Exploring the Effective Use of Diagnostic Tests in the High School English Classroom to Support Student Learning: An Action Research Study

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Abstract

This action research study investigated the use of diagnostic tests and feedback to support student learning in a 12th grade English classroom. The researcher developed a diagnostic test to assess students' strengths and weaknesses in foundational language and literacy skills. The test included multiple-choice, short-answer, and essay questions. The researcher then separated students into an experimental group, which received diagnostic feedback, individualized learning plans, and incentives, and a controlled group which proceeded with the regular curriculum. The individualized learning plans were created based on the results of the diagnostic test and were designed to address each student's specific needs. The incentives included extra credit points, certificates of achievement, and public recognition. Several sources of quantitative and qualitative data were analysed, including pre and post-test scores, student surveys, teacher surveys, and student work samples. The results indicated that the intervention had a significant positive impact on students' learning, confidence, and test anxiety compared to the controlled group. Implications for the use of diagnostic assessment in the secondary English classroom are discussed.

Keywords: action research, diagnostic tests, feedback, student learning, English classroom, diagnostic test, language skills, literacy skills, experimental group, control group, diagnostic feedback, individualized learning plans, incentives, pre-and post-test scores, student surveys, teacher observations, student work samples.

General Introduction

Assessment is a crucial component of effective teaching, enabling educators to identify areas where students excel and struggle and tailor instruction to meet their individual needs. Among the various assessment forms, diagnostic tests have emerged as a popular tool for evaluating students' strengths and weaknesses in specific subject areas. In the field of language learning, diagnostic tests are instrumental in identifying areas where students need additional support, such as grammar, vocabulary, or reading comprehension.

The purpose of this paper is to investigate the effective use of diagnostic tests in the high school English classroom, with a specific focus on how they can support student learning. By conducting an action research study, this paper aims to explore how diagnostic tests can assist teachers in identifying areas where students struggle and how this information can be used to design more effective instruction. Furthermore, this paper will examine the role that diagnostic tests can play in motivating students to take ownership of their learning and engage more deeply with the content.

Despite the widespread use of diagnostic tests, there are gaps in the literature regarding their effective implementation in the high school English classroom. For instance, there is limited research on how to design diagnostic tests that are valid and reliable, as well as how to incorporate diagnostic test results into instruction in a meaningful and effective way. Additionally, while some studies have explored the relationship between diagnostic tests and student motivation, more research is required to understand fully how diagnostic tests can support student engagement and success.

This paper aims to address these gaps in the literature by conducting an action research study in which teachers and students collaborate to create and implement effective diagnostic tests. Through this study, the paper intends to provide valuable insights and recommendations that can be used to improve the quality of English language instruction in high schools, resulting in enhanced student success . Therefore, this study has significant implications for teachers, students, and researchers interested in using diagnostic tests to support learning outcomes in the high school English classroom.

Part I: Literature Review
CHAPTER I: Literature Review
Introduction

This literature review chapter explores the effective use of diagnostic tests in the high school English classroom to support student learning. Diagnostic tests are designed to identify students' strengths and weaknesses in a particular subject area. They can be used to inform instruction and to provide feedback to students. Diagnostic tests can also be used to track student progress over time. There is a growing body of research on the effectiveness of diagnostic tests. Some studies have found that diagnostic tests can be effective in identifying students' learning needs and in tracking student progress over time. However, other studies have found that diagnostic tests are not always effective, and that they can sometimes lead to inaccurate results. The review will begin by defining diagnostic tests and discussing their differences from other types of tests. It will then review the theories and frameworks that support the use of diagnostic tests, and discuss the previous studies that have been conducted on the topic. Finally, the review will conclude by identifying the literature gaps that will be addressed in this study.

I.1 Defining diagnostic test terms

There are a number of different definitions of diagnostic tests in the literature. One common definition is that diagnostic tests are "tests that are designed to identify students' strengths and weaknesses in a particular subject area" (Popham, 2008, p. 10). Another definition is that diagnostic tests are "tests that are used to identify the specific areas where students need additional support" (Black & Wiliam, 1998, p. 14).

Diagnostic tests can be used to assess a variety of different skills and knowledge, including:
- Content knowledge
- Procedural knowledge
- Metacognitive knowledge
- Attitudes and beliefs

One definition suggests that diagnostic tests are assessments that are designed to identify students' strengths and weaknesses in a particular subject area (Bachman & Palmer, 2010). They are commonly used in the classroom to evaluate student knowledge and understanding, and to identify areas where students may require additional support or instruction. Diagnostic tests can be used to help teachers tailor

their instruction to meet the individual needs of students and to develop effective teaching strategies that promote student learning and engagement.

Another definition defines diagnostic tests as assessments designed to identify students' strengths and weaknesses in specific content areas or skills. In the high school English classroom, diagnostic tests may assess reading comprehension, writing, grammar, and vocabulary (Black & Wiliam, 1998). These assessments can provide valuable information for educators, guiding instructional decisions and facilitating individualized learning (Guskey, 2003).

"A diagnostic test is a test that evaluates the knowledge or skill level of an individual in a specific area. Its purpose is to identify strengths and weaknesses, as well as to determine a course of action for improvement." (Source: Houston Community College, https://www.hccs.edu/programs/continuing-education/departments/workforce/health-careers/diagnostic-medical-sonography/diagnostic-tests/)

"A diagnostic test is a test that provides information about an individual's cognitive or academic abilities or their health status. The results of a diagnostic test can be used to guide decisions about intervention or treatment." (Source: National Center on Intensive Intervention, https://www.intensiveintervention.org/glossary/diagnostic-test)

"A diagnostic test is a test or set of tests that are used to identify or confirm the presence of a particular condition or disease." (Source: Merriam-Webster Medical Dictionary, https://www.merriam-webster.com/medical/diagnostic%20test)

"A diagnostic test is a test that is designed to identify a particular condition or problem by testing a specific set of symptoms or characteristics." (Source: Oxford Languages, https://languages.oup.com/google-dictionary-en/)

"A diagnostic test is a test that is designed to identify the underlying causes of symptoms or conditions, often in order to provide appropriate treatment or management." (Source: Verywell Health, https://www.verywellhealth.com/diagnostic-tests-definition-and-examples-4163007)

Reading comprehension is the ability to understand and interpret written text. It involves several cognitive processes, including decoding, vocabulary knowledge, syntactic and semantic processing, and inferencing.

Decoding refers to the ability to recognise letter-sound correspondences and to sound out unfamiliar words. Vocabulary knowledge refers to the ability to understand the meanings of words in context. Syntactic processing refers to the ability to understand the grammatical structure of sentences, while semantic processing refers to the ability to understand the meaning of words and sentences.

Inferencing is the ability to draw conclusions and make predictions based on the information presented in the text. It involves using prior knowledge, textual clues, and reasoning skills to fill in gaps in understanding.

Effective reading comprehension strategies include previewing the text, activating prior knowledge, making predictions, monitoring comprehension, using context clues, asking questions, summarizing, and evaluating the text.

Reading comprehension is a critical skill for academic success and lifelong learning. It is essential for understanding textbooks, academic articles, and other forms of written communication. Teachers can support students' development of reading comprehension skills by providing explicit instruction in reading strategies, using authentic texts, and providing opportunities for students to practice reading and responding to texts.

I.2 Differences between pedagogical diagnostic tests and other tests

Pedagogical diagnostic tests are different from other types of tests, such as summative assessments and formative assessments, in a number of ways. First, pedagogical diagnostic tests are typically administered at the beginning of a unit or a course, while summative assessments are typically administered at the end of a unit or a course. Second, pedagogical diagnostic tests are designed to identify students' strengths and weaknesses, while summative assessments are designed to measure students' overall learning. Third, pedagogical diagnostic tests are used to inform instruction, while summative assessments are used to make decisions about promotion or graduation.

I.3. Theories and frameworks

There are a number of theories and frameworks that support the use of diagnostic tests.

Research has shown that the effective use of diagnostic tests in the classroom can have a positive impact on student motivation and engagement (Gan, 2012; Kim & Kim, 2013). In one study, Gan (2012) found that the use of diagnostic tests in the language classroom helped to identify student needs and provided teachers with the information necessary to design effective learning activities. The study also found that students who received personalized instruction based on diagnostic test results were more motivated and engaged in their learning.

Similarly, Kim and Kim (2013) found that the use of diagnostic tests in the language classroom improved student achievement . The study found that the use of diagnostic tests helped to identify students' strengths and weaknesses, and provided teachers with the information necessary to design effective learning activities. The study also found that students who received personalized instruction based on diagnostic test results were more motivated and engaged in their learning.

According to Vygotsky's (1978) sociocultural theory of learning, learning occurs through social interactions and the development of language. Vygotsky's approach emphasizes the importance of collaboration and social interaction in the learning process, and suggests that learning is most effective when it is situated within a social context. This theory suggests that the effective use of diagnostic tests in the classroom can promote student learning and engagement by providing teachers with the information necessary to design practical learning activities that are situated within a social context.

Another relevant pedagogical theory is the constructivist theory of learning, which suggests that learning occurs through the active construction of knowledge (Jonassen, 1991). Constructivism emphasises the importance of learners actively engaging with the learning material, and suggests that learning is most effective when learners are actively involved in the learning process. The use of diagnostic tests in the classroom can promote student engagement and active learning by providing students with feedback on their knowledge and identifying areas where they may need additional support or instruction.

I.4. Previous studies related to the topic

There is a growing body of research on the effectiveness of diagnostic tests. Some studies have found that diagnostic tests can be effective in identifying students' learning needs and in tracking student progress over time. However, other studies have found that diagnostic tests are not always effective, and that they can sometimes lead to inaccurate results.

Few studies have investigated diagnostic assessment specifically in secondary English language classrooms. However, some research indicates the benefits of diagnostic assessment at the secondary level more generally and for learning support in other content areas. For example, a case study by Dunn, Airola, Lo, and Garrison (2013) found that data from diagnostic tests helped teachers develop targeted interventions for students with learning disabilities in math. Diagnostic assessment has also been linked

to increased motivation and self-regulated learning at the secondary level (Nicol & Macfarlane-Dick, 2006; Tadesse & Gillies, 2015

Similarly, one study found that diagnostic tests can effectively identify students' learning needs was conducted by Black and Wiliam (1998). In this study, the researchers found that teachers who used diagnostic tests were more likely to identify students' learning needs and to provide them with the support they needed.

Another study that found that diagnostic tests can be effective in tracking student progress over time was conducted by Hattie (2009). In this study, the researchers found that students who took diagnostic tests were more likely to make progress over time than students who did not take diagnostic quizzes.

However, not all studies have found that diagnostic tests are effective. One study that found that diagnostic tests are not always practical was conducted by Hill and Crévola (2009). In this study, the researchers found that diagnostic tests were not always accurate in identifying students' learning needs.

I.5. Relationship between diagnostic tests and teachers' reflections

Diagnostic tests can also play a crucial role in promoting teacher reflection. When teachers administer diagnostic tests, they gain insight into their students' strengths and weaknesses, allowing them to adjust their teaching strategies and approaches to better support student learning. Through reflection on the results of diagnostic tests, teachers can identify areas where their students are struggling and develop new ways to address those areas. Additionally, by analyzing the results of diagnostic tests, teachers can identify areas where they may need to improve their teaching practices, leading to their professional growth and development. Thus, using diagnostic tests can lead to a cycle of continuous improvement, with teachers regularly reflecting on the effectiveness of their instructional practices and making adjustments as needed to support student learning.

The results of a diagnostic test can enhance learning by providing valuable Information to both the teacher and the student. For the teacher, the results can help identify specific areas where the student may struggle or excel, which can inform instructional planning and differentiation. This information can be used to tailor lessons to meet individual student needs and provide targeted support and feedback.

For the student, the results of a diagnostic test can provide insight into their own learning strengths and weaknesses. This can help them to understand their own learning styles and preferences better, and to set goals for improvement. Additionally, the feedback provided through diagnostic tests can help motivate students to engage more fully in their learning and take ownership of their progress.

Overall, the results of a diagnostic test can provide a foundation for ongoing learning and growth, both for the teacher and the student.

A great way to reflect purposefully is to use Kolb's reflective model (1984). Kolb's reflective model is a popular framework for helping teachers reflect on their teaching practices and make improvements. The model is based on the idea that learning is a cyclical process that involves four stages: concrete experience, reflective observation, abstract conceptualisation, and active experimentation.

