

# Assessing Down Syndrome EFL Learner's Language Ability: Incorporating Learners-Teachers' Perspectives

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## Abstract

This study aimed to explore Down syndrome EFL learners and their teachers' perceptions of language ability assessment and considering their perceptions in order to develop an appropriate test format which can enable them to present their best of language ability. To achieve this purpose, 35 individuals with Down syndrome (both genders), their teachers, and counselors participated in this research. 21 individuals with Down syndrome were at the basic level of second language development, 14 individuals were elementary. It is noteworthy that four instruments were used in this study: Observation, Interview, and Questionnaire and Down Syndrome EFL learners' language proficiency test. Down syndrome individuals' English classes were also observed to achieve information on the strengths and weaknesses in developing second language. Then, an interview was conducted among Down syndrome individuals, their teachers, and counselors for the purpose of qualitative data required to make a researchers-made questionnaire in order to elicit their assessment perceptions. The data obtained from the study revealed that the Down Syndrome learners preferred to be tested that most of students with Down Syndrome prefer to be assessed only through some especial test items which including the multiple-choice, matching, true-false, short-answer questions, fill-in-the-blanks tests, conversation with patterns and oral assessments. This study can provide teachers and material developers with the knowledge to develop and provide assessment models to help Down Syndrome EFL learners improve their learning quality.

**Keywords:** down syndrome, EFL learner, language ability, assessment

## 1. Introduction

Second language learning is a prominent part of education everywhere and as a result, the field of second language learning research has grown rapidly in recent years with the consideration of educational and psychological issues on language development of learners. Many scholars (e.g., August & Shanahan, 2008, etc.) have examined the role of language ability in any educational system; however, such studies are not limited to the process of second language learning, but they also consider various factors (e.g., anxiety, accommodations, culture, etc.) which might affect the process of language learning. These factors with their complex interplay determine the speed, facility, and even inhibition with which a new language is learned.

While it has long been recognized in the Learning Disability (LD) field that second language study would be a terrific challenge to learning-disabled students, somehow this fact has recently been ignored in the field of second language instruction and in pedagogical environment in general, many types of such disabilities, Down Syndrome (DS) is the most common genetic cause of mental retardation. This genetic abnormality results in a distinct facial appearance, heart and some respiratory problems, mental retardation and language disabilities in the process of language learning (Chapman, 1995), as well as cognitive delay, neurological impairment and selective difficulties with language development that can be accounted for in terms of low intelligence, hearing impairment, speech impairment, physical disabilities and their language deficits in expressive speech (Kumin, 1996; Zainudin, 2019).

Learners with DS also experience Learning Difficulties (LDs) that lead to delays in many areas of development. Scholars have recognized that learners with DS have great difficulty mastering English, because of learning disabilities, their specific speech delay, in learning to use spoken language relative to their non-verbal

understanding (Chapman, 1997; Chapman, & Hesketh, 2000; Kasari, & Sigman, 1996; Alemi, & Bahramipour, 2019). They also stated every child with DS would have expressive language that is delayed relative to their language comprehension. This fact has added some urgency to the need for recognition of this problem. As more research is being done and more scholars are recognizing the problem, more solutions are being created for the student facing the challenge of learning a foreign or second language and the teachers who teach them.

Children with DS generally have difficulty with speech and language skills than would be predicted by their mental age and cognitive development (Wisniewski, Miezjeski, & Hill, 1988; Buckley, 1992). They are ready to communicate and use a language system well before they are able to begin using speech. The use of a transitional language system should be considered to enable children to continue to progress in language and to communicate with their environment until they are capable of using speech (Mundy, Kasari, Sigman, & Ruskin, 1995). Sign language probably is the transition system most commonly used (see Altakhaineh, & Alkhatib, 2019; Kouri, 1989; Gibbs, & Carswell, 1991; Pueschel, & Hopmann, 1993; Kumin, 1994). The gap between language production and cognition emerges in the early period of language development (Mundy, *et. al.*, 1995; Cardosa-Martins, Mervis, & Mervis, 1985; Miller, 1992). Language-learning difficulties with DS are often greater than would be predicted given their cognitive development (Chapman, 1995; Chapman, Schwartz, & Bird, 1991; Chapman, Seung, Schwartz, & Bird, 1998; Fowler, 1990).

Despite the fact that a substantial amount of investigations, developments, and research show that children with DS learn more than one language (Bird, Cleave, Trudeau, Thordardottir, Sutton, & Thorpe, 2005), few studies have assessed on DS learners in their process of language learning. The result might be that the focuses of researchers have often been on the DS language ability development rather than assessment. However, the research findings show that assessment is crucial to any degree of curriculum, because it not only guides the development of learners, but also monitors and continuously improves the quality of programs (Black, 2003; Black & William, 1998).

It is obvious that assessment as an essential part of any degree of curriculum gives teachers deep insights of individuals' needs and the achievements of the relevant curriculum. However, because of the manner of mental retardation, speech and their language deficits, particularly in language production, syntax, and poor speech intelligibility, relative to nonverbal cognitive and comprehension skills, assessment of language ability of DS differs from that of other learners (Abbeduto, Murphy, Cawthon, Richmond, Weissman, Karadottir & O'Brien, 2003).

Accommodations are an important part of effective educational programs in both learning and assessment for students with disabilities (Beess, 2006). Several accommodations (such as extended time, visual clues, color code cards, etc.) are introduced by some researchers (e.g. Schneider & Crombie, 2003; Kormos & Smith, 2012, etc.), as facilitators of assessment but no specific model has been investigated. Therefore, the necessity of having a specific format of language ability assessment rises for DS in which teachers can be assured that learners demonstrate best of their knowledge.

Despite considerable individual variability, learners with DS have a characteristic profile of language and communication strengths and difficulties. Language skills for children with DS are more severely affected than non-verbal cognition (Fowler, 1990; Abbeduto, *et. al.* 2003; Miller, 1988; Yoder & Warren, 2004; Hidalgo, & Abril, 2018). Evidence indicates that impressive language skill is stronger than the expressive language skill that deals with the output of language. In fact, for many reasons children with DS have difficulties to formulate thoughts that are expressed using the appropriate word or combination of words. When this information is used to develop specifically targeted early intervention and education programs, the effects of the syndrome and subsequent disability can be reduced. Studies show that individual with DS, not only take longer to learn new skills, but also learn differently in some key areas (see Roberts, Hunter, Gravel, Rosenfeld, Berman, Haggard ... & Wallace, 2004).

Although several teachers around the world are aware of DS and related difficulties, Crais (1996), and Crais, Roy and Free (2006) believe that each learners with DS should have his or her language assessed to identify strengths and needs in phonology, vocabulary, syntax, pragmatics, and literacy. However, the key problem is that despite the fact that this exploitation of some teaching strategies that are different from those typically taken into account in education and also these recommendations, instructions and considerations used in the language assessment grades, indicating that the testing and assessment mechanisms, devices or methods have not been probably suitable with the characteristics of DS learners such that they have not been able to reveal their true language ability on the process of second language assessment. Therefore, developing a specific model of language ability assessment for measuring DS learners' language ability is warranted based on the rational that

exceptional students should be treated given their characteristics in education including both teaching and testing. However, in the light of learner-centered education, it is advisable to incorporate the learners' perceptions in the process of educational decision. Among the various dimensions of educator, learner-oriented assessment or testing necessitates involving the learners' perceptions in all processes and steps of assessment.

More specifically, this study was designed to elicit DS learners' and teachers' perceptions and requirements of language ability assessment in a bid to develop an appropriate and sound testing model of assessment of DS learners' language ability and language academic achievements. The main purposes were abstracted in the form of the following research questions:

**RQ1.** What are the perceptions of Down Syndrome EFL learners about language ability assessment?

**RQ2.** What are the perceptions of teachers of Down Syndrome EFL learners' on language ability assessment?

**RQ3.** To what extent are Down Syndrome learners' and teachers' perceptions of language ability assessment compatible?

**RQ4.** Is there any significant difference among test methods in assessing Down Syndrome EFL learners' language ability?

