

## **The Use of Computerized Software in Teaching English: A Study of a Software Program American headway starter-**

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### **Abstract**

Phone number: 0657964284 No one can deny the remarkable changes that modern technology has brought about in our world today, thanks to the invention of the computer and the services it has made available, especially in the scientific and educational fields. One of the most important outcomes of these developments is the emergence of what is known as computerized educational software, which has contributed to redesigning educational materials according to specific scientific and technical foundations and linking them to multimedia such as images, sound, and videos. Most of these software programs have been produced in the field of foreign language learning, particularly the English language, as it is the first global language. Accordingly, our study attempts to present some models of software used in teaching the English language and to evaluate their effectiveness, namely (American Headway Starter), available on the Internet for learners of English. However, before

addressing this, it is necessary to define some of the concepts of the study.

**Keywords:** software, education, English language, modern technology.

### **1- The Nature of Educational Software:**

Educational software is “a series of several points carefully designed in such a way as to lead the learner to master a subject with the least possible number of errors”<sup>1</sup>. It is also defined as “educational materials that are designed and programmed by computer to be curricula whose production is based on the principle of dividing work into small, logically sequential parts”<sup>2</sup>.

Software is an educational unit designed by computer in a coherent and organized manner according to sound pedagogical foundations, including a set of knowledge, experiences, activities, multimedia, and diverse assessment methods. It is presented based on the principle of response and reinforcement in order to achieve specific objectives<sup>3</sup>.

In light of the above, it becomes clear that the definitions agree that educational software



consists of instructional materials designed by computer according to certain scientific, pedagogical, and technical foundations, allowing the learner to learn and master a given subject or field. These software programs also provide many features and multimedia elements such as images, sound, and videos, in addition to an organized and programmed lesson, which give a sense of attraction and enjoyment and contribute to achieving interaction between the learner and the lesson or the field intended to be learned or developed, such as learning foreign languages. We also point out that the process of preparing this software depends on gradual progression and the division of work into parts or sections distributed across screens and windows in a manner consistent with the characteristics of the computer.

Multimedia educational software relies on “the multiplicity of ways of processing the same piece of information, which leads to a variety of methods for presenting topics in this software. This means that such software is considered a set of multiple templates for content (text, image, sound, etc.) placed in digital form, designed, stored, and displayed through the computer and its advanced capabilities, and used interactively. The learner’s interaction and communication with the software take place through the mouse, menus, and icons”<sup>4</sup>.

The latter—the mouse—is the learner’s tool for controlling the menus, icons, and windows

related to the software, enabling control and interaction through moving between windows and clicking the required buttons to operate the software and navigate through its stages.

We also emphasize the major role played by the Internet in making this software and its multimedia available among network users around the world, as well as through social media platforms such as YouTube, Facebook, Twitter, and others, where such software and related media are published, shared, and downloaded.

## **2- The Importance of Educational Software:**

The learning mode based on educational software emerged with the expansion of Internet use in the last two decades of the 20th century, as specialists sought to find advanced educational methods and models to provide an interactive, dynamic, and multi-source learning environment, benefit from technology, and keep pace with rapid developments. This led to the emergence of the e-learning model with its features, characteristics, and requirements, as well as the appearance and spread of computerized software, especially among learners.

Educational software constitutes an effective means of learning and teaching, as it is one of the outcomes of advanced technological development. It organizes the learning process by providing an introduction to the topic or concept to be taught, then explaining it accurately, possibly presenting many



examples, followed by applied exercises that support the topic to be taught.

Moreover, the use of this software in the educational process allows the learner to learn according to their own readiness, abilities, and capacities, and to control the curriculum, educational content, and the amount of information received. The learner becomes active through interaction with the content, receives immediate feedback, and benefits from objective assessment through standardized tests. The learner can study at a time and place that suits their circumstances, thus saving time and effort<sup>5</sup>. As for the teacher, learning through the use of computerized software becomes more effective than traditional alternatives in addressing the learner's senses, helping to overcome the monotony that may arise in traditional verbal teaching methods, which may cause boredom among learners. Digital educational programs also help save the time spent on teaching, correction, and preparation, thereby providing efficiency in teaching changing and modern topics<sup>6</sup>.

