
Evidence Based Learning for Developing Reading Fluency and Historical Understanding Skills of History Section Students Faculty of Education, Helwan University

Dr .Manal Farouk Mohammed
Assistant professor of Curriculum and
EFL Instruction Faculty of Education,
Helwan of University

Dr .Heba Abdallah Ramadan
Lecturer of Curriculum and
Instruction, History section Faculty of
Education, Helwan of University

Abstract

understanding skills for History section students , faculty of education, Helwan university through using evidence based learning . The participants of the study were 60 students. They were divided into two groups (the experimental group and the control group) . The study employed a reading fluency skills test and historical understanding skills test . The necessary reading fluency skills and historical understanding skills were determined through two checklists approved by a jury of specialists in teaching EFL and History . During the experiment, the experimental group received instruction through using evidence based learning while the control group received regular instruction . The experiment lasted for three months. The analytical descriptive method and the quasi experimental design were used. The statistical analysis of the obtained data from the pre and post administrations of the two tests revealed the effect of using evidence based learning on developing the required reading fluency and historical understanding skills for History section students , faculty of education, Helwan university through using evidence based learning . Using evidence based learning had a large effect size on developing the required reading fluency and historical understanding skills for the participants .Based on the obtained results, it was recommended developing required reading fluency and historical understanding skills through evidence based learning .In addition, using evidence based learning for improving linguistic performance was also suggested.

Keywords: evidence based learning, reading fluency and historical understanding

Introduction

Preparing the qualified History teachers is the target goal of teacher preparation programme of History . It should meet the new and career ready standards for student 's learning efficiency in everyday in every classroom. So, the preparation programme provides them with a thorough knowledge of History to deepen understanding of historical events throughout different ages that shaped the world .They gain a fuller understanding of policy ,philosophical and contemporary social issues in addition to a foundation of knowledge about pedagogy.

The preparation programme offers a sequence of courses in the History . They are organized by grade level for four years . They vary from ancient to modern day History and from local to global . There is a focus on Modern Asia History, Islamic East, Europe Civilization in the Middle Ages , Egypt in Roman and Greek Ages , Ancient Middle East History Features and Historical Texts in Europe language (English)(Kelly,2019).

Through historical texts in English, students acquire information while reading and interpreting historical texts. They examine various readings of historical texts. They are aware of historical contexts and conventions into their own reading of the historical texts .They make sense of the texts and reflect critically on their own expectations . Thus, this course has a double aim as it seeks to develop students' reading and understanding of the historical texts in English (Kiella.& Stavanger 2021) .

Reading and comprehending historical texts require students to have the following skills

- 1-identifying the main question that answered by the historical narratives
- 2-reading the historical explanation or analysis with meaning
- 3-recognizing the rhetorical cues that signal how the author organized the text
- 4-defining the purpose ,perspective and point of view from which the narrative

has been constructed (University of California. 2022).

The following will be dealt with the two skills in particular and the importance , the components, sub skills and how to teach them in details.

Firstly. reading historical texts makes students think about history in board sense.Through reading, they recognize how historical themes are interconnected. They are connected with the people, society and situation that produced a particular document . They are engaged imaginatively in exploring the wider meaning .They link between what they read and what they knew from their prior knowledge .They know more about characters that formed the history of nation.They also see ideas illustrated with a wealth of main details and couched in a compelling narrative (Standange 2006).

In other word, History teachers thought that teaching reading skills through using historical text is the responsibility of teachers of language arts . History teachers should deliver content and provide context for the historical texts that students discuss, elaborate and interpret. But ,they are not knowledgeable about reading techniques used in teaching reading in English classroom .They are not able to apply them in teaching history(Wineburg,2012).

Hogan(2017) stated that there are three kinds of reading can be developed while reading historical texts

- 1- Basic or surface reading: Students skim over the document and get a general idea about the topic.
- 2- Close or deep reading :Students skim the document quickly to get the general idea . They again read the text carefully and analyse the writer's point of views.
- 3- Critical reading : Students read more deeply as they not only focus on the writer's idea but also on the context of the text.

Recently, due attention is paid to develop other kinds of reading through historical texts such as reading fluency (Gardener 2021) . But, there are few studies that seek to achieve this goal . This stimulates the researchers to try to develop reading fluency for

History students section in the faculty of education Helwan university while reading historical texts.

Abadanio and Furner (2005) stated that developing reading fluency is the critical aspect of learning to read .It plays a vital role in developing effective and efficient readers. It is the bridge between decoding and comprehension and one of the most reliable indicators of students 'ability to comprehend a text. Through it, students can read smoothly without spending time to sound out words . They can use context clues to figure out unknown words . In addition, they are able to understand what they read and pay attention to the details in a book.

Reading fluency is important as Jensen (2015)mentioned for the following reasons :

- 1-being a good estimate of students 'reading proficiency,
- 2-predicting success of students' reading comprehension,
- 3-detecting students that are not reading at grade level,
- 4-allowing teachers to place students in appropriate instructional settings.

Duke, Alessandra and Ward, (2012) and Rasinski and Nageldinger (2016) stated that there are three components of reading fluency as follows:

1-Automaticity: It involves rapid word reading without conscious decoding. It

needs careful balance in developing both oral and silent reading .

2- Accuracy : It deals with reading words accurately and typically measured as a

percentage. It is related to automaticity.

3-Prosody : It includes expressive and phrased reading .It links comprehension

With the way of reading a loud .It not only reflects some levels of comprehension .It also supports deeper understanding.

Fuchs, , Fuchs, Hosp and Jenkins (2001) and Smuel (2002) stated that reading fluency represents an extremely complex process as the reader has to

- 1- integrate perceptual skills to automatically translate the letters to sounds that can be represented.

- 2- posses and develop lexical skills : It deals with using sound components into recognizable wholes and processing skills to identify meaningful connections in and between sentences and relating text information with prior knowledge.
- 3- pay attention to meaning and comprehend the text instead the focus only on decoding the words automatically.

According to Rasinski David and Nageldinger (2015) reading fluency is a neglected skill due to many reasons . Firstly, the National reading panel report 2000 indicated that the aim of reading instruction is based on silent reading comprehension . Fluency is usually related to oral reading and has been viewed as irrelevant. Secondly , fluency is associated with fast reading as one aspect of fluency is automaticity in word recognition . It is measured in terms of reading speed or rate. It is ironic as the idea of fast and accurate word retrieval is based on allowing the reader to focus his/her attention on comprehension .Thirdly, fluency is competency that is mastered early in a student's reading development. It is difficult to begin mastering fluency in advanced levels with complex and challenging texts.

From what has been displayed, it is clear that developing reading fluency is important as one of the main aims of teaching reading historical texts in English .As for the second aim which is the second aim of teaching developing the historical understanding , it will be dealt in the following.

Tambyah (2017) stated that acquiring historical understanding skills should start in the early years of childhood and begin to studying different skills .It can be done through capturing children imagination and creativity. They should be provided with an important foundation for continuing historical study. As for the middle grades and high school years, students should develop the skills required for comprehending historical events .They should analyze relationships among different forces while reading historical

texts. So, historical understanding should be considered as an important dimension in history curriculum.

There are many aspects of historical understanding

1-Making connections with the visual and auditory content : When students can

relate images with what they already learned and the information they knew before.

2-Making knowledge of one topic to shape another : They use the knowledge they

possess in understanding new points.

3-Discussing forms of historical knowledge in relation to each other : They can

connect between substantive knowledge ,historical content and procedural knowledge

4-Connecting with the wider historical picture : There are two ways used to

stimulate students to think of expanding the topic

a-using pictures

b-concept maps used to make link between the ideas or concepts with the main concept

5-Constructing meaning using various language strategies : Students can use

different strategies to develop historical understanding eg explaining,

inferring, asking questions, identifying and commenting about events and

discussion. They were most evident when discussing matters in class as

a group (Cutajar,2020).