**RQ5.** What is the best test method assessing Down Syndrome EFL learners?

Several studies (e.g. Abbeduto, & Murphy, 2004; Antonarakis, & Epstein, 2006; Fidler, 2005) have been conducted on the characteristics of educational behavior of DS learners, but they have not specified on the way they should be tested in which many teachers act based on their own tuitions rather than sound empirical data. However, the basic theories about the nature and nurture of assessment model are quite difficult to point out how teachers can apply results of research. Therefore, this study can be of significance for two reasons: theory and practice. As far as the former is concerned, the findings of this study intend to contribute to the literature in introducing a DS assessment model. Practically, language teachers can gain valuable insights and can equip them with a model to complement their teaching with a compatible testing model. This study can also be beneficial to learner-centered education, as it tried to incorporate learner's characteristics and views in educational decisions.

## **2. Methodology**

Following both quantitative and qualitative research paradigms, this mixed-methods study accommodates non-experimental, exploratory and descriptive features. To carry out such a design, the following methodological tend was pursued.

### *2.1 Participants*

This research was conducted with a group of DS participants learning English as an EFL and a number of teachers. Therefore, attempts were made to include 35 homogeneous DS from a group of Persian EFL learners. They consisted of both male and female, with an age range of 15-50 years. Therefore, totally 35 EFL learners were recited to attend the study. All participants were identified to have a language delay, 26 participants were currently receiving some form of special services (11 were attending a community-based program and 15 were attending a special education program). Parents of 21 participants reported that they had received speech therapy, physical therapy, and occupational therapy.

It is noteworthy that a group of 20 DS Iranian EFL Learners who had the same features to the main population of the study was recruited in the piloting phase. The latter group included 5 teachers, comprised of both male and female included 3 language teachers, and 2 other teachers (science and social worker) from DS Association of Iran.

### *2.2 Instrumentation*

Four instruments including observation, interview, questionnaire, and language tests were developed, piloted and then used for data collection purposes:

Observing DS learners' English classes was done within a framework (see Pausch, & Popp, 1997; Tavakoli, Jalilevand, Kamali, Modarresi, & Zarandy, 2015) for finding out how learning and development take place, both for teachers and for students and also to achieve information about DS learners' strengths and weaknesses in developing second language. In addition, to find out DS individuals' perceptions, their teachers, and DS counselors' assessment perceptions, an interview was run. It consisted of open-ended questions in order to encourage participants to express their feelings, commands, and ideas. The interviews were conducted among teachers in order to find out their extent of awareness of DS learners and associated difficulties learners struggle, as well as their strengths and weaknesses in the process of language learning and assessment. In addition,

interviews were conducted among students in order to encourage them to express their perceptions and requirements of a suitable test format in the process of language assessment. The interview was conducted among DS counselors to achieve information about DS characteristics, perceptions, and requirements, identify their difficulties, and their strengths in the process of language learning.

To collect more quantitative data, a Likert-scale questionnaire was made based on the data, extracted from the interviews and observation based on what Bachman and Palmer (1996) described.

A researcher-made questionnaire was administered to DS learners. The first draft of the Down Syndrome EFL Learners' Language Proficiency Assessment Questionnaire contained 44 statements. After piloting the questionnaire, four items that did not meet the acceptable reliability index were omitted. Therefore, this questionnaire consists of 40 items developed in order to elicit DS learners' test methods, perspectives, and preferences. Each item contains five alternatives and the participants were supposed to choose only one option. Due to DS learners' reduced intellectual capacity, the questionnaire was designed to be completed by the help of their teachers and the researchers. Items were developed under consideration of themes extracted from literature review, observation, plus interviews with relevant professionals and DS teachers. Its reliability index estimated via Cronbach's Alpha proved to be 0.88. Besides, three experienced EFL teachers accepted the face and content validity of this instrument of the study.

Since test methods have an essential role in language learning, a number of various tests were generated based on the data collected through the interviews, observation, and questionnaire. The test was designed and administered with different formats such as matching, multiple choice, unscrambling, and fill in the blank test formats. Its reliability index measured via KR-21 formula proved to be 0.841. In addition, three experienced EFL teachers accepted the face and content validity of this instrument of the study.

### *2.3 Procedure*

This study consisted of six phases; the following steps were orderly taken:

1. Observing DS learners' English classes was done to achieve information about DS learners' strengths and weaknesses in developing second language.
2. An interview was conducted among DS learners, their teachers, and counselors.
3. Researchers extracted information from the interview and observation in order to find out DS learners' assessment perceptions and teachers considerations and strategies in the process of assessment.
4. A researchers-made questionnaire was developed and administered in order to elicit their assessment perceptions. It is noteworthy that a group of 20 DS Iranian EFL Learners who had the same features to the main population of the study was selected as the piloting group for questionnaire reliability.
5. The data based on the observation, interview, and questionnaire were analyzed in order to design a suitable test formats to figure out DS learners' requirements in second language learning, as well as enable teachers to assess the learner's level of language ability.
6. The developed test was administered which was followed by an interview with DS learners to figure out how the theme of the test is appropriate.

### *2.4 Research Design*

Following both quantitative and qualitative research paradigms, this mixed-methods study accommodates non-experimental, exploratory and descriptive features.

## **3. Results of the Study**

### *3.1 Pilot Study*

A group of 20 DS Iranian EFL learners who had the same features to the main population of the study was recruited in the piloting phase. The results of this pilot study as shown in Table 1 revealed that five items of the English Language Proficiency test that lacked adequate item facility; item discrimination, or reliability value were excluded. In fact, the results revealed the Cronbach's Alpha reliability index of 0.84 for the final version of English Language Proficiency test consisting of 40 items. In addition, the first draft of the Down Syndrome EFL learners' language proficiency assessment questionnaire contained 44 statements. After piloting the questionnaire, four items that did not meet the acceptable reliability index were omitted. In fact, the reliability value for the final draft of the Down Syndrome EFL learners' Language Proficiency Assessment Questionnaire indicated to be 0.88 estimated via Cronbach's Alpha. Besides, three experienced EFL teachers accepted the face and content validity of these two instruments of the study. It is noteworthy that these two instruments were revised at several stages

according to three experienced EFL teachers' comments in order to be finalized researchers-made instruments.

Table 1. Reliability Statistics for the Instruments of the Study

<i>Instrument</i>	<i>No. of Items (1<sup>st</sup> draft)</i>	<i>No. of Items (Final draft)</i>	<i>Cronbach's Alpha</i>
English Language Proficiency test	45	40	0.841
Down Syndrome EFL learners' Language Proficiency Assessment Questionnaire	44	40	0.885

### 3.2 Investigation of the Research Question One

The first research question asked: "What are the perceptions of Down Syndrome EFL learners about language ability assessment?" In order to investigate this research question, all DS Iranian EFL learners as the participants (N = 35) were wanted to respond to a questionnaire explaining their perceptions towards language proficiency assessment. Table 2 represents the results of their answers to this questionnaire, ordered from the most agreed statement to the least one.

Table 2. Down syndrome EFL Learners' Responses to the Language Proficiency Assessment Questionnaire

<i>Item</i>	<i>Disagree</i>		<i>Undecided</i>		<i>Agree</i>	
1-Test items are important to me (multiple choice, open ended, matching, ...)	0	0.0%	0	0.0%	35	100.0%
2-Test item should be clarified.	0	0.0%	0	0.0%	35	100.0%
22-Sometimes, it is needed to write the word, sentence, or text.	0	0.0%	1	2.9%	34	97.1%
5-Test should contain variety and different items.	0	0.0%	2	5.7%	33	94.3%
27-I prefer brain storming through some questions regarding to reading passage.	0	0.0%	2	5.7%	33	94.3%
32-I prefer multiple choice test items to evaluate my language ability.	0	0.0%	2	5.7%	33	94.3%
24-Test items of vocabulary skills need to be varied.	0	0.0%	3	8.6%	32	91.4%
36-I prefer matching test items to evaluate my language ability.	0	0.0%	3	8.6%	32	91.4%
8- Matching items figure out my language ability well.	0	0.0%	4	11.4%	31	88.6%
25-I prefer to be evaluated sound ability through playing with sounds.	0	0.0%	4	11.4%	31	88.6%
4- Required information need to be presented in the test item. (Not so much not least).	0	0.0%	5	14.3%	30	85.7%
10-I prefer short answer questions.	0	0.0%	7	20.0%	28	80.0%
20-I prefer test items of reading skills in form of multiple-choice items.	0	0.0%	7	20.0%	28	80.0%
33-I prefer true and false test items to evaluate my language ability.	2	5.7%	5	14.3%	28	80.0%
6-Multiple-choice items are more appropriate to my language ability and style.	0	0.0%	8	22.9%	27	77.1%
34-I prefer fill in the blank in a sentence test items to evaluate my language ability.	0	0.0%	8	22.9%	27	77.1%
26-It is better asked me to read the context loud.	5	14.3%	4	11.4%	26	74.3%
3-All parts of the test item should be included on one page.	0	0.0%	10	28.6%	25	71.4%
11-I prefer those test items that prompt me to apply linguistic knowledge.	0	0.0%	10	28.6%	25	71.4%