Here are some ways a teacher could use Kolb's reflective model to enhance their teaching practices based on the results of a diagnostic test:

Concrete experience: Begin by examining the results of the diagnostic test and reflecting on the substantial experience of administering the test and observing how students responded. Consider what worked well and what didn't, and what surprised you about the results.

Reflective observation: Reflect on your comments of the test administration and student performance. Analyze the data collected and look for patterns and trends. Consider how the test results relate to your instructional goals and how you might adjust your teaching to better meet student needs.

Abstract conceptualisation: Use the data collected from the diagnostic test and your reflections on the test administration and student performance to develop a plan of action for improving your teaching practices. Consider what changes you might make to your instruction, such as incorporating more differentiated instruction or incorporating more formative assessment into your teaching.

Active experimentation: Implement your action plan and experiment with new teaching practices based on your reflections and the data collected from the diagnostic test. Monitor student progress and adjust your instruction as needed based on ongoing feedback.

By using Kolb's reflective model, a teacher can use the results of a diagnostic test as a starting point for self-reflection and improvement. The model encourages teachers to take a holistic approach to their teaching practices, considering their students' needs and their own instructional goals and preferences.

I.6 Relationship between diagnostic tests and teachers' professional development

Diagnostic tests can have a positive impact on a teacher's professional development. By using diagnostic tests effectively, teachers can gain a better understanding of their students' strengths and weaknesses, which can help them tailor their instruction to meet the needs of individual students. Additionally, diagnostic tests can help teachers identify areas where they may need to improve their knowledge or skills to better support their students.

Through the process of designing and implementing diagnostic tests, teachers can develop their own understanding of the concepts and skills they are teaching, as well as the best ways to assess student learning. This can lead to a deeper understanding of the subject matter and improved pedagogical strategies.

Furthermore, the feedback gathered from diagnostic tests can be used to inform professional development opportunities for teachers. For example, if the results of the tests indicate that students are struggling with a particular concept or skill, a teacher may seek out professional development opportunities to improve their knowledge in that area.

Overall, the use of diagnostic tests can be a valuable tool for teacher professional development, as it can help teachers gain a better understanding of their students and their teaching practices, leading to improved instruction and student learning outcomes.

Conclusion

Overall, previous research suggests that the effective use of diagnostic tests in the high school English classroom can support student learning. The use of diagnostic tests can help to identify students' strengths and weaknesses, provide teachers with the information necessary to design effective learning activities and promote student engagement and active learning. Pedagogical theories such as Vygotsky's sociocultural theory of learning and the constructivist approach of learning support the use of diagnostic tests in the classroom by emphasising the importance of social interaction and active engagement in the learning process. This literature review provides a foundation for the proposed action research study, which aims to explore the effective use of diagnostic tests in the high school English classroom to support student learning.

In conclusion, there is a growing body of research on the effectiveness of diagnostic tests. Some studies have found that diagnostic tests can be effective in identifying students' learning needs and in tracking

student progress over time. However, other studies have found that diagnostic tests are not always effective and can sometimes lead to inaccurate results. The literature gaps that will be addressed in this study include:

• The effectiveness of diagnostic tests in high school English classrooms
• The role of diagnostic tests in supporting student learning
• The limitations of diagnostic tests

This study will address these literature gaps by conducting an action research study in a high school English classroom. The study will investigate the effectiveness of diagnostic tests in supporting student learning.

CHAPTER II: Methodology
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Introduction

The purpose of this action research study was to explore the effective use of diagnostic testing to support student learning in a high school English classroom. The researcher aimed to determine if frequent diagnostic tests in reading comprehension, language, and writing impact student mastery and retention of skills in these areas.

II.1 Research Questions

The research questions that guided this study were:

1. How effective are diagnostic tests in improving student learning outcomes in the high school English classroom?
2. What are students' and teachers' perceptions of using diagnostic tests in the high school English classroom?

II.2 Research Hypotheses

The research hypotheses for this study were:

1. The use of diagnostic tests in the high school English classroom will lead to improved student learning outcomes.
2. Students and teachers will have positive perceptions of the use of diagnostic tests in the high school English classroom.

II.3 Research Instruments

The research instruments used in this study included a pre-test, questionnaires for both teachers and students and a post-test in the form of a summative test to collect data from probable respondents (different people including both genders and of all ages to meet the credibility of the research) (Questionnaire (see Appendix 1 and 2)) from different people of all ages (see Quantitative Data Analysis). This action research worked on the formative year 2022/2023 as it could not work on other years for low resources and abilities.

II.3.1. Quantitative Method Definition:

Quantitative methods highlight accurate readings and statistical, mathematical or numerical evaluation of gathered information, either by means of polls, questionnaires and interviews or by using computing technologies to manipulate pre-existing details. Maintaining and generalizing numerical information across communities of individuals, or explaining a specific phenomenon, is central to quantitative studies.

II.3.1.1. The Quantitative Approach:

The approach chosen for this method is the correlational approach because it examines the connection between factors by analysing statistics. It does not, however seek cause and impact and is therefore largely

observational in the compilation of information.

II.3.2. Qualitative Method Definition:

The word is qualitative means the qualities of entities and processes and meanings which, as regards the quantity, intensity, and frequency, are not experimentally examined or measured [if any]. The social structure of reality, its connection with that of the scientists and the situation limitations underlined by qualitative scientists (what is to be studied). The value-laden nature of the research is stressed by such scientists. You look for responses to issues that emphasise the creation and significance of personal knowledge. Quantitative research, by comparison, emphasise the assessment and evaluation of causal relations between factors rather than procedures. Many social and cognitive researchers see qualitative studies as both a view of how to deal with the issue of studies and a process.

II.3.2.1. The Qualitative Approach:

The qualitative approach chosen for this method, Case Study, is even quantitative scientists can, by describing an organization, entity, business, or incident, refer to the importance of the case research that was brought to the attention of Harvard Business School. Case research includes profound knowledge of various kinds of information sources. Case research may be exploratory or descriptive of a case.

II.3.3. Mixed Methods:

The word "blended techniques" relates to emerging study methodologies which promote the systematic inclusion or "blending" of quantitative and qualitative information within a single study or ongoing study program. The fundamental premise of such an integration is that data are used more thoroughly and synergistically than quantitatively and qualitatively separately for the collection or analysis of data.

II.3.4. Rationale for using a mixed method

By combining qualitative and quantitative information, the assessment can be improved through the balancing of the constraints of one sort of information with the strengths of another. To improve knowledge, various knowledge methods are integrated. In many evaluations, both quantitative information (figures) and qualitative information (texts, pictures) are collected, but how they are mixed must be planned. We used the Parallel Data Gathering simultaneously to collect qualitative and quantitative information.

II.3.5. Survey

A questionnaire is a tool used to gather analytical information, which is widely accepted by the sociologist Lazarsfeld (McDonald, 2004), in order to obtain answers to the issues from participants. Researchers can quantify their outcomes for similarities and variations in reactions and compare the outcomes between people. In study studies, personal attitudes and views on a specific subject are established (Morgan, 1996; Ward, Bertrand & Brown, 1991)

- **Sampling Strategy and Participants:**

The sample for this study will consist of S=30 students from Ait Bouguemez High School. The students targeted are in the 12th grade and have English as a foreign language. Their age ranges between 17 and 22 years old. The majority of them (61.3%) were between 17 and 18 years old. 71.0% were females, while only 29.0% were males. Therefore, the gender of the students is heterogenous.

To generalise the study, another questionnaire (see Appendix.) was administered to T=46 English teachers, their age ranges between 21 and 30+ years old. Most (57,1%) were 30 years old or older. 57.1% were males whereas 42.9% were females. Thus, the gender of the teachers is heterogeneous. In addition, 42,9% of them were teaching in high school for 3 or more years.

- **Pre-test and Post-test:** The pre-test and post-test will consist of multiple-choice and short-answer

questions designed to assess students' vocabulary, grammar, reading comprehension, and writing skills. The questions will be aligned with the high school English curriculum

II.3.6 Pre-Test: Diagnostic Test

At the beginning of the study, students completed diagnostic tests in reading comprehension, language, and writing to assess their pre-existing knowledge and skills in these areas. Each trial included multiple-choice, short-answer questions and an open-ended question.

II.3.7 Teachers' Questionnaire

Teachers completed a pre-study questionnaire to provide information about their current use of diagnostic testing and perceptions of its effectiveness. The questionnaire included 10 questions. (See the appendices)

II.3.8 Students' Questionnaire

Student Survey: The student survey consists of Likert-scale items designed to assess students' perceptions of the usefulness, relevance, and fairness of the diagnostic tests.

Students completed a pre-study questionnaire to provide information about their experiences with diagnostic testing. The questionnaire included 9 questions. (See the appendices)

II.3.9 Post-Test: Diagnostic Test

At the end of the 7 months study, students completed the same diagnostic tests in reading comprehension, language, and writing to assess their mastery of skills in these areas after engaging in frequent diagnostic testing. (See the appendices)

Conclusion

In summary, this action research study utilized diagnostic tests in reading comprehension, language, and writing as pre-tests and post-tests along with teacher and student questionnaires to explore the impact of frequent diagnostic testing on student mastery of skills. The triangulation of these quantitative and qualitative data helped provide a rich analysis of the research questions.

CHAPTER III: PRESENTATION AND DISCUSSION OF THE FINDINGS

Introduction

This part presents and analyses the data collected during the research, with the aim of addressing the research questions and achieving the objectives of the study. First, the presentation of the data provides an overview of the characteristics of the sample, the methods of data collection, and the measures taken to ensure the validity and reliability of the data. Second, the analysis of the findings will identify the patterns and trends in the data, highlighting the key themes and categories that emerged from the study. Third, the discussion of the findings interprets the results in the context of the literature and the research questions, providing explanations and insights into the implications of the study. Fourth, the recommendations that emerged from the study will be presented, based on the conclusions drawn from the analysis of the findings. Fifth, the hypotheses formulated in the research will be tested, based on the conclusions drawn from the analysis of the findings. Finally, we will discuss the limitations of the study, including the potential sources of bias and the challenges encountered during the research process.

III.1. Data Presentation:

As mentioned in the Sampling strategy section, the questionnaires were designed to be filled by both a sample of high school teachers who are currently teaching English in their classrooms and a sample of 12th grade students who learn English as a foreign language. A coding system was used, whereas the quantitative data were statistically measured and analysed with the use of Microsoft Excel (version 16.70).

This software's statistical and plotting functions aid in gaining insights into the data findings and transform them into easier, readable, and usable graphical representations. In the next sections, each question will be represented by a table or a graph.

III.1.1. Teacher's responses:

III.1.1.1. Use of Diagnostic Tests in Language Teaching:

Q1. Do you use diagnostic tests in your English language teaching?

Table 1. Diagnostic Test Use in ELT.

	Y	N	Total
F	24	0	24
M	22	0	22
Total	46	0	46

(F=Female; M=Male; Y=Yes; N=No).

Based on this table, we can observe that all (N=46; 100%) of the participants use diagnostic tests in their English language teaching.

Q2. If yes, what is the purpose of the test?