Shortly, developing reading fluency and historical understanding skills through using historical texts is important .Searching for different techniques or strategies used to develop these skills is a

challenge as few studies were found. So, the present study uses evidence based learning in a trial of developing them.

Before discussing the evidence based learning with its importance and steps , it is important to give a hint on evidence based approach . Coe and Kime (2019) identified the main characteristics of evidence based approach in the following :

- 1- Understanding the evidence : Students should know more about meta cognition and realize its aspects.
- 2- Testing the why: The audience is asked to say which one of the interventions would have impact on students' learning.
- 3- Being critical: Individual does not accept what seems obvious or believed. S/he seeks making sure of the appropriate evidence.
- 4- Prioritizing evaluation : It is the main side of evidence based learning. The more willing to compromise on evaluation, the less evidence used.
- 5- Formative monitoring :It is more difficult than summative .It has real benefits in improving the outcomes.

6-Understanding methodology: To make sure of evidence, it is important to

judge its quality ,to understand the strengths and weaknesses of different

methodologies and how they can affect the claims.

Groccia and Buskist (2012) identified the seven principles of evidence based learning

- 1-prior knowledge affects current and future learning.
- 2-organizing knowledge affects how students learn and apply what they know.
- 3-motivation can encourage and sustain learning.
- 4-mastery learning is developed by acquiring skills ,practicing and integrating Them.
- 5-goal directed practice with targeted feedback facilitates learning.
- 6-emotional.social and intellectual factors affect learning.
- 7-meta cognitive monitoring of learning enhances further learning

Evidence based learning is guided by the critical thinking .It involves specific steps to be carried out in a cyclical way as follows :

- 1-deciding on and defining the posed question
- 2-collecting and analyzing evidence ,the data, information and literature
- 3-elaboraing and designing initiatives (involving objectives and assessment indicators)
- 4-implementing and practicing the initiatives
- 5-assessing the outcomes of the initiatives against objectives and indicators
- 6-making decisions based on evidence involving outcome assessment and applying feedback to improve the process (Carter, 2019).

Therefore, the present study proposed using evidence based learning for developing the required reading fluency and historical understanding skills of the 4th year, History section students of the Faculty of Education, Helwan University.

Context of the Problem.

Being coordinator of teacher preparation programme of History section ,the second researcher was provided with opportunities to review all syllabuses of the programme . In addition, supervising student teachers of the 3rd and 4th years during teaching practice , it was found that 4th year students usually complained from the difficulty of the syllabus entitled historical texts by European language (English)taught to them in the second term .They practiced pronouncing some words in English and write comment on text. The syllabus contains articles that include many historical expressions and different historical events They neither understand the historical expressions in English nor read them accurately .They can not pronounce them correctly and understand its meaning in context. They read them slowly . So, the two researchers began to search for the aims of teaching this course

.They found that students should pronounce historical expressions correctly and understand their meanings . They should read sentences smoothly and do not stop while reading they should comprehend what they read. This leads them to be fluent in reading .Moreover, they should deduct historical events, connect between events and relate between the previous and new one . The researchers felt that they had great difficulty in reading articles fluently and understanding the historical events in English . To make sure of the existence of the problem she felt, the researcher did the following procedures

First : Interview

The researcher held informal interviews with the two staff members of Faculty of Arts , Helwan University who taught this syllabus . It aimed at identifying the following

- The reasons behind students' weakness in reading articles fluently and understanding historical events
- The methods and techniques used in teaching the historical texts by European language (English)

The results of the interview revealed that students were trained on translating words and reading expressions by asking them to repeat words . They were asked to write comment on the text . They were not trained on pronouncing words correctly and reading the articles fluently .They also were not trained on relating events or knowing the significance of the articles . Staff members used regular instruction .So, they had lack in pronouncing expressions accurately and reading fluently and understanding historical events.

Second : Administering a reading fluency test

The first researcher administered a reading fluency skills test to 30, 4th year , History students section , Faculty of Education, Helwan University. It included article and asked students some true or false questions after reading

Most of students (80 %) could not read the historical expressions, they read slowly. They usually stop to spell words .They could not understand the text ,so they did not answer questions correctly . The result revealed their weakness in most

reading fluency skills. So, there was a pressing need to develop them for those students.

Third : Administering historical understanding test

To be more sure, the second researcher of the present study administered a historical understanding skills test to 30, 4th year , History students section , Faculty of Education, Helwan University. It included an article. Students were asked why, what do they think , how do they know ,what is the relationship. Most of students (70 %) could not answer the questions and the rest answered the questions as writing comment . The researcher found that most of them lack of historical understanding skills.

So, having been sure of the existence of the problem , the two researchers conducted together this study in a trial of developing reading fluency and historical understanding skills for the 4th year , History students section , Faculty of Education, Helwan University .

Statement of the Problem

The problem of the present study was represented in the lack of the required reading fluency and historical understanding skills of the 4th year, History section students of the Faculty of Education, Helwan University. Thus, in a trial of overcoming this problem, the present study attempted to use evidence based learning for developing the required reading fluency and historical understanding skills for those students.

Questions of the Study

In order to tackle the above problem, the present study attempted to answer the following main question:

What is the effect of evidence based learning on developing the required reading fluency and historical understanding skills of the 4th year, History section students of the Faculty of Education, Helwan University?

From the main question, the following four sub- questions were derived:

1-What are the required reading fluency skills to be developed for the 4th year, History section students of the Faculty of Education, Helwan University ?

- 2-What are the required historical thinking skills to be developed for the 4th year, History section students of the Faculty of Education, Helwan University ?
- 3-What is the proposed framework of using evidence based learning for developing reading fluency and historical understanding skills of the 4th year, History section students of the Faculty of Education, Helwan University?
- 4-To what extent will the evidence based learning develop each reading fluency skill of the 4th fourth year, History section students of the Faculty of Education, Helwan University?
- 5-To what extent will the evidence based learning develop each historical understanding skill of the 4th fourth year, History section students of the Faculty of Education, Helwan University?

Hypotheses of the Study

The present study hypothesized that :

- 1-There is a statistically significant difference between the mean scores of the experimental and the control groups' students on the post administration of the reading fluency skills test, in favour of the experimental group.
- 2-There is a statistically significant difference between the mean scores of the experimental group students on the pre and post administrations of the reading fluency skills test , in favour of the post administration of the test.
- 3-Evidence based learning is effective in developing each reading fluency skill of the 4th fourth year, History section students of the Faculty of Education, Helwan University.
- 4-There is a statistically significant difference between the mean scores of the experimental and the control groups' students on the post administration of the historical understanding skills test, in favour of the experimental group.
- 5-There is a statistically significant difference between the mean scores of the experimental group students on the pre and post administrations of the historical understanding skills test , in favour of the post administration of the test

6-Evidence based learning is effective in developing each historical understanding skill of the 4th fourth year, History section students of the Faculty of Education, Helwan University

Aim of the study

The present study aimed at developing the required reading fluency and historical understanding skills of the 4th year, History section students of the Faculty of Education, Helwan University

Variables of the Study

The present study variables are as follows:

- 1-The independent variable : evidence based learning
- 2-The dependent variable : developing the required reading fluency and historical understanding skills of the 4th year, History section students of the Faculty of Education, Helwan University.

In the present study , the researchers measured the effect of the independent variable (evidence based learning) on the dependent variable (developing required reading fluency and historical understanding skills of the 4th year, History section students of the Faculty of Education, Helwan University).

Delimitations of the Study

The present study was confined to

- 1-The 4th year, History section students of the Faculty of Education, Helwan University.
- 2-Developing reading fluency and historical understanding skills for the 4th year, History section students of the Faculty of Education, Helwan University. (Appendix A & D)
- 4-The experiment lasted for three months , one section per a week. It started on 18th Feb , and continued to 19th May 1 ,during the second term of the academic year 2020-2021 at the Faculty of Education, Helwan University.