12-Speaking skill should be evaluated orally through interviews.	0	0.0%	12	34.3%	23	65.7%
14-Vocabulary needed to be evaluated in reading context.	1	2.9%	12	34.3%	22	62.9%
28-I prefer making sentences for vocabulary.	3	8.6%	11	31.4%	21	60.0%
18-Writing skills needed to be evaluated through making sentence or context s	1	2.9%	15	42.9%	19	54.3%
40-I prefer role-playing with my classmates to evaluate my language ability.	5	14.3%	12	34.3%	18	51.4%
13-Language test should contain all language skills (listening, speaking, reading and writing)	0	0.0%	18	51.4%	17	48.6%
16-Do not separate the measure of vocabulary knowledge and grammar.	0	0.0%	19	54.3%	16	45.7%
29-Writing style and spelling should be in text format.	5	14.3%	16	45.7%	14	40.0%
37-I prefer complete the sentence test items to evaluate my language ability.	7	20.0%	16	45.7%	12	34.3%
7- I prefer written test rather than oral test.	16	45.7%	8	22.9%	11	31.4%
17-It is better to measure speaking skills in form of both written and oral.	22	62.9%	4	11.4%	9	25.7%
9-Open- ended questions are more suitable to represent my language ability.	20	57.1%	7	20.0%	8	22.9%
23-It is better asked me to specify elements of a sentence syntactically.	23	65.7%	4	11.4%	8	22.9%
38-I prefer complete the context test items to evaluate my language ability.	23	65.7%	4	11.4%	8	22.9%
39-I prefer complete conversation test items to evaluate my language ability.	21	60.0%	6	17.1%	8	22.9%
15-Grammar points should be measured separately and in a sentence.	13	37.1%	15	42.9%	7	20.0%
35-I prefer fill in the blank in a text test items to evaluate my language ability.	3	8.6%	25	71.4%	7	20.0%
19-Listening skills could be evaluated in written form.	27	77.1%	3	8.6%	5	14.3%
21-Open- ended test items are more appropriate to measure my reading skills.	27	77.1%	4	11.4%	4	11.4%
31-I prefer open-ended test items to evaluate my language ability.	23	65.7%	8	22.9%	4	11.4%
30-I prefer to find multiple meaning's vocabularies in the test to identify my semantic recognition skill.	21	60.0%	12	34.3%	2	5.7%

As seen in Table 2, two items attracted the attention of the all participants, i.e., Item 1: "Test items are important to me (multiple choice, open ended, matching ...)" and Item 2: "Test item should be clarified" (Agree = 100.0%). Moreover, Table 2 indicates that the second most preferred item (Agree = 97.1%) was Item 22 "Sometimes it is needed to write the word, sentence or text", followed by Item 5: "Test should contain variety and different items" (Agree = 94.3%) as the third most accepted item. However, the results of the questionnaire indicated that the least (Agree = 5.7%) selected statement was Item 30: "I prefer to find multiple meanings of words in the test to identify my semantic recognition skill". Additionally, the second least important statements (Agree = 11.4%) were both Item 31: "I prefer open-ended test items to evaluate my language ability" and Item 21: "Open-ended test items are more appropriate to measure my reading skills". Besides, just 14.3% of the Down Syndrome EFL learners chose Item 19: "Listening skills could be evaluated in written form" as the third least preferred one.

Moreover, as the test format is concerned (see Tables 3 and 4, as shown in Figures 1 and 2), the questionnaire data indicated that most of DS learners preferred multiple-choice, matching, true-false, short-answer questions,

fill-in the blanks (in sentences) tests and oral assessments. In contrast, they referred open-ended questions, fill-in the blanks (in text), making sentences, dialogue completion or completing incomplete sentences or texts as the most difficult and demanding tests with which they struggle a lot.

Table 3. Perceptions of EFL Down Syndrome Learners towards Language Proficiency Assessment (Test Formats based on Questionnaire)

<i>Test Methods and Accommodations</i>	<i>Percent (%)</i>
Being assessed individually	100
Extra time	100
Multiple-choice	94.3%
Matching	91.4%
Short –answer questions	80%
True-false	80%
Fill in the blanks (in a sentence)	77.1%
Conversation with partners	51.4%
Completing incomplete sentences	34.3%
Speaking (both oral and written)	25.7%
Completing incomplete texts	22.9%
Dialogue completion	22.9%
Fill in the blanks (in a text)	20%
Listening (both oral and written)	14.3%
Open-ended questions	11.4%

Perceptions of EFL Down Syndrome towards Language Proficiency Assessment (Questionnaire)

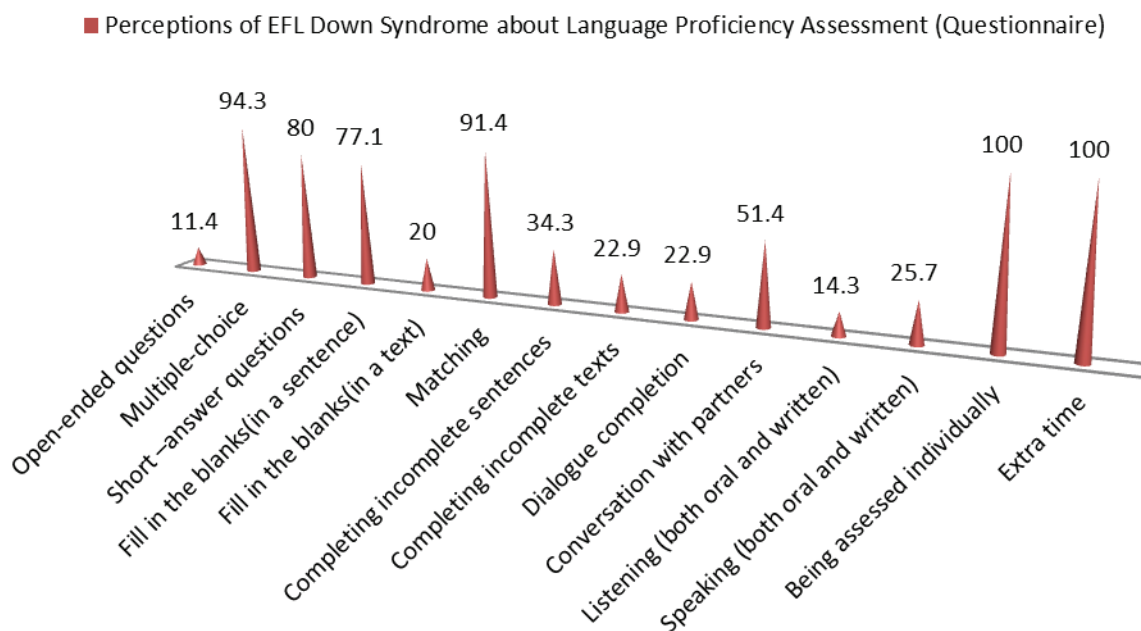


Figure 1. Perceptions of EFL DS towards Language Proficiency Assessment (Questionnaire)

Table 4. Perceptions of Down syndrome EFL Learners towards Language Proficiency Assessment (Interview)

<i>Test Methods and Accommodations</i>	<i>Percent (%)</i>
Individually	100%
Extra time	100%
Multiple choice	85.7%
True-false	80%
Matching	77.1%
Orally	68.6%
Short answer	65.7%
Cloze dictation	57.1%
Fill in the blanks	51.4%
Cloze	0

