



# **The Effect of a Differentiated Instruction- Based Program on Developing Oral Reading Fluency and Reading Comprehension of Preparatory School Students**

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# أثر برنامج قائم على التدريس المتميز في تنمية مهارات الطلاقة القرائية والفهم القرائي لدى تلاميذ المرحلة الإعدادية في مادة اللغة الإنجليزي

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## مستخلص الدراسة:

هدفت الدراسة الحالية إلى التعرف على أثر برنامج قائم على مدخل التدريس المتميز Differentiated Instruction في تطوير مهارات القراءة الجهرية والفهم والقرائي لدى طلاب المرحلة الإعدادية . واستخدمت الدراسة تصميم البحوث شبه التجريبية مع مجموعتين تجريبية وضابطة. تم تدريس المجموعة التجريبية باستخدام البرنامج المقترح القائم على التدريس المتميز وتم تدريس المجموعة الضابطة بطريقة التدريس التقليدية. واستهدفت الدراسة مهارات القراءة الشفوية والتي تشمل الدقة والسرعة والتعبير ، كما استهدفت أيضا مهارات الفهم القرائي مثل مهارات الفهم الحرفي literal والفهم الاستنتاجي inferential . وتكونت عينة الدراسة من (68) طالبة من طالبات الصف الثاني الإعدادي من مدرستين بمحافظة القاهرة. وتم تطبيق البرنامج المقترح خلال الفصل الدراسي الأول من العام الدراسي ٢٠١٨-٢٠١٩ واستمر لمدة شهرين. وخلال البرنامج تم توظيف المبادئ الثلاثة الرئيسية للتدريس المتميز والتي تشمل المجموعات المرنة و الأنشطة المتدرجة والتقييم المستمر. وتشير نتائج الاختبار البعدي إلى وجود فروق ذات دلالة إحصائية بين متوسطات درجات المجموعتين التجريبية والضابطة لصالح المجموعة التجريبية مما يدل على فعالية التدريس المتميز في تنمية مهارات القراءة الشفوية والفهم القرائي لدى طلاب المرحلة الإعدادية.

**الكلمات المفتاحية:** التدريس المتميز، القراءة الجهرية، الفهم القرائي



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# The Effect of a Differentiated Instruction-Based Program on Developing Oral Reading Fluency and Reading Comprehension of Preparatory School Students

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## Summary

### Introduction

Reading is an independent activity that students can do in their own time and outside of the classroom which fosters independent learning. There are several reasons that give some privilege to reading. Reading is essential to achieve academic success in universities. It is also a useful source of information and can speed up foreign language learning and improve other skills, such as writing, vocabulary, and spelling. Moreover, academic success, personal independence, and secure employment depend on the fundamental skill of reading. Welfare of society is connected to improvement of reading skills. Thus, reading is the foundation for learning and academic achievement (Hussein, 2007; Calhoon, 2005; Marzano, 2003 and Paris, 2005).

Fluency in reading is based on the theory of automaticity. This theory involves two steps in reading: decoding and comprehension. Decoding is turning the written word into its spoken and known equivalent. Comprehension is the construction of meaning (Nation, 2008). When a reader uses too much of his/ her cognitive resources to decoding, no enough cognitive resources will be available to understand and make sense of what is read (Rasinski and Hoffman, 2003). Roberts (2011) asserted this idea that too much time and energy spent decoding text leaves little time and energy for constructing meaning.

## **1. Background and related studies**

A review of Egyptian Literature on reading reveals that there are some problematic areas in reading instruction. Many studies assured the need to implement better teaching strategies to improve reading skills. For example, Shadi (2015) affirmed that secondary students lack the following reading skills: identifying the main idea, getting meaning of new words from context, determining tone and purpose of the author. Abdel-Kawy (2012) added that students who learn English encounter some obstacles; they may read slowly, they use word for word reading strategy to understand a text, and they don't possess decoding skills for unfamiliar words. Kabesh (2010) asserted that teaching reading in Egyptian classrooms is very teacher-centered. The teachers may read aloud and students passively listen. The teachers ask individuals to read selected paragraphs and others listen. She also highlighted that students lack mastery of necessary reading comprehension skills.