Software also contributes to diversifying learning methods through the multiplicity of digital templates that carry the content to be taught, while ensuring interactivity by linking the learner and the user in general with the software and the computer to achieve harmony, communication, enjoyment, and excitement in learning.

We can add a set of other features that give computerized programs their importance<sup>7</sup>:

- Reducing the difficulty of conveying scientific material to the learner.
- Helping the mind encode auditory, visual, and verbal stimuli and link information to its various elements.
- Facilitating understanding by presenting examples and models containing many auditory and visual stimuli, as well as static and moving graphics, thereby engaging several senses of the learner in the learning process.
- Developing discovery skills among learners, as these programs help promote work and experimentation based on guided discovery.
- Providing complete technology to create an integrated educational process by giving learners the opportunity to review previous experiences, obtain new information if desired, and receive guidance, activities, and educational systems.

### **3- A Model of Computer Software for Learning English (American Headway Starter):**

Headway is a set of programs for teaching the English language at all levels, from beginner to proficiency. It is based on several criteria and foundations, including simplicity and clarity of style, as well as gradual progression in presenting lessons and exercises from easier to more difficult. These programs are reliable and internationally recognized, as they are adopted by most schools around the world for teaching



English, especially in private schools and intensive English language schools.

The program was authored by Liz and John Soars of Oxford University Press, who developed this program and many book series related to Headway. The names of these two authors have become associated with English language teaching due to the worldwide fame of their program and its remarkable success. They are specialists in this field, and the program is the result of their teaching experience and its alignment with their students' needs.

Among the series designed within the Headway program are:

- Headway Beginner
- Headway Elementary
- Headway Intermediate
- Headway Pre-Intermediate
- Headway Upper-Intermediate
- Headway Advanced
- American Headway Starter

It should be noted that these programs have been released in several editions, and each program is divided into series for teachers, series for learners, and series for exercises and final tests.

They are characterized by interactivity and address various aspects of teaching the English language through presenting a series of lessons in a simple and gradual manner. They can also be relied upon for self-learning, as they are designed to help learners pass national examinations and English language

proficiency tests that qualify them to obtain scholarships to English-speaking countries. English is the first global language, and most countries require, as a condition for granting scholarships, at least a good level of proficiency in English (B1–B2).

Headway programs are also characterized by their comprehensiveness, as they cover English grammar and present it in contexts related to social life (talking about describing relationships, jobs, studies, holidays, and so on). They do not rely solely on rote learning; just as there is a program dedicated to lessons and grammar, there must also be intensive and supported exercises that help the learner gradually comprehend and master the English language.

In this chapter, which addresses the use of software in the educational process, we have chosen a ready-made educational software (a ready-made application), namely American Headway Starter. We obtained it, and it includes a set of exercises related to English grammar. It is a multimedia software, as it uses written text along with images, sound, and video, and its use is simple and gradual, as mentioned previously.

Once this software or application is opened, the following image appears, serving as its interface. It has a green background displaying the name of the application, American Headway Starter, as well as the name of the university that published this application, Oxford.





Then, as soon as the page is clicked using the mouse, a new window appears in which the user is asked to enter their name; the name

does not have to be real. After that, the Enter key is pressed, as shown in the image.



Figure (2) shows the name registration window for accessing the application. Then a window appears containing a list of terms related to this software; you can respond by accepting or clicking “accept.” After accepting the terms, you enter the application, and the main window of the program appears.

In this window, we notice the name of the program clearly displayed in the center of the image, and at the top of the image there are 14 units included in the program. Thus, the program is divided into a set of different units or topics.





Figure (4) shows the main window of the software along with the units it contains.

By clicking on the icon **Unit 1** (the first unit or first module), we notice the appearance of another list including **grammar – vocabulary – writing – video**, as shown in the following image. Under each of these, there are titles that can be viewed by clicking on them.

Figure (5) shows the division of each unit into sub-sections.

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For example, by clicking on **Grammar**, a list of the lesson titles that make it up appears, which are:

- Am / are / is, my / your 1
- Am / are / is, my / your 2
- Am / are / is, this is
- Hello! – review



Figure (6) shows the contents of the **Grammar** option.

As for clicking on the **Vocabulary** option, a list of the contents of this section appears, which includes, respectively, presenting a set

of names that must be identified and pointed out, showing numbers and countable items, as well as the plural form, and finally exercises



related to greetings (good morning). The titles are shown in the following image:

- What's this in English?