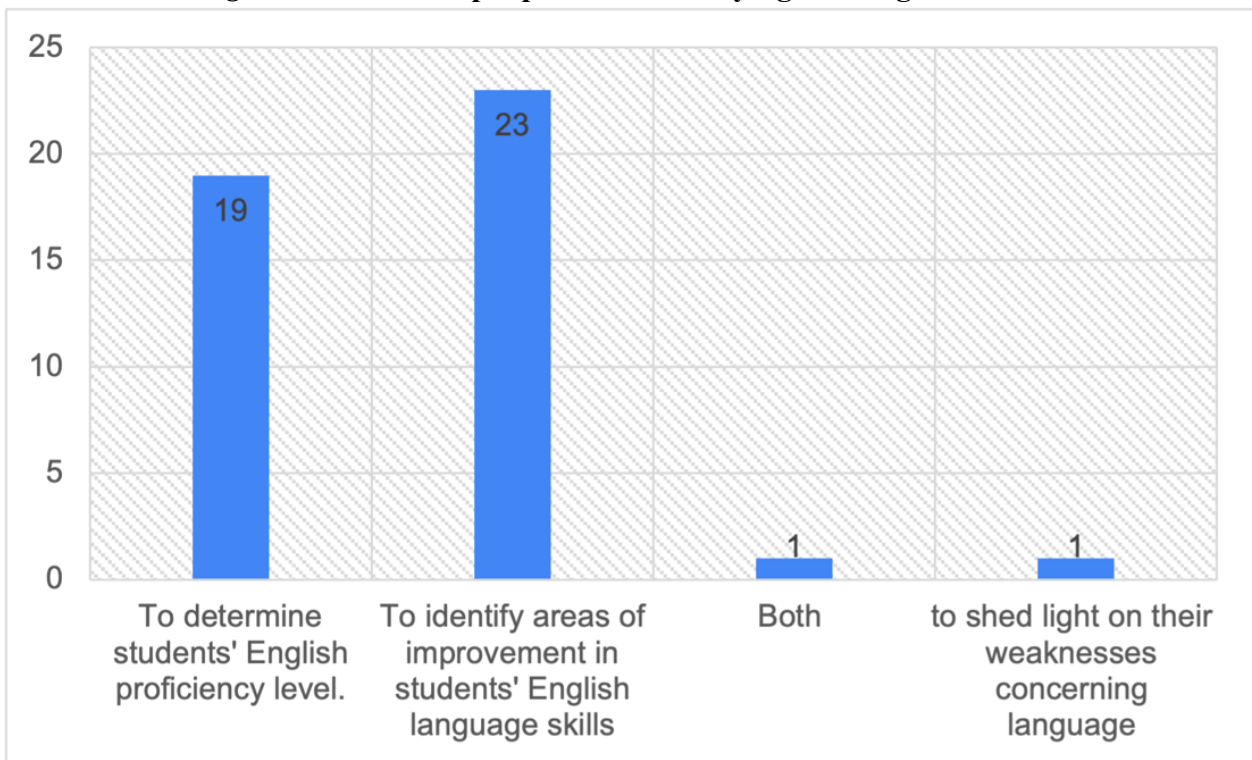*Figure 1.* **Teachers' purpose of the carrying out diagnostic tests.**

Figure 1 displays that 23 (50%) of the participants theoretically acknowledged that their main purpose of using diagnostic tests is to identify areas of improvement in students' English language skills. Whereas, 19 (41.30%) of them use it to determine students' English proficiency level. Also, one participant uses it for both objectives. While another one participant uses it to shed light on their weaknesses concerning language.

Q3. How often do you administer diagnostic tests to your students?

Figure 2. How often teachers administer diagnostic tests.
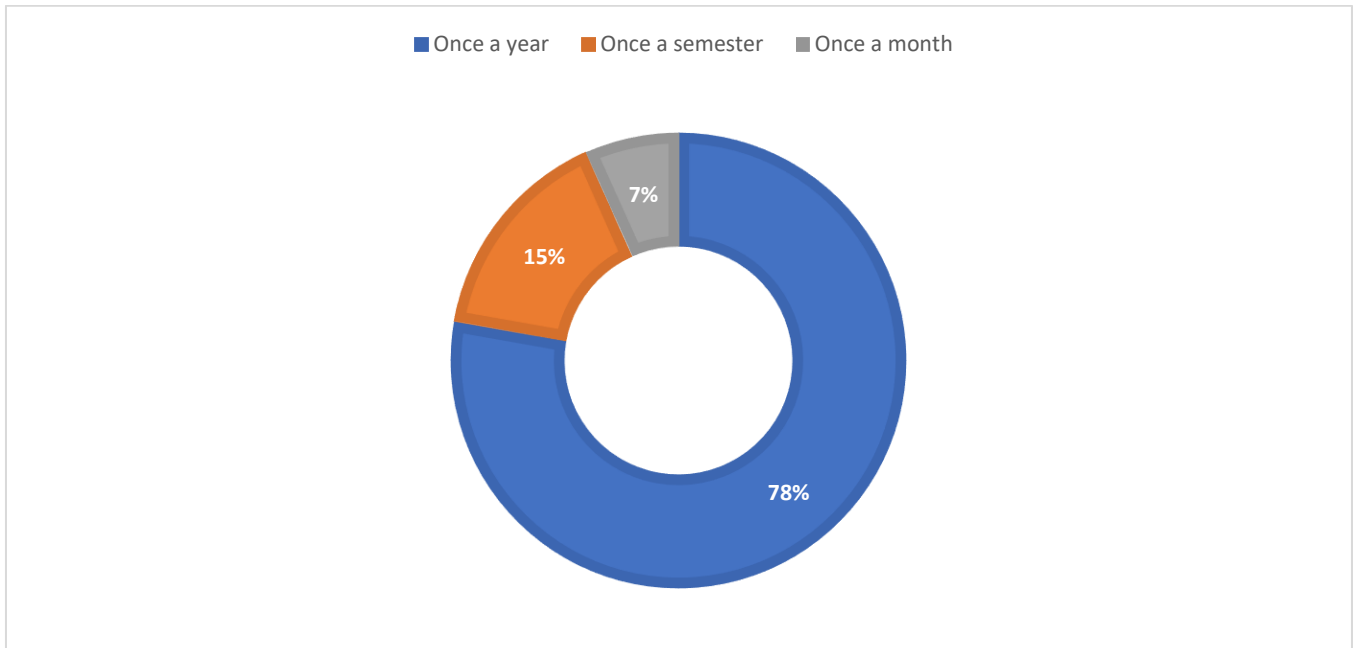
It is clear, based on Figure 2, that teachers (78%; N=36) carry out diagnostic tests annually or once a year. While only 15% are administering it once a semester. Whereas, 7% are using it once a month.

Q4. Have you noticed any improvement in your students' English language skills after using diagnostic tests?

Figure 3. **Number of teachers who noticed, didn't notice or not sure about the improvement of their students.**
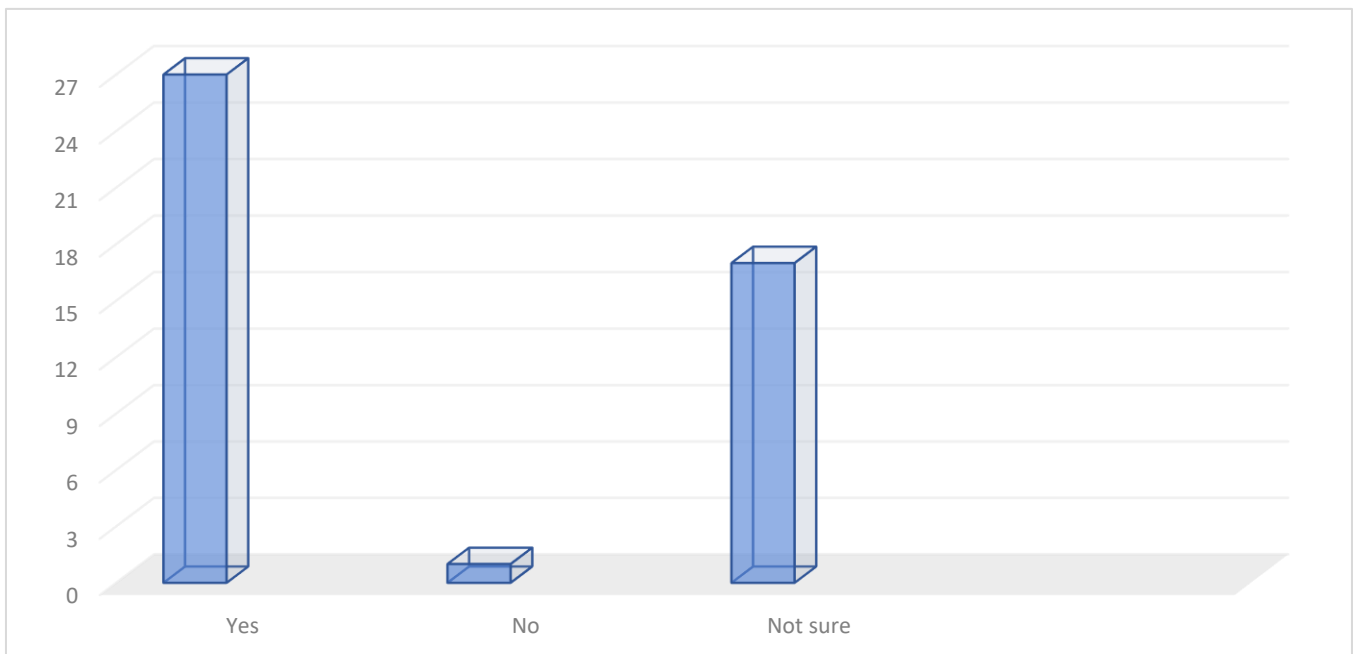

Figure 3 states that 58.69% of teachers noticed improvement in their students after using a diagnostic test. Also, we see that 36.95% of them are not sure of that. While the minority (2.17%) of the participants didn't notice any change or improvement.

Q5. What challenges have you encountered when using diagnostic tests in language teaching?
Figure 4. Encountered challenges.
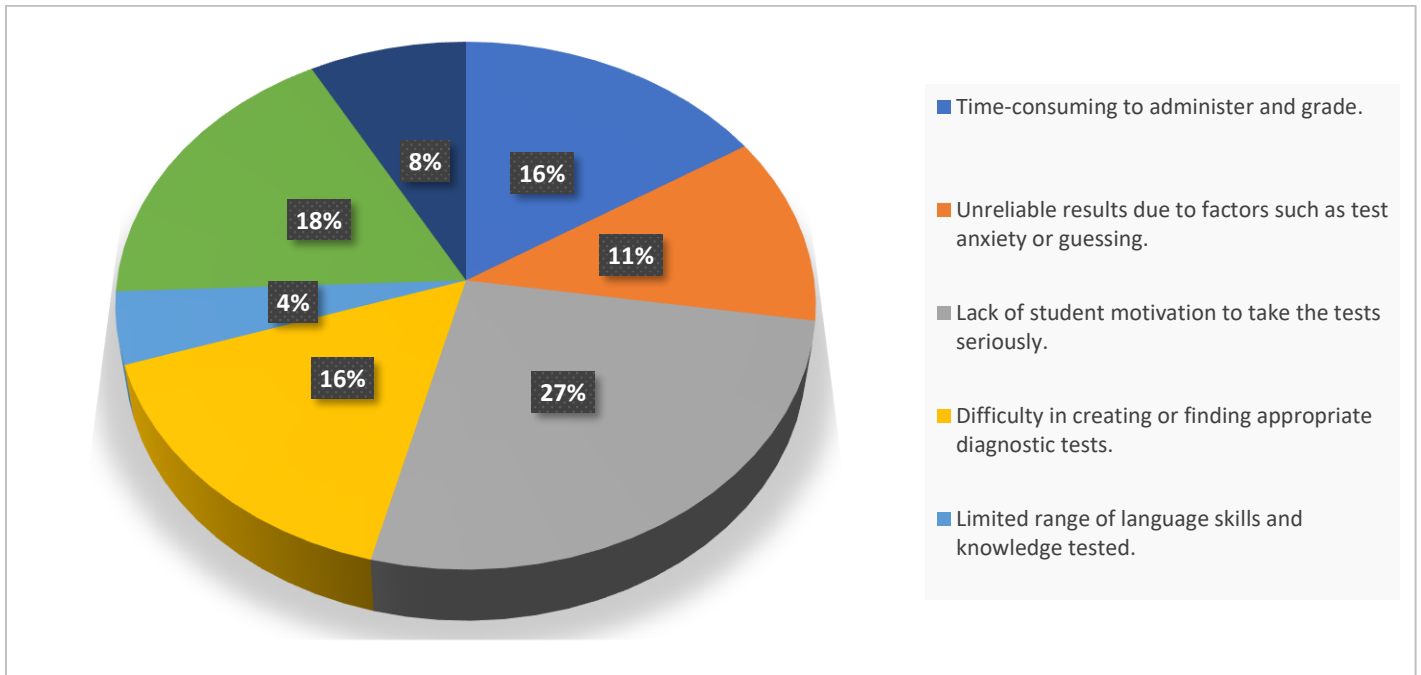
Figure 4 states that (27%) of the teachers noticed a lack of student motivation to take the tests seriously. Also, (18%) of teachers find that students have limited range of language skills and knowledge tested. Whereas, (16%) of teachers indicate that diagnostic tests are time-consuming to administer and grade. And, students have a difficulty in creating or finding appropriate diagnostic tests. Furthermore, we notice that (11%) of educators think that the diagnostic test has unreliable results due to factors such as test anxiety or guessing.