Significance of the Study

The significance of the present study lies in the fact that it attempted to develop the required reading fluency and historical events skills for the 4th year, History section students of the Faculty of Education, Helwan University. It is hoped that the results of the present study would contribute to:

1-Directing the attention to the importance of developing reading fluency and historical events skills for the 4th year, History section students of the Faculty of Education, Helwan University.

2-Providing empirical evidence on using evidence based learning in developing reading fluency and historical events skills for the 4th year, History section students of the Faculty of Education, Helwan University.

3-Presenting lists of the reading fluency skills and historical events skills for the 4th year, History section students of the Faculty of Education, Helwan University.

Definitions of terms

Reading fluency

Hasbrouck & Glaser (2012, p13) defined fluency as reasonably accurate reading at an appropriate rate with suitable expression, that leads to accurate and deep comprehension and motivation to read.

Mather and Wendling (2016, p151) defined reading fluency as encompassing accuracy , the speed ,rate of reading ,and the ability to read with expression and comprehension .They also indicated that some definitions focus more on decoding and speed ,whereas others emphasize the role of comprehension.

Reading fluency skills were defined in the present study as the abilities of expression &prosody (changing voice according to the statement and reading with varied volume and expression),smoothness (reading smoothly with some breaks and making self correction).accuracy(pronouncing words correctly and figuring out unfamiliar words),phrasing &automaticity(pausing appropriately and reading a text accurately) and comprehension (connecting words to guess the meaning and getting the meaning of the text).

Historical understanding skills

Historical understanding was defined by Kamarga and Jakarta (2000.p62)as what students show know about history (family ,society country and world).This is illustrated from the records ,(aspirations, efforts , treatments and failure)of human activities in social ,political , science , technology, economic and cultural aspects which align with students 'level of understanding of development learning historical understanding and historical thinking skills .

Historical understanding skills were defined as the ability to listen and read historical stories and narratives with understanding to identify the basic elements of the narrative or story structure (the characters ,situation, sequence of events and their outcome) and to the ability to describe the past through the eyes and experiences of those who were there as revealed through their literature ,art, artifacts and other records of their time(University of California,.2022.p34).

Historical understanding skills were defined in the present study as the participants ‘ abilities of predicting historical events from text ,presenting logical reasons for historical events, presenting logical reasons for historical events ,reformulating events With their own words, identifying causes of events using evidence to interpret events and reading creatively .

Evidence based learning

Pedaste and Sarapunt (2011,p 3) defined evidence based learning as it is designing and applying learning tasks .Through them , students investigate alternatives ,make experiments and presenting what is known in the light of evidence.

Minner and Century (2010, p496) defined evidence based learning as a processes of discovering cause –effect relationship. Through it students hypothesize hypothesis and verify them through their experiences and searching from resources .

Evidence based learning was defined in the present study as the process of engaging the 4th year, History section students of the Faculty of Education, Helwan University in (5A)steps. It begins with asking , then acquiring, appraising, applying and finally it ends with evaluating.

Review of literature

It is divided into three parts

Part 1 Reading fluency

The nature of reading fluency

Fluency is derived from the Latin word (fluens) which means to’’ flow ’.It is characterized by the following :

1-It is a constrained skill.

2-It is dependent on the development of other skills such as automaticity,

accuracy and prosody .

3-It should be explicitly taught.

4-It is essential for comprehension .

Over the last several years , the definition of reading fluency was connected with speed .Its traditional definition was that it is the ability of reading a text accurately at an appropriate rate and with prosody .it was based on the three components of reading fluency which are accuracy, rate and prosody .Nowadays , reading fluency is not seen as just speed .It does not involve only the three components. There is more essential element that needs to be added to reading fluency which is comprehension . So, the comprehensive definition of reading fluency is that it is the ability of reading accurately at an appropriate rate while demonstrating prosody and comprehension of the text (Melissai , 2020).

The components of reading fluency skills

Reading fluency involves three components (automaticity ,accuracy and prosody). Although all the three components play an important role for school achievement ,the first two ones (automaticity and accuracy) are most commonly used in education (Elhassan, Crewther, Bavin,, and Crewther2015).

Hiderbrand (2021)stated that educators thought the reading fluency is just reading fast but there are four components that create a valuable reading fluency experience as follows:

1-Speed : The rate or speed at which students read. It is the first part of reading fluency . Good reading fluency rate is one that promotes comprehension. Automaticity is considered part of speed .It is the ability to look at a word and know what it says without sounding it out.

2- Accuracy : There is a confusion between accuracy and fluency.It is said that fluency is the opposite of accuracy .Fluency is how fast students read the text and accuracy is how students read correctly

.But they are tied together as part of reading Fluency is how many words students read correctly.

3-Prosody :It is the emotion and expression students use when they read phrases smoothly with intonation.

4-Comprehension: It is essential part of reading fluency that students leave as they can not concentrate in comprehension while reading aloud.

The relationship between reading fluency and comprehension

Reading comprehension and reading fluency are strictly inter related and also correlated with important aspect in school outcomes. Teaching students to read fluently and comprehend a text is one of the main goals of education .

The reason for the great emphasis on teaching reading fluency is the strong correlation between it and reading comprehension .Each aspect of reading fluency has a clear connection to comprehension as follows:

1-Accuracy: When the reader reads inaccurately, s/he has no access to the

author's intended meaning that can lead to misinterpretation.

2-Automaticity :Poor automaticity hinders the reader's capacity to construct

ongoing interpretation of the text.

3-Prosody : Poor prosody can lead to confusion through meaningless groupings of

words or through inappropriate application of expression.

Hiderbrand(2021)indicated that fluency and comprehension are connected. Reading comprehension has a great effect on helping students comprehend the texts. Students who read the text slowly ,are not able to think about the overall meaning of the text . Students who struggle with reading fluency are focused on sounding out each word and reading at such a slow pace. It is so difficult for them to read sentences and connect them together and a paragraph as a whole . They can not connect words to get the meaning. On the other hand, when students are able to read with fluency, they can focus on getting the meaning instead of figuring out the words of the text.Students need to understand and think about what they read, to read with fluency.

Developing reading fluency

Keehn (2003) stated the following methods that are used to develop reading fluency:

1-Re reading : Students read the text repeatedly until they reach the benchmarks

or the target rate . They can repeat the process with the new text.

2-Modelling: They listen to models of fluent readers and repeat until they

pronounce words correctly with intonation.

3-Explicit instruction : Instructional attention to the aspects of fluency can build

students' meta cognitive awareness of fluency production.

4-Manageable text: Students can practise oral reading fluency with texts that

meet their reading levels .It can be followed when readers can read materials

with ease.

Blaum(2021) added other strategies for developing reading fluency

1-Promoting phrased reading in class :Fluency includes reading phrases

seamlessly as opposed to word by word .Students read the text and teacher

writes its lines into sentence strips to show students how good readers cluster

portions of text rather than saying each word separately.

2-Enlist tutors to help out : Teacher asks tutor to help non fluent reader. The

tutor and the student can read a pre selected text a loud simultaneously .The

tutor provides a helpful kind of one on one support.

3-Reader's theater in class: It is conveyed through expression and intonation.

The focus is to interpret the script rather than memorize it. Teacher reads,

then students read it a loud .S/ he also chooses students to read various aspects.

Moreover, developing reading fluency as mentioned by Driend and Mechler (2021) requires students to read

- 1-relatively short passages,
- 2- text from a variety of genres such as stories and non fiction,
- 3-text that is motivating to the individual student and
- 4-text that contains mostly words they know or easily decode .

Stages of developing reading fluency

Pikulsk and Chard (2005) identified steps to build reading fluency in the following

- 1-building phonological foundation (phonic awareness and letter knowledge),
- 2-developing vocabulary and oral language skills,
- 3-effectively teaching high frequency vocabulary and providing adequate practice,
- 4-teaching common word parts and spelling patterns ,
- 5-teaching decoding skills and practice them,
- 6-providing students with appropriate texts,
- 7-using guided oral repeated reading strategies for struggling readers,
- 8-supporting guide and encouraging wide reading,
- 9-applying appropriate screening and monitoring assessment.