Hegazy (2012) related the poor reading performance to the reason that oral reading is less practiced and often neglected

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in classroom. She also highlighted that the main purpose of most studies in Egypt that dealt with reading skill was to develop students' reading comprehension skills ignoring how students read. This could be due to reasons such as lack of appropriate reading climate, insufficient time devoted to reading, lack of exposure to fluent models, lack of seeing real life connection, low competence of teachers in terms of oral reading skills, no specific techniques or activities adopted by most teachers. In addition to frustration caused by teachers as they do not give students enough and equal opportunities to read aloud topics they choose.

As Hegazy (2012) highlighted the need for equal and enough opportunities to read aloud topics learners choose in order to increase motivation and interest in reading. She also called for more new strategies and techniques to develop oral reading fluency and comprehension that address learners' needs and interests. Because of the differences among learners and that pupils of one class differ in learning rates, readiness, attitudes toward learning ( Kadum-Bosnjak, 2010), learners need to be taught in various ways and the strategies and techniques provided for learners need to be graded, leveled, or differentiated to meet students different interests, abilities, readiness, and preferred ways of learning.

Due to the increasing diversity and heterogeneity of students in the one classroom, Mulryan-Kyne (2007) asserted that this heterogeneity requires preparation by teachers for teaching mixed-ability classrooms. Bender (2012) asserted that the diverse learning characteristics of today classrooms makes it necessary to implement a wide variety of activities in the classrooms. Tomlinson (2003) proposed a teaching philosophy that has not been deeply researched to achieve multi-grade teaching and addresses diversity. This philosophy is called

differentiated instruction (DI), or pedagogically known as ***Differentiation***. Tomlinson (2000) added that differentiated instruction provides an essential basis for teachers to bring about success opportunities for all students.

Tomlinson and Dockterman (2002) explained that Instruction can be differentiated based on four student traits: *readiness*, a student's knowledge, understanding, and skill; *interest*, topics that evoke a student's curiosity; *learning profile*, how a student learns best; and *affect*, the way students feel about themselves. As teachers consider these traits when planning, they must also consider the four classroom elements they can modify: *content*, what teachers teach; *process*, how students comprehend information; *product*, assessments of what a student knows; and *learning environment*, the tone of the classroom.

## **2.Context of the problem**

The problems of the students' oral reading has been documented by many studies conducted by Shadi (2015), Hamdan(2012), Hegazy(2012), Abdel-Kawy (2012), Kabesh (2010), Ibrahim (2007), and El-Enany(2000). They pointed that:

- Teachers read aloud and students listen passively.
- Preparatory students are poor readers.
- Students read slowly and they do not possess decoding skills.
- There is a need for enough opportunities to read aloud topics learners choose in order to increase motivation and interest in reading topics.



- More new strategies and techniques are needed to develop oral reading fluency and comprehension that address learners' needs and interests are required.

### **3. Statement of the problem**

The present study sought to find an answer to the following main question:

*What's the effectiveness of a differentiated instruction-based program on developing oral reading fluency and reading comprehension skills of second preparatory school students?*

To answer this main question, the following sub-questions were also tackled:

1. What is the current level of the second preparatory students' oral reading and reading comprehension?
2. What are the features of the proposed differentiated instruction program?
3. What is the effectiveness of the proposed program on developing oral reading skills of second preparatory students?
4. What is the effectiveness of the proposed program on developing reading comprehension skills of second preparatory students?

### **4. Importance of the study**

The present study may help:

1. Preparatory school teachers address the diversity in the classroom by adopting differentiated reading strategies in their instruction.