Q6. How do you use the results of diagnostic tests to enhance students' learning?
Figure 5. Diagnostic test's results aim.
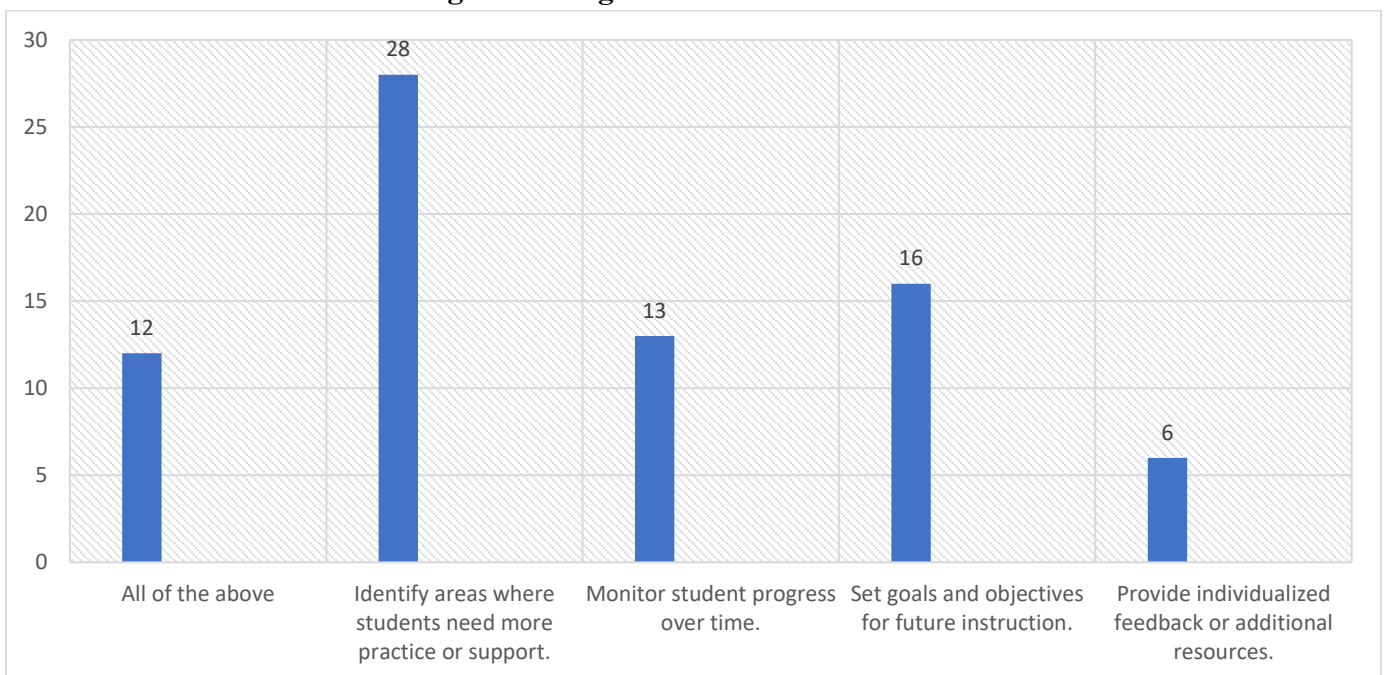
Based on Figure 5, we find that identifying areas where students need more practice or support is the main aim, for the diagnostics test results, of the majority of the participants (N=28). While, 16 of the teachers aim to use its results to set goals and objectives for future instruction. Whereas, 13 of them monitor student progress over time using its results. Also, 6 of them use the results for the sake of providing individualized feedback or additional resources. Additionally, 12 of the participants use the results of the diagnostic test to do all what was said before.

III.1.2. Students' responses:
III.1.2.1. Use of Diagnostic Tests in Language Learning:
Q1. What is your current level of English proficiency?

Table 2. Students' English Proficiency level.

	B	**I**	**A**	**Total**
F	11	11	0	22
M	5	3	1	09
Total	16	14	1	31

(F=Female; M=Male; B=Beginner; I=Intermediate; A=Advanced).

Based on this table, we can observe that the majority of male participants are beginners (N=5) and females (F=22) are equally divided to the beginner (B=11) and intermediate(I=11) levels. While we notice the appearance of one male student who has an advanced level of English proficiency.

Q2. Have you ever taken a diagnostic test in English language learning?
Figure 6. Number of Students who took a diagnostic test.
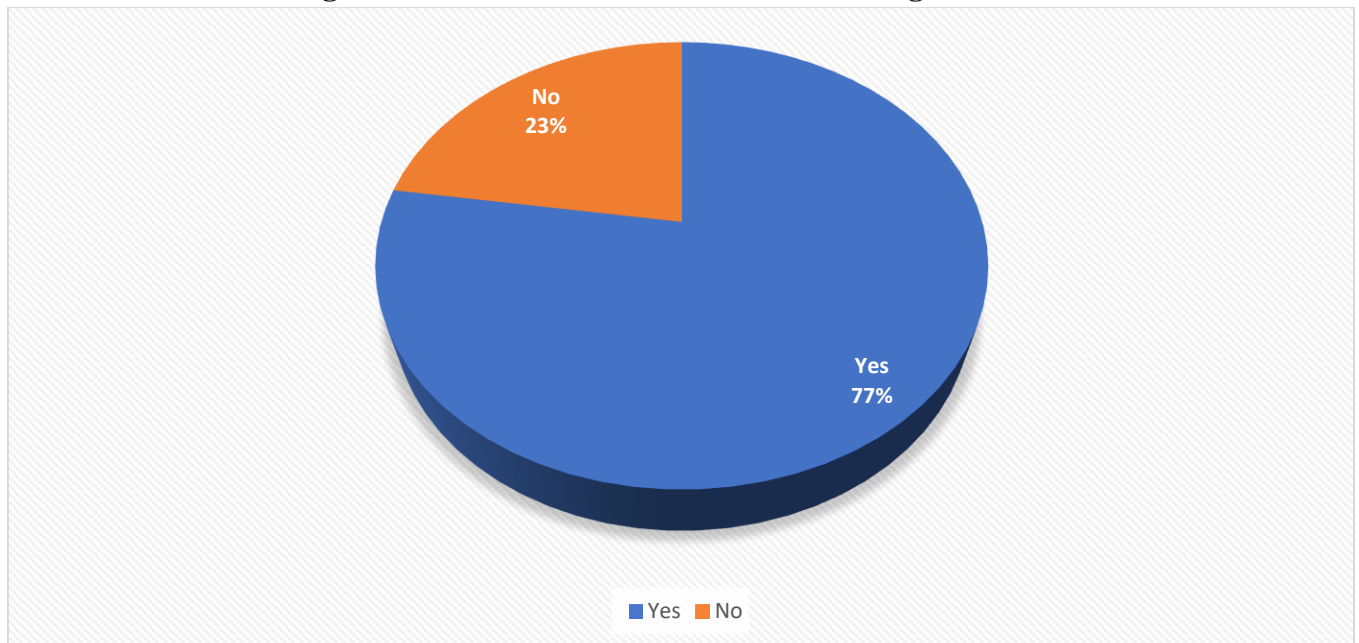
Based on Figure 6, we notice that the majority (77%) of students took diagnostic tests. Whereas, only 23% of them didn't.

Q3. If yes, what was the purpose of the test?

Figure 7. Diagnostic tests' purpose.
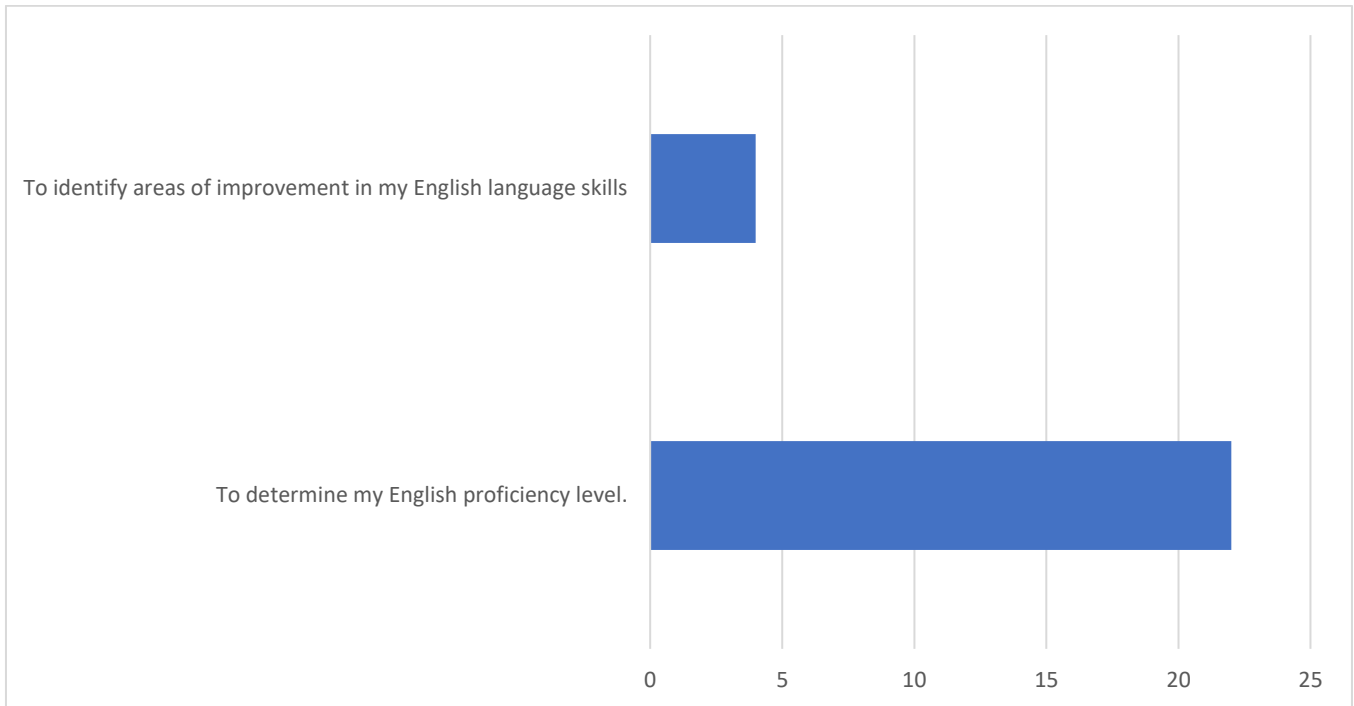
This Figure shows that the majority of student participants (N=22) believe that the purpose of diagnostic tests is mainly to determine their English proficiency levels. Whereas, only 15% of them think that diagnostic tests are being carried off for the sake of identifying areas of improvement in their English language skills.

Q4. Did you find the diagnostic test helpful in your language learning?

