were mostly improved using PBL were comprehension and vocabulary skills and the speaking activities that mostly used were drilling, storytelling, picture-cued, translation, question and answer, games, directed response, discussion, and role play. The findings also pointed to the effectiveness of PBL in improving speaking skills with elementary level students.

Elam and Nesbit (2012) studied using PBL utilizing web 2.0 to enhance students' English language skills. The participants were 22 students who studied English language as an FL in a Korean college. They were asked to use a range of web 2.0 tools to carry out their projects. The data were derived from surveys and self and peer review. The results indicated that a combination between PBL and web 2.0 tools is considered a useful way to acquire English language skills.
Concluding Remarks
Based on reviewing the research of PBL, web 2.0, and the integration of PBL and web 2.0, some conclusions can be induced. PBL has been proved to be an effective learning method in improving the speaking skills. The same can be said about the utilization of web 2.0 application in improving the speaking skills which has been found effective by the research too. The integration of both PBL and web 2.0 could have a role in developing the speaking skills as well. To the best of the researcher's Knowledge, the research on the effectiveness of a web 2.0-enhanced PBL is scarce in the area of FL. However, the research showed that the integration of web 2.0 applications and PBL could enhance its processes and the utilization of web 2.0 to enhance PBL seems useful in FL teaching and learning. The research has been focused on one using application with PBL such as a Facebook (Chang, 2014), social network sites (Cheong, Tandon, and Cheon, 2014), and voice-blogs (Huany, 2013) to promote the speaking skills.
But, this study is different from the previous studies in using a range of web 2.0 applications along with the stages of the project (i.e. website). Thus, YouTube, Facebook messenger group, Weebly (a free website to create websites), Wikipedia, and some blogs and website are utilized to achieve the project. In other words, web 2.0 was appeared in all stages of achieving the project.
Moreover, to the best of the researcher's best knowledge, there are scarce studies found in the Arab countries particularly in the Jordanian context to investigate the effectiveness of PBL enhanced by web 2.0 in improving the speaking skills so this study is different in its context. This study is concerned with the school context which could contribute to learning the speaking skills in schools (the formal setting to learn the English language in Jordan) through the utilization of web 2.0-enhanced PBL in the school context. Thus, this study is similar to the studies that investigated the effectiveness of PBL and web 2.0 in improving the speaking skills. But, this study is different from other studies in its attempt in finding out the most enhanced speaking skill by the instructional program and the least enhanced skill by the instructional program, as well as, it is different in its context and in dealing with web 2.0 applications that are important part in each stage in achieving the project.
Method and Instrumentation
This study followed experimental pre-post design.
1. Participant of the study
The participants of the study were (21) female students. They were instructed through the proposed web 2.0-enhanced PBL instructional program. The participants were purposefully chosen to participate in the study from Al-Koura Directorate of Education-Jordan in the scholastic year 2018/2019.
2. Instrument of the study
A speaking pre-post-test: the researcher designed the pre-post speaking test in light of the speaking activities in Jordanian textbook, Action Pack II (Viz. Module One, Two, and Three). The speaking test aimed at detecting the participants' speaking performance after learning through a web 2.0 enhanced PBL instructional program to determine the most and the least speaking skill affected by the program. Each student was tested alone in order to avoid any distraction. To establish the validity of the instruments, the researcher consulted a jury of EFL university instructors, so in light of their feedback, the speaking test was modified.
In order to establish the reliability of the speaking test, the researcher used a pilot study. Thus, with an interval of two weeks between the first and the second test, test-retest method was used with a group of eleventh-grade students (18 students). The researcher used Pearson's Correlation test to obtain the reliability coefficient of the tests; the results are presented in Table 1 below.

Table 1: Pearson's Correlations-Coefficient of Overall Speaking Performance Test
Table 1 shows that the values of Correlation Coefficient are high and appropriate for the purposes of the present study.

The speaking test in its final form consisted of four parts. The first part was an interview with the students consisted of seven questions, the second part was to talk about a topic, the third part was to talk about a situation, and the fourth part was to give your opinion.

The researcher adopted the Rubric Score of the Speaking Test suggested by Harris (1977), which is a five-point analytical rubric to measure the levels of improvement of speaking fluency, accuracy of grammar, and accuracy of vocabulary. Each criterion has a five-point rating scale ranging from 1=poor, 2=fair, 3=good, 4=very good, to 5=excellent. The participants' responses were corrected using this rubric; a final grade was obtained after adding the grades on the three speaking skills of the test (fluency, grammar, and vocabulary).

