Using Google Drive as the E-portfolio for the Self-assessment of Speaking Fluency in Iran's High Schools

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Abstract

This study examines the effect of video recording in Google Drive as the self-assessing E-portfolio on high school EFL learners' speaking fluency. To that end, a quasi-experimental comparison group research was implemented in which thirty Iranian high school EFL students were assigned either to e-portfolio or comparison groups. While the e-portfolio group assessed their own performance by keeping electronic portfolios in Google Drive, their counterparts in the comparison group presented their performance in the class. The students' speaking fluency was assessed through both pre- and post-tests. A speaking rubric was used to get the students' scores. The results of the independent sample t test showed that taking advantage of self-assessment through video-based e-portfolios improved the learners' speaking fluency. The study had relevant implications for both material designers and language teachers not only to promote student speaking skills, but also to enhance students' lifelong learning.

Keywords: E-portfolios, self-assessment, speaking fluency, video recording

1. Introduction

According to the related literature, the recognition of self-regulation and self-assessment as alternative effective ways of learning in the school environment has become a more recent focus of educational researchers. Similarly, in the context of societal pressures that create stress, within the educational community, the importance of autonomy learning within schools has assumed increased significance. In the digital age although there is still a need for transmission of culture, two other important skills a learner needs to gain out of school is learning how to learn, and getting to know how effectively one can use the available tools in order to solve his/her own problems (Illeris, 2007). Moreover, Oguz Serin (2011) asserts how using technology and effective learning techniques can enhance creative thinking and problem solving.

Blanche and Merino (1989) described self-assessment as a condition of learner autonomy in which students will not have to depend entirely on the opinions of teachers if they can evaluate themselves accurately. Similarly, the Saphe project (1999) defined 'self-assessment' as requiring learners to think about what they have learned so far, identify gaps and ways in which these can be filled and take steps towards remediation. Boud (2013) in a more general sense, looks at self-assessment as requiring re-working throughout life in order to meet new challenges. Moreover, he states that a learner needs to be lifelong assessor so as to become successful lifelong learner. He also argues, along with others, that we should focus more on the role of formative rather than summative assessment.

Portfolios can help students learn through technology-based ways by which transferring, searching, and organizing data are provided (Rhodes, Chen, Watson, & Garrison, 2014). In another definition, Lorenzo and Ittelson (2005) define an e-portfolio as "a digitized collection of artefacts including demonstrations, resources, and accomplishments that represent an individual, group, or institution". In other words, an electronic portfolio is provided as to help not only students but also teachers to compile and organize data in the form of audio, video, text, etc., which are being saved and shared for the later use. For the purpose of this study, the e-Portfolios were the individual student portfolios created using the google drive tool.

1.1 Statement of the Problem

According to the Ministry of Education in the Islamic Republic of Iran, the Fundamental Reform Document of Education (FRDE) aims to help the students gain necessary skills for life by providing opportunities to enhance critical thinking, communicative skills, and independent learning (Ministry of Education of Iran, 2011). English learning hence as a part of the curriculum in foreign language learning has taken communicative skills into consideration. However, a considerable challenge which has made the students not to acquire the language in English as a foreign language (EFL) contexts was that teachers acted to be all-explainer who expecting very little out of the students' performance both in and out of the classroom (Alibakhshi, 2015; Scrivener, 2011). So, students became pure dependent learners, without having the ability to convey meanings independently. That is to say, learners of English in Iran often do not have enough opportunities to speak English in school classrooms.

Although, lately, speaking has been considered as integral part of any language learning program, still the majority of EFL students in Iran find it difficult to speak English fluently and meaningfully (Sotoudehnama & Hashamdar, 2016). Another problem which learners in EFL contexts encounter is that students assume the teacher as the only one in the class who is in charge to teach, evaluate, and find difficulties in learning (Scrivener, 2011).