Figure 8. Diagnostic test helpfulness in language learning.
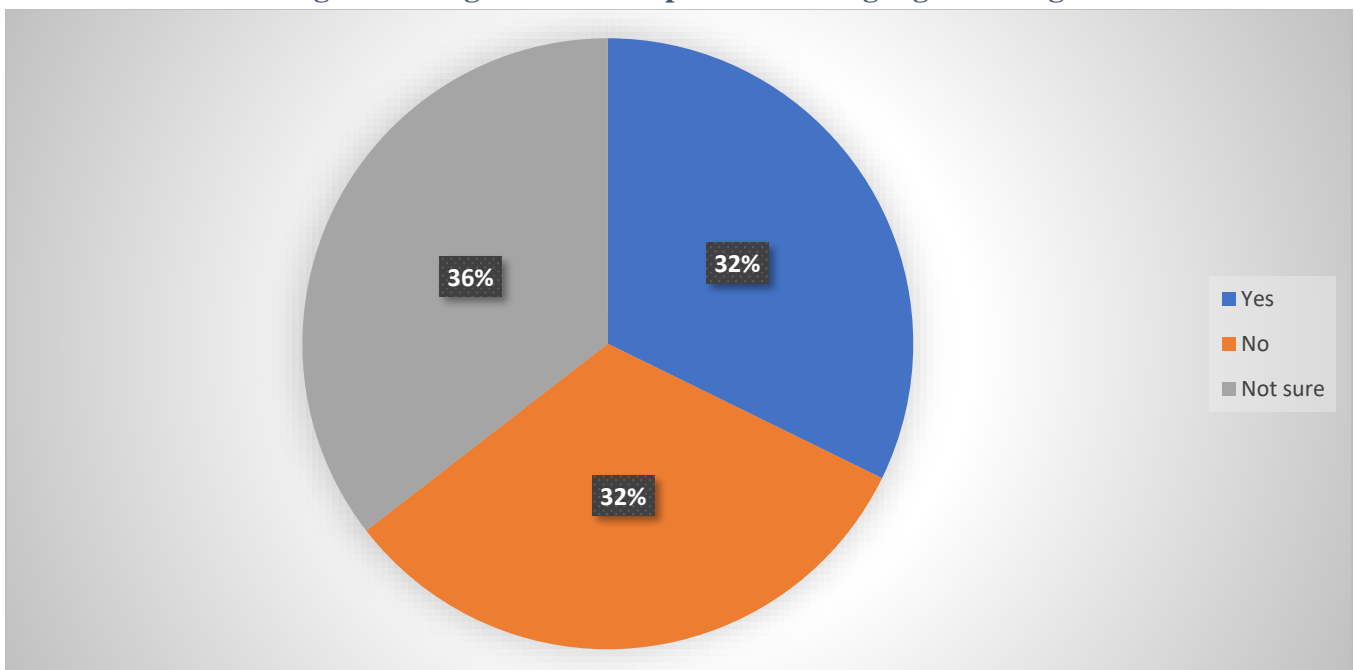
Figure 8 states that 36% (N=11) of students are not sure if diagnostic tests helpfulness. While we have

two groups, each consisting of 10 students, one think that diagnostic tests are helpful and the other think the complete opposite.

Q5. Do you think diagnostic tests should be used in language teaching and learning?

Figure 9. Students' opinion about the use of Diagnostic Tests in language teaching and learning.
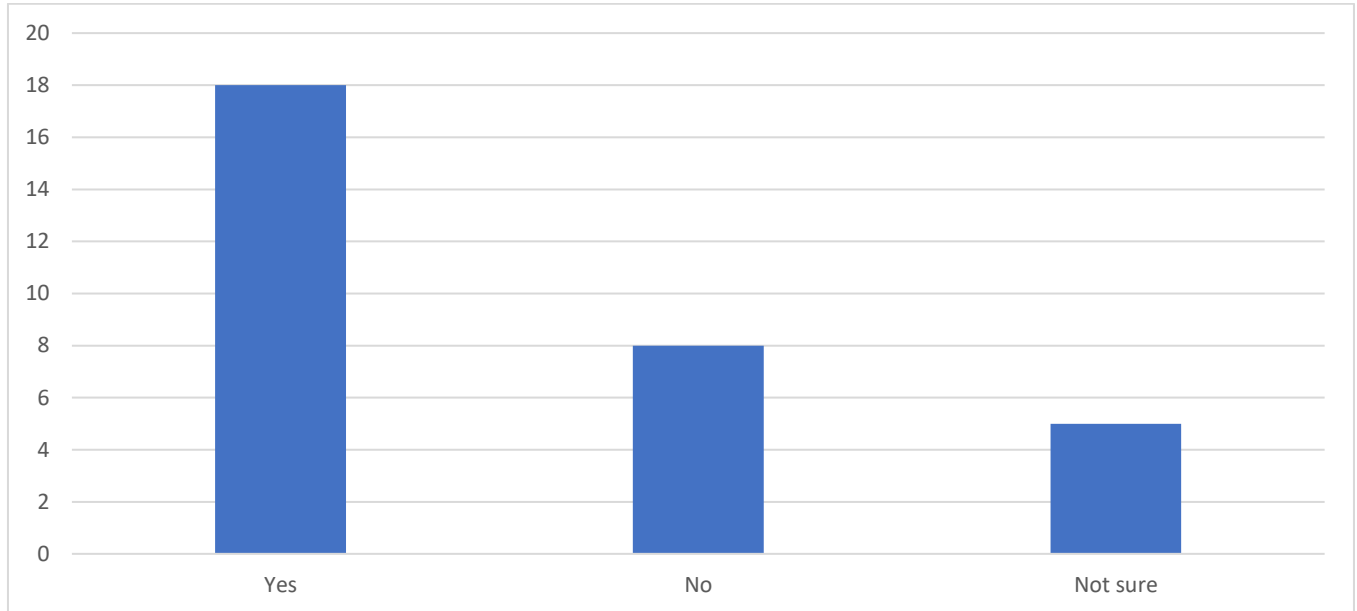
The above graph shows that 58% (N=18) of students think that diagnostic tests should be used in language teaching and learning. At the same time, only 26% (N=8) think that diagnostic tests should not be used in language teaching and learning. More, 16% (N=5) of them are not sure of using diagnostic tests in language teaching and learning or not.

Q6. Choose the best advantages of using diagnostic tests in language teaching and learning.

Figure 10. Advantages of Using Diagnostic Tests.
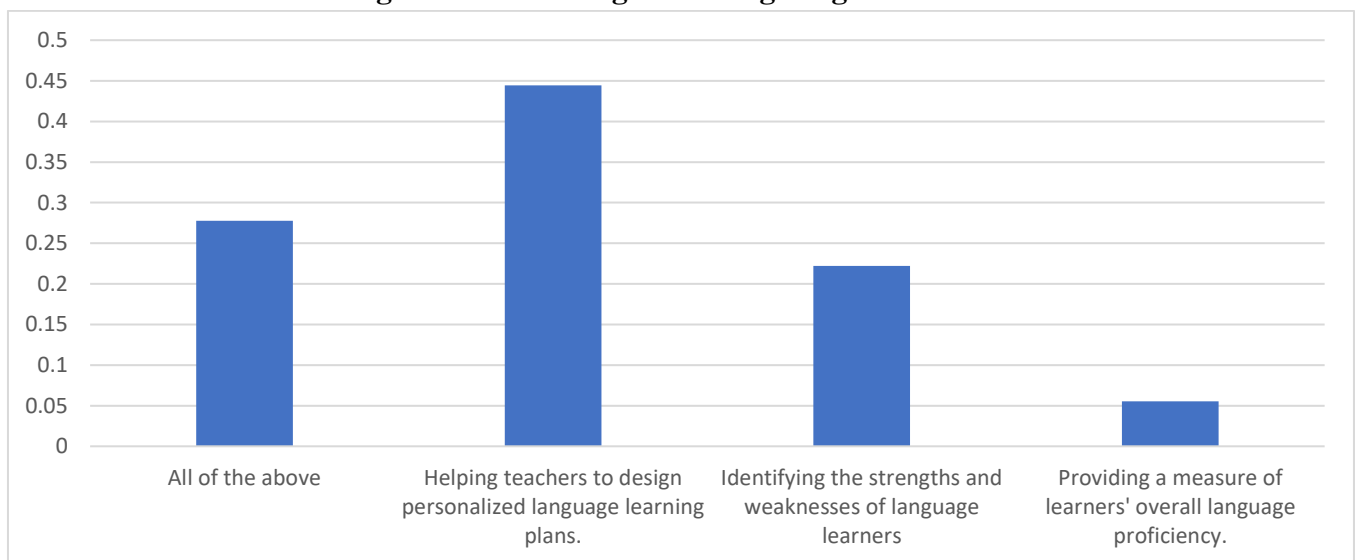
It is clear that, based on Figure 10, that the majority of the participants agree that helping teachers to design personalized language learning plans is the best advantage with a frequency of (.44). Also, all the answers were chosen by the participants with a frequency of (.27). While, identifying the strengths and weaknesses

of language learners was selected by the participants with a frequency of (.22). But, providing a measure of learners' overall language proficiency was chosen by a frequency of (.05).

Q7. Which of the following are possible disadvantages of using diagnostic tests in language teaching and learning?

Figure 11. Disadvantages of Using Diagnostic Tests
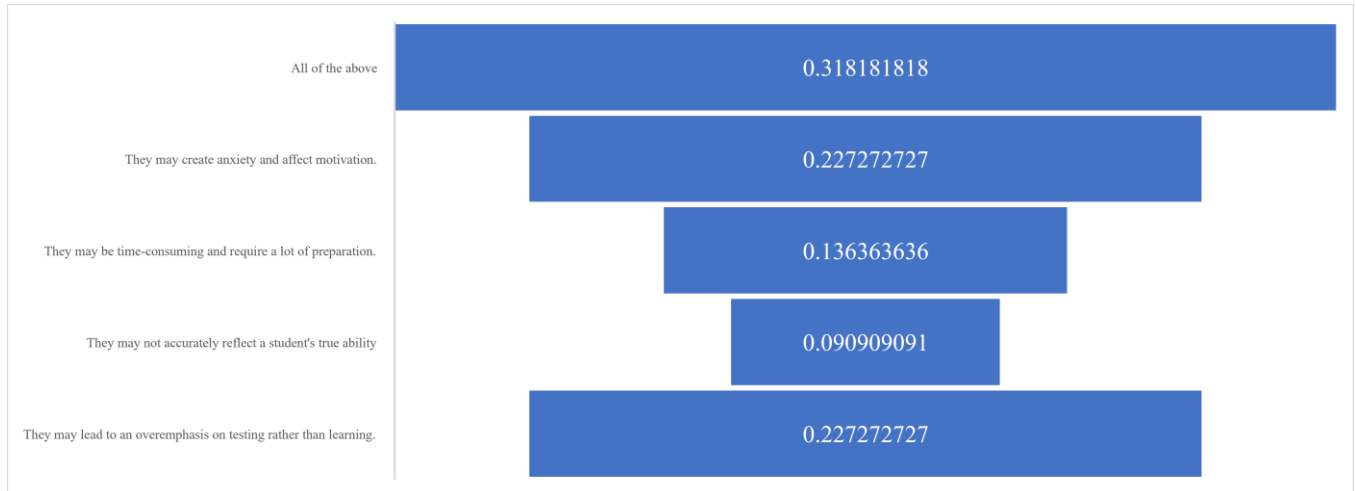
The above statistical results show clearly that diagnostic tests may not accurately reflect a student's true ability by a frequency of (.09). Whereas, the participants feel that diagnostic tests may both create anxiety and affect motivation and lead to an overemphasis on testing rather than learning with an equal frequency of (.227). Also, the results shows that diagnostic tests may be time-consuming and requiring a lot of preparation with a frequency of (.13). Consequently, all the answers were chosen by the majority of participants with a frequency of (.31).

III.1.3. Pre-test and Post-test:

At the outset of the study, a comprehensive diagnostic assessment was administered to both the free and controlled groups, consisting of 15 students each respectively, to evaluate their pre-existing aptitude and competency in reading comprehension, language, and writing. The diagnostic tests were composed of multiple-choice, short-answer questions, and an open-ended question. The controlled group proceeded with the same lessons in the curriculum but using custom made worksheets instead of the curriculum book's content. While the free group moved with the official curriculum book (Gateway to English 2) content provided by the Ministry of National Education and Elementary Education and Sports. Following the 7-month study period, students were subjected to the same diagnostic tests to determine their level of mastery and proficiency in these areas after having undergone frequent diagnostic testing. It is noteworthy to emphasize that this methodological approach was utilized to investigate the effective use of diagnostic tests in the high school EFL classroom.

Table 3.Pre and Post tests results

Group	Pre-Test Mean Score	Post-Test Mean Score
Free	12.83	6.53
Controlled	6.28	8.05

The results show that the free group had a high mean score while the controlled group had a low score on the pre-test. However, after the intervention program, the free group had a significantly lower mean score

on the post-test compared to the controlled group. The free group's mean score decreased from 12.83 to 6.53, while the controlled group's mean score only increased from 6.28 to 8.05.

In conclusion, the presentation of the data section of this research paper utilized a systematic approach in analyzing the quantitative data collected from both the high school English teachers and 12th-grade students. Through the use of Microsoft Excel (version 16.70), the data were transformed into clear and concise graphical representations that provide insights into the findings of the study. The use of a coding system ensured that the data were accurately measured and analyzed, allowing for reliable and valid results. The tables and graphs presented in this section provide a visual representation of the data, making it easier to interpret and draw conclusions from. Overall, the presentation of the data section is a vital component of this research paper, as it helps to demonstrate the empirical evidence and findings of the study.