Fuchs, Compton, Powell, Seethaler and Capizzi (2006) stated the following steps to develop reading fluency

1-Sub words : Children learn the basic letters in school and their sound

knowledge and begin to establish the association between them.

2-Word level : They pronounce words

3-Phrase and sentence fluency : Word presentations are created in the long term

memory on which fluency develops.

4-Text passage fluency

Teaching reading fluency

Reading fluency can be taught through

1-Audio assisted reading: It is used when students listen to audio recording

(audio CD , audiobook and I Pad)and follow a long in a text.

2-Poetry performance : Teacher asks students to read poems that s/he chooses.

They are suitable for their age and level .They make a power point presentation

as they narrate by reading the poem .

3-Reader's theater: Students get so excited by the idea of performing in a play.

This activity does not require students to memorize any text.

4-Partner reading : Students work in pairs as they read together the same piece

of text .They divide the text into paragraphs.

5-Repeated readings: Students are given a passage that they never read before.

They read for exactly one minute .The total words read are counted .It is called

a cold score and written on a chart .They practise reading and listen to it read

by a fluent model. Following practice and model, students complete a hot

reading in another one minute again .They count the total words to find their

hot score .Their hot scores are then graph above their cold scores (Melissai, 2021).

The basic principles of reading fluency

Frizell (2015) indicated that the basic principles of reading fluency are

1-Fluency is the bridge between identifying words quickly and comprehending

the text.

2-When students read fluently ,they focus on the meaningful and enjoyable

aspects of reading.

3-Reading fluently means not only reading the words but also saying them in

ways to communicate the feeling and meaning.

4-Reading fluency lays the foundations for increasing comprehension.

Factors influencing reading fluency

Hudson , Lane and Pullen (2005) and Gordon (2016) identified the factors that affect reading fluency

1-The level of text difficulty : Teacher should use relatively short texts as they are motivating to the individual student. The automaticity ,speed and prosody of the fluent reader are affected by text difficulty than fluent readers .So, it is important to select appropriate text .

2-The familiarity of the reader with the words, the context and the genre of the

text,

3-The amount of practice with the text,

4-The reader's meta cognitive abilities,

5-The reader's motivation and engagement

The characteristics of fluent reader

Schudt-Caldwell, and Leslie (2005) mentioned that readers require three things to be able to be fluent as follows:

1- having a long store of sight words that can be automatically recognized.

2- having effective strategies for analyzing unfamiliar words

3- understanding the purpose of reading as it involves comprehension .It enhances reading with expression.

On the other hand , students struggling with fluency may sound chopping when they read a loud because they are unfamiliar with certain words or they struggle to string words together . This

struggle can lead to frustration and embarrassment . During silent reading ,struggling readers can read slowly with no facial expression .So, it is said that when reading fluency suffers, students dislike reading(Hollowell (2021).

Assessment of reading fluency

In the concept of evaluating reading fluency ,reader should read a cohesive and complex text to enable him/her to construct meaning . S/ he should read a whole text because s/he can provide initial data and a rich insight into the reader's ability to read fluently. Teachers begin with collecting oral reading samples via remaining records . After that ,they analyze data to monitor student's progress and identify the reading instruction to be followed (Abadanio and Furner , 2005).

، Morin (2020) stated that there are two different types of reading fluency that should be evaluated

1-Oral reading fluency : It involves how students can read aloud . They should be able to read a text without hesitating or stumbling .They should use appropriate intonation and expression . They also pronounce most words correctly.

2-Silent reading fluency: It is more complicated than oral reading fluency. Students should comprehend the text.

There are two ways can be used in assessing reading fluency as mentioned by Lazel institutes 2021 .The first type is one minute reading of a passage to measure the number of words read and the accuracy . There is a fluency passage for each level .The second type is based on reading a series of sentences and answering true /false statements about the sentences to reflect their comprehension for the texts.

Problems of reading fluency

There are three main problems that affect reading fluency as follows:

1-Decoding : It is the ability to break words into syllables , apply knowledge of

letter sounds and pronounce words correctly.

2-Auditory processing : It deals with skills related to how the brain recognizes and

interprets information that students hear. Students can hear the words but have

difficulty processing the information.

3-Practice with speed and fluency: It involves allowing more time to practise

reading. Teacher listens to what they read and notice difficulties with letter

sounds .Teacher can ask questions about the content to check understanding

and comprehension(Truelove ,2021).

Difficulties of reading fluency

The problems with reading fluency can derive from different underlying causes. Problems with automatic word recognition contribute to the difficulties with fluency and in turn lead to problems with comprehension .These problems can be :

1-Slow and labored reading : it deals with frequent stopping at unknown words .

2- Lacking expression that is appropriate to the meaning in oral reading .

3-Insufficient or inaccurate decoding of unfamiliar words can lead to difficultly in

developing automatic recognition of words.

4-Lack of words memory that read and practiced before

5-Automatic recognition of few words

6-Poor comprehension even at a literal level.

To conclude ,reading fluency has been neglected by studies in later school levels. However, it is an important topic area of longstanding interest.it represents a crucial point for teachers to help struggling student meet school standards. In addition , it is necessary in school settings that are based on learning from textbooks and time limited assessment to determine students' progress (Bigozzi , Tarchi, Vagnolli , Valente and Pinto 2017).

Part 2 : Historical understanding

The importance of developing historical understanding

Historical understanding is one of the main outcomes of teaching History .Developing historical understanding not only helps students in getting information but also enhances their mental habits.

Cutajar (2020) summarized the importance of developing historical understanding in the following

- 1-predicting and interpreting facts
- 2-checking and investigating historical events
- 3-getting sufficient knowledge based on deep understanding
- 4-reordering events in logical and chronological sequence
- 5-developing research skills and finding out facts based on evidence
- 6-analyzing historical events and expressing ideas in logical way
- 7-knowing more about people culture and relating what they get with their life
- 8-building good characters through understanding historical events
- 9-creating open minded individuals that can criticize and judge events and accept

others

Developing historical understanding through historical texts

Understanding historical texts vary with individuals and historical events. Students should read, comprehend and integrate the information found.

Readers represent understanding of historical texts at three levels according to Wineburg (2000).

1-Representation of micro structure of textual elements .It is a verbatim

and linguistic representation of the text

2-Representation of micro structure of the text. It represents the propositions of the text.

3-The situation model :It is the highest level as it represents the situation

described in the text. It deals with what the text is about .So ,the text

information is integrated with the reader's world knowledge at this level.

Rouet, Marron, Perfetti, & Favart, (2006) stated that understanding or comprehension of historical texts is different from other types of texts in the following

1-It requires going through several sources to understand the situation.

2-Documents are not read with the sole purpose of understanding what

happened. There are multiple perspectives that exist for any single event but no

single agreed upon interpretation exists .

3-The process involved in building a representation :It deals with understanding the various interpretation of a historical situation and

how a document relates to them .

The role of students

Students have effective role to play in developing their historical understanding as Wineburg (2000) mentioned

1-identify the source of the document and how it affects the relationship

between the content and events.

2-check and compare information across sources and check information against

his/her own world knowledge

3-select what can be retained from each document and decide how it can be

used,

4-go through several sources to come up with full understanding of the situation .

The role of teachers in developing historical understanding

According to Bain (2016), developing students' historical understanding requires teachers to

1-acquire and employ a repertoire of pedagogical sound instructional strategies

2-understand the multiple ways diverse students learn of history

- 3-develop a familiarity with effective, disciplinary-specific resources and methods of assessment
- 4-practice and employ different ways and methods for developing historical understanding in classroom.

Raph and MacArthur (2017) stated that the intent of stated curriculum to develop concepts of historical understanding is undermined by two factors:

- 1-Teachers inadequate knowledge of the scope of the curriculum ,
- 2-A patchy understanding of how key substantive and procedural historical concepts contribute to historical understanding .