The old evaluation methods are still another source of problem where these methods impose threat on students rather than improving learning (Johnson, Penny, & Gordon, 2008). Assessment tools as an integral part of learning have been largely used to measure students' performance at schools in traditional ways. Although these tools are still being used widely worldwide, they show little about students' progress, if there is any. As the education system increasingly appreciates Self-Regulated Learning (SRL), suitable tools are also needed to record and assess the students' performance so as to help them become autonomous learners.

1.2 Objective of the Study

To help address these issues, and maximize the integration of technology into education, this study aims to examine the impact of self-assessment e-portfolios on speaking fluency in high school EFL context in Iran.

1.3 Research Question and Hypothesis

The research question and hypothesis of this study are as follows:

Q: Does creating electronic speaking portfolios with a guided self-assessment rubric promote EFL learners' speaking fluency?

H0: The self-assessment using video recording e-portfolios does not promote students speaking fluency.

2. Literature Review

2.1 Self-assessment of Learning vs. Self-assessment for Learning

These two technical phrases shed light on the purpose of using assessment. Indeed, these approaches are considered as two extremes on a continuum. In practice, the same SA tool can be used either for more evaluation-oriented means as assessment of learning or for more learning-oriented means as assessment for learning (Stiggins, 2005). While research on assessment has been conducted primarily from an assessment *of* learning perspective, researchers have been giving increasing attention to assessment for learning. As validity and reliability in assessment for learning are seen as challenging terms, the relationship between them should be highlighted here. In assessment for learning, validity should be a precondition for reliability because, according to Sadler(1989), concentration on the validity of judgments about individual pieces of work should take priority over attention to reliability of grading in any context where the diagnosis and improvement are highlighted. Validity through this dimension is seen as the degree to which the content, the procedure, and the tasks of the assessment get along with the instruction. Moreover, Zimmerman (2002) believes that if learners get engaged in self-assessment learning, they can transform their in-abilities into academic skills.

2.2 Studies on Self-Assessment Learning

There are several studies on self-regulated and self-assessment learning in the literature (Finch, 2012; Warchulski, 2015). However, to address the research question the following presents those which take English language learning into consideration. To examine the impact of both technology and self-assessment on English learning some researchers conducted purposeful studies. Çelik, Arkın, and Sabriler (2012), for example, researched EFL learners' use of Information communication Technologies (ICT) for self-regulated learning. The result showed that neither sex nor the participants' language levels affected self-regulated learning. The collected data also showed that the learners often use ICT to practice vocabulary, writing, and listening skills. Likewise, Chang (2005) investigated the effects of autonomy learning through a web-based language learning program on EFL learners. The participants' motivation toward using this strategy was also investigated. The results revealed that engaging the students to advance self-assessment learning through web-based instructions improve learning. Thus, it is highly suggested to employ self-assessment learning through web-based programs.

Some studies focused on self-assessment to promote language skills in language learning. For instance, Pratontep and Chinwonno (2008) investigated the effect of self-regulated learning on Thai university EFL learners in a reading project. The results revealed that there were considerable differences between the learners' pre- and post-test mean scores. Focusing on another skill, Lin and Gan (2014) explored the effect of self-regulated learning on Taiwanese college students' use of English listening strategies. The results showed that among the two types of metacognitive awareness of listening, the most frequently used type was metacognitive strategy, and the least frequently used one was metacognitive knowledge. The results also revealed that the participants had a strong self-regulated learning. A significant and strong relationship between metacognitive awareness of listening and self-regulated learning was observed. In a same vein, Aregu (2013) studied the relationship between self-regulated learning and speaking efficacy and performance among Ethiopian students. The results revealed that the e-portfolio group outperformed the comparison group in the speaking efficacy. Analysis of the qualitative data also revealed that the participants in the e-portfolio group improved in speaking efficacy.