3. The Instructional Program

In order to achieve the purpose of the study, the researcher redesigned the project lessons in Action Pack 11 under study (Viz. Free-time, plan a celebration, and search a sport) in light of the use of PBL procedures, enhanced by the purposeful use of some web 2.0 applications, namely, Weebly website, the Teacher's website, Facebook messenger group, YouTube, Blog, Wikipedia. It is worth noting that although the project lessons of Action Pack 11 could be an extra opportunity to practice the English language skills, there are less opportunities to practice the speaking skills, and the appearance of web 2.0 applications is also limited. So, this instructional program offered the priority to the speaking skills with the inclusion of web 2.0 applications.

The idea of the instructional program was based on putting the themes of the project lessons in Action Pack 11 under study together in a form of a free website, and through the process of developing the content of the website, the students would undergo activities that could improve their speaking fluency and accuracy of grammar and vocabulary. To achieve doing the project, the students were randomly assigned into four groups, and each of which was responsible for developing a group website by working collaboratively on constructing and developing meaningful web pages, based on the themes of the project lessons understudy in the English language textbook, Action Pack 11.

4. Web 2.0 Applications Used in the Instructional Program

Basically, besides utilizing Weebly to design and develop a group website as the final product of the project, students also use a range of web 2.0 applications as resources for searching information such as Wikipedia, YouTube, Blogs, and Facebook. They use a Facebook messenger group for communicating ideas about the project.

Weebly is a web 2.0 website that is used to build and construct free, group websites. It is an online drag and drop website builder that enables students to create unique websites. It is chosen in this instructional program because it is a free website, it is a rich-feature platform, it does not require any special tech skills, and it is also a mobile optimized. Weebly can be beneficial for generating websites because it has responsive template, app integration, full-width page editor, and free-sub domain. It is easy to start building a website with Weebly, and students can sign up using
Facebook, Google, or e-mails. Students learned how to use Weebly through being exposed to a set of illustrative examples and through YouTube videos that showed them how to construct and develop websites using Weebly.

Another web 2.0 based application used in the instructional program is a Facebook messenger group, Creative Builder. It was used to enhance the teacher-students interaction and student-student interaction. Moreover, the teacher guided students in the processes of the project and followed up students' progress toward developing their group websites. Students also shared group websites through the messenger group and received feedback from their classmates and teacher. Additionally, the teacher sent reflective notes about students' presentations and opened a door for negotiating ideas about the topics related to the content of the web pages. The choice of Facebook application was mainly related to its familiarity, availability, flexibility, and simplicity. So, it could be a meaningful, authentic, and an online learning environment where discussing topics, sending multimedia files, sharing ideas, and elaborating content knowledge could be reinforced. Students could return back to a Facebook group for getting information whenever they want, or for asking about any problem they encounter.

YouTube videos were used as multimedia tools that activated students' prior knowledge about different topics and opened a room for self-learning because students can retrieve them any time. Some YouTube videos were used in the teacher's website to offer a meaningful and authentic learning about web 2.0 applications, how to create and design a website, and the skills of the oral presentations. Additionally, YouTube videos as being multimedia content sharing contributed to the content of the web pages as resources of information that enriched students' understanding of the themes of the web pages.

Web 2.0 was also used as a source of information to enrich the content of websites. So, students searched through web 2.0 applications such as Blogs, websites, and Wikipedia to look for the valid and updated information that they would use to cover the themes of the web pages. The choice of web 2.0 resources was left for groups to show their creativity and research skills. Every member of students contributed to the searching process through figuring out relevant web 2.0 resources, and students discussed what they had collected and decided on the most relevant information. Students had their choice on what to use from web 2.0 text, audio, or video files, and they preserved resources in portable files.

5. The Teacher's Website

The researcher designed a website called the Teacher's Website. This website had multiple uses in the instructional program, it was used as a model example of a website designed by Weebly to teach the students how to use Weebly practically, it contained guidelines to help the students to achieve each web page in their websites and organize group-work activities, and it consisted of web pages related and relevant to the themes of the projects of Action Pack 11 understudy so it was a source of information to activate students' knowledge about the topics and enhance their understanding of each one so the web pages of the Teacher's Website included related YouTube videos, images, and links. Furthermore, the content of the Teacher's website was supported by a number of web pages that were used to teach students related vocabulary and expressions, to enhance the students' skills of oral presentation, to revise the students of writing articles and giving and exchanging opinions in English, and to enhance self-learning activities because the students could access the Teacher's website in proportion with their time in any place they preferred. The students read the web pages of the Teacher's website with the group and individually. The web pages of the Teacher's website was designed to be attractive and useful to encourage the students to be lovely engaged in the process of the instructional program.