- Numbers 1–10
- Good morning



Figure (7) shows the contents of the **Vocabulary** option.

As for the third option, **Writing**, in the first unit, it relates to writing an introduction. It is in fact a text containing a set of blanks that are

filled in using vocabulary provided by the program, all with the aim of producing a correct text in the end.

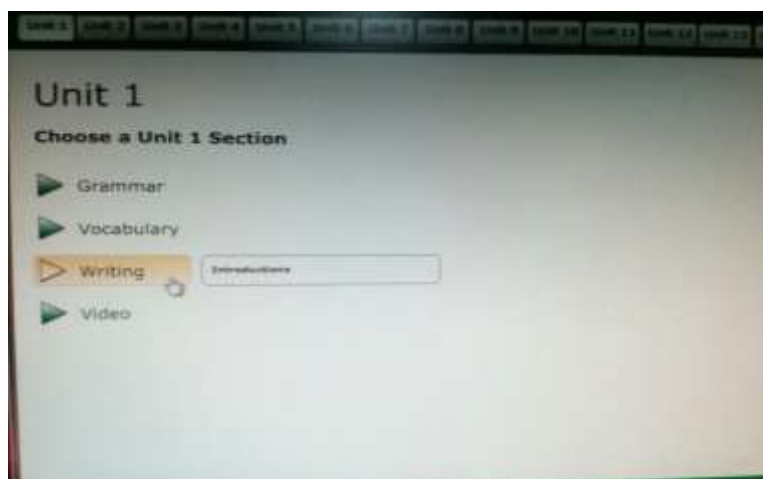


Figure (8) shows the content of the **Writing** option.

The last option is **Video**, which includes an exercise related to the topic of meetings and introductions, *hello*. It is accompanied by a

video, and the exercise is answered by listening to this video.



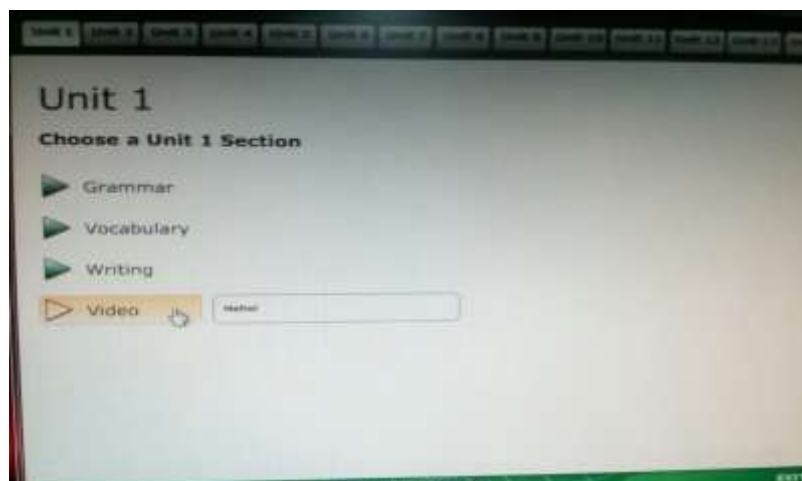


Figure (9) shows the content of the **Video** option.

This presentation provides an overview of the content of the first unit in general. The units in the studied software are diverse in their topics and are graded and sequential in their structure

from easier to more difficult, from the first unit to the last, that is, Unit 14.

In the following table, we attempt to enumerate the content of each unit.

Vidéo	Writing	vocabulary	Grammar	Unit
Hello !	Writing an introduction	What's this in english ? Number 1-10 Good morning	Am-are-is My-your This is review	Unit1
Where are you from ?	On vacation	Contries Adjectives Number 11-30	He-she-they His-her What's his name ? Where's she from ?	Unit2
What's your job ?	About me	Jobs Personal information Social expression	Am- are- is with negative form Am-are is with questions review	Unit3
My family	Describing a friend	The family Describing a friend On the phone	Posissive adjectives Has-have review	Unit4
Things i like it	My life	Sport- food- drink Present simple verbs How much is it ?	Present simple	Unit5
Your day	My busy day	The time	Present simple verbs Question	Unit6