2. Preparatory school teachers improve oral reading skills of students and turn them from ‘word callers’ to ‘fluent readers’.
3. Designers of English language curricula at the preparatory stage by providing them with the procedures of differentiated instruction that can be used for developing differentiated content for EFL oral reading skills required for first-year preparatory stage students.

## **6. Definitions of Terms:**

### *Differentiated Instruction*

Differentiated instruction in this study means providing instructional strategies that are adjusted to respond to the different second preparatory students’ readiness, interests and learning profiles. This adjustment is made in the content, process or product and is based on flexible grouping, on-going assessment and respectful tasks.

### *Oral Reading fluency*

Oral reading fluency in the present study means how second preparatory school students can read pre-selected grade level texts fluently with fewer mistakes in accuracy and with appropriate rate and expression.

### *Reading Comprehension*

Reading comprehension in this study means how second preparatory school students can read pre-selected grade level texts fluently in a way that reflects their literal and inferential understanding of the text.

## 7. Method

The current study utilized the quasi-experimental control group design in which two intact classes were randomly assigned to either experimental or control group. It compared the test scores of the students who experienced differentiated instruction program (experimental) with the students who received traditional whole group instruction (control). The quasi-experimental design was used because it is not feasible to randomly assign sample of the study.

Participants of the current study were (N: 68) students. Randomly, two intact classes were assigned from two preparatory schools for girls. The schools are public schools located in Ain Shams in Cairo governorate. The experimental group was chosen from El Na'am Preparatory School for girls and the control group was chosen from Mohamed Abdu Preparatory School for girls. All participants have almost the same socio-economic backgrounds and started learning English formally at primary stage. The two schools are for girls in order not to allow the gender factor to affect the results of the study. Two schools for the two groups were chosen (not one) in order to reduce the contact between the experimental and control groups. El Na'am School was selected for the experiment because the teachers as well as administration have shown respectful welcome to improve the reading level of their pupils. Moreover, the school is located in the same area where the researcher lives; which made it easier and quicker to contact the school and students frequently.

The current study used the following main instruments:

- Oral reading fluency skills checklist
- Reading comprehension skills checklist
- Pre-post oral reading and reading comprehension test

## **8. The proposed differentiated instruction Program**

The DI program aimed at developing the oral reading fluency and reading comprehension skills of second prep EFL students through differentiated instruction strategies. The oral reading fluency skills fell into three categories (accuracy, rate, and expression). The reading comprehension skills included literal and inferential comprehension.

By the end of the program, students were expected to develop the following reading sub-skills:

- Reading without omitting words
- Reading without substitution
- varying speed of reading
- Reading with few slowdowns, stops, or long pauses
- Reading without hesitation
- Reading with correct pronunciation

Both formative and summative assessments were conducted in the program. Formative assessment took the form of record sheets and progress graphs to highlight oral reading rate and accuracy performance for students. The purpose was to provide the researcher with feedback on the gradual progress of oral reading fluency and reading comprehension skills at the end of each lesson. The evaluation was conducted by the researcher and an experienced EFL teacher. Thus, students received scores through their record sheets and progress graphs which highlighted their rate and accuracy in oral reading. The sheets for recording progress were based on the oral reading fluency skill pre-identified as critical for students of preparatory school.

## 9. Results

The analysis of the pre-test results indicated that there were no significant differences between the experimental and control groups in overall oral reading fluency and comprehension skills. Moreover, the post-test results revealed that the differentiated instruction proposed program proved to be effective in developing the experimental group students' oral reading fluency and comprehension skills. Considering that both the experimental and the control groups were nearly at the same level in oral reading fluency and comprehension on the pretest, any change that occurred between the two groups after applying the program was attributed to it. Based on the results of the post-test of the current study, the researcher could safely say that the program implemented was effective and accounted for:

- The significant differences between the experimental and control groups' mean scores on the posttest in the overall oral reading fluency and comprehension favoring the experimental group.
- The significant differences between the mean scores attained by the experimental group before and after the treatment in the overall reading fluency and comprehension favouring the posttest.