5. Duration and Content of the Instructional Program
The instructional program lasted for eight weeks and was divided into seven stages. The first stage was to introduce the groups to the instructional program, the idea of the project, its stages and procedures, and Weebly (a free website that is used to build websites). The second stage was to establish the groups' websites using Weebly. The third, fourth, and fifth stages were to develop the content of group websites based on the themes of the projects under study in Action Pack 11. The sixth stage was to revise the group websites, and stage seven was the final product where the student presented the well-developed websites to an audience. The first and second stages lasted for one week, the third, fourth, and fifth stages lasted two weeks for each, and the sixth and seventh stages lasted for one week as shown in Table 2.

**Table 2: The Duration and Content of the Instructional Program**

<table>
<thead>
<tr>
<th>Week</th>
<th>Day</th>
<th>Stage</th>
<th>Classroom activity</th>
<th>Follow-up activity</th>
<th>Self-learning activity</th>
<th>Number of sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>One</td>
<td>Stage One: Preparation</td>
<td>Classroom activity (group-work)</td>
<td>Follow-up activity</td>
<td>Self-learning activity</td>
<td>One session 45 minutes</td>
</tr>
<tr>
<td>Two</td>
<td>One</td>
<td>Stage Two: Building a group website using Weebly</td>
<td>Classroom activity (group-work)</td>
<td>Follow-up activity</td>
<td>Self-learning activity</td>
<td>One session 45 minutes</td>
</tr>
<tr>
<td>Two</td>
<td>One</td>
<td>Stage Three: Constructing, developing, and presenting web pages about free time activities.</td>
<td>Classroom activity (group-work)</td>
<td>Follow-up activity</td>
<td>Self-learning activity</td>
<td>One session 45 minutes</td>
</tr>
<tr>
<td>Three</td>
<td>One</td>
<td>Stage Four: Developing the content of group websites through constructing web pages about a plan of a celebration.</td>
<td>Oral presentation</td>
<td>Follow-up activity</td>
<td>Self-learning activity</td>
<td>One session 45 minutes</td>
</tr>
<tr>
<td>Four</td>
<td>One</td>
<td></td>
<td>Classroom activity (group-work)</td>
<td>Follow-up activity</td>
<td>Self-learning activity</td>
<td>One session 45 minutes</td>
</tr>
<tr>
<td>Two</td>
<td></td>
<td></td>
<td>Classroom activity (group-work)</td>
<td>Follow-up activity</td>
<td>Self-learning activity</td>
<td>One session 45 minutes</td>
</tr>
<tr>
<td>Five</td>
<td>One</td>
<td></td>
<td>Classroom activity</td>
<td>Follow-up activity</td>
<td>Self-learning activity</td>
<td>One session 45 minutes</td>
</tr>
<tr>
<td>Two</td>
<td></td>
<td></td>
<td>Oral presentation</td>
<td>Follow-up activity</td>
<td>Self-learning activity</td>
<td>One session 45 minutes</td>
</tr>
<tr>
<td>Six</td>
<td>One</td>
<td>Stage Five: Developing</td>
<td>Classroom activity</td>
<td>Follow-up activity</td>
<td>Self-learning</td>
<td>One session</td>
</tr>
</tbody>
</table>
The activities of the instructional program comprised activities done in the classroom (group-work activities) and follow-up and self-learning activities (out school activities). In details, the students work collaboratively in the classroom to discuss the themes of the web pages of the websites and exchange ideas about them, agree on the content of the web pages, and assign roles for each member in the group in the searching process for information to cover the content of the web pages. After searching the information, the students worked collaboratively to organize the collected information and agreed on the tools that they wanted to use from the Weebly builder to cover the content. Then, the students worked collaboratively to edit the content of the web pages based on the accuracy of grammar and vocabulary to the content. After revising the content of the web pages, the students organized an oral presentation to present the content of web pages to their classmates. They performed a group oral presentation. After finishing the group oral presentation, the students answered the teacher's and classmates' questions.

Each student had her role in every process of achieving the web pages. The teacher monitored the students' engagement with their groups in the classroom and checked that every member in the groups was actively did her role. If facing any difficulty, the students asked the teacher for help to facilitate any process. Moreover, in the groups, the students offered each other help and peer-feedback. Thus, even weak students had the opportunity to be an active member in achieving the project. The students collected the researched themes from web 2.0 resources in portable files and handed them to the teacher to give the teacher opportunity to check the groups' work.