		Word's that go together Day in a week	Negation adverbs	
My favorites	A vocation postcard	Adjectives Opposite adjective Can i... ?/places	Question words :who- where-why-how  -this and that	Unit7
Describe your living room	Visiing Miami and Florida	Rooms and furniture -in and out of town direction	There –is-are- /negation Preposition :in-on- under- next-to Some and any	Unit8
They were born in...	Familly birthday	Peoples and jobs Have-do-go When's your birthday ?	was-were born Was-were/ question Past simple(inrregular verbs	Unit9
What did you do last night ?	Last saturday	Time expressions Sports and leisur Weekend activities	Past simple/regular and inrregular verbs Past simple/question Past simple/negation -ago	Unit10
What can you do ?	My roommates	Verbs-nouns Adjective- nouns Evryday problemes	Can-can't Adverbs Request and offers	Unit11
What do you eat in a day ?	On the phone Restaurant order	shopping	I'd like I'd like...question Some and any	Unit12
What are you doing these day ?	Buying a car	Colors and clothes Opposite verbs What's thz matter ?	Present simple- present continuous Present continuous with questions	Unit13
What are you doing this weekend ?	Jorge and ingrid a mini autobiography	Transportation Social expressions	Future plans- travelling Tense review Grammar review	Unit14

Table (1) shows the contents of the units in the studied program.

When talking about how to complete the exercises in the educational software

**American Headway Starter** and interact with it via the computer, we attempt below to



present some exercises, their format, and an explanation of how to answer them.

In the first exercise of Unit One, under the topic **Grammar – am/are/is – my/your 1**, there are eight sentences containing blanks, and the task is to complete them. This is done

by clicking on the arrow located in the box of each sentence, where a set of options appears from which the user selects an answer; it is then automatically entered into the box. This process is repeated for all the sentences on the screen, as shown in the following image.

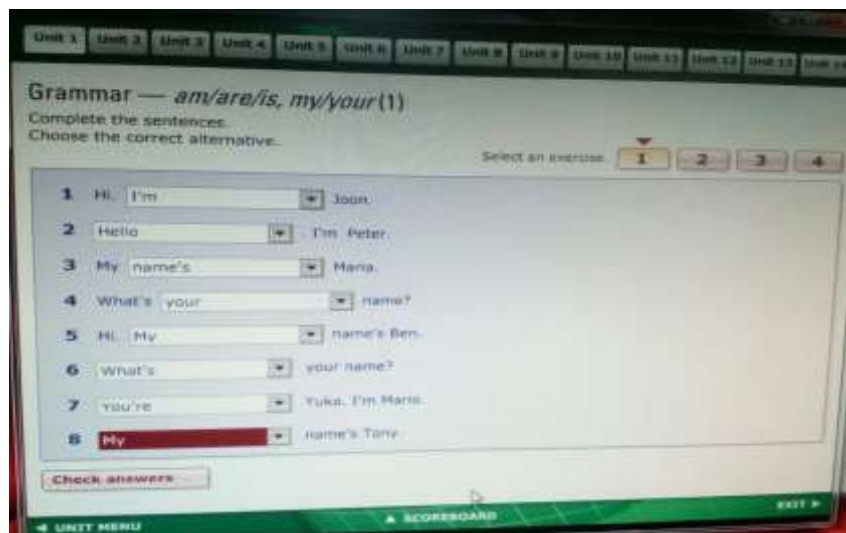


Figure (10) shows the first exercise in Unit One.

A distinctive feature of this software is that it allows you to view your evaluation and provides both the correct and incorrect answers, giving you a score based on the number of correct answers. This is done by

clicking on the **scoreboard** located at the bottom of the screen. Here, we notice that the score obtained is eight out of eight, as all the answers were correct, as shown in the image