Some other researchers investigated the impact of SRL on students' English vocabulary learning. Hamedani (2013), for example, investigated the effect of self-learning on vocabulary learning among Iranian EFL learners. He concluded that self-regulation significantly affected learners' vocabulary acquisition. Mizumoto (2013) conducted a similar study to examine the effect of self-efficacy on EFL learners' vocabulary learning. The results revealed that the treatment group experienced significant increase in self-efficacy and vocabulary knowledge compared with the other two contrast groups.

2.3 Electronic Portfolio

An electronic portfolio (e-portfolio) is an electronic collection of evidence that shows a learning journey over time (Barrett, 2005). The artifacts, selected purposefully by the learner, can include writing, photos, videos, projects and observations (Barrett, 2011). With an e-portfolio, the critical element is reflection. Barrett said the real value of an e-portfolio is in the reflection and learning that is documented therein, not just the collection of work. A structured portfolio is more standardized, in that it outlines expectations for work that is to be completed. A structured portfolio is most often used when it is necessary to demonstrate a particular set of criteria have been met.

2.4 Pedagogical Use of E-portfolios

E-portfolio-based assessment can be used to develop students' self-regulated learning as the focus in students-centered learning is primarily on students. E-portfolio-based assessment provides an opportunity which let students to be engaged in the learning process as they take responsibility of every step in their own learning, such as setting goals, organizing the content of e-portfolios, and even assessing their own learning (Ivanova, 2017). E-portfolio-based assessment provides invaluable opportunity through which the students can monitor their own learning process. Monitoring one's own learning can enable one to assess and reflect on one's own work, which can help to understand one's strengths and weaknesses, what worked and what did not work, and improve learning according to those findings. Therefore, the purpose of this kind of assessment is to enable students to customize their own learning through active participation.

2.5 The Electronic Language Portfolios (ELP)

It has been highlighted that the implementation of ELP as a digital format particularly in language learning programs has some advantages over hardcopy formats. Distance learning and tracing the students' language learning process over the years have been recognized as having some benefits (Schneider & Lenz, 2001). Schneider and Lenz, the authors of the official ELP guide for developers, emphasized the significance of having a digital ELP suggesting that an electronic version of the ELP would advance specific opportunities:

▪ A digital ELP is updateable: In the process of language learning, students can easily update and expand their ELP. So, no need to copy papers.

▪ All the data of the digital ELP can be stored in a date base, which can be used later by different organizations for longitudinal studies on the language learning process. The students can also have access to their ELP to assess their language learning performance.

▪ A digital ELP is customizable according to the users' language level.

▪ A digital version makes it possible to have a multimedia ELP including; audio, and video which paper-based portfolios don't provide this facility.

 ▪ A further innovation is that a digital ELP is easy to share via e-mail and it is quicker to fill up   than with a pen and paper procedure (Barrett, 1994).

As was mentioned above, many studies in the literature highlighted the use of e-portfolios to improve English learning. Few however, discussed their uses to promote productive skills, particularly in EFL school context.

2.6 Empirical Studies on Oral Portfolios

There are very few studies regarding technology-based portfolios to promote oral skills. The studies focusing on oral portfolios reveal different results on particular aspects of using them. Danny Huang and Hung for example, conducted a study on e-portfolios for oral skill improvement (Huang & Hung, 2010). The purpose of the study was to examine the effects of e-portfolios on three indices- language quantity, lexical richness, and syntactic complexity of EFL students' oral performance in conversation classes. This study also investigated the students' attitudes towards the employment of this digital device as the medium of oral work assessment. The researchers assigned the participants into control and e-portfolio groups on which they administered pre- and post-tests with the use of e-portfolios. The results of the study showed that the e-portfolio group improved in language learning better than the comparison group. Secondly, the electronic portfolio treatment played a substantial role in students' use of various lexical items. The students used a wider range of vocabulary in their oral speeches compared to the comparison group. Lastly, the learners in e-portfolio group had positive attitude toward using these type of portfolios, as they pointed out that the advantages to the e-portfolios outnumber the drawbacks.