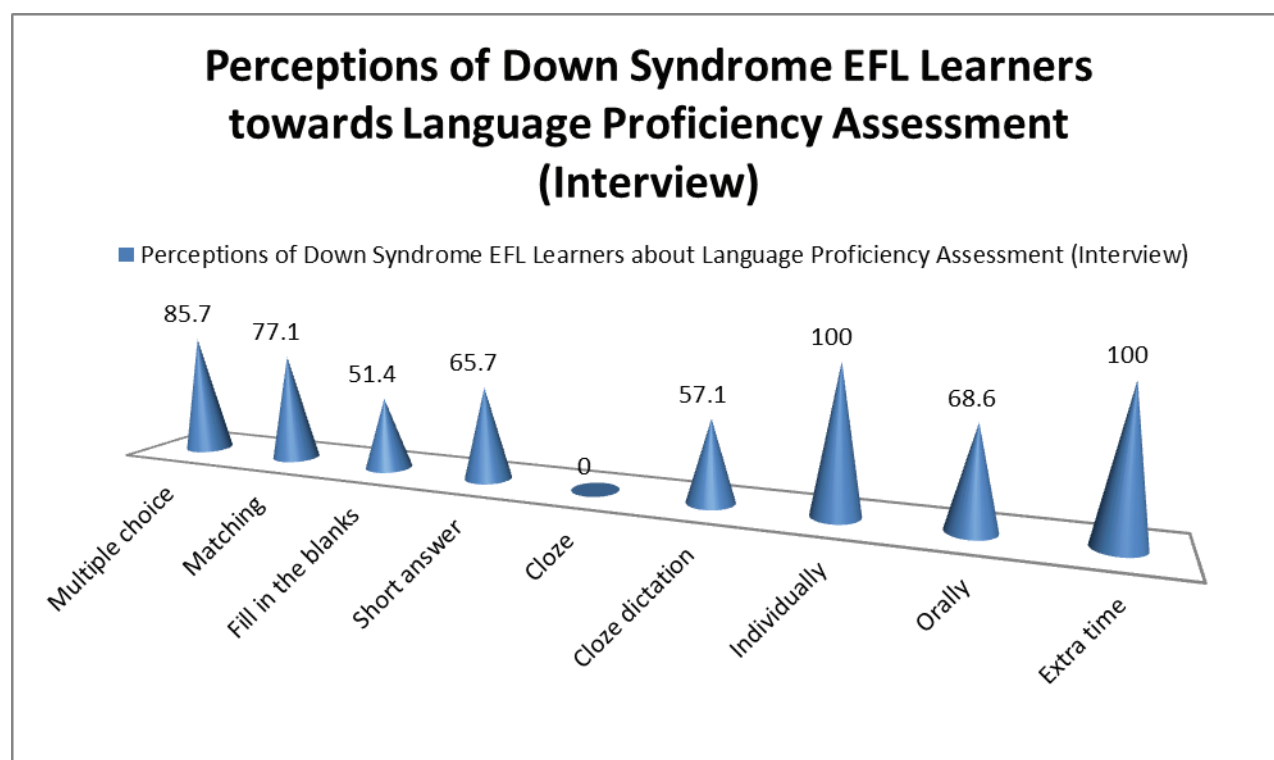


Figure 2. Perceptions of EFL down Syndrome towards Language Proficiency Assessment (Interview)

### 3.3 Investigation of the Research Question Two

In order to explore the second question addressing the perceptions of teachers of Down Syndrome EFL learners on language proficiency assessment, an interview consisting of 10 questions was administered to five teachers. The interviews began with acquiring background information about DS students. Most of these teachers believed in the cognitive disability of students with DS results in a lower learning pace. Therefore, giving some priorities in terms of time and patient to complete a task or to answer a question can motivate DS learners in the process of language learning. In addition, they added, their cognitive disability has deficits in visual and auditory memory that results difficulty in processing, retrieving, and assimilating information. The important teaching practices for the deficits in visual and auditory memory were the task analysis and repetition. Task analysis is a technique where the teacher divides a project into smaller steps in order to enable the student with DS to complete one-step at a time (Klein, Cook, Richardson-Gibbs, 2001; Khemaja, & Taamallah, 2016; Sidek, 2014).



In their view, success for the student requires a focus on individual achievement, individual progress, and individual learning and requires focus the activities on assessing individual students to monitor their progress through the curriculum. This requires specific, directed, and intensive remedial instruction for students with DS, whether the student is in the general education classroom, or learning in a special class setting, but no especial method or allowance was used by them.

Statistically speaking, the researchers held different perceptions. According to the information provided in Table 5 and Figure 3, the results showed that 100 percent supported multiple choices, matching test items, and questions focused on the importance of listening and speaking skills and having conversation with their partners. All of them believed in individual assessment followed by giving them more time.

Table 5. Perceptions of EFL Teachers towards Language Proficiency Assessment

<i>Test Methods and Accommodations</i>	<i>Percent (%)</i>
True/False	100%
Multiple-choice	100%
Matching	100%
Listening (both oral and written)	100%
Speaking (both oral and written)	100%
Being assessed individually	100%
Extra time	100%
Open-ended questions	0
Short –answer questions	0
Fill in the blanks (in a sentence)	0
Fill in the blanks (in a text)	0
Conversation with partners	0
Completing incomplete sentences	0
Completing incomplete texts	0
Dialogue completion	0

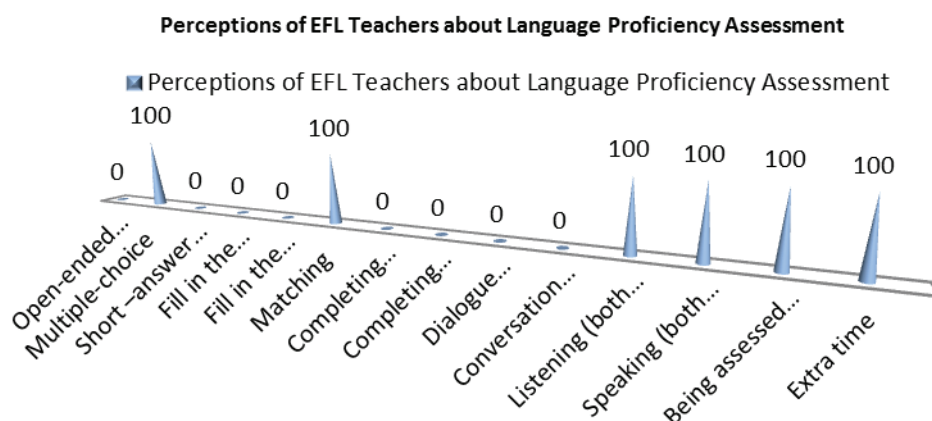


Figure 3. Perceptions of EFL Teachers towards Language Proficiency Assessment

### 3.4 Investigation of the Research Question Three

In order to answer the third question addressing the extent to which EFL teachers' and DS learners' perceptions of language proficiency assessment are compatible, the analysis of the qualitative data from the interviews and questionnaire indicated teachers and DS learners' perceptions of language ability assessment were different in some test items. As already mentioned, multiple choice, matching, true-false, and oral assessment were suggested by the majority of teachers and DS students.

According to Table 6, contrary to the students, the teachers did not welcome open-ended questions; fill in the blanks (in a text), completing incomplete texts, and dialogue completion. Meanwhile, teachers' suggestions on individual assessment, giving students' extra time during the assessment, focus on oral modality and introducing pictorial test the most, as demanding tests concurrent with DS learners. Thus, the second null hypothesis could not be rejected completely, but it was seen that students had different ideas about some test items.