Ways of historical understanding

There are five ways of thinking about historical understanding as mentioned by Ferreli and MacArther (2001)

- 1-understanding the present in the light of the past
- 2-appreciating historical narratives
- 3-sorting out documentary evidence to construct a probable account of things
In the past
- 4-reflecting thoughtfully about historical situations
- 5-answering factual questions about historical characters and situations

Historical understanding skills classification

- Historical understanding skills contain
- 1-reordering events according to the importance
 - 2-reordering characters a according to their importance and roles
 - 3-presenting reasons for historical events
 - 4-describing visual images
 - 5-connecting between visual images and historical events
 - 6-identifying the similarities and differences between historical events
 - 7-judging historical events
 - 8-predicting results of some historical events
 - 9-making decisions for some historical events

10-guessing the meaning of historical terms

11-using evidence to interpret events (Mossa2015 and Mohamoud 2016)

Raph and MacArthur (2017) identified the historical understanding skills in the following

- 1- Reading creatively: Students imagine themselves in the characters they study
- 2- Considering the context of events requires higher order thinking skills
- 3- Reconstructing the literal meaning of a historical passage through recognizing the characters and the events(what, when, why)
- 4- Developing evidence historical perspectives through describing the past using its own terms
- 5- Drawing upon data in historical map to get information about the historical setting of the event
- 6- Using visual and mathematical data to elaborate information from literature and historical narratives
- 7- Drawing upon visual literacy and musical sources (photographs, paintings, novels, folk) to clarify information

Elements of historical understanding

Brooks (2013) stated that historical understanding has six main elements in the classroom

- 1-determining historical significance
- 2-considering epistemology and evaluating evidence
- 3-assessing continuity and change
- 4-judging progress and decline
- 5- displaying empathy and moral judgment
- 6-assigning historical agency

Considerations while developing historical understanding

Van & Van (2013) stated that while developing historical understanding, many considerations should be followed

- 1-understanding is developed in sequence. It is based on prior knowledge and experiences

2-historical thinking and reasoning are part of the process that enhance

understanding. It is the link between students' thinking and reasoning in the context.

3- understanding entails developing deepen views of historical events

4-students adopt their own strategies of demonstrating events

Assessing historical understanding

VanSledright(2013) indicated that assessing historical understanding advocates argued that the traditional and typical standardized testing approaches are not appropriate for measuring the more complex processes involving historical understanding .Students are asked to attain as they can not assess what students really understand . Change should be done in learning ,teaching and assessing of cognitive and mental abilities. There are indicators set in the light of core state standards and how to be applied in History .So, evaluation can be done by providing a variety of assessment strategies and assessment rubrics to evaluate historical understanding.

Part 3 Evidence based learning

The nature of evidence based learning and its origin

Education is not based on a simple intervention of teacher to cause a desired effect (cause and effect relationship).Students need to interpret and make sense of what is being taught . The process and product are internally related .Evidence based movements is effective when cause and effect are separated and a desired effect is pre determined (Wiltshier, 2007)

Biesta (2007) and Wiltshier(2007) mentioned that evidence based was first used in evidence based medicine . It was initially developed to teach medical students. In addition to the speech of evidence from medicine to other health fields ,it has been adopted in more distant fields of professional activity such as social work and

in education . Then, the term evidence based education was first used by Hargreavers in 1996 ,in a lecture given at teacher training agency. A move to evidence based education requires

A-utilizing existing evidence

B-establishing new evidence as the current one was insufficient,

In 2015. The department of Education in England introduced an evidence based phonics reading check to help support primary students with reading. In 2015, Carter review of initial teaching training suggested that teacher trainees should have access and skills in using research evidence to improve their teaching

. Debates about using evidence based learning in education are based on the following

1-the evidence and the context in question as how the available evidence is used

or not

2-the quality of the available evidence and the methods used to interpret

research , can also contribute to ongoing debates.

3-the qualitative and quantitative evidences are used in education, but there is a

debate about how these different types of evidence should be considered(Dsouza, 2016)

The importance of evidence based learning

Crison 2014 mentioned that using evidence based learning is essential in

1-providing content based on using resources

2-presenting information about empirically supported pedagogies

3-teaching students effective study methods

4-conducting empirical classroom studies

5-using scientific methods in assessment

In 2021, Harmon stated that evidence based learning can be effective when students learn

1-Relating new ideas to what is known and transferring them into their long term

Memory.

2-Remembering information when practice retrieving it from their long term

memories and think about its meaning .

3-developing problem solving and critical thinking skills with focusing on

background knowledge

4-understanding the structure of the problem and its context

The principles of evidence based learning

Sya'ban, Wazir, Horneffer(2021)stated that the main principles of evidence based learning are

1-Learning is based on retrieving and elaborating information to be more

effective rather than simply receiving information

2-Students learn effectively through using learning styles , not by accommodating

their learning styles or preferences .

3-Highlighting should be strategic and guided by defined objectives to be

beneficial.

4-Massd practice leads to reach good results in the short term and master

learning.

Components of evidence

The key components of evidence that students seek to find it should be

1- Objective : Data that individuals evaluate and interpret similarly.

2- Valid : Data that represent the tasks to accomplish success.

3- Reliable : Data that can not be changed when collecting by other people

or in another time.

4- Systematic : Data that are collected according to a rigorous design either

experimentation or observation.

5- Referred : Data that are approved (Lincs,2015).

Evidence based learning in Universities

In the context of using evidence based learning on universities, there are three main arguments to support its implementation as follows:

1-Evidence based approaches can bridge teaching and research .It provides

opportunities for exchanging and collaborating in experimenting, implementing

and assessing outcomes of pedagogical practices.

2-Existing internal quality assurance can nurture evidence based approaches .It is

essential for developing learning and teaching in university .Teaching staff can

see the evidence process with its five steps is important for accessing valuable

information as implementing innovative initiatives in learning and teaching

3- Evidence based approaches are nurtured by existing evidence collection and

academic structures .The process of collecting data requires a mindset shift not

additional process .

The role of students in evidence based learning

Students ' role in evidence based learning was emphasized by Cranney

Fiona McDonald(2012) in the following

1-Thinkers :They changed from the recipient of knowledge to producers .They

become autonomous learners with meta cognitive skills for controlling in the cognitive process.

2-Searchers: They select relevant information and interpret it through one's existing knowledge.

3-Processors of information : Learning is the construction of knowledge by

students . The central instructional issue is how to encourage students to be

effective processors of information .

Students who use and follow evidence based learning should have knowledge and skills in

- 1- analyzing data and problem solving
- 2- collecting evidence and making inferences
- 3- working in teams using cooperation, communication and negotiation skills
- 4- adapting and responding flexibly to change
- 5- having self regulation and being independent of mind
- 6- Presenting materials in well organized ,well structured and persuasive manner(University of Meboyrne (2021).

Steps of evidence based learning

Five main steps that should be followed while implementing evidence based learning mentioned by Borba ,Tonmin , Pontario and Limus (2021)

1-Ask

It involves posing question that relates to the problem . It focuses on thinking and helps in formulation of search strategies .It identifies where students search and what types of research methods they should look for and use.

2-Acquire

Students identify where they search for the answers of the question ,formulate the search and get the information .They search the literature to find the evidence. They detect the best evidence for answering the research question. They depend on using primary and secondary resources .Choosing the best database for the particular question requires students to know what each data base specializes in , how it is indexed and what they have access to .

3-Appraise

Students assess the value and trustworthiness of the evidence .They critically assess the retrieved evidence .They search for three board areas ie the region of the research, the significance of results and the impact .They identify the levels of evidence (expert opinion qualitative studies, descriptive studies or systematic reviews) .