In the same vein, Bolliger and Shepherd (2010) analyzed learners' perception of integrating e-portfolios into classes to promote oral skills. Their findings indicated that 89% of the students in this study agreed on the positive role of portfolios in self-evaluation. In Bolliger and Shepherd's research, learners emphasized the positive impact of portfolios on their speaking, as well. These two studies revealed that the participants were pleased with the oral portfolios implementations for the improvement of self-reflection and speaking skills. In addition to the improvement in speaking skills, portfolios could also contribute to a decrease in anxiety of learners. Wang and Chang (2010) also studied the effects of self-monitoring and portfolios on college students' anxiety levels and English speaking performance. This study revealed that oral portfolios enabled learners to learn not only from themselves, but also from their peers and their teachers. The researchers also illustrated the slight decrease in students' communication apprehension through the use of such an alternative assessment. That is, it is not certain

that oral portfolios help learners to decrease their anxiety. This finding might imply that teachers need to foster a sense of achievement to reduce the students' anxiety level in speaking to a great extent. The study by Wang and Chang also provided an insight for teachers to include such oral assessment techniques in their classes as students expressed their positive attitudes toward evaluating their own performance through watching their video-recorded speech.

Taking language skills into consideration, the use of electronic tools was mainly used to improve both reading, and writing rather than listening and speaking. Speaking is emphasized by Iran's English program at school through CLT along with appreciating learner-centered approaches. However, most of the students still unable to speak English fluently. Although much time and energy have been invested to highlight the advantages of learner autonomy to improve reading and writing, little attention has been paid to the effectiveness of self-assessment to improve speaking skills especially in Iran. To help solve the above-mentioned problem, this study is to investigate the effect of self-assessment on Iranian EFL school students' speaking fluency through video recording and keeping electronic portfolios.

3. Methodology

3.1 Design of the Study

This study enjoys a quasi-experimental research with a pre-test, post-test comparison group design. To address the research question, the effect of the independent variable i.e. using SA e-portfolio on the dependent variable, i.e. EFL learners' speaking fluency was studied. The participants were assigned into two groups namely the e-portfolio group and the comparison group.

3.2 Participants and Setting

This study was conducted at two separate state high schools in Abadan, Iran where English is taught as a foreign language two times a week, one hour a day. The school administration had an open attitude toward educational research and was of great assistance in helping the researchers to gain free access to the school environment and school activities, as well as to the information on the students' previous records. At the time of this study, the students were from families with very low to middle level socioeconomic status. The total population was 40 male students studying in 12th grade with an average age of 18. According to the results of Oxford Proficiency Test (OPT), only intermediate EFL learners (N=30) whose score fell within the range of $\pm$ 1SD from the mean score and had both smartphones as well as access to the Internet were chosen. So, using a purposive sampling strategy, 15 participants were assigned either to e-portfolio group or comparison group. All of the participants were informed that they were going to participate in the study.

The participants in the e-portfolio group were asked not to attend the class for 15 minutes during speaking practices. They agreed by giving their written consent. Before the researchers started to run the study students were given an information about the tasks, the self-assessment rubrics, and speaking e-portfolios. The names of the students have been kept anonymous; instead the researchers used code numbers for each student like ST1 and ST2. They were assigned into e-portfolio group from one school and the comparison group from the other. While the participants in the e-portfolio group treated to implement the self-assessment e-portfolio in order to enhance their English speaking fluency, the participants in the comparison group did the regular class activities, that is to say, performing their speaking practices in the classroom. Except the test scoring, all parts of the study were carried out by the researchers, who were the teachers of both classes as well. To ensure the reliability of the tests, the researchers asked a colleague to help them score the students' performance. Then, inter-rater reliability was calculated.