Table 6. Perceptions of EFL Teachers and Students with Down Syndrome about Language Proficiency Assessment

<i>Test Methods and Accommodations</i>	<i>Perceptions of Teachers</i>	<i>Perceptions of Students with Down Syndrome</i>
Open-ended questions	Teachers did not welcome open ended questions.	88.6% of Students with DS found Open-ended questions as the most difficult and demanding test which they struggle a lot. They regularly showed their interest in open-ended questions.
Multiple-choice items	Teachers suggested Multiple-choice items.	Most students with DS positively associated with Multiple-choice items.
Short-answer questions	Teachers did not welcome short-answer questions.	Most students with DS were interested in short-answer questions.
Fill in the blanks (in a sentence)	Teachers did not welcome fill in the blanks.	Fill in the blanks (in a sentence) are favored by most students with DS.
Fill in the blanks ( in a text)	Teachers did not welcome fill in the blanks.	80% of Students with DS found Fill in the blanks (in a text) as the most difficult and demanding test which they struggle a lot.
Matching	Teachers suggested Matching test items.	Most of students with DS prefer Matching questions.
True-false	Teachers suggested true-false test items.	Most of students with DS welcome True-false questions.
Completing incomplete sentences	Teachers did not welcome Completing incomplete sentences.	65.7% of Students with DS found Completing incomplete sentences as the most difficult and demanding test which they struggle a lot.
Completing incomplete texts	Teachers did not welcome Completing incomplete texts.	77.1% of Students with DS found completing incomplete texts as the most difficult and demanding test which they struggle a lot.
Dialogue completions	Teachers did not welcome Dialogue completions.	77.1% of Students with DS found Dialogue completions) as the most difficult and demanding test which they struggle a lot.
Conversation with partners	Teachers did not welcome Conversation with partners.	About half of students with DS favored conversation with partners.
Listening (both oral and written)	Majority of teachers suggested oral listening assessment.	85.7% of Students with DS found written listening test as the most difficult and demanding test which they struggle a lot. But 68.6 % of them were agreed with oral examination.
Speaking (both oral and written)	Majority of teachers suggested oral speaking assessment.	74.3% of Students with DS found written Speaking test as the most difficult and demanding test which they struggle a lot. But 68.6 % of them were agreed with oral examination.
Being assessed individually	Majority of teachers suggested individual assessment.	All students with DS agree to be assessed individually
Extra time	Majority of teachers suggested Extra time.	All students with DS agree with extra time.

### 3.5 Investigation of the Research Question Four

The fourth question sought to find out whether there is a significant difference among test methods in assessing Down Syndrome EFL learners' language proficiency or not. In order to answer this question, a Repeated Measures Analysis of Variance (RMANOVA) was applied. In a One-way repeated measure Analysis of Variance (ANOVA) design, "each subject is exposed to two or more different conditions, or measured on the same continuous scale on three or more occasions" (Pallant, 2011). In fact, the participants of this study answered the 40 questions of multiple choice ( $N = 10$ ), matching ( $N = 10$ ), fill in the gap ( $N = 10$ ), and put in order ( $N = 10$ ) formats within a single test. Before discussing the results of RMANOVA, the researchers calculated the related descriptive analyses, the results of which are set forth in Table 7.

As the results in Table 7 show, the highest mean score is for "Multiple choice" ( $\bar{x} = 8.34$ ,  $SD = 1.30$ ), followed by "Matching" ( $\bar{x} = 7.97$ ,  $SD = 1.34$ ), "Fill in the gap" ( $\bar{x} = 6.63$ ,  $SD = 1.75$ ), and then "Put in order" ( $\bar{x} = 5.60$ ,  $SD = 1.75$ ).

Table 7. Descriptive Statistics for Scores Gained on Different Test Methods in Assessing Down Syndrome EFL Learners' Language Proficiency (Scores out of 10)

Motivation Factors	Mean	Std. Deviation	N
Multiple choice	8.34	1.305	35
Matching	7.97	1.339	35
Fill in the gap	6.63	1.716	35
Put in order	5.60	1.752	35

RMANOVA was performed to see whether these mean scores are statistically significant; the results of which are manifested in Table 8.

Table 8. Test of Within Subjects Effects RMANOVA for Language Proficiency Scores Gained on Different Test Methods

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	
Motivation	Sphericity Assumed	166.993	3	55.664	22.917	.000	.403
	Greenhouse-Geisser	166.993	2.766	60.365	22.917	.000	.403
Error (Motivation)	Sphericity Assumed	247.757	102	2.429			
	Greenhouse-Geisser	247.757	94.058	2.634			

As it is observable in Table 8., Greenhouse-Geisser correction revealed that means of different test methods in assessing Down Syndrome EFL learners' language proficiency were statistically significant ( $F = 22.92$ ,  $p = .000$ ,  $p < .05$ ). Multivariate tests for the RMANOVA (See Table 9) further approve this result.

Table 9. Multivariate Tests RMANOVA for Different Test Methods

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	
Factor	Pillai's Trace	.708	25.877	3.000	32.000	.000	.708
	Wilks' Lambda	.292	25.877	3.000	32.000	.000	.708
	Hotelling's Trace	2.426	25.877	3.000	32.000	.000	.708
	Roy's Largest Root	2.426	25.877	3.000	32.000	.000	.708

a. Exact statistic

b. Design: Intercept

Within Subjects Design: Motivation

As set forth in Table 9 above (multivariate tests), the partial eta square index is .71, which is quite a large effect size ( $.701 > .138$ ). The attained results for Wilks' Lambda ( $F(3, 32) = 25.88$ ,  $p = .000$ ,  $p < .05$ ) showed that there were significant differences among the means of different test methods; accordingly, the first null hypothesis of the present study that states, "There is no significant difference among test methods in assessing

Down Syndrome EFL learners’ language proficiency” was rejected; therefore, it can be claimed that there is a significant difference among test methods in assessing Down Syndrome EFL learners’ language proficiency. However, ANOVA cannot tell us where the meaningful differences lie; therefore, pairwise comparisons were prepared (see Table 10).

Table 10. Pairwise Comparison of the RMANOVA for Different Test Methods

(I) Factor	(J) Factor	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Multiple choice	Matching	.371	.336	.275	-.311	1.054
Multiple choice	Fill in the gap	1.714*	.356	.000	.990	2.439
Multiple choice	Put in order	2.743*	.349	.000	2.034	3.451
Matching	Fill in the gap	1.343*	.357	.001	.617	2.069
Matching	Put in order	2.371*	.391	.000	1.576	3.167
Fill in the gap	Put in order	1.029*	.437	.024	.141	1.916

\*. The mean difference is significant at the .05 level.

As demonstrated in Table 10 and Figure 4, the mean difference between “Multiple choice” ( $\bar{x}$  = 8.34) and “Matching” ( $\bar{x}$  = 7.97) was not statistically significant ( $p = .27, p > .05$ ), but the mean difference between each pair of possible test method was statistically significant ( $p < .05$ ). In fact, Table 10 reflects that the mean difference between “Multiple choice” ( $\bar{x}$  = 8.34) with both “Fill in the gap” ( $\bar{x}$  = 6.63) ( $p = .000, p < .05$ ) and “Put in order” ( $\bar{x}$  = 5.60) ( $p = .000, p < .05$ ) was statistically significant. In addition, as seen in Table 10, the mean difference between “Matching” ( $\bar{x}$  = 7.97) with both “Fill in the gap” ( $\bar{x}$  = 6.63) ( $p = .001, p < .05$ ) and “Put in order” ( $\bar{x}$  = 5.60) ( $p = .000, p < .05$ ) was statistically significant. Besides, Table 10 indicates that the mean difference between “Fill in the gap” ( $\bar{x}$  = 6.63) and “Put in order” ( $\bar{x}$  = 5.60) ( $p = .02, p < .05$ ) was statistically significant on the benefit of “Fill in the gap” ( $\bar{x}$  = 6.63).

Generally, as displayed in Figure 4, the results indicate that “Multiple choice” type of language proficiency is the easiest one for the Down Syndrome EFL learners and “Put in order” is the most difficult one to answer. In addition, the second easiest test method is “Matching” followed by “Fill in the gap”.