4-Apply

It is the step of implementing the evidence and carry out the results on group of participants .Students apply the findings into practice to make a decision. They need to decide if it applies to specific situation They develop handouts on topics

5-Evaluate

Students assess the impact. It involves looking at how students perform in the process .They ask answerable well formulated question. This step completes the continuous quality improvement cycle. They can use self evaluation checklist to evaluate their performance in each step of evidence based learning process.

Evidence based learning strategies

Lethaby (2018) and Jubbal(2020) stated that various evidence based learning strategies can be used to enhance students' learning as follows :

1-Prior knowledge

It involves using pre tasks to activate and build background knowledge.

Students expand on what they had by relating it to the previous knowledge.

2-Elaborative interrogation :

It enhances memory during learning .Students read the fact to remember and

generate explanation .They use questions of how and why to understand the meaningful idea .

3-Interleaving

It is the practice of alternating .It depends on finding the links , similarities and

difference between ideas .It is based on switching between topics ,ideas and

subjects. Students are trained at switching between learning topics (previous and now).

4-Retrieval practice

It involves practice by bringing back to mind what students learned before and

write down what they have learned .They check how they did and what they forgot or remembered.

5-Self explanation

Students explain the similarities and differences between new and previously

studied material .They explain features of learning to themselves.

6-Distributed /spaced practice

Each lesson begins with a practice from the previous one . Students plan their

own study timetable .Students review the material to form connection between

ideas and recall them . They forget before remembering the information. They

incorporate the old material with new one to create summary or checklist.

7-Practice testing

It deals with studying the topic and trying to recall the newly studied

materials. It can be used as a way to support learning concepts and align the

quiz items with core course concepts .It involves self learning and enhances

retention by adding further encoding to information in long term memory .The

search for answers activates related information that is further encoded a long

with the important data

8-Mnemonics :

It allows information to stick to the brain. It involves repeated learning of

content material that can help students in understanding .It deals with linking

words with familiar sounds, words or associating the meaning of words using

rhymes .Students create a visual image to share the information.

9-Feynman's technique

It develops students' thinking . They can understand complex problem by

breaking it into simplest forms and searching the unknown part of the problem .

It allows students to express their opinions about the problem and think

critically to find solutions.

The researchers used five strategies in the suggested framework throughout the five steps of the evidence based learning .This will be dealt in more details in the suggested framework.

Tips for implementing evidence based learning

Implementing evidence based learning is a challenge, the following tips can help in applying it in appropriate way

1-take it slow at the beginning : When implementing evidence based learning, it is

important to take some steps to monitor the impact of the change to be more

efficiently and effectively.

2-ensure the strategy that is fit for purpose : Teacher usually searches for the

strategy that achieves the purpose . It should have the most positive impact on

students . They are willing to benefit from these changes .

3-set clear lesson goals: It is important to know what teachers want students to

achieve by the end of the lesson .Clear and attainable lesson goals help

teacher and students succeed.

4-ensure students get it : It is vital to check if students understand the

information that taught to them or not .Teacher can change the strategy used

to help students understand .

5-providing feedback : Teacher should pay due attention to providing students

with feedback when they want to boost their students outcomes .It supports

students' progress.

6-be willing to learn and develop skills :Teacher should encourage students to

learn and increase their interest in applying the evidence . S/he should develop

students' skills in searching and implementing evidence(hllp//blog.ins government.mo.uk).

Barriers of evidence based learning

Gursky (2021) mentioned that there are various barriers of evidence based learning as follows:

1-lack of time :Searching for the evidence , selecting the best one and

implementing it requires much time.

2-misperceptions about evidence based learning

3-lack of access to full journal articles

4-lack of skills in finding and understanding studies to support the selected

Evidence.

5 lack of resources: The primary resources are limited .Depending only on

secondary sources is insufficient.

6-conflicting results of studies : There was no agreement in the findings of some

studies. Some support specific evidence while others do not

7-lack of interest : Students are not willing to follow the different steps of

evidence based learning

8-Lack of training : Students are not trained at how to find the evidence and

implement it .

Borba ,Tonmin , Pontario and Limus (2021) indicated that the barriers of evidence based learning involves lack of time ,

knowledge , difficulties in assessing the research and lack of the perception of the benefits of applying evidence based learning into practice. In addition , students carry out the first three steps (ask, acquire and appraise).They lack knowledge to apply the last two steps in practice. The last steps seek to integrate the evidence into decision making and achieve changes in students 'outcomes .

Instruments of the Study

1-A reading fluency skills test

To ensure the progress of the participants in reading fluency skills , a pre-post test for measuring the required reading fluency test skills for the 4th year , History students section , Faculty of Education, Helwan University was designed . It consisted of two articles . First, students were asked to read each article orally , then answer true or false questions (five items each) . It was submitted to jury members specialized in the field of methods of teaching English who assured its the validity and appropriateness.

To measure the reliability of the test, the test –retest reliability was counted. It was $r=0.76$.So, the test was reliable and could be used before and after the experiment. The final version of the test is shown in appendix (b).

2- A reading fluency skills rubric

In order to measure the students' progress in reading fluency skills the researchers designed a scoring rubric as a pre- post measuring instrument . It measured the five main reading fluency skills required for the participants . It was submitted to jury members specialized in the field of methods of teaching English to test the validity and appropriateness. Having done their modifications, the rubric became valid. The final version is shown in appendix (c).

3-A historical understanding skills test

To ensure the progress of the participants in historical understanding skills , a pre-post test for measuring the required historical understanding skills for the 4th year , History students section , Faculty of Education, Helwan University was designed . It consisted of two articles . Students were asked to read each article , and answer the questions (eight for the first article and seven for

the second) . It was submitted to jury members specialized in the field of methods of teaching History who assured its the validity and appropriateness.

To measure the reliability of the test, the test –retest reliability was counted. It was $r=0.78$. So, the test was reliable and could be used before and after the experiment. The final version of the test is shown in appendix (b).

4-A historical understanding skills rubric

In order to measure the students' progress in historical understanding skills, the researchers designed a scoring rubric as a pre- post measuring instrument . It measured the historical understanding skills required for the participants . It was submitted to jury members specialized in the field of methods of teaching History to test the validity and appropriateness. Having done their modifications, the rubric became valid. The final version is shown in appendix (c).

Method of the study

The present study followed the descriptive analytical method for reviewing literature. Furthermore , the quasi experimental pre- post tested two groups design was used in the experimental part of the study to investigate the effect of evidence based learning on developing the required reading fluency and historical understanding skills of the 4th year, History section students of the Faculty of Education, Helwan University

Participants of the study .

The participants of the study consisted of 60 , 4th year, History section students of the Faculty of Education, Helwan University in the academic year 2020-2021. They were divided into the experimental and control groups

The Suggested framework

The aim: It aimed at developing the required reading fluency and historical understanding skills of the 4th year, History section students of the Faculty of Education, Helwan University.

The content : The content consisted of seven sessions . Each session dealt with a historical article assigned in the academic book (Historical Texts in English) using the steps of evidence based learning .

Procedures

The proposed framework of the present study displayed in Appendix (G) went on as follows:

1-Ask with wit using of prior knowledge

-Teacher asked students to see pictures

-Teacher asked them to describe what they saw and comment on the original

article

- Teacher presented the article on the power point .

Teacher asked students to read the following table and followed instructions .They should ask questions concerning before, during and after reading the text.

before reading What to search about	During reading Ask relevant and logical questions	After reading Ask how the questions were answered
-Teacher asked students to pose questions eg What was the text about? -Teacher asked students to listen to the article on the tape Teacher read the text loudly using stress ,tone and rhyme and students listen	-Teacher asked students to pose questions eg What did this convention focus on ? -Students underlined the difficult words and pronounce them	-Teacher asked students to pose questions eg In pairs students read the text .Each student read line alternatively.

-After reading, teacher asked students to write a title for the text

- They were asked to use their own words to express what they found while reading this text ,they summarized the text.