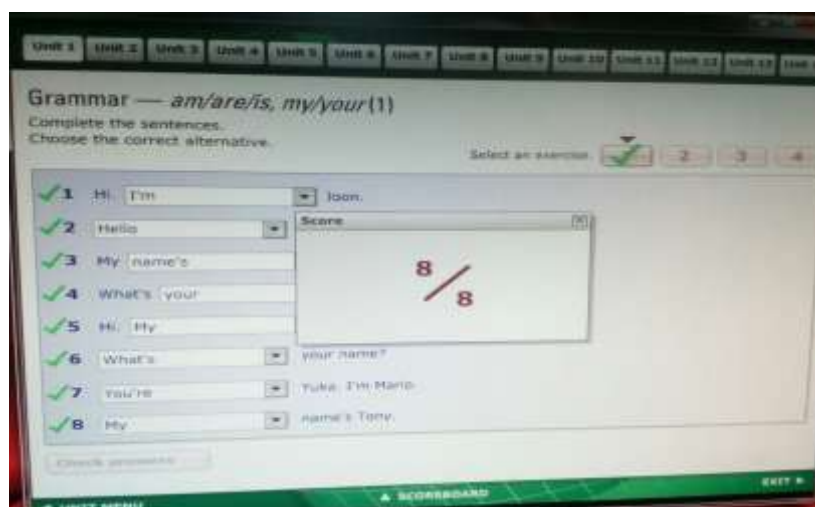


Figure (11) shows the software's evaluation and scoring of the user's answers.



In the **American Headway Starter** application, it is also possible to review the correction of incorrect answers provided by the user by clicking on **See Answers**. The software also allows the user to try the exercise again to reinforce the information by clicking on **Try Again**. The image shows these buttons at the bottom of the screen.

In conclusion, we can say that the application falls under multimedia computerized software, as it employs sound, images, and videos alongside text. It is built on a gradual structure, as we have observed, with graded units and diverse topics that can help the learner master the English language. We chose this particular English software because English is highly in demand, and there are many educational programs designed for it that are being distributed worldwide. In contrast, there is a scarcity of software designed for teaching Arabic. Usually, such software aligns with the prescribed curriculum and is focused on the final stages of education, such as the fifth year of primary education, the fourth year of middle school, and the baccalaureate or third year of secondary school. This is largely because software designers aim, to some extent, to achieve financial profit, and therefore focus on stages where demand for Arabic-language software is lower. Additionally, since Arabic is the native and official language of our country, most learners do not require such software. Consequently, computerized educational software for teaching Arabic as a living

language is rare, particularly software that focuses on developing communication skills, unlike English, which is highly demanded worldwide. Learning English allows us to access other cultures and communicate with others.

It should also be noted that there is computerized software on the Internet for other educational fields, such as Islamic studies, which aims at religious education, alongside many other general cultural fields. There are also programs in medicine, mathematics, and various widely required sciences. These advanced applications can support learning and self-learning and help overcome many learning difficulties, as not everything can be provided through educational institutions. Knowledge has experienced an enormous explosion due to technology, which has also provided solutions that allow some control, direction, and organization of this knowledge through software and websites that enable the organization, accessibility, and communication of knowledge. This was the purpose of using programming and software in the educational process.

This example is a simple model intended to support our study by providing the reader with an example of computerized educational software that can be used to develop English language skills. There are, of course, many other applications, and **American Headway Starter** is only a simple model among them.

**Footnotes:**



1. Majda Al-Sayyid, *Design and Production of Educational Media*, Safaa Publishing, Amman, 2001, p. 377
2. Abdul Hafiz Muhammad, *Computer in Education*, Safaa Publishing, Amman, Jordan, 2002, p. 265
3. Fatima Muhammad Abu Shaaban, *The Effect of E-Training on Acquiring Educational Software Skills Among Female University Students*, Master's Thesis, 2013, p. 35
4. Ibid., p. 38
5. Ismail Hassouna, Suleiman Harb, *Lectures on Computer and Communication Technology in Education (A Guide for Non-Specialist Teachers)*, Al-Aqsa University, Gaza, 2018, p. 70
6. Ibid., p. 71
7. Ismail Hassouna, Suleiman Harb, *Lectures on Computer and Communication Technology in Education (A Guide for Non-Specialist Teachers)*, p. 75

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1. Majda Al-Sayyid, *Design and Production of Educational Media*, Safaa Publishing, Amman, 2001
2. Abdul Hafiz Muhammad, *Computer in Education*, Safaa Publishing, Amman, Jordan, 2002
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#### **Theses:**

4. Fatima Muhammad Abu Shaaban, *The*

*Effect of E-Training on Acquiring Educational Software Skills Among Female University Students*, Master's Thesis, 2013