Using a Webinar Based Program to Develop EFL Research Skills among Students of Higher Institutes of Languages

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Abstract

The current study aimed at using a webinar based program to develop EFL research skills among students of higher institutes of languages. The study's participants were chosen at random (N=40) from second-year students at Ministry of Higher Education, Madina Higher Institute of International Languages, English Department. The researcher prepared a research skill checklist, a rubric and a webinar-based program. After the study instruments were pre-administered, a webinar-based program was used to instruct the experimental group. At the conclusion of the treatment, the same tools were used again. The findings demonstrated that the program was successful in fostering the research skills of second-year EFL students. Conclusions, recommendations and suggestions for further research were provided at the end of the study.

Keywords: Webinar Based Program, Research Skills, Languages Higher Institutes' Students

Introduction

Nowadays, students must access and look for information due to the advancement of information technology. The methodical process of gathering and evaluating data, in order to better comprehend the phenomena being studied, is known as research. Finding the truth and resolving an issue are objective endeavors (Prahmans, 2017). Understanding the phenomena and sharing that understanding with others are the primary responsibilities of the researcher (Paul & Jeanne, 2004).

The university places more of a focus on research. In order to take use of the information that is accessible, universities now require students to complete compulsory courses on research skills and methodology in addition to instruction on how to use computers to discover information. Universities have invested a significant amount of money and manpower to assist students in developing their research skills (Meerah & Arsad, 2010). Nonetheless, research instruction ought to have begun in primary school. Before entering graduate school, students who have conducted research at various educational levels will gain observational, manipulative, and coordination skills. Additionally, they will become knowledgeable researchers and adopt the practice of problem-solving or inquiry (IKhsan et al., 2011).

The first step in the research process is choosing a study topic and transforming it into a research question. It is crucial that the study topic is neither too general to be answered realistically nor too specific to be insufficiently substantive. The researcher must develop research hypotheses following the formulation of a research topic. A forecast of what is anticipated to happen or a connection between ideas of interest is called a hypothesis. Usually, an experiment of some kind is used to test the hypothesis (Hapuhinna, 2015).

According to Whittaker (2012), there are six phases of research. Selecting a study subject and developing a precise research question constitute the first step. Selecting the study strategy, design, techniques, and sample is the second step. Conducting the literature

review is the third step. The fourth step is gathering data. Step five is data analysis. Writing up the study and presenting its conclusions is the final step.

The skills required to do research, including strategies and tools that may be learnt, are known as research skills. They consist of analysis, dissemination, critical thinking, and problem solving. These skills are essential for pre-service teachers because they will enable them to establish a solid theoretical and practical link between their own learning process and research. Research skills allow students to recognize an issue, gather relevant and useful information, assess the quality and applicability of these resources, and develop a workable solution (Prahmana, 2017).

According to Zehro et al. (2025)'s study, research skills are abilities that take into account 21st-century technology advancements as well as the competences students need to succeed their academic life and career. Examining the functionalization and difficulties of research skills training for undergraduate learners is the primary goal of this evaluation. A systematic literature review employing the recommended reporting items for systematic review and meta-analysis (PRISMA) technique synthesized 12 selected publications published between 2019 and 2023 that were located in the ERIC and Google Scholar databases. A range of methods and approaches for enhancing research skills are shown in the results, including the 4C-ID model, research-based learning, consistent supervisor support, independent project work, instruction on how to access and use literature, active learning theory, and useful systematization models. When it came to teaching university students in research skills,

instructional effectiveness, curricular integration, and a lack of resources were typical issues. As a result, projects for students must incorporate research methods and active learning. In order to provide better organized and effective training for research abilities, it is also crucial that research methods be taught in undergraduate courses.

Under the direction of the lecturer, research-based learning is a type of student performance that aids in knowledge construction and skill development (Prahmana, 2017). The phrase "students as researchers" is a teaching strategy that encourages students to participate in undergraduate research in order to increase their own knowledge and comprehension of the larger body of knowledge in their field (Walkington, 2014). Therefore, it is possible to view the development of research abilities as a fundamental aspect of the educational process. It is important to support students in posing research questions that are more complex, detailed, comprehensive, and particular as they embark on a quest to uncover the unknown.