The design of the websites were left to the students' creativity. The students designed the websites to expressed their opinions (as a group) about the themes. The web pages were full of images, YouTube videos, and texts that the students choose to include to express the themes from their point of view.

Follow up activities were designed to follow up the students' progress in each step of the project. Thus, after each lesson, follow-up activities were utilized via the Facebook messenger group through which, the researcher followed up the students' progress in developing the web pages.
provided the students with feedback on their performance, discussed with them their opinions of the themes, and asked them to reflect on their performance on the oral presentation. The students in the follow up activities discussed weak and strong points of their performance, exchanged ideas about related themes, asked about any difficulty they faced, expressed their opinions and feelings about any activity, exchanged files, and received recorded messages from the teacher for explain some grammatical points and writing issues. The students were asked to share their websites via the messenger group to offer their classmates opportunities to give their opinions about their content. Regarding self-learning activities, they were found after each lesson for offering the students opportunities for autonomous learning. Thus, the students learned and searched related issues to achieve the project via the Teacher's website, or any web 2.0 application they wished to access to inform their knowledge such as blogs, websites, Facebook, and YouTube. The students also widened their understanding of related issues that were important to succeed in achieving the project (i.e. developing a website and presenting them orally) such performing an oral presentation so they searched through web 2.0 tools such as YouTube to enhance their oral performance. The students were also asked to self-access web 2.0 applications for preparing for the sessions for getting ideas to be basis for group-discussions of the themes.

Findings
In order to answer the question of the study What is the most and least affected speaking skill by the instructional program, as can be seen from the performance of the eleventh-grade students on the speaking post - test?, the researcher first calculated the means and the standard deviations of the speaking pre-post-test as shown in Table 3.

<table>
<thead>
<tr>
<th>Domain</th>
<th>N</th>
<th>PRE Mean</th>
<th>Std. Dev.</th>
<th>Post Mean</th>
<th>Std. Dev.</th>
<th>Adjusted Mean</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td>21</td>
<td>8.95</td>
<td>2.78</td>
<td>14.76</td>
<td>2.98</td>
<td>14.98</td>
<td>0.32</td>
</tr>
<tr>
<td>Grammar</td>
<td>21</td>
<td>8.38</td>
<td>2.72</td>
<td>11.38</td>
<td>3.65</td>
<td>11.51</td>
<td>0.40</td>
</tr>
<tr>
<td>Fluency</td>
<td>21</td>
<td>8.23</td>
<td>2.64</td>
<td>13.90</td>
<td>3.33</td>
<td>13.92</td>
<td>0.31</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>25.57</td>
<td>7.79</td>
<td>40.04</td>
<td>9.56</td>
<td>40.45</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Table 3 shows that there are differences between the mean scores of the students on the pre and post-test in favor of the skills on the post-test of the three speaking skills.

To find out the most and the least enhanced skill by the instructional program, the means and standard deviation of the students' scores of the speaking post-test were calculated as shown in Table 4.

<table>
<thead>
<tr>
<th>Domain</th>
<th>N</th>
<th>Post-test Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td>21</td>
<td>14.76</td>
<td>2.98</td>
</tr>
<tr>
<td>Grammar</td>
<td>21</td>
<td>11.38</td>
<td>3.65</td>
</tr>
</tbody>
</table>
Discussions of the Results Related to the Research Question

Based on the findings of the students' scores on the speaking post-test, the speaking skill that was most affected by the program was vocabulary, and the least speaking skill affected by the program was grammar. The fluency skill was near the vocabulary skill in terms of being enhanced by the program.

Some justifications could be excluded from the implementation of the instructional program for the improvement of the three speaking skills. The students' improvement in vocabulary could be attributed to the opportunity offered by the program to expose to a range of vocabulary items related to the themes of the web pages (free-time, celebration, and sport); every lesson could enhance the vocabulary storage because the students not only learned isolated vocabulary, but also they use them in a meaningful context through the communication process in the groups. Thus, FL learners should be exposed to extra activities to increase their vocabulary knowledge.

Another justification for the enhancement of the vocabulary skill could be related to the way the vocabulary was introduced to the students; the vocabulary items were well-introduced to the students by supporting each topic with some key words that were necessary for comprehending the topics, enhanced by a range of authentic examples from the Teacher's website utilizing the images and YouTube videos that could be good resources for learning vocabulary.