Example

-After reading, teacher asked students to imagine themselves lived in this age, They tried to search for the problem with this convention and its effect on them and gave evidence for the effectiveness of the convention on Great Britain.

2-Acquire with elaborative interrogation

Students were asked to search for the evidence for improving the conditions of the existence of the mentioned convention, its advantages and disadvantages and how to reduce them .

-They posed questions about the evidence as possible using what ,where , how and why using the appropriate tone and volumes

Example

They asked history teachers ,supervisors , staff members about this convention and their points of views for its withdraws and how they could be limited. They also searched for books and web sides

3--Appraise with interleaved practice

After finding the evidence, students decided if the evidence was valid and imported before applying it . They tried to find the links , similarities and differences between ideas .

-Teacher asked students to use checklist to judge the evidence before using it

Example

-They linked between the convention and what happened today in Arab countries. They found similarities and differences between them

Teacher asked students to use checklist to judge the evidence before using it .

4-Apply with retrieval practice

Students recalled what students learned before and write down what they have learned .They checked how they did and what they forgot or remembered. They tried to apply their evidence on other persons by asking them about it and its effect on them or they ask each other.

Example

After students collected and appraised the evidence ,they decided to apply and use it .They imagined themselves lived in this age and had many difficulties with the convention. It affected different sides of life .They suggeste writing new rules for the external trade without

limited duty and tariff, The change in some conditions concerning rights and regulations can make modifications

Teacher asked students to pose questions eg

-What was the place for the implementation?

-What was the right time to implement?

5-Evaluate with practiced testing

Students looked at how they performed in the process. They used self evaluation checklist for each of the five steps of the evidence based learning

Example

Teacher asked each student to read the above article in front of class .After that students and teacher corrected pronunciation, tone and volume while saying sentences

Evaluation

Teacher asked each student to read his/her evidence and present his/her findings. After each student made presentation with expressing points of view that reflected what s/he got ,teacher commented and gave feedback.

Data Analysis and Results

The results of the study are discussed and interpreted in relation to the study

questions and hypotheses, mentioned earlier, as follows:

1-Answering the first sub- question

To identify the required reading fluency skills for the 4th year History section students , faculty of education, Helwan university , a checklist was designed by the researcher. The checklist was submitted to jury members who approved it . It included five main skills in its final version (see appendix A) . Thus, the first sub-question of the present study was answered.

2-Answering the second sub- question

To identify the required historical understanding skills for the 4th year History section students , faculty of education, Helwan university , a checklist was designed by the researcher. The checklist was submitted to jury members who approved it . It

included seven skills in its final version (see appendix (D) . Thus, the second sub- question of the present study was answered.

3-Answering the third sub -question

The third sub- question was answered as a suggested framework for using the evidence based learning was designed and displayed as shown before . For more details, the suggested framework of the present study is shown in appendix (G) .

4-Answering the fourth sub -question

Answering the fourth question is related to verifying the hypotheses of the present study of fluency reading . So they will be dealt with together as follows:

1-Findings related to the first hypothesis

The first hypothesis stated that “There is a statistically significant difference between the mean score of the experimental and the control groups’ students on the post administration of the reading fluency skills test, in favour of the experimental group”. The reading fluency skills test was administered to the control and experimental groups after the experiment. Data obtained were treated statistically . Findings are shown in table(1)

Table (1)

t- Value , Mean scores , Standard of Deviation of the Experimental and Control Groups on the Post Administrations of the Test

Group	Mean Score	standard deviation	Calculated t value	The level of significance Size
control	12.7	6.1	13.4	0.01.
experimental	34.1	18.3		

Table (1)revealed that the calculated (*t*) value (11.4) was significantly higher than the tabled (T)value (2.88) with (58) degrees of freedom at the (0.01) level of significance . Thus, using the evidence based learning significantly improved the experimental group reading fluency skills . Hence, the first hypothesis was verified.

2-Findings related to the second hypothesis

The second hypothesis stated “There is a statistically significant difference between the mean score of the experimental group students on the pre and post administrations of the reading fluency skills test, in favour of the post administration of the test.”

The reading fluency skills test was administered to the experimental group before and after the experiment. Data obtained were treated statistically . Findings are shown in table(2).

Table (2)

t- Value , Mean scores , Standard of Deviation of the Experimental

Group on the Pre and Post Administrations of the Test and the Effect Size

administration	Mean score	standard deviation	Calculated t value	The effect size
pre	15.6	12.2	16.7	0.90
post	34.1	18.3		large

Table (2)revealed that the calculated (*t*) value (13.4)was significantly higher than the tabled (T)value (2.75) with (29) degrees of freedom at the (0.01) level of significance .Thus, using evidence based learning had significantly improved the experimental group reading fluency skills . Hence, the second hypothesis was verified.

Moreover, the effect size was calculated using eta square . It was (0.90) i.e higher than the large effect size value (0.8) .This showed that using the evidence based learning significantly improved the experimental group reading fluency skills .

3-Findings related to the third hypothesis

The third hypothesis stated that “Evidence based learning is effective in developing each of the required reading fluency skills for the 4th year History section students , faculty of education, Helwan university ”. The reading fluency skills test was administered to the experimental groups before and after the

experiment . Data obtained were treated statistically for each main skill. Findings are shown in table(3).

Table (3)
t- Value , Mean scores , Standard of Deviation of the Experimental Group on the Pre and Post Administrations of the Test and the Effect Size on Each Main Skill

administration	Mean score	standard deviation	Calculated t value	The effect size
1-Expression	7.3	14.7	15.7	0.89 large
	9.2	15.6		
2-smoothness	2.7	21.1	13.7	0.86 large
	6.5	12.25		
3-accuracy in word cognition	7.4	5.4	12.4	0.81 large
	9.4	14.8		
4-phrasing	4.3	8.3	19,1	9.2
	5.4	9.4		
5-comprehension	5.6	7.6	9.6	0.74 medium
	10.1	10.6		

Table (3)revealed that the calculated (*t*) value of each reading fluency skill was significantly higher than the tabled (*T*)value with (29) degrees of freedom at the (0.01) level of significance. Thus, evidence based learning had significantly improved each main reading fluency skill of the experimental group. Hence, the third hypothesis was verified .

Moreover, the effect size of each skill was calculated using eta square formula. It was higher than the large effect size value (0.8) as shown in table 3 expect for one skill (comprehension) . It had a

medium effect size .This showed that the using evidence based learning had a large effect size on developing most of the main reading fluency skills for the experimental group.

5-Answering the fifth sub -question

Answering the fifth question is related to verifying the hypotheses of the present study of historical understanding . So they will be dealt with together as follows:

1-Findings related to the fourth hypothesis

The fourth hypothesis stated that “There is a statistically significant difference between the mean score of the experimental and the control groups’ students on the post administration of the historical understanding skills test, in favour of the experimental group”. The historical understanding skills test was administered to the control and the experimental groups after the experiment. Data obtained were treated statistically . Findings are shown in table(4)

Table (4)

t- Value , Mean scores , Standard of Deviation of the Experimental and Control Groups on the Post Administrations of the Test

Group	Mean Score	standard deviation	Calculated t value	The level of significance Size
control	6.1	13.33	17.8	0.01.
experimental	18.5	22.7		

Table (4)revealed that the calculated (*t*) value (17.8) was significantly higher than the tabled (T)value (2.88) with (58) degrees of freedom at the (0.01) level of significance . Thus, using the evidence based learning significantly improved the experimental group historical understanding skills . Hence, the fourth hypothesis was verified.

2-Findings related to the fifth hypothesis

The fifth hypothesis stated “There is a statistically significant difference between the mean score of the experimental group

students on the pre and post administrations of the historical understanding skills test, in favour of the post administration of the test.”

The historical understanding skills test was administered to the experimental groups before and after the experiment. Data obtained were treated statistically . Findings are shown in table(5).