According to Vieno et al. (2022)'s research article, depending on their degree requirements, students can build research skills in both thesis-based and non-thesis-based undergraduate and master's programs. However, what constitutes a research competence and what is taught, exercised, and evaluated are not clear or consistent. In order to provide guidance for the improvement of a comprehensive list of research abilities that are applicable to various programs and disciplines, a literature search and an environmental scan were conducted in order to address this uncertainty. The precise skills reported in each program type were similar, despite

the fact that there aren't many published studies that directly compare research skills in thesis and non-thesis degrees. This viewpoint study found that critical appraisal, information synthesis, decision making, issue solving, data gathering, data analysis, and communication were the seven research abilities most commonly listed in both thesis and non-thesis programs. These abilities are helpful for a variety of possible career choices and can help students during their academic program when properly contextualized. Broadening the concept of "research skills" can help in program development and updates to give students a clear opportunity to acquire the abilities they need to succeed in their academic and professional efforts, regardless of the type of program.

Given the significance of research skills, a number of studies are carried out to help students improve their research abilities, such as the one by Meerah and Arsad (2010). Through a project, they evaluated the pupils' research abilities. Participants were social science students at secondary schools in Malaysia. The research's conclusions demonstrated that the students felt the course to be beneficial in addition to enjoying the assignment. They received experience conducting quality research as well as certain research skills.

The study conducted by Henderson, Nunez-Rosado, and Casar (2011) aimed to enhance research skills through a joint research endeavor. Participants in the study were community college science students enrolled in General Biology I (ages 25 to 30) and II (ages 15 to 20) during the course of two semesters and three academic years. The study's findings demonstrated that students were grateful for the opportunity and that their research abilities had

grown.

According to Pandey and Pandey (2015), a research design is the strategy or framework for a study that serves as a guide for gathering and evaluating data. A list of the most often used research designs is provided by Walliman (2011). Historical, descriptive, correlational, comparative, experimental, simulation, evaluative, action, ethnological, feminist and cultural research designs are all included in this area. The type of research challenge determines which design should be used.

According to Kumar (2011), there are a number of techniques for gathering data, including questionnaires, interviews, and observation. The deliberate and methodical process of seeing and recording an occurrence or interaction as it occurs is called observation. There are two types of observation: participant observation and non-participant observation. Another technique for gathering data is interviewing. In this verbal exchange, an interviewer attempts to extract knowledge, a belief, or an opinion from the subject. Unstructured and structured interviews are the two categories of interviews. A questionnaire is a useful tool for gathering information. It is a written set of questions, and responders record their responses. The aim of the study, the resources at hand, and the researcher's expertise all influence the method selection.

Data, technique, research strategy, research participants, and epistemology are the six essential concepts in research, according to Whittaker (2012). The information that researchers gather in order to address the study topic is referred to as data. The entirety of the researcher's

approach to doing his research, including the research techniques employed, is referred to as methodology. The term "research approach" describes the conventional distinction between quantitative research traditions. The process of choosing study participants is referred to as "research participants." The study of knowing that deals with the issue of what constitutes valid knowledge is known as epistemology.

According to Kothari (2012), there are three approaches to approach research: deductive/inductive, applied/basic, and quantitative/qualitative. In quantitative research, numerical data is gathered and analyzed to determine the frequency, range, and magnitude of events. Conversely, qualitative research examines and takes into account a topic's less evident aspects, like values, attitudes, and perceptions. Basic research aims to increase knowledge generally without any particular applied goal, whereas applied research is meant to adapt its findings to a particular situation. While the inductive strategy could result in a new meaning of the term, the deductive approach gives researchers a methodical means to test known concepts on a variety of people.

Data analysis requires a number of related procedures, including the creation of categories for raw data through coding, tabulation, and statistical inference. The foundation of analysis work is the use of several statistical formulas to calculate different percentages, coefficients, etc. Relationships between differences that support or contradict a study hypothesis should be analyzed and tested for significance in order to draw conclusions (Pandey & Pandey, 2015).