3.3 Instruments

To gather the data, the instruments employed in this study included OPT, the oral pre-test and post-test, electronic portfolios on google drive, some teacher-made picture stories, and a rubric of speaking assessment. Some of the instruments were either developed or modified by the researchers, in line with both the study aims and the syllabus and curriculum goals. The following discusses the instruments in more details.

3.3.1 Oxford Proficiency Test (OPT)

To homogenize the groups in this study, OPT was used. It is a standardized widely used test by which learners' English proficiency is determined.

3.3.2 A Pre-test and a Post-test of Speaking

As a pre-test and post-test, the participants in both groups were asked to narrate a teacher-made picture story which was basically taken from the reading section in the students' course book. Every narration time lasted about 5 minutes, two times a week. A speaking rubric was used to score the students' performance (See Appendix A). In fulfilling the criteria of a good test, validity and reliability of the test should be considered. Content validity of a test was determined based on the expert judgment. To ensure reliability of both pre-test and post-test the researchers and his colleagues scored the students' performance at the same time. Then, the researchers using inter-rater reliability compared the results.

3.3.3 Electronic Portfolios on Google Drive

To create e-portfolios the researchers suggested the use of Google Drive for several reasons. First, it provides a free online place to develop and maintain electronic portfolios by which the learners could refer to in any time anywhere to check the change in their performance during the experiment. Second, it can be easily used by participants either using personal computers or smartphones. Third, it supports social networking systems. So, they could share the access link with the teacher to ensure about accomplishing the tasks. Forth, any users can create, change, delete, and update his/her profile and dashboard. The basic idea, however, was to provide users some simple tool in order to help them take the responsibility of their own learning. The participants in the e-portfolio group needed to record video of their performance when narrating the stories at home using their smartphone cameras, and electronically upload the resulting video recordings to their Google Drive account. To create an e-portfolio, the participants in the e-portfolio group went through the following instruction. 1. Type Google drive in the google box. 2. Click on Google Drive. 3. Click on new, and then on Folder. 4. Give the folder a name. e.g. ST1, ST2, and so on. The participants then put their recorded files into the folder.

3.3.4 Teacher-Made Picture Stories

To run the treatment, the teacher provided some teacher-made picture stories by taking the content of each story into consideration. As both the e-portfolio group and the comparison group need a same paper-based pictures for narration, enough photocopies were made and distributed among the students.

3.3.5 A Rubric for Assessing the Speaking Fluency

In evaluating the students' speaking scores, the observer used speaking rubric developed by Harris (1975) in evaluating the students' speaking scores. As the participants needed the same rubric for self-assessment, the Persian version of the speaking rubric was given to the e-portfolio group to avoid confusion.

3.4 Data Collection

At first, to ensure homogenization, an OPT was given to all the students prior to the treatment, the result of which showed no significant difference existed between the groups. Before the treatment, students were given a picture story as a pre-test and were asked to narrate the story. The aim was to elicit the participants' scores on speaking fluency before the treatment. Moreover, the researchers devoted some time to introduce the procedure for the e-portfolio group since the students had difficulties in understanding the system. They had difficulty in understanding the aim of the e-portfolio and they repeatedly asked the same questions about how to start the implementation. The questions were answered by the researchers again and again so as to make all students understand the aim and make them know what they have to do and not to do. After embedding the implementation in the first weeks, whenever the students needed extra information they were asked to meet the teacher in the class.

In the second week of the study, during the treatment, the only difference between the two groups was that the e-portfolio group was asked to upload their video-recorded performance to Google Drive into a folder which was shared with the teacher-researchers. The participants in both groups had the chance to present their performance 16 times during the study. During this time however, the portfolio group using paper-based rubric evaluated their own performance, and handed it over to the teacher when they meet in the class. The participants in the comparison group presented their performance publicly, i.e. narrating the picture story in front of their peers in the classroom. To compare the effectiveness of the treatment on the participants at the end of the experiment, all participants in the study were asked to narrate a picture story as a post-test. To ensure the reliability of the tests, the data which were provided by two raters analyzed using inter-rater reliability measurement.