Moreover, the key words were used through discussing the topics and exchanging ideas so the students could increase their retention of the key words. In other words, the purposeful use of vocabulary items could be a reason for the enhancement of the vocabulary knowledge because the students use the vocabulary items they learned in the instructional program for meaningful interaction to express their thoughts and support their ideas.

The repeated exposure to the vocabulary items could be a potential justification for the enhancement of the vocabulary storage. The researcher believes that the students could increase their vocabulary gradually because they had four interrelated lessons to search, construct, and develop a topic, which could increase opportunities for them to expand their knowledge about the topic, and increase their learning of the related vocabulary to the topic at the same time. For example, they revised the content of celebration (the second web page on their websites), they plan a celebration, they searched about the celebration to support the plan, they wrote the plan on the web pages, and they presented it to their classmates. These processes had done sequentially through four classes, which again could strengthen the vocabulary storage about the topic.

The students learned the vocabulary from different resources used in the instructional program. For example, YouTube could be a resource of vocabulary knowledge; the students, as watching the videos, not only listened to a range of vocabulary items, but also learned their uses. The Teacher's website could be another source of vocabulary knowledge because it contained a lot of images, videos, and links which the students could benefit from to widen vocabulary knowledge.

Moreover, the utilization of web 2.0 applications (Facebook, websites, Blogs, and Wikipedia) could enhance the rapid access to vocabulary items. Thus, such applications could facilitate the process of finding out resources for more information about the topics, which could reflect on the successful learning of vocabulary. Besides, the students could utilize the available application from the Internet like Google translation or other applications to increase their understanding of the new words.
The students were put in an environment that encouraged them to increase their vocabulary storage while developing the content of the web pages. More specifically, the students chose the topic of the web page and found out resources about the chosen topic, which could necessitate the students to recognize a range of vocabulary items related to the researched topic. Thus, they used the vocabulary heavily in order to comprehend the information they read that would be the bases for the discussion of the topics and the content of the web pages. Besides, the researcher believes that the chosen topics could be a probable reason for the development of the vocabulary knowledge. The students dealt with interesting topics relevant to their actual life on the one hand, and the topics were suitable for the students' level on the other hand, this could enhance the development of the vocabulary skill.

A probable reason for the improvement of vocabulary skill could be related to the comfortable environment found in the program, which could increase the effective engagement of the students with the development of the web pages. The researcher believes that when the students were heavily engaged in the processes of the project, they could benefit from the opportunities given by the instructional program to use the learned words to communicate their ideas because they could find a place for their voice to be respected in a calm environment that could be a reason for the meaningful use of the students' knowledge about a topic, which could never be achieved without the use of vocabulary.

Regarding the development of the accuracy of grammar and vocabulary, the different forms of feedback used in the program could play a role in the enhancement of the vocabulary and grammar knowledge. For example, the peer-feedback that the students received could be a probable reason of the improvement of vocabulary and grammar knowledge because it could raise their awareness of their mistakes and support their performance. The teacher offered a delayed feedback of the grammatical errors and mistakes to highlight these mistakes and errors and to give more opportunities to benefit from a focus feedback for more successful performance. Moreover, through the Facebook messenger group, the teacher directed the students to use the correct words and grammar, and she also followed the students' progress in this regard. The teacher also encouraged the correct use of vocabulary and grammar, and she also discussed the students of the strong and weak points in their performance. The given feedback could also play a role in offering the students time to develop the fluency skill since they could feel safe and comfortable to talk without too much thinking about their mistakes. Therefore, the students could be encouraged to focus on expressing the meaning as first priority. However, through practicing explicit speaking activities like oral presentation followed by discussing strong and weak points could encourage the students to produce accurate and fluent oral production since it could raise the students' awareness of their oral production. Moreover, the teacher avoided the direct correcting of the students' mistakes while discussing the topics or presenting them orally. Instead of that, students were discussed the strong and weak points with the teacher to avoid mistakes. Furthermore, highlighting the strong points could encourage the students' self-confidence.