By taking data from a sample of the population, the sampling technique allows researchers to make inferences about the population. The sample that is selected should be representative of the total population. Simple random sampling, systematic sampling, stratified sampling, and clustered sampling are some of the sampling techniques (Hapuhinna, 2015).

According to Walliman (2011), doing a literature review is one of the initial stages in organizing a research project. This entails searching through every information source to get the most recent information and evaluating it for quality, controversy, relevancy, and gaps. A literature review entails an unbiased assessment of the material gathered, including its advantages and disadvantages. According to Kumar (2011), a literature review improves research technique, clarifies and focuses the research subject, integrates the researcher's results with the body of existing knowledge, and expands and strengthens the researcher's knowledge base. Writing the research report is the final skill of a research project, according to Walliman (2011). A research problem definition, an outline of data collection and analysis techniques, potential results, a project timeline, a description of the resources needed, a list of references, and the title, goals, background, and prior research are all components of academic research.

Webinars, often known as web-based seminars, are a type of seminar that is held online. These days, professional training and higher education frequently promote digital learning as it is recognized as an efficient teaching-learning method. Students facilitate conversation in these virtual sessions, which not only improves their communication abilities but also teaches them how to

interact with individuals from all over the world. Students may use webinars as a platform to learn how to use webcams, modern IT technologies, and other tools. Additionally, students learn how to improve their moderator abilities (Gupta and Sengupta, 2021).

Webinars are live online instructional presentations where viewers can ask questions and leave comments, according to the Merriam-Webster online dictionary (2024). Synchronous audio-video conferencing technologies, commonly referred to as web-based seminars, are called webinars. Web + seminar is how the word was created (Verma and Singh, 2010). The technology is also referred to as "audio-graphic conferencing" (Hampel, 2003), "online conferencing" (Hewett and Lyn 2007), and "synchronous cyber face-to-face classroom" (Wang, Chen, and Levy, 2010). Despite having distinct names, webinars have the following elements, according to Newman (2013): polling, audio and video communication, text-based discussion, and whiteboard. These components may vary among the available webinar solutions; some offer additional capabilities like mobile phone compatibility, screen sharing, and meeting recording (for a list of available webinar tools, check the Wikipedia page on "Comparison of web conferencing software"). As said before, webinars are better than using a single type of tool because they are classified as multi-synchronous communication tools. The benefits of webinars were highlighted by Newman (2013) as follows: "Webinar technology is fast rising in both usage and capacity. Education and training are among the fields that are expanding so quickly. Businesses are increasingly using online technology for training, product presentations,

and education, mostly due to the substantial time and cost benefits". Newman further contended that by investing almost the same amount of time and effort, users might contact a greater number of individuals. Additionally, he proposed that instructional webinars might be readily modified and customized to meet the needs of the attendees.

Arif et al. (2025) at Ziauddin University Faculty of Nursing and Midwifery (ZUFONAM) carried out a qualitative phenomenological research to investigate the efficacy of webinars and workshops as instructional tactics employing the Kirkpatrick model among MSN students. ZUFONAM Master of Science in Nursing (MSN) students made up the target group. This study used a qualitative phenomenological technique and a quasi-experimental post-analysis strategy. The experiences of nursing students presenting webinars and workshops as course assignments were investigated in a qualitative descriptive research. Participants were asked to share their challenges, lessons learned, and recommendations during semi-structured interviews. The first challenges caused by ambiguity, the enhancement of cooperation, communication, collaboration, and technical handling abilities, and suggestions for incorporating webinars and workshops into teaching approaches were among the main themes that arose from the thematic analysis. The study's findings illustrate the growing importance of interactive learning strategies in nursing education. Recent studies have demonstrated that seminars and webinars frequently enhance confidence, teamwork, and communication skills, despite ongoing issues with students' preparedness and comfort level with new formats.

According to Kinoshita (2008), a greater number of people worldwide can now utilize ICT, opening up new applications for these technologies. From a different angle, Gooding (2008) discussed the tools' accessibility and said that everyone may now use the costly technology that was previously only available to large organizations for little or no cost.