3.5 Data Analysis

To answer the research question proposed in this study, after collecting the required data and scoring the tests, appropriate statistical procedures were followed using SPSS software (version 25.00). The descriptive statistics such as the mean, standard deviation, and range were calculated in order to examine the central tendencies and variability of the scores. To seek answers to the research question two independent-samples *t*-test were run on the scores obtained from both pre-tests, and post-test. The former verified if there were any significant differences between the groups' speaking fluency, and the latter determined the effect of the treatment.

4. Results

In answering the research question which asks "Does creating electronic speaking portfolios with a guided self-assessment rubric promote EFL learners' speaking fluency" at first, an independent-sample *t*-test was run to ensure the homogeneity of variance at the pre-test stage in the two groups The results shown in Table 1 indicate a t value of .38 with a *p* value of .70. This probability is much greater than the alpha level of .05. Therefore, no significant difference was present between the two groups before running the treatments. Thus, the groups were considered homogeneous regarding their speaking level before the treatment.

Table 1. Test of homogenity of variances

Levene's Test for Equality of Variances		*t-test for Equality of Means*						
F	Sig	t	df	Sig (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence interval of the Difference	
							Lower	Upper
.592	.448	-.386	28	.702	-.06667	.17275	-.42052	.28719

To ensure reliability of the pre-test, two raters scored the students' speaking fluency. The results are presented in Table 2.

Table 2. Inter-rater reliability coefficient of pre-test

	Rater 1	Rater 2
Pearson Correlation	1	.926**
Sig (2-tailed)		.000
N	30	30
Pearson Correlation	.926**	1
Sig (2-tailed)	.000	
N	30	30

*** Correlation is significant at the 0.01 level (2-tailed).*

According to Table 2, the inter-rater reliability for the pre-test equals 0.92 which is a high level of reliability. Moreover, to compare the students' performance of both groups on the post-tests, at first, the descriptive statistics of the scores such as the mean and standard deviation were calculated. The results are tabulated in Table 3.

Table 3. Descriptive statistics of the post-test scores

	N	Mean	Std.	Std. Error Means
E-portfolio Group	15	4.4000	.50709	.13093
Comparison Group	15	2.9333	.59362	.15327

As seen in Table 3, the mean scores (M) and standard deviations (SD) of the e-portfolio group and the comparison group for speaking post-test were (M= 4.40, SD=0.50) and (M= 2.93, SD= 0.59), respectively. In order to test the null hypothesis (self-assessment using video recording e-portfolios does not promote students speaking fluency) and to examine whether or not the independent variable produced any significant differences in the students' speaking fluency in this study, the data of the two groups (e-portfolio and comparison groups) were compared running an independent-sample *t* test.

Table 4. Independent-sample T-test between the two groups' post-test scores

F	Sig	t	df	Sig (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence interval of the Difference	
							Lower	Upper
.800	.379	7.276	28	.000	1.46667	.20158	1.05375	1.87959

Note. The mean difference is significant at the 0.05 level

In the light of the results in Table 4, it is safe to claim that there is a significant difference (p= .00) between the overall performance of the two groups on the post-tests (P<0.05). The above table shows that the e-portfolio group considerably outperformed the other group, and the null hypothesis was, therefore, rejected. To ensure the reliability of the post-test, inter-rater reliability was measured. The results are presented in Table 5.

Table 5. Inter-rater reliability coefficient of post-test

	Rater 1	Rater 2
Pearson Correlation	1	.905**
Sig (2-tailed)		.000
N	30	30
Pearson Correlation	.905**	1
Sig (2-tailed)	.000	
N	30	30

**. *Correlation is significant at the 0.01 level (2-tailed).*

These results show high agreement between the raters.