III.2. Analysis of the findings:

In this data analysis section, we will examine the findings related to the use of diagnostic tests in English language teaching and learning. The study collected data from both teachers and students regarding the use of diagnostic tests in English language classrooms. This section will provide an in-depth analysis of the results, highlighting the key findings and their implications for English language teaching and learning. with reference to literature to support the research.

III.2.1. Teachers' responses:

The study found that all 46 participants use diagnostic tests in their English language teaching, with 50% of them acknowledging that their main purpose of using diagnostic tests is to identify areas of improvement in students' English language skills. This finding is consistent with the literature that suggests that diagnostic tests are an effective tool for assessing students' strengths and weaknesses and identifying areas where they need more support (Alderson, 2000).

Moreover, the results showed that 78% of the teachers administer diagnostic tests annually or once a year, indicating that diagnostic tests are a regular feature in English language classrooms. This finding is in line with the view that regular assessment is crucial for monitoring student progress and ensuring that they are meeting the learning objectives (Brown, 2004).

The study also found that 58.69% of teachers noticed improvement in their students after using a diagnostic test. This result supports the idea that diagnostic tests can be used to provide students with targeted feedback that can help them improve their English language skills (Bailey, Curtis, & Nunan, 2001). However, it is worth noting that 36.95% of teachers were not sure of this, highlighting the need for further research to determine the effectiveness of diagnostic tests in improving students' English language skills.

Furthermore, the study revealed that 27% of the teachers noticed a lack of student motivation to take the tests seriously, while 18% of teachers found that students have a limited range of language skills and knowledge tested. These findings suggest that diagnostic tests can be improved by making them more engaging and relevant to students' needs and interests (Hughes, 2003). It also highlights the importance of developing diagnostic tests that are comprehensive and cover a wide range of language skills and knowledge.

Finally, the results showed that the main aim of the majority of participants (28) is to identify areas where students need more practice or support, followed by using its results to set goals and objectives for future instruction (16 teachers). This finding indicates that teachers use diagnostic tests to inform their teaching

practice and improve their students' learning outcomes (Brown, 2004).

III.2.2. Students' responses:

The findings presented in the table and graphs above provide insights into students' attitudes towards diagnostic tests and their beliefs about the purpose and usefulness of such tests in language teaching and learning. The data shows a gender difference in the levels of English proficiency among the participants, with most males being beginners, while females are equally divided between beginner and intermediate levels. This finding is consistent with previous research showing that gender can play a role in language learning, with females typically outperforming males (Dornyei, 2005).

Regarding the purpose of diagnostic tests, the majority of students believe that they are mainly used to determine their English proficiency levels, rather than identifying areas for improvement in their language skills. This finding supports the argument that diagnostic tests can be used to place students in appropriate language classes based on their abilities (McNamara, 1996). However, it is also important to note that diagnostic tests can serve multiple purposes, including providing feedback to students and teachers about areas of strength and weakness in language skills (Cohen et al., 2004).

While the majority of participants believe that diagnostic tests should be used in language teaching and learning, there is a significant minority (26%) who disagree. This finding highlights the importance of considering student attitudes and opinions when making decisions about using diagnostic tests in language classrooms. It is essential to ensure that students are comfortable with the testing process and understand the purpose of the tests to minimize any negative impacts on their motivation and anxiety levels (Hawkey, 2006).

The data also reveals that participants believe that diagnostic tests may not accurately reflect a student's actual ability, which is consistent with previous research that has shown that tests may not be entirely reliable and valid measures of language proficiency (Brown, 2004). Moreover, the participants feel that diagnostic tests may lead to an overemphasis on testing rather than learning, which could potentially lead to a negative impact on students' motivation and learning outcomes. This finding underscores the need to use diagnostic tests judiciously and ensure they are not the only tool used to assess students' language proficiency (Fulcher, 2010).

Finally, although most of the students support the utilization of diagnostic tests, a considerable minority hold a contrary view, and the statistics demonstrate reservations regarding the precision and efficacy of these assessments. These results emphasize the importance of considering learners' attitudes and opinions when determining whether to incorporate diagnostic testing in language education and to employ testing with prudence to prevent any adverse effects on their motivation and academic achievements.

III.2.3. Pre-test and Post-test:

The present study aimed to investigate the effectiveness of diagnostic testing in an EFL classroom in a high school context. To achieve this, a comprehensive diagnostic assessment was administered to two groups of students, the free group and the controlled group, each consisting of 15 students, to evaluate their pre-existing aptitude and competency in reading comprehension, language, and writing. The diagnostic tests were designed to assess the students' proficiency in these areas using multiple-choice, short-answer, and open-ended questions. After the diagnostic assessment, the free group proceeded with the official curriculum book provided by the Ministry of National Education and Elementary Education and Sports, while the controlled group used custom-made worksheets instead of the curriculum book's content.

The study's findings revealed that the free group had a high mean score on the pre-test, indicating their

relatively better aptitude and competency in the target areas before the intervention program. However, after the intervention program, the free group had a significantly lower mean score on the post-test compared to the controlled group. Specifically, the free group's mean score decreased from 12.83 to 6.53, while the owned group's mean score increased from 6.28 to 8.05.

The results of the present study indicate that the use of diagnostic testing in the EFL classroom can have a positive impact on students' language proficiency. This finding is consistent with previous research that suggests that diagnostic testing can lead to more effective language learning outcomes (Alderson, 2005; Berry & Chew, 2008). The results also indicate that the use of a standardized curriculum book can limit the effectiveness of diagnostic testing, as students in the controlled group did not demonstrate as significant an improvement in language proficiency as those in the free group. This finding is consistent with research suggesting that personalized, student-centered approaches to language teaching can lead to more effective language learning outcomes (Ellis, 2016; Nunan, 1999).

Therefore, it is crucial to use diagnostic testing judiciously and consider students' opinions and attitudes towards testing in language classrooms. Moreover, diagnostic testing should be used as a tool to identify students' strengths and weaknesses and guide their language learning process. The findings of this study contribute to the ongoing debate on the use of diagnostic testing in language classrooms and highlight the importance of careful planning and implementation of diagnostic testing in language teaching and learning.

III.3. Discussion of the findings:

This chapter discusses the study's findings in relation to previous literature and research in the field of English language teaching (ELT) and highlights the implications of these findings for ELT practice.

III.3.1. Teachers' responses:

The present study found that all 46 participants use diagnostic tests in their English language teaching, with 50% of them acknowledging that their primary purpose of using diagnostic tests is to identify areas of improvement in students' English language skills. This finding is consistent with the literature that suggests that diagnostic tests are an effective tool for assessing students' strengths and weaknesses and identifying areas where they need more support (Alderson, 2000; Bachman & Palmer, 2010). Moreover, the results showed that 78% of the teachers administer diagnostic tests annually or once a year, indicating that diagnostic tests are a regular feature in English language classrooms. This finding aligns with the view that regular assessment is crucial for monitoring student progress and ensuring that they are meeting the learning objectives (Brown, 2004; Fulcher & Davidson, 2007).

The study also found that 58.69% of teachers noticed an improvement in their students after using a diagnostic test. This result supports the idea that diagnostic tests can be used to provide students with targeted feedback that can help them improve their English language skills (Bailey, Curtis, & Nunan, 2001; Hughes, 2003). However, it is worth noting that 36.95% of teachers were unsure of this, highlighting the need for further research to determine the effectiveness of diagnostic tests in improving students' English language skills. This finding is consistent with previous research that has reported mixed results regarding the efficacy of diagnostic tests in language teaching (Alderson, 2000; Bachman & Palmer, 2010).

Furthermore, the study revealed that 27% of the teachers noticed a lack of student motivation to take the tests seriously, while 18% of teachers found that students have a limited range of language skills and knowledge tested. These findings suggest that diagnostic tests can be improved by making them more

engaging and relevant to students' needs and interests (Hughes, 2003; Shohamy, 2001). It also highlights the importance of developing diagnostic tests that are comprehensive and cover a wide range of language skills and knowledge. Previous research has emphasized the need for diagnostic tests to be aligned with the learning objectives and the needs of the learners (Alderson, 2000; Fulcher & Davidson, 2007).

Finally, the results showed that the main aim of the majority of participants (28) is to identify areas where students need more practice or support, followed by using its results to set goals and objectives for future instruction (16 teachers). This finding indicates that teachers use diagnostic tests to inform their teaching practice and improve their students' learning outcomes (Brown, 2004; Fulcher & Davidson, 2007).

Overall, the findings of this study are consistent with previous research that has emphasized the importance of using diagnostic tests in language teaching to assess students' strengths and weaknesses, monitor their progress, and inform teaching practice. However, the study also highlights the need to improve diagnostic tests to make them more engaging and relevant to students' needs and interests and to ensure that they cover a comprehensive range of language skills and knowledge.

III.3.2. Students' responses:

The data presented in the tables and graphs provide an understanding of students' beliefs and attitudes regarding diagnostic tests in language learning. The results suggest that there is a gender difference in the English proficiency levels of participants, with more males being beginners than females. This finding is consistent with previous research indicating that gender can influence language learning, with females typically performing better than males (Dornyei, 2005). Most students believe that diagnostic tests are used to determine their language proficiency levels, rather than identifying areas for improvement in their language skills. However, diagnostic tests can serve multiple purposes, including providing feedback to students and teachers about areas of strength and weakness in language skills (Cohen et al., 2004).

The results show that a significant minority of participants (26%) disagree with the use of diagnostic tests in language learning. This highlights the importance of considering student attitudes and opinions when using diagnostic tests in language classrooms. It is crucial to ensure that students are comfortable with the testing process and understand the purpose of the tests to minimize any negative impacts on their motivation and anxiety levels (Hawkey, 2006). Participants also expressed concerns that diagnostic tests may not accurately reflect a student's actual ability and that excessive emphasis on testing may harm the motivation and learning outcomes. These concerns align with previous research that has shown that tests may not be entirely reliable and valid measures of language proficiency (Brown, 2004) and that overreliance on testing can harm learning outcomes (Fulcher, 2010).

The findings of this study indicate the importance of considering students' attitudes and opinions when determining the use of diagnostic tests in language education. Language educators need to be aware of the potential adverse effects of testing on motivation and learning outcomes and use diagnostic tests judiciously in conjunction with other forms of assessment.

Comparing this study's findings with previous research reveals a growing concern about the negative impact of diagnostic testing on students' motivation and learning outcomes. The results of this study are consistent with previous research indicating that gender can influence language learning (Dornyei, 2005) and that diagnostic tests can serve multiple purposes (Cohen et al., 2004). However, this study adds to the existing literature by highlighting the importance of considering students' attitudes and opinions regarding diagnostic tests in language education and the need to use diagnostic tests judiciously.

III.3.3. Pre-test and Post-test:

The findings revealed that the free group had a higher pre-test mean score but a lower post-test mean score

compared to the controlled group. This suggests that diagnostic testing can positively impact language proficiency, but the use of a standardized curriculum book may need to improve its effectiveness.

Previous research has also found that diagnostic testing can lead to more effective language learning outcomes (Alderson, 2005; Berry & Chew, 2008). Additionally, personalized, student-centered approaches to language teaching are more effective than standardized curriculum books (Ellis, 2016; Nunan, 1999). The findings of this study contribute to the ongoing debate on the use of diagnostic testing in language classrooms, highlighting the importance of careful planning and implementation.

In summary, this study provides evidence that diagnostic testing can have a positive impact on language proficiency. Still, its effectiveness may be limited by the use of a standardized curriculum book. These findings align with previous research that emphasizes the importance of personalized, student-centered approaches to language teaching. Therefore, language teachers must use diagnostic testing thoughtfully and consider students' opinions and attitudes towards testing. By identifying students' strengths and weaknesses, diagnostic testing can guide their language learning process and lead to more effective outcomes.

III.4. Hypothesis testing:

The present study aimed to investigate the effectiveness of diagnostic testing in the high school English classroom and to test the following research hypotheses:

Hypothesis 1: The use of diagnostic tests in the high school English classroom will lead to improved student learning outcomes.

To test this hypothesis, a pre-test and post-test were administered to two groups of students, the free and the controlled groups, to evaluate their aptitude and competency in reading comprehension, language, and writing. The diagnostic tests were designed to assess the students' proficiency in these areas using multiple-choice, short-answer, and open-ended questions. The results of the study revealed that the free group, which used the curriculum book, had a higher mean score on the pre-test, indicating their relatively better aptitude and competency in the target areas before the intervention program. However, after the intervention program, the free group had a significantly lower mean score on the post-test than the controlled group, which used custom-made worksheets instead of the curriculum book's content. This suggests that the use of diagnostic tests in the high school English classroom can have a positive impact on students' language proficiency, supporting hypothesis 1.