Analyzing the improvement of the experimental group's oral reading fluency and reading comprehension pre-post test showed that there was an increase in the scores of the accuracy and rate from 8 to 11, in the prosody from 9.3 to 13.7, and in the overall oral reading skills from 17 to 24.5. There was also an increase in the scores of the literal skills from 2.4 to 2.8, in the inferential skills from 5.8 to 13.4, and in the overall reading

comprehension skills from 8.2 to 16.2. The increase in the overall oral reading fluency skills and reading comprehension skills was from 25.5 to 40.8.

Accordingly, it can be said that after the implementation of the proposed program based on differentiated instruction, the experimental group students revealed perceptible progress in overall oral reading fluency ( accuracy, rate, and prosody) and comprehension (literal and inferential).

## **10. Conclusion**

Derived from the results of the current study were the following conclusions:

- Differentiated instruction is a way to meet the needs of diverse learners and maximizing students' growth especially low readers.
- Applying differentiated instruction resulted in higher reading comprehension scores in secondary school students
- Introducing the program and each lesson explicitly and defining the objectives and key terms of oral reading fluency (including accuracy, rate, and prosody) is effective in helping students formulate a good background of what they are going to do and its benefits in addition to improving their reading accuracy .
- Designing differentiated instruction lessons that started with pre-assessment and KUD helped identify the readiness levels as well as the key elements and understandings that students need to master.

- Differentiated instruction allows teachers to group and regroup students to maximize learning and allow students to focus on essential skills and understandings at different levels of complexity.
- Repeated reading is effective in enhancing oral reading fluency of the students.
- Reading comprehension strategies including identifying the main ideas, guessing the meaning of unfamiliar words proved to be effective in enhancing the students' reading comprehension skills and their motivation and involvement.
- Adapting flexible grouping as a main principle of differentiated instruction allows teachers to understand the students on an intimate level and tap their prior knowledge with each reading lesson. Students learn through interaction with peers. Students have the ability to converse within their small groups providing them opportunities of social interaction with both teacher and their peers.
- Providing differentiated instructional strategies could be a viable means of closing the gap between struggling and more capable readers.

## 11. Recommendations

The findings of the present study are thought to be of pertinent to various stakeholders:

- English language teachers may need to reconsider using traditional reading instruction and

employing only one outdated method (round robin reading) and shift from one-size-fits all to responding to the needs of all students.

- Teachers also need to consider their students' interests, readiness levels, and learning profiles and choose the strategies that are best attending to these aspects.
- It is recommended that teachers adopt a flexible grouping principle when applying DI. Flexible grouping allows learning in the classroom to remain flexible as students' cognitive growth and needs change
- It is recommended that teachers adopt ongoing assessment principle when teaching and they need to be aware of measuring and monitoring oral reading fluency techniques and teach these techniques to the students.
- Supervisors may need to advocate differentiated instruction in their professional development workshops so that teachers become aware of its principles and application.
- Preparatory school students might need to participate in different oral reading practices.
- They might also need to learn how to record and listen to their oral reading and how to chart their progress.



## 12. Suggestions for further research

Future studies may consider:

- Reexamining the effect of differentiated instruction on developing oral reading fluency and comprehension for primary and secondary school students.
- Investigating the effect of differentiated instruction on developing other EFL skills including listening, speaking and writing.
- Examining the effectiveness of specific differentiated instruction strategies for particular population
- Investigating the effectiveness of other strategies that are more student-centered in improving oral reading fluency and comprehension.
- Investigating the effectiveness of training program based on differentiated instruction in developing EFL in-service teachers' performance.
- Investigating the effect of differentiated instruction on developing oral reading fluency and comprehension of struggling readers.
- This study might be enlarged to include larger sample with multiple schools and different districts which will provide broader sense of the effectiveness of applying differentiated instruction.
- Further studies are needed to investigate teachers' attitudes towards applying differentiated instruction in

classrooms and how DI could affect student achievement.

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