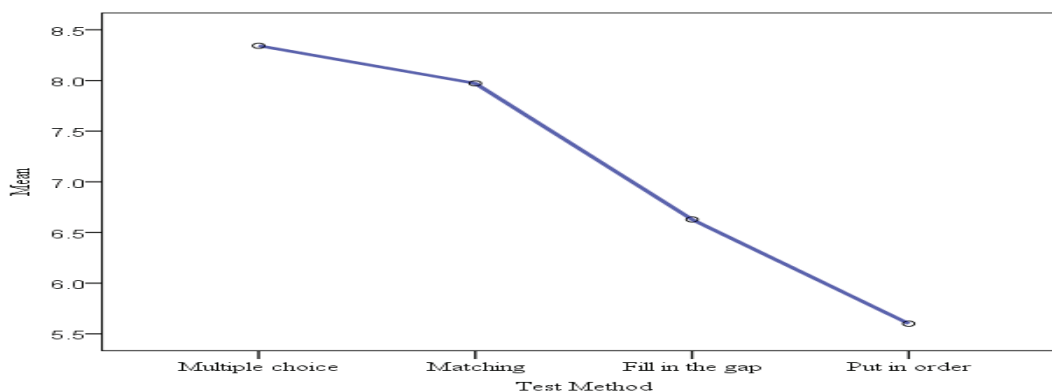


Figure 4. Language proficiency means gained on different test methods

### 3.6 Investigation of the Research Question Five

In order to investigate the fifth research question addressing the extent to develop the best test method assessing Down Syndrome EFL learners, data from the observation, interviews, questionnaire, and test were collected. Sixty-four sessions of DS learners’ English classes analytically observed in order to find out their strengths and weaknesses in learning second language, and develop best method assessing for them. Teachers who are successful in educating children with DS use three strategies. The first strategy is to consider learners’ needs. For example, the teacher finds out how, when, and why the child is inattentive, impulsive, and hyperactive. The teacher then selects appropriate instructional practices associated with academic instruction, behavioral needs identified for the child and classroom accommodations that fit the content, and learner’s needs appropriate. Finally, the

teachers integrate appropriate practices into an individualized educational program that should be created to reflect annual goals along with supplementary aids and services necessary for attaining those goals.

Table 11. Classroom Observation Data

	<i>Justified</i>	<i>Observed</i>
1	one goal is for students to be able to translate	Student translate the passage from English to Persian
2	The primary skills to be developed are reading and speaking little attention is given to listening and writing	Students read aloud a passage and translate it and talk about the subject. Listening (listen to song) Writing ( they practice writing the sentence they create)
3	It is possible to find native language equivalence for all target language words	Students translate new words from English into Persian
4	Learning is facilitated through attention to similarities between the target language and the native language	The teacher takes advantages of similarities between Persian and English language systems.
5	Inductive application of grammar. Dynamic interplay between the whole and the parts is important.	Grammar is dealt with explicitly but minimally Students learn grammar through examples and passage, Teacher briefly mentions a few points about English grammar Ex: students choose there is or there are through a passage practiced in the lesson.
6	Language learning provides good mental exercise.	Students memorize vocabulary
7	Objects help students to understand the meaning	Teacher provides object (e.g. pictures, flash cards) in the classroom. Use visual aids when appropriate. Examples are picture clues for words, hand and mouth movements to illustrate a sound, or color coded endings to illustrate gender and subject/verb agreement.
8		Teacher answers students' questions by giving examples or translates.
9	Pronunciation should be worked every session	Working on pronunciation with playing games, practice front of mirror, and also in reading the passage loudly
10	There is no formal evaluation. Each session teacher would make sure that students learn the material.	Teacher checks student performance to assess their mastery of the lesson. Teacher asks them to read the passage which they have worked previous session and then translate the passage. Teacher checks their vocabulary through reading text and sometimes asks them directly or by pictures. Diction is another way to evaluate them. Checking their workbook and sometimes asks them to do some exercise is another way that teacher make sure that students learn their lesson.
11	Vocabulary is emphasized over grammar	Students will learn best if their conscious attention is focused on using the language not language forms.
12	Language is primary spoken not written	Written language is a reflection of spoken, spoken language can be transferred to written.
13	Errors are important and necessary to learning. Students are expected to make errors when they first begin to learn English.	Help students correct their own mistakes. Describe how students can identify and correct their own mistakes. First teacher asks to concentrate and again repeat but if error happens again teacher corrects students' error softly in a non-threatening way (not in direct) and repeat the correctly what the student has said incorrectly. (confrontational manner)

		Teacher is aware of where the students will have difficulty.
14	Teacher conduct guiding and controlling the class	Teacher provides students with cues,
15	Encouragement is primary	Students feel successful when teacher encourage them It motivates them to work harder to get highest score
16	Techniques:	<ul style="list-style-type: none"> <li>-Repetition drill</li> </ul> <p>Provide opportunities for the student to practice and review a concept frequently to assure automaticity. Examples might include practicing forming letters correctly, spelling non-phonetic words, and reviewing spelling patterns.</p> <ul style="list-style-type: none"> <li>-Transformation drill (ex: Transform positive sentences to negative sentences)</li> <li>-Question and answer drill</li> <li>-Use of minimal pairs (ship/ sheep, students are asked to perceive the differences between 2 words and then say 2 words)</li> <li>-Fill in the blank exercise (with options) <ul style="list-style-type: none"> <li>-Dictation, cloze dictation</li> <li>-Reading aloud</li> <li>- Translation of the passage</li> <li>- Pronunciation (mirror...)</li> <li>- memorization</li> <li>-Use words in sentences <ul style="list-style-type: none"> <li>-Matching</li> <li>- Cross words</li> <li>-Role play</li> </ul> </li> </ul> </li> </ul>
17	Language is learned by repeating after a model	Teacher records new lesson for each students
18	The teacher works with the students while the students work on language	Because of their cognitive disabilities, the teacher works with students using or modifying the general education curriculum to meet their individuals' needs.
19	Learning involves transferring what one knows to new contexts	The teacher will pay attention to conditions required for knowledge and skills learned in one context to be retrieved, connected, and applied to a new situation.
20	Reading is worked on from the beginning but follows from what students have learned to say.	Discussion in class is richer and more fun, when students have read the material before class.
21	Meaning is made clear by focusing students' perception	By the action of sound, students repeat the sound (Aa,...)(phonics) Make the meaning clear from the known to the unknown.
22	One way that meaning is made clear is through translation	Students translate the passage which they read
23	Progress is important not perfection	The learner's pronunciation is improved but not close to the target language
24	Students should do meaningful practice	There is homework assigned
25	Learning is facilitated in cheerful environment	Classroom environment is colorful Singing song (songs are useful for freeing the speech muscles and evoking positive emotions)

26	The teacher gives the students the impression that learning English will be easy and enjoyable	Students feel secure and cheer
27	Students need to concentration	Students need calm state to concentrate Also teacher creates an accepting atmosphere that learner feel free and learning become less threatening Teacher can transform their negative feeling that might block their learning.
28	Students need quiet reflection time in order to learn	Teacher read passage 3 times with translate it, students are relax and listen.
29	Homework	For homework, students read new passage, memorize new vocabulary, writing new vocabulary, doing exercises of their work book
30	Music and movement reinforce the linguistic material	Through music and movement, students will be more open to learning .( learning is fun)
31	Teaching English does not focus on linguistic forms, but rather on using the language.	Teacher and students play a question-and-answer game.
32	The teacher is the authority (knowledgeable)in the classroom	Students must trust the teacher and feel more secure.
33	Evaluation	Evaluation usually conducted on students' performances not through formal test Teacher-made classroom test would be more integrative test than a discrete-point one. Oral examination would be prepared than being asked to answer a question which deals with only one point of language at a time. Teacher would be aware of students' progress
34	When students have idea what will happen in each activity, they feel more secure	Teacher tells the students what they are going to do
35	Teacher is sensitive to students level of confidence	Teacher gives them just what they need to be successful
36	Feeling of success is really important	Teacher encourage them and give them some positive commands after she is satisfied (when students have been mastered ) Language can be thought with imperatives. Having high score motivates them to work harder and they feel successful and free.
37	Use audiovisual materials	Use a variety of audiovisual materials to present academic lessons. For example, use diagrams, graphics and pictures to augment what they say in words.
38	Perform ongoing evaluation.	Identify students who need additional assistance. Watch for signs of lack of comprehension, such as daydreaming, visual, or verbal indications of frustration. Provide these children with extra explanations.
39	Help students focus. Remind students to keep working and to focus on their assigned task	Teacher provides follow-up directions or assigns learning partners. These practices can be directed at individually or at the entire class. In addition, when teacher ask them to highlight key words in the instructions on worksheets in order to help them focus on the directions.