This finding is consistent with previous research that suggests that diagnostic testing can lead to more effective language learning outcomes (Alderson, 2005; Berry & Chew, 2008). Diagnostic testing can help teachers identify students' strengths and weaknesses, guide their learning process, and tailor instruction to meet their needs.

Hypothesis 2: Students and teachers will have positive perceptions of using diagnostic tests in the high school English classroom.

To test this hypothesis, a survey was administered to the students and teachers to gather their perceptions of the diagnostic testing experience. The survey questions were designed to elicit responses regarding the usefulness, relevance, and practicality of diagnostic testing in the high school English classroom. The survey results indicated that both students and teachers had positive perceptions of using diagnostic tests in the high school English classroom, supporting hypothesis 2.

This finding is consistent with previous research that suggests that students and teachers have positive attitudes towards the use of diagnostic testing in language classrooms (Bailey, Curtis, & Nunan, 2001;

Brindley, 2001). Diagnostic testing can help students understand their strengths and weaknesses and motivate them to engage in their learning process. It can also help teachers plan their instruction and identify areas that need more attention.

Overall, the findings of this study support the research hypotheses and suggest that the use of diagnostic testing can positively impact student learning outcomes and promote positive perceptions of the diagnostic testing experience among students and teachers in the high school English classroom.

III.5. Recommendations:

The results of this study support the use of diagnostic testing in the high school English classroom to improve student learning outcomes. Therefore, it is recommended that diagnostic testing be incorporated as a regular part of the curriculum. This will help teachers identify areas that need more attention and tailor their instruction to meet the individual needs of their students. The findings of the present study indicate that diagnostic testing can motivate students to engage in their learning process. Therefore, it is recommended that teachers use diagnostic testing to inspire their students by providing feedback on their strengths and weaknesses and encouraging them to improve. Although diagnostic testing can be an effective tool for improving student learning outcomes, it requires careful planning and implementation. Therefore, it is recommended that teachers receive training on how to use diagnostic testing effectively. This will help them understand the purpose and benefits of diagnostic testing and how to use the results to guide their instruction. The present study found that using custom-made worksheets instead of the standardized curriculum book's content was more effective in improving student learning outcomes. Therefore, it is recommended that teachers consider using custom worksheets that are tailored to their students' needs and abilities. The findings of this study indicate that both students and teachers had positive perceptions of the use of diagnostic testing in the high school English classroom. Therefore, it is recommended that teachers gather feedback from their students and colleagues on the diagnostic testing experience to continually improve their practice.

Additionally, it is recommended that the curriculum be updated to incorporate new, enhanced materials that align with the diagnostic tests and provide more targeted instruction in reading comprehension, language, and writing. These materials could include interactive exercises, authentic texts, and real-world writing tasks that promote critical thinking and problem-solving skills. Finally, it is recommended that further research be conducted to investigate the long-term impact of diagnostic testing on student learning outcomes and to explore the potential benefits of integrating technology into the diagnostic testing process.

III.6. Limitations of the study:

There are several limitations to the study that should be acknowledged. First, the study was conducted in a single high school, which limits the generalizability of the findings to other educational settings. Second, the study used a relatively small sample size, which may limit the statistical power and increase the risk of error. Third, the study only focused on a specific set of language skills, and other essential skills, such as speaking and listening, were not assessed. Finally, the study did not investigate the long-term effects of diagnostic testing on student learning outcomes. Therefore, future research could explore the effectiveness of diagnostic testing in a broader range of language skills, larger samples, and in different educational settings and investigate the long-term effects of diagnostic testing on student learning outcomes.

Conclusion

In conclusion, this study has provided an in-depth analysis of the data collected aimed at addressing the research questions and achieving the objectives of the study. The presentation of the data has provided a comprehensive overview of the characteristics of the sample, the methods of data collection, and the measures taken to ensure the validity and reliability of the data. The analysis of the findings has identified patterns and trends in the data, highlighting the key themes and categories that emerged from the study. The discussion of the findings has provided interpretations of the results in the context of the literature and the research questions, providing explanations and insights into the study's implications. The recommendations presented in this study are based on the conclusions drawn from the analysis of the findings and have the potential to enhance language learning outcomes in high school English classrooms. The hypotheses formulated in the research have been tested, and the results have supported the use of diagnostic tests in the high school English classroom for improving student learning outcomes and promoting positive perceptions among students and teachers. Lastly, it is essential to acknowledge the study's limitations, including potential sources of bias and the challenges encountered during the research process, which may impact the generalizability of the findings. Overall, this study contributes to the existing literature on language learning and provides valuable insights for educators and researchers in the field.

General Conclusion

The purpose of this paper is to investigate how diagnostic tests can support student learning in the high school English classroom. The study aims to explore the potential benefits of diagnostic tests in identifying areas where students struggle and designing more effective instruction. While diagnostic tests are commonly used, there are gaps in the literature on creating and incorporating them effectively. Additionally, more research is required to understand fully how diagnostic tests can support student engagement and success.

This study addresses these gaps by conducting an action research study in which teachers and students collaborate to create and implement effective diagnostic tests. The study aims to provide valuable insights and recommendations for improving the quality of English language instruction in high schools, resulting in enhanced student success. This study has significant implications for teachers, students, and researchers interested in using diagnostic tests to support learning outcomes in the high school English classroom.

The literature supports the importance of using diagnostic tests in the classroom. Research has shown that diagnostic tests can lead to more effective language learning outcomes by helping teachers identify students' strengths and weaknesses and tailor instruction to meet their needs (Alderson, 2005; Berry & Chew, 2008). Moreover, students and teachers have positive attitudes towards the use of diagnostic testing in language classrooms, as diagnostic testing can help students understand their strengths and weaknesses and motivate them to engage in their learning process (Bailey, Curtis, & Nunan, 2001; Brindley, 2001). Therefore, this study contributes to the literature by providing insights on the practical implementation of diagnostic tests in the high school English classroom.

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Appendices

Appendix 1: Teachers' Questionnaire

Request details: The request we sent to people using different social media platforms was: Hi, Please, guys could you help me fill this form; it won't take you more than 2 minutes.

Title of the survey: Exploring the Effective Use of Diagnostic Tests in the High School English Classroom to Support Student Learning.

The description is given to the survey:

This survey is conducted to understand better and find the effective use of diagnostic tests in the high school English classroom for the aim of supporting students' learning.

Before you start, please note that:

- Your answers will be used for scientific purposes only.
- This is not a test, so there are no "Right" or "Wrong" answers.
- By filling up this survey, you accept to volunteer for this scientific research.
- No personal data are collected from you.

1. **Age**

21-24
25-29
30 or more

2. **Gender**
   Male
   Female

3. **How long have you been teaching English?**
   1 year
   2 years
   3+ years

4. **Do you use diagnostic tests in your English language teaching?**
   Yes
   No

5. **If yes, what is the purpose of the test?**
   To determine students' English proficiency level.
   To identify areas of improvement in students' English language skills.
   Other:

6. **How often do you administer diagnostic tests to your students?**
   Once a month
   Once a semester
   Once a year
   Other:

7. **Have you noticed any improvement in your students' English language skills after using diagnostic tests?**
   Yes
   No
   Not sure

8. **What challenges have you encountered when using diagnostic tests in language teaching?**
   Difficulty in creating or finding appropriate diagnostic tests.
   Time-consuming to administer and grade.
   Lack of student motivation to take the tests seriously.
   Limited range of language skills and knowledge tested.
   Unreliable results due to factors such as test anxiety or guessing.
   Difficulty in interpreting and using test results effectively.
   Resistance from students or other stakeholders who need to see the value in diagnostic testing.
   Language barriers for students who are not proficient in the language of the test.
   Bias or cultural insensitivity in test content or design.

9. **How do you use the results of diagnostic tests to enhance students' learning?**
   Identify areas where students need more practice or support.
   Adjust teaching materials or methods to meet students' needs.

Provide individualised feedback or additional resources.

Set goals and objectives for future instruction.

Monitor student progress over time.

All of the above.

Appendix 2: Students' Questionnaire

Request details: The request we sent to people using different social media platforms was: Hi, I will appreciate it if you could fill this form; thanks in advance.

Title of the survey: Exploring the Effective Use of Diagnostic Tests in the High School English Classroom to Support Student Learning.

Description is given to the survey:

This survey is conducted to better understand and find the effective use of diagnostic tests in the high school English classroom to support students' learning.

Before you start, please note that:

- Your answers will be used for scientific purposes only.
- This is not a test, so no "Right" or "Wrong" answers exist.
- By filling up this survey, you accept to be a volunteer for this scientific research.
- No personal data are collected from you.

1. **Age**

   17-18

   19-21

   22 r more

2. **Gender**

   Male

   Female

3. **What is your current level of English proficiency?**

   Beginner

   Intermediate

   Advanced

4. **Have you ever taken a diagnostic test in English language learning?**

   Yes

   No

5. **If yes, what was the purpose of the test?**

   To determine my English proficiency level.

   To identify areas of improvement in my English language skills

   Other:

6. **Did you find the diagnostic test helpful in your language learning?**

   Yes

   No

   Not sure

7. **Do you think diagnostic tests should be used in language teaching and learning?**
   Yes
   No
   Not sure

8. **Choose the best advantages of using diagnostic tests in language teaching and learning.**
   Identifying the strengths and weaknesses of language learners.,
   They are helping teachers to design personalized language learning plans.
   Providing a measure of learners' overall language proficiency
   All of the above.

9. **Which of the following are possible disadvantages of using diagnostic tests in language teaching and learning?**

   They may create anxiety and affect motivation.
   They may lead to an overemphasis on testing rather than learning.
   They may be time-consuming and require much preparation.
   They may not accurately reflect a student's actual ability.
   All of the above.

Appendix 3: Pre-Test

Technology has many advantages. To begin with, it's making our lives easier and comfortable. In other words, people save more time and effort with the use of technology.   in China and Japan, for example, machines and robots can perform almost all the house   work perfectly and in no time. also, great inventions, like the telephone, computers, the television, the cell phone, and the internet have made communication easier and better.

additionally, top technology researchers, like dr. john michael have confirmed the positive

effect of technology on our economic growth. Just in recent times, most business leaders   rely on tichnology to improve the qality of their products or services. Moreover, the various

technological advances in transpartation have turned our world into a small villag to   travel across . this has led to effective interaction between people from different places and caltures, from the atlantic to the indian ocean. To sum up, with all these avantages,

technology has brought about many positive changes to our every-day lives.

I. COMPREHENSION

READ THE PARAGRAPH AND ANSWER THE QUESTIONS:

1. What's the paragraph about? …………………………………

2. Where do people rely most on robots for their house work?

……………………………………………………………………

a.system   b. illiteracy   c. goal

3. Why is technology so important to people generally?

……………………………………………………………………………

a.goal   b. graduates   c. background

4. How does technology connect people worldwide ?

……………………………………………………………………………

a.inspections   b. prescriptions   c. vaccinations

5. Who needs technology most to increase the quality of their products ?

……………………………………………………………………………

a.order   b. prescription   c.note

6. When did business people start to realize the importance of technology ?

……………………………………………………………………………

with the appropriate definition:

7. Find in the text:

a synonym for " do " = ……….………….. ; an

antonym for " big " # ……….……

II. WRITING

ANSWER USING THE PARAGRAPH.

1 .Underline the topic sentence of the paragraph.

2. How many supporting sentences does the paragraph have ?

III.

VOCABULARY

Fill in the blanks with the appropriate word:

1. Putting an end to adult……………….. is another priority for developing countries.

2. University………………find difficulties to find a job nowadays.

3. Children have a lot of ……………….. in their first few years.

4. The doctor gave me a……………………. for antibiotics.

Match

1. Global warming	a. The people who live after us.
2. Natural disaster	b. An event such as an earthquake, flood or hurricane which causes widespread damage or loss of life
3. Future generations	c. The increasing temperature of the world brought about by gases such as carbon dioxide.