The activities of developing the websites could enhance the development of accuracy and fluency. The students worked collaboratively to develop the content of the web pages with relevant information, and the content was edited by the students in terms of the choice of the correct words and grammar side by side with the meaningfulness of the content. Thus, the students could enhance the quality of the web pages. Such experience of elaborating the content of the web pages collaboratively could be a reason for enhancing the accuracy and fluency. Thus, from the researcher's observation, the students benefited from each stage of developing the web pages in terms of the accurate and fluent language they used.
The accuracy of grammar was the least developed skill by the instructional program. However, the instructional program could be an opportunity to use a range of language forms because the instructional program was designed to highlight the successful application of the knowledge and skills of the students based on their previous knowledge and skills from the Modules of Action Pack 11 under study. Thus, to develop each web page in the website, the students utilized the learned grammatical points, as well as, used the functions of the language. For example, when the students developed the themes of the web pages, they needed to use future forms, the tenses of English, and the modals, which were presented previously in the Modules. So, the program could be a meaningful context to use previously learned grammar.

The explanation of the development of the accuracy of grammar could be linked to the use of the grammatical knowledge in meaningful communication as a way to express meanings other than memorizing grammar as isolated forms of the language. For example, the students used the accurate language to interact meaningfully whether in the classroom or through the messenger group to clarify their meaning. In the instructional program, the students also used the functions of the language in a meaningful context to exchange ideas and information, give personal opinions about different topics, and present the topics.

The group oral presentation could be an opportunity to enhance both accuracy and fluency. The students were asked to present the content of the web pages four times, which could enhance the use of the correct vocabulary and grammar. The students trained before conducting an oral presentation in the groups, which could enhance the students' awareness of the correct use of the language and could support the students' confidence to use the correct forms of the language. Thus, from the researcher's observation, there was a gradual enhancement of both accuracy and confidence in speaking at the four-times oral presentation.

Regarding the remarkable enhancement of the fluency skill, it could be said that a web 2.0-enhanced PBL instructional program was designed to give the students sufficient opportunities for enhancing their fluency skill. Thus, the program was basically based on group-work activities, collaboration and negotiation of meaning, which could raise the students' confidence to produce the oral language with flow. Therefore, there could be a need of communicative tasks for offering suitable conditions for fluency development.

Another justification for the enhancement of the fluency skill could be linked to the comfortable and enjoyable environment in the groups that could encourage the students to speak confidently. The warmth social context of learning in the instructional program could also play a role in the improvement of the students' fluency because it could decrease the affective factor which could be responsible for fear to speak in the FL. Thus, from the researcher's observation, the students interacted friendly around meaningful and interesting topics related to their life in ways that could be a reason for encouraging the students to express their meaning fluently.

The instructional program was based on communicative activities and students-centered activities, which could enhance the students' fluency. It could be concluded that the activities that could enhance fluency should be real-life situations, student-centered, meaningful, and relevant to students' life in order to encourage the students to be independent and self-confident to speak fluently.

To sum up, the instructional program was designed to offer a balance between the development of fluency and accuracy through the stages of the project. Thus, to develop a web page, the students discussed its content, communicated their ideas, exchanged information based on the materials they collected, organized and analyzed the information, wrote and edited the web page, discussed the relevant tools and content, and organized an oral presentation, practiced oral presentation, and presented the web page supported by the use of its tools. In such activities, there could be a focus
Conclusion
This study attempted to find out the most and the least enhanced speaking skill by the proposed web 2.0 enhanced PBL instructional program. The finding showed that the three speaking skills were enhanced by the instructional program, and the most enhanced skill was vocabulary, followed by fluency, and the least skill was grammar. This research encouraged the purposeful use of the cutting edge technology like web 2.0 applications with learning methods like PBL. Thus, students of FL could find meaningful opportunities to develop their speaking skills. Moreover, students could develop other language skill by the utilization of such instructional programs that seek offering meaningful and authentic opportunities that could enhance the conventional methods of teaching and learning an FL. This study encouraged other researchers to conduct studies to investigate the potential effectiveness of PBL supported by web 2.0 applications in other English language skills. The researcher recommended to take doing projects supported by web 2.0 into consideration when designing activities to promote the English language skills especially in the FL contexts to offer students extra opportunities to practice the language skills especially speaking which could be the most challenging skill in learning an FL. The researcher also recommended to highlighting the utilization of web 2.0 to raise the students’ autonomous learning.

Finally, these are the acronyms mentioned in the study.

Table 5: Key Words in the Study

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBL</td>
<td>Project-based learning</td>
</tr>
<tr>
<td>FL</td>
<td>foreign language</td>
</tr>
<tr>
<td>EFL</td>
<td>English as a foreign language</td>
</tr>
<tr>
<td>SNSs</td>
<td>Social networking sites</td>
</tr>
</tbody>
</table>

References


Links from the Internet
https://icsai.org/proarch/1iclep/1iclep-18.pdf.
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