40	Utilizing follow-up directions.	<p>Teacher also guides them with follow-up directions:</p> <ul style="list-style-type: none"> <li>— Oral directions. After giving directions to the class, provide additional oral directions. For example, ask the learner if he or she understood the directions and repeat the directions together.</li> <li>— Written directions. Provide follow-up directions in writing. For example, write the page number for an assignment on the chalkboard and remind the child to look at the chalkboard if he or she forgets the assignment.</li> </ul>
41	Eliminate or reduce frequency of timed tests	Allow students more time to complete quizzes and tests in order to eliminate “test anxiety,” and provide them with other opportunities, methods, or test formats to demonstrate their knowledge
42	Using Think-Pair-Share strategy (Slavin, 2002).	Teachers ask students to think about a topic, pair with a partner to discuss it, and share ideas with the group
43		Check assignments
44	Preview the next lesson	Teacher tells students how to begin preparing for the next lesson. For example, inform children that they need to put away their textbooks and come to the front of the class for spelling lesson.
45	Organize language concepts from simple to complex.	<p>For example, consonant+vowel+consonant patterns with three letters should be taught before using blends or digraphs for four- and five-letter words</p> <p>Provide guided pair work activities to practice and reinforce a concept, pairing a strong student with a weaker student.</p> <p>For reinforcement, provide ample time to discover, practice, and use meaningful mnemonic devices, such as songs with specified grammatical sentence structures or special rhythms; reinforce concepts by using acronyms (for example, USA = United States of America), drawings, and gestures</p>
46	Multisensory	Teach the language using multiple input/output strategies — visual, auditory, tactile, and kinesthetic

According to the information provided in Table 11, there is no single educational program, practice, or setting will be best for all learners. Academic instruction, behavioral interventions, and classroom accommodations are three components that are needed to implement for successful programs. Therefore, it is important how to integrate a program using these three components and provide techniques that can help children with DS in a classroom setting.

Assessing Down syndrome individuals from linguistically diverse backgrounds and their short-term memory problem can be a complex task. Dynamic assessment as a testing technique is proposed which is highly interactive and process-oriented to seek and identify the skills and learning potential of an individual and emphasize the learning process. Dynamic assessment as a framework to Mediated Learning Experiences (MLE) which focus on the test-teach-retest method and the examiner deliberately teaches, observes how the individual responds to instruction, and adjusts teaching accordingly.

Teachers, therefore, may need training in methods of addressing the special needs of students with DS in their classrooms. They may require additional time and resources to establish a classroom appropriate for students with diverse needs and abilities. They may need to work together with a student with learning difficulties to determine what accommodations might be most beneficial for that student.

Accommodations for exams allow students with DS to fairly represent their knowledge and skills, while mitigating the impact of disability-related impairments. There are several different types of accommodations that may be suggested based on the academic environment, the course objectives, and the abilities of the student. Arranging and providing accommodations is an interactive process between the students with DS and their teachers.



Some testing accommodations to consider in EFL DS learners test methods were the followings: (It is noteworthy that results were gained through Observation, Interviews and Questionnaire and Test result)

1. Consider the forms of testing (oral, open-book, and hands-on demonstration);
2. Use a larger font size on a test. Some students with DS find that large print helps their processing ability;
3. Eliminate distractions, while students are taking tests;
4. Grant time extensions. Students may need longer to take a test or divide the test into sections;
5. Provide study questions in advance that model the format of the test. For example, use multiple-choice questions, if the test will use that type of format;
6. Give practice tests;
7. Have students tested one another, and review answers;
8. Use of a private, distraction-reduced room, or a distraction-reduced room with a few other students;
9. Test item should be clarified;
10. Using clear instructions in the test. It would be better to use follow-up strategy for direction;
11. Objects and pictures help students during the test;
12. Test should contain variety and different items;
13. Brain storming needed through some questions regarding reading passage;
14. Test items of vocabulary skills need to be varied;
15. Font whose use in test should be large enough and attractive;
16. Instructions should be short, obvious, (sometimes need oral translation), and required information need to be presented in the test item (not so much, not least);
17. Scaffolding, they learn through the test;
18. Sound ability can be evaluated through playing with sounds;
19. All parts of a test item should be included on one page;
20. utilizing those test items that prompt them to apply linguistic knowledge;
21. When testing, consider using the following formats:

**a. Multiple-Choice accommodations:**

- Using yes-or-no question
- Reducing the number of choices
- Providing more information about a choice
- Using matching items

**b. Short-Answer:**

- Providing a list of facts and information to use in the answer
- Allowing the student to choose between several prepared short answer questions
- Using the cloze technique in a prepared paragraph, or scrambling information for the students to arrange in correct sequence or order

**c. Essay Accommodations:**

- Providing partial outlines for the student to complete
- Allowing take-home tests

#### **4. Discussion**

As previously stated, the present study was conducted to assess the language ability of Down Syndrome EFL learners in order to suggest an assessment model. To achieve this aim, five research questions were addressed. As to the first research question that asked: "What are the perceptions of Down Syndrome EFL learners about language ability assessment?" all the participants were wanted to respond to a questionnaire, explaining their perceptions towards language proficiency assessment. The results of their answers to this questionnaire, ordered from the most agreed statement to the least one. Item 1: "Test items are important to me (multiple choice, open

ended, matching ...)” and Item 2: “Test item should be clarified” (Agree = 100.0%) attracted the attention of the all participants. Moreover, the second most preferred item (Agree = 97.1%) was Item 22 “Sometimes it is needed to write the word, sentence or text”, followed by Item 5: “Test should contain variety and different items” (Agree = 94.3%) as the third most accepted item. However, the results of the questionnaire indicated that the least (Agree = 5.7%) selected statement was Item 30: “I prefer to find multiple meaning’s vocabularies in the test to identify my semantic recognition skill”. Additionally, both Item 31: “I prefer open-ended test items to evaluate my language ability” and Item 21: “Open- ended test items are more appropriate to measure my reading skills” (Agree= 11.4%) were selected as the second least important statements. Besides, Item 19: “Listening skills could be evaluated in written form” was selected by just 14.3 of the Down Syndrome EFL learners as the third least preferred one. In addition, as the test format was considered majority of DS students preferred to be assessed through multiple choice, matching, short-answer questions and fill in the blanks (in a sentence) tests. They also agreed that they could present their best of knowledge if they were assessed orally and individually with extra time in comparison to other students. On the other hand, cloze tests, open-ended questions, fill in the blanks and completing incomplete sentences and texts were the tests that were not much welcomed by DS students. Meanwhile, their claims were evident in their test results; indicating that they had a significantly better performance on multiple choices and matching test, and the lower on fill in blanks, put in order (making sentences) /completing incomplete sentences tests.

As the results of the second research question indicated, according to interviews with teachers, it can be concluded that most of teachers believed in the cognitive disability of students with DS results in a lower learning pace. Therefore, giving some priorities in terms of time and patient to complete a task or to answer a question can motivate DS learners in the process of language learning. However, they are unaware of available and useful methods and strategies introduced by many scholars that considerably affect their learning progress and avoid utilizing them and lacking of clear insight on the most appropriate manner and test method in assessing their language ability. These results highlight the importance for FL teachers to obtain a better understanding of DS and its related difficulties in order to be able to assist these students and facilitate the process of language learning and assessment.

The third research question addressed the extent to which EFL teachers’ and DS learners’ perceptions of language proficiency assessment are compatible. Their perceptions were concurrent with each other in the manner of assessing, but far different from each other in suggesting the most appropriate test method. In the teachers’ view, the appropriate test method for assessing DS learners was multiple choices and matching. Contrary to the students, the teachers did not welcome short-answer items, fill-in-the-blanks (in sentences), true-false tests, and conversation with patterns. Of course, the head shared ideas and perceptions on assessing modes with their students in the forms such as multiple choices, matching, individual assessment, and focus on oral modality. Thus, the second null hypothesis could not be rejected completely, but it should be considered that differences were obvious in teachers’ and students’ perceptions about DS learners’ language proficiency assessment.