5. Discussion

The application of SA e-portfolio in comparison to the traditional teaching methods, significantly improved students' speaking fluency as measured by the researcher-developed tests ($p= .000$). Based on the results of the post-tests in which the experimental participants considerably outperformed the traditional group, the present study concluded that the use of SA e-portfolio can be effective in enhancing the speaking fluency of Iranian high school EFL learners. SA in this study gave the learners more freedom to evaluate their own learning, focus on their own weaknesses and strengths, and become autonomous learners. Although at the beginning they needed some help, the overall results of this study supported self-regulation theory (Zimmerman & Schunk, 2012) as it provided an opportunity in which learners found out that teacher's instructions are not the only source of learning.

Though the participants in the e-portfolio group were introduced to the study in an introductory session before the treatment, when it came to practice at home, the uniqueness of the condition might have been a source of distraction affecting their performance in the first two sessions. On the contrary, in the third session, they performed better than the participants of comparison group and gained significant results. Another possible explanation for the effectiveness of the treatment as reported in this study might be related to the potential benefit of using technology as diverse learning styles. Students bring to the learning environment different learning strategies and styles, different levels of motivation, and different language competencies. Students are different in their favored styles for learning. It seems that when students are able to use a compatible learning style, they learn much more effectively than when they have to employ an incompatible learning style. In this regard, learners with different learning styles could cope with the materials.

While the participants in both groups of this study were provided with pictures, the superiority of the e-portfolio group can be attributed to the use of SA e-portfolios in this group versus in-class presentation used in the e-portfolio group. The results of this study also approved the ideas as well as the studies that illustrated the usefulness of self-assessment learning. The idea of Warchulski (2015) as well as that of Finch (2012) were confirmed as the formers described self-assessment as a condition of learner autonomy in which students would not have to depend merely on teacher's evaluation, and the latter as the advocate of cognitive and constructivist theories, believed that self-assessment enables students to enhance learning in a meaningful way.

The results of this study also supported the usefulness of formative self-assessment i.e. self-assessment for learning as it was stated by Stiggins (2005). He clearly made distinction between self-assessment of learning and self-assessment for learning as a response to those who complain about its validity. Moreover, the findings in the study support some past studies. A research was conducted by Huang and hung (2010) on the use of e-portfolios on learners' oral performance, where he concludes that using e-portfolios was significantly more effective than traditional learning in facilitating students' speaking learning.

6. Conclusion

The following conclusions are made based on the findings of the data analyses presented in the previous section. Two independent-samples *t*-test was used to address the research question. The null hypothesis stated that 'self-assessment using video recording e-portfolios does not promote students speaking fluency.' In this regard, the results demonstrated that the effect of using SA e-portfolio was statistically significant ($p= .000$). The findings indicated that the use of SA e-portfolio in learning English produced a statistically significant difference in the students' speaking fluency by the post-test, when compared to traditional instruction in the classroom. The researchers accordingly concluded that the SA e-portfolio positively benefited speaking fluency of Iranian EFL students.

7. Implications

The results of this study are important to curriculum developers as they come to have a better understanding of the role of SA and e-portfolios in improving speaking fluency. This study has also the potential to encourage material developers to integrate appropriate software and electronic materials in the learning speaking. They can develop materials so that learners can learn at their own speed and also based on their learning preferences to promote their speaking skills. By including various features suitable for different types of learners, it might be possible to create better teaching materials on computers. Curriculum developers should take into account that not only possible SA e-portfolio equipment should be provided, but also effective training for both teachers and students needs to be supplied.

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Appendix A: **Rubric for Speaking Fluency Assessment**

From *English as Second Language book* developed by Haris, David (1975)

Points	Speaking Quality
5	Speech is fluent and effortless as that of native speakers.
4	Speed of speech seems rather strongly affected by language problems.
3	Speed and fluency are rather strongly affected by language problems.
2	Usually hesitant often forced into silence by language problems.
1	Speech is so halting and fragmentary as to make conversation virtually impossible.