Table (5)

t- Value , Mean scores , Standard of Deviation of the Experimental Group on the Pre and Post Administrations of the Test and the Effect Size

administration	Mean score	standard deviation	Calculated t value	The effect size
pre	12.8	153	12.8	0.84
post	18.5	22.7		large

Table (5)revealed that the calculated (*t*) value (12.8)was significantly higher than the tabled (*T*)value (2.75) with (29) degrees of freedom at the (0.01) level of significance .Thus, using evidence based learning had significantly improved the experimental group historical understanding skills . Hence, the fifth hypothesis was verified.

Moreover, the effect size was calculated using eta square . It was (0.84) i.e higher than the large effect size value (0.8) .This showed that using the evidence based learning significantly improved the experimental group historical understanding skills

3-Findings related to the sixth hypothesis

The sixth hypothesis stated that evidence based learning is effective in developing each of the required historical understanding skills for the 4th year History section students , faculty of education, Helwan university ”. The historical understanding skills test was administered to the experimental

groups before and after the experiment . Data obtained were treated statistically for each main skill. Findings are shown in table(6).

Table (6)
t- Value , Mean scores , Standard of Deviation of the Experimental Group on the Pre and Post Administrations of the Test and the Effect Size on Each Main Skill

administration	Mean score	standard deviation	Calculated t value	The effect size
1-Predicting events	3.8 6.7	14.24 13.28	11.7	0.82 large
2-guessing the meaning of historical terms	5.5 10.7	8.9 11.5	10.7	0.78 large
3-analyzing visual images	4.1 10.8	13.4 13.2	12.7	0.84 large
4-reformulating events with their own word	3.1 5.6	10.4 5.9	9.6	0.76 large
5-identifying causes of events	2.7 6.5	21.6 15.2	7.9	0.95 large
6-using evidence to interpret events	3.4 6.2	13.4 11.3	11.01	0.85 large
7-read creatively	3.2 6.6	6.1 10.3	10.8	0.80 large

Table (6)revealed that the calculated (*t*) value of each historical understanding skill was significantly higher than the tabled (*T*)value with (29) degrees of freedom at the (0.01) level of

significance. Thus, evidence based learning had significantly improved each main historical understanding skill of the experimental group. Hence, the sixth hypothesis was verified .

Moreover, the effect size of each skill was calculated using eta square formula. It was higher than the large effect size value (0.8) as shown in table 6 .This showed that the using evidence based learning had a large effect size on developing most of the main historical understanding skills for the experimental group.. Thus, the fifth sub question was answered as shown before in table(6). In turn, the main question of the study was answered as the effect size on the reading fluency skills as a whole was large (0.95) and the historical understanding was large as shown too in tables (2) (4)

Findings of the study assured that the main question and its five sub questions were answered as the evidence based learning significantly improved the experimental group reading fluency skills and had a large effect size on the reading fluency skills as a whole and all of the reading fluency skills separately except for one . In addition, it had a large effect size on developing historical understanding skills .

Discussion of results

The statistical analysis presented above , resulted in the verification of all the hypotheses of the study and answering the study questions. It also realized the achievement of the study main aim , which was to develop the required the reading fluency and historical understanding skills for the 4th year, history section students of the Faculty of Education, Helwan University. throughout the use of evidence based learning .

The comparison between the performance of the control group and experimental group and the pre and post performance of the experimental group after the experiment showed the improvement achieved in the required reading fluency and historical understanding in the post performance . The researcher attributed this improvement to the following factors:

1-More than one researchers conducted the study. They thought of the problem of the present study. They met students and staff members to know more about the problem , how to solve and how to carry out the steps of teaching .Many discussions were held to find the appropriate technique or method to conduct the experiment . They supported each other in addition to they were from different sections that led to different points of views. All of all they completed each other.

2-Dealing with the difficulties of reading the historical texts in English for those students. There was a focus on training them how to pronounce words and say sentences smoothly without breaks and use tones and volumes while asking and answering questions that lead them to improve their reading skills in general and reading fluency in particular .This view supported Fuchs, Fuchs, Hosp, & Jenkins views (2001) who stated that fluency is the critical building blocks of reading. Students become fluent by reading continuously under guidance as asking them to read on their own does not work .They need to read more through training on how to read fluently step by step.

3-The focus on developing comprehension while reading as one of the main skills of reading fluency made students use their mental abilities and thinking while reading . It was a challenge for them at the beginning and most of them could not do but with more practice through the steps of evidence based learning .They could improve and enjoy reading fluently with its comprehension side . This view supported Hudson, Lane and Pullen' s views (2005)who indicated that reading fluency is connected with comprehension when students read fluently, they comprehend what they are reading. Fluent reader who can automatically decode words can give full attention to comprehend the text.

4- Developing historical understanding skills for History students section through historical texts was a challenge . They were trained on interpreting events, reading creatively as they acted as if there were actual characters, reformulated events and identified the causes

of the historical events through following the steps of evidence based learning with its five steps . This was consistent with Bruniges's point of views (2005)as he indicated that educationalists supported using evidence based learning in learning and teaching to increase students' outcomes as it improve the quality of teaching , focus students' attention on their strengths and weaknesses and present a report on an assessment as a means of communicating students.

5-The idea of using evidence based learning strategies during each step stimulated students to learn more . It focused on connecting between what students learned before and what they learn now . They also connected between the past events and today. So, students became more familiar with articles and understood them . This supported Dsouza's point of views (2016) as he stated through evidence based learning ,students can learn new ideas through connecting them with what they already learnt .They remember data better when retrieving it from their long term memory and think about its meaning .They can develop critical thinking and problem solving skills through feedback.

6-Beginning the session with showing students pictures and asking them to relate them with what they learned .Images affected developing their ways of thinking and understanding of the topic. They encouraged them to make links between events and predicted the topic and what happened .This view is agreed with VanSledright ,s point of view(2014) who assured that images influence students' mental processes . Understanding was enhanced by the link between students' thinking and reasoning .They applied reasoning to the learning context .They developed a wider historical view of events.

7-The link between the steps of evidence based learning , reading fluency and historical understanding .Students were able to practise the reading fluency skills implicitly and explaining, interpreting and manipulating the historical events throughout the whole stages of evidence based learning .Each step required reading the text ,more than one time first silent reading, then they read it orally as a whole

to get the meaning .While searching about the evidence in resources they read what they found to their groups. In addition , they discussed , analyzed and summarized their findings .Finally, their presentations for reading the evidence reflected what they learned about how to read and understand historical texts.

8-The idea of posing questions encouraged students to understand the texts and deepen comprehension .In addition their imagination was enhanced when they pretended to be the actual characters lived in the past. So, they involved in the events and could perform better .This view is agreed with Brooks 's point of view (2013) indicated that historical understanding skills can be developed when students are provided with various opportunities to formulate and pose different questions that are related to specific event in the past. They also can examine the historical evidence and check its validity and quality . They can create historical narratives as they considered themselves heroes and manipulate events . In addition, they can make arguments of their own points of views using their own terms .

9-The researchers tried hard to overcome the obstacles they met while carrying out the experiment to fulfill its aims. Some of the obstacles were as follows

A-Students were unwilling to be engaged in the experiment at the beginning.

B-The difficulty of reading words in the texts and sentences to get the meaning.

C-Students stuck with traditional ways of learning and did not want to do efforts to learn

D-The difficulty of the historical texts in English as students could not read them easily.

Recommendations

In the light of the results of the present study, the following recommendations are suggested

1-More emphasis should be placed on developing students' reading fluency skills while teaching the historical texts in English

2-More emphasis should be placed on developing students' historical understanding skills in different educational stages.

3-Applying evidence based learning in teaching History for improving students ' thinking skills

Suggestions for further research

1-Further research is needed to examine the effect of evidence based learning

on developing critical thinking skills for college students of History section.

2-Training pre and in service teachers on developing historical understanding

skills while teaching History

3-Further research is suggested to investigate the effect a suggested programme on developing reading fluency and historical understanding skills for pre service students in the historical texts in English

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