Regarding the fourth research question that asked whether there is a significant difference among test methods in assessing Down Syndrome EFL learners’ language proficiency or not, a RMANOVA was applied. In fact, the participants answered the 40 questions of multiple choice (N = 10), matching (N = 10), fill in the gap (N = 10), and put in order (N = 10) formats within a single test. According to the gained results, the highest mean score was for “multiple choice” (M = 8.34, SD = 1.30), followed by “matching” (M = 7.97, SD= 1.34), “fill in the gap” (M = 6.63, SD = 1.75), and then “put in order” (M = 5.60, SD = 1.75).

RMANOVA was performed to see whether these mean scores are statistically significant. Greenhouse-Geisser correction revealed that means of different test methods in assessing Down Syndrome EFL learners’ language proficiency were statistically significant ( $F = 22.92, p = .000, p < .05$ ). According to Multivariate tests for the RMANOVA, the partial eta square was .71, which was quite a large effect size ( $.701 > .138$ ). The attained results for Wilks’ Lambda ( $F(3, 32) = 25.88, p = .000, p < .05$ ) showed that there were significant differences among the means of different test methods; accordingly, the first null hypothesis of the present study that states, “There is no significant difference among test methods in assessing Down Syndrome EFL learners’ language proficiency” was rejected.

As the results related to the fifth research question indicated, according to observation, interviews, questionnaire, and test results, it can be concluded that most of students with DS preferred to be assessed only through some especial test items, including multiple-choice, matching, true-false, short-answer questions, fill-in-the-blanks tests, conversation with patterns and oral assessments. In addition, cognitive disability of students with DS

results in a lower learning pace. Therefore, giving them practice test and extra time to complete a task or to answer a question and then review the answers can motivate DS learners in the process of language learning.

Regarding the speech deficits, DS learners show cognitive and language delays. In a same line, Abbeduto and Murphy (2004) investigated the pragmatic abilities of children with DS, especially discourse abilities, using a barrier task. The results showed that children have the ability to communicate with a native speaker, but along with strengths and weaknesses in their speech. DS learners performed similar to control children in that they could appropriately switch from indefinite to definite object descriptions over time. DS learners did not perform as well as control children in relation to the use of unique mappings for objects, the use of referential frames, and the signaling of comprehension to the other speaker. These results indicated that children with DS are not as professional at presenting necessary information for listener, but do understand the increase in shared knowledge that occurs during the course of a conversation.

Moreover, Laws and Bishop (2003) compared expressive and receptive vocabulary in children with Specific Language Impairment (SLI) and children with DS. They found that vocabulary performance of children with SLI was poorer than both children with DS and typically developing children matched for non-verbal mental age. Vocabulary performance of the children with DS was similar to that of typical developing children. However, both children with DS and SLI showed poorer performance than the typically developing children.

According to DS English classes' observations, the present researchers found the poor performance of DS learners in expressing language and new vocabulary, as well as the understanding of new vocabularies due to cognitive delay and the expression of these words due to deficits in expressive language. Their teachers attempted to facilitate the learning of new word, express it and finally to use new word in the correct context. Techniques like working on pronunciation with playing games practice expressing new words in front of mirror and reading the passage loudly or providing objects such as pictures or flash cards to understand the meaning of new word.

Regarding the inclusion of students with disabilities in the large-scale assessments administered to the general education population, in a study Koretz (1997) investigated the performance of students with special needs on the statewide assessment (KIRIS) in Kentucky, which was in the vanguard of increased inclusion. In a follow-up study, Koretz and Hamilton (1999) replicated and developed that study using newer data. They made a direct comparison of performance on multiple-choice (MC) and constructed-response items. Based on these studies, it was found that the large majority of mentally retarded students were included in the main assessment. Accommodations that were used for lower grades indicated the effect on open-response (OR) questions. In some instances, students with accommodations received high scores. Differential item functioning was found in both test formats but only among students who received accommodations. According to the obtained findings, 'Multiple choice items' can be the easier type of assessment in contrast with production test items such as 'put in order' and 'fill in the gap' for Down Syndrome EFL learner . On the other hand, 'put in order' as a type of production test item is the most difficult one to answer, but 'test accommodation' regarding to their strength and weakness effect on production test items with high performance.

## **5. Conclusions, Suggestions and Implications**

DS is the most common genetic cause of mental retardation that is caused by a trisomy of chromosome 21. Most children with DS show language learning delay. In fact, they have language deficits particularly in expressive language and syntax. In order to evaluate Down Syndrome EFL learners' language ability, educational assessment was applied. In fact, using standardized assessment, it would be possible to recognize areas of weakness in speech and language as well to gain a deep understanding of students' educational experiences (Huba & Freed, 2000; Kryszewska, 2014). Miller and Linn (2000) believe that "much of the impetus for performance assessments is that they should mirror the teaching and learning process and provide a better measure of accountability" (p. 373). According to Radan (2015, p. 101), "The main purpose of assessment was to figure out the extent of students' progress during the related course. On the other hand, the manner of assessing, its circumstance and test methods cause a considerable effect on testees' performance which can facilitate or inhibit this process".

Since assessment of language ability of DS learners differ from other learners, it is obvious that teachers must be continuously gathering data and observing in order to plan effective standardized tests. In addition, assessment has an essential role in developing learners' learning and monitors and increasingly improves the quality of curriculum programs as well; therefore, teachers working with children with disabilities must have an assessment plan in place to maximize effectiveness of their treatment course.

According to the statistical findings, the existence of significant differences among test methods in assessing Down Syndrome EFL learners' language proficiency was revealed. Moreover, based on the students' responses

to exploring their perceptions towards language proficiency assessment, the results showed that Items 1 and 2 attracted the attention of the all participants. However, it was revealed that Items 30 and 31 were the least selected statements. In addition, as the test format is concerned, the data obtained from the questionnaire indicated that most of DS learners preferred multiple-choice, matching, short-answer questions, fill-in the blanks (in sentences) tests and oral assessments. In contrast, they referred open-ended questions, cloze tests, fill-in the blanks (in text), making sentences, dialogue completion or completing incomplete sentences or texts, as the most difficult and demanding tests with which they struggle a lot. Their need to be assessed orally with some extra time is also highlighted in both interview and questionnaire.

Based on the questionnaire distributed among Down Syndrome EFL learners to express their perceptions towards language proficiency assessment, it was revealed that statement 1: “Test items are important to me (multiple choice, open ended, matching ...)” and statement 2: “Test item should be clarified” were selected by all the participants; however, the least selected statement was Item 30: “I prefer to find multiple meaning’s vocabularies in the test to identify my semantic recognition skill”. Whereas, multiple choice, matching, true-false, short answer questions and fill-in-the-blanks (in sentences) test items were selected as the most preferred items.

Conducting this research, it was concluded that there is a significant difference among test methods (matching, fill in the gap, multiple choice, and put in order) in assessing EFL learners’ language ability with DS in that the highest mean score was recorded for “multiple choice” followed by “matching”, “fill in the gap”, and “put in order”. In fact, the results indicated that “multiple choice” type of language proficiency was the easiest one for the Down Syndrome EFL learners and “put in order” was the most difficult one to answer.

This study can provide teachers and material developers with the knowledge to develop and provide assessment models to help Down Syndrome EFL learners improve their learning quality.

Teachers must have an active attempt to collect the perspectives of DS learners in relation to their instructional practices or different strategies and assessments used in classrooms and consider all the learners’ personal preferences when planning a treatment course for them. Teachers are recommended to choose the type of test that is best suited to DS learners’ preferences.

Down Syndrome EFL learners may benefit from the results of this study in that they will be more active participants rather than passive subjects, because they will take part willingly in assessment, when find the test formats in line with their own abilities and interests. In other words, they will have the opportunity to show their ability to use language. EFL material developers are also suggested to closely cooperate with teachers and students with DS they are developing materials for. This will help ensure that the materials best suited to the learners’ needs and their preferences.

As a research direction, continuous effort is suggested to be directed on the impact of assessment models on instruction, related to communication skills in DS language settings. Also, it is suggested that future researchers expand studies focusing on the comparison of DS learners’ preferences towards assessment models with other EFL learners with different developmental disabilities. Finally, future research should attempt to investigate the effect of regular classroom assessments on the level of vocabulary or syntax development of children with DS.

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