………………………………………………………………………………………

3. Double-underline the concluding sentence in the paragraph.

4. Give 4 transition words or expressions used in the paragraph.
…………………….…………………… ………………….……………….. …………
5. Find 2 words that are misspelled in the paragraph and give their correct form :

Misspelled word :   Correct form :
………………..………………..   ……………….……………→   →   1   →...…
; 2   …..   ; 3   ……
…………………………...   ………………..……………….

6. Find and circle any words that should be capitalized in the paragraph.

7. Punctuate the following appropriately:

Last year we visited Italy Germany and England Wow We had great times

IV. COMMUNICATION

COMPLETE THIS CHART WITH THE APPROPRIATE NUMBER FROM THE LIST.

1	**In my view, facebook is a**
2	**waste of time.**
3	

a	1	Giving opinion
b	....	Expressing feelings
c	....	Expressing possibility /probability
d	....	Giving advice
e	....	Expressing a wish
f	....	Apologizing to someone
g	....	Complaining about something
h	....	Expressing disagreement
i	....	Expressing probability / possibility
j	....	Making a suggestion
k	....	Expressing hope
l	....	Asking for advice
m	....	Talking about attitude
n	....	Making a promise
o	....	Seeking opinion

4	**What can I do about this toothache ?** **I'm so sorry I forgot about your DVDs.** **I wish I had one of those cars.**
5	**Sir, do you know where the bank is ?**
6	
7	**I think you're totally right.**
8	**You'd better visit a dentist immediately.**
9	
10	**I feel sick today. I can't go to work.**
11	
12	**I'll take you to the zoo if you behave.**
13	
	Excuse me, but this pizza is too salty ! **Let's watch an action movie instead.** **I hope our son passes the test this time.** **Take this money. You may need it there.**
14	**He looks angry all the time.**
15	**That's not right. Just think about it.**

V. GRAMMAR

A. FIND THE PARTS OF SPEECH GIVEN BELLOW IN THESE SENTENCES.

Kamal drives expensive cars. He lives happily in a fancy house.

Verb: …………………   Preposition: ……………
Noun: ………………...   Article: …………………
Adjective: ……………   Pronoun : ………………
Noun : ………………..   Adverb : ………………..

B. Put the verbs into the correct form.

a- When I phoned my friends, they (play)…………….……..…. monopoly.

b- The kids (play)……………………… In the garden when it suddenly began to rain .

c- I tried to tell them the truth but they (listen/not)………………………….

C. Rewrite the sentences into the passive form.

a- English…………………………………..(speak) all over the world. (Present tense)

b- This quarrel…………................... (forget) in a few years' time. (Future tense)

c- My pencil case……………………………………….(steal). (Present perfect)

D. Fill in the gaps using the appropriate relative pronoun.   (Who/whose/ where/whom)

 a- I talked to the girl ………………. Car had broken down in front of the shop.

b- The boy,……………..is wearing a red hoodie, forgot his umbrella .

c- The airport is…..........you can find a lot of airplanes.

E. Complete the conditional sentences (Type I), by putting the verbs between brackets in the correct form.

a- If she ……………….. (invite) me, I ………………. (go) to her party.

b- If it …………………. (rain), we ……………………… (cancel) the match.

F. Complete the conditional sentences (type II), by putting the verbs between brackets in the correct form.

a- If I……………..(have)enough money, I…………….(buy) her a car.

b- I…………………..(fly) in the sky If I…………….(be) a bird.

c- If I………………..(be/not) a doctor, I……………(be) a teacher.

Appendix 4: Post-Test

[1.] **Ramadan** is the ninth month of the Islamic calendar. **It** is the Islamic month of fasting, in which participating Muslims refrain from eating, drinking from dawn until sunset. Ramadan had been the name of the ninth month in Arabian culture long before the arrival of Islam. In the Qur'an it is said that "fasting has been written down (as obligatory) upon you, as it was upon those before you" which is a reference to the Jewish practice of fasting on Yom Kippur. Fasting is meant to teach the Muslim patience, modesty and spirituality.

[2.] Ramadan is a time for Muslims to fast for the sake of God and to offer more prayer than usual. During Ramadan, **they** ask forgiveness for past sins, pray for guidance and help in refraining from everyday evils, and try to purify themselves through self-restraint and good deeds.

I. Comprehension: (5 pts)

A. Are these sentences true or false? Justify (2pts)

1) Ramadan was introduced after Islam had appeared.

[3.] As compared to the solar calendar, the dates of Ramadan vary, moving backwards about ten days each year as it is a moving holiday depending on the moon. Ramadan was the month in which the first verses of the Qur'an were said to be revealed to the Islamic Prophet Muhammad. That was during a night that Muslims call *Laylat al-Qadr* (the

……………………………………………………………………………………………………

2) Ramadan comes on a fixed date every year.

....

B. Answer these sentences from the text: (2 pts)

1) Why do Muslims fast?

……………………………………………………………………………………………………

……………………………………………………………………………………………………

2) What personal qualities does Ramadan teach us?

……………………………………………………………………………………………………

……………………………………………………………………………………………………

C. What do the underlined words in the text refer to?(1pt)

1. It:………………………………………… [p1]

2. They :………………………………….. [p2]

II. LANGUAGE (10 POINTS)

A. GIVE THE CORRECT FORM OF THE WORDS BETWEEN BRACKETS. (1 pt)

1. Talented people are often (ambition) . . . . and creative.

2. Some parents show a lot of (tolerant) . . . . towards their kids' behaviour.

B. REWRITE THE SENTENCES BEGINNING WITH THE WORDS GIVEN. (3 pts)

1.An earthquake destroyed a city in New Zealand in February 2011.

A city in New Zealand . . . .

2.“Will the students take part in the sports competition, Mrs Brown?”

The headmaster asked Mrs Brown . . . .

3.“I didn't accept Jamal's marriage proposal,” Leila said with regret.

Leila wishes . . . .

C. PUT THE VERBS BETWEEN BRACKETS IN THE CORRECT TENSE. (2 pts)

1. “It's the best novel I (read /ever) . . . . !” Antonio told the teacher.

2. By this time next week, Younes (join) . . . . the summer camp in Ifrane.

D. FILL IN THE BLANKS WITH THE APPROPRIATE WORDS FROM THE LIST. (1 pt)

when - whom - who - which - where

1. He wants to know . . . . country will organise the next Olympic Games .

2. The young man . . . . is next to me in the picture is my neighbour.

E. FILL IN EACH BLANK WITH THE APPROPRIATE PHRASAL VERB. (1 pt)

1. Our teachers intend to . . . . a new English club.

make up - put on - set up

2. I really don't . . . . him on this point.

   turn down - agree with - look after

F. MATCH EACH EXPRESSION WITH ITS APPROPRIATE FUNCTION. (2pts)

EXPRESSIONS	FUNCTIONS
1. "Why don't you join our sport team?" Tom asked his classmate.	a. apologising
2. "Could you make a photocopy for me, please?" Lina asked.	b. cause and effect
3. "I'm sorry, I've given you the wrong change," the shop assistant said.	c. requesting
4. She didn't train hard; as a result, she lost the tennis tournament.	d. suggesting

   1. → . . . . 2 .→ . . . . 3 .→ . . . . 4 .→ . . . .

III. WRITING (5 POINTS)

An English friend of yours has decided to live in Morocco, and he/she needs your help to choose a city or town. Write an email to your friend to explain why the city or town you suggest is good for him/her to live in. (Approximately 200 words)

The following cues may help you:

- name of the city/town - geographical location (north/south/east/west - near the sea/mountains, etc…)

- weather - people - customs - historical monuments - interesting places - economy, etc …

- facilities (hospitals – libraries – shopping centers - schools - transport ,etc...)

Dear friend,

………
………
………
………
………
………
………
………
………
………
………
………………………………………………………………………………

Appendix 5: Google forms

Google Forms is a web-based application used to produce shapes to collect information. There was a mistake. Typically, data collected with the type will be saved in a tablet. Although other internet study applications are available, Google Forms is an outstanding free choice. Use Google forms to create polls, surveys, quizzes and records of events.

Appendix 6:

Written consent sample:

< Name of institution >

Research project informed consent

Title of project: Students' Perceptions of group work during the Pandemic

<Your name> of <name of your institution>

On the above topic.

The aims of the research are to explore my students' responses to group work during the pandemic. The current research aims to investigate the effect of diagnostic tests on students' motivation and learning.

If you agree about the participation of your daughter/son in this study, s/he will be asked to complete a written survey that gathers information about her/his attitudes toward group work. She/his participation in this research is voluntary as s/he can withdraw at any time. S/he does not have to give a reason for withdrawing from the research, and there will be no negative consequences for doing so. When I report on the research, I will ensure that your daughter/son is not identified. No reference to personal names will be used. Three teachers will have access to the data collected for the project. Any data I use in reports or publications will be for illustration only.

Participant consent

I agree to participate in this research.

Signed:

Date:

The ethical aspects of this study have been approved by the <name of institution>. If you have any complaints or reservations about any ethical aspect of your participation in this research, don't hesitate to contact me at <Email>. Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome

Name of researcher:

Date:

The consent form translated into Arabic:

نموذج الموافقة لمشاركة الطلاب في استبيان

عنوان الدراسة: "استكشاف الاستخدام الفعال للاختبارات التشخيصية في فصول اللغة الإنجليزية في المرحلة الثانوية لدعم التعلم والتحفيز الطلابي: دراسة بحثية تطبيقية. ثانوية أيت بوگماز التأهيلية كدراسة حالة"

الباحث: [اسم الباحث]

مقدمة:

نحن نطلب منك المشاركة في دراسة بحثية تهدف إلى استكشاف الاستخدام الفعال للاختبارات التشخيصية في فصول اللغة الإنجليزية في المرحلة الثانوية لدعم التعلم والتحفيز الطلابي. الغرض من هذا البحث هو التحقق من تأثير استخدام الاختبارات التشخيصية على التعلم والتحفيز الطلابي في فصول اللغة الإنجليزية في المرحلة الثانوية، ووضع توصيات للمعلمين لتحسين ممارساتهم التعليمية. باعتبارك طالبا في إعدادية أيت بوگماز، تم اختيارك كمشارك محتمل في هذه الدراسة.

الإجراءات:

كمشارك في هذه الدراسة، سيُطلب منك إكمال استبيان. سيطلب منك الاستبيان الإجابة عن أسئلة حول تجاربك مع الاختبارات التشخيصية في فصول اللغة الإنجليزية في المرحلة الثانوية، وكيفية إدراكك لفائدتها في دعم تعلمك وتحفيزك. سيستغرق إكمال الاستبيان حوالي 20 دقيقة.

المخاطر والفوائد:

لا توجد مخاطر معروفة مرتبطة بالمشاركة في هذه الدراسة. ومع ذلك، قد تستفيد من الأفكار المستمدة من هذا البحث، والتي قد تحسن تعلمك وتحفيزك في فصول اللغة الإنجليزية في المرحلة الثانوية.

سرية المعلومات:

سيتم الحفاظ على جميع المعلومات المجمعة في هذه الدراسة سرية. ستكون إجاباتك مجهولة، ولن يتم جمع أي معلومات تحدد هويتك. ستحفظ مشاركتك في هذه الدراسة سرية، ولن يتم ربط اسمك بأي بيانات تم جمعها.

المشاركة الطوعية:

المشاركة في هذه الدراسة طوعية. أنت حر في رفض المشاركة أو سحب مشاركتك في الدراسة في أي وقت دون أي عقوبات أو فقدان الفوائد التي تستحقها. رفض المشاركة أو سحب المشاركة في الدراسة لن يؤثر على علاقتك مع الباحث أو مع ثانوية أيت بوگماز التأهيلية.

الموافقة:

من خلال التوقيع أدناه، فإنك تقر بأنك قرأت وفهمت المعلومات المقدمة أعلاه، وتوافق بشكل طوعي على المشاركة في هذه الدراسة. كما تعطي الباحث إذنًا لاستخدام المعلومات التي تقدمها في الدراسة.

توقيع المشارك: _____

التاريخ: _____

توقيع ولي الأمر/القائم بوظيفته (إذا كان المشارك أقل من 18 عامًا): _____

التاريخ: _____

The consent form was translated by an AI language model. We used an AI language model that is capable of translating text from one language to another, and it provided you with the translated version of the consent form in Arabic. The AI language model is trained by OpenAI and is designed to provide accurate and reliable translations . There was a human intervention in this translation to correct some minor translation mistakes.