Additionally, synchronous communication combined with other media interaction is growing more and more common, according to O'Dowd (2013). It is utilized for corporate and educational objectives in addition to personal ones, such online meetings with friends. Many webinar websites promote webinars for businesspeople since they are among the most cost-effective and time-efficient ways to arrange meetings, compared to going to a far-off place and returning. According to Newman (2013), a number of businesses have developed a curriculum based on their webinar trainings, and if participants complete all of the needed webinar sessions, they are granted certificates. The websites of Cambridge University, Oxford University Press, and the British Council all offer webinar training for language teachers, while Scholastic Publishing offers a variety of webinars for educators.

Additionally, they are employed in educational environments. In their use of webinars for nurse education, Daley et al. (2008) noted that they can facilitate the growth of relationships between peers in different places to share viewpoints and enable the walls of the local learning community to be expanded. Participants were enrolled in collaborative leadership courses, and the webinar was used to host seminars on national health services with international students. After the research, the students

thought webinars were so "amazing" that they were incorporated into the course curriculum. Additionally, the webinar experience, according to the participants, enhanced their learning and fostered a sense of teamwork. A webinar tool was also utilized in nurse education by Senecal and Gazda (2009). Participating were PhD candidates from the College of Nursing and Health Innovation at Arizona State University. Because they were unfamiliar with the webinar platform, the participants found it difficult to utilize. They also encountered some technological issues, such audio and video loops. To get effective results, the authors recommended thorough webinar preparation. Joshi et al. (2012) looked at how well webinars work as teaching resources for nursing education. Two groups of three-year nursing students were chosen to take part. The first group was the webinar group, while the second was the "participatory learning" group. The webinar group watched lectures via web conferencing, while the other group studied the course content from textbooks. The study compared the pretest and post-test results of the participants and showed that webinars could be effective teaching methods. Webinars are frequently used in other professions, such as law. A lawyer's meeting on education law was announced by the Florida Bar Journal in June 2012.

Hampel (2003) and Hampel and Baber (2003) noted several advantages of using web-conferencing technologies in formal language training when it comes to language education through webinars. They argued that in online language classes where most students studied asynchronously, very low retention rates were typical. Conversely, web-conferencing-enabled online courses

offered more regular scheduling and regular, face-to-face interactions with other students. More direct learner interaction and higher overall retention rates might result from this arrangement. Furthermore, Yamada and Akahori (2009) highlighted the value of a webcam component in learner-centered communication, which can raise students' alertness and performance. Additionally, Cheng et al. (2005) used the Anacam-Live webinar technology at Taiwan's Cyber University to reduce synchronous contact between the students and the teacher. According to the survey, participants were happy with how the teacher and pupils interacted. Ng (2007) built another webinar system at the Open University of Hong Kong called Interwise. The instructors divided the two hundred students into six groups and presented the subject both in-person and synchronously. According to the study, synchronous learning promotes interaction between teachers and students, despite the participants' occasional technical issues with their Internet connection.

Heiser, Stickler, and Furnborough (2013) carried out another study with language learners at Open University UK. The participants had to complete training on Elluminate, a web conferencing program used by the institution for instructional reasons. The participants experimented using the instrument after being briefed on its features. According to the study, participants felt comfortable using the webinar tool following the training, and they thought they would suggest this training to other students. This study suggests that it is crucial to teach users before using an IT solution. Kohorst and Cox (2007) examined “Elluminate” to set up online office hours and communicate with students about the topics covered in the

course. According to the study, "Elluminate" effectively enhanced interaction between the students and the teacher when they had enquiries concerning the course.

Context of the problem

While teaching academic courses to second-year students in English departments at higher language institutes (who did not take courses in methodology, psychology, or education), the researcher observed that they lacked research skills, despite the fact that research skills are crucial. Reviewing literature and related studies, the researcher to his best knowledge found one study conducted by Zehro et al. (2025) who observed that EFL undergraduate students have weak prior knowledge and skills in conducting research and that they need further enhancement of the research training to produce knowledgeable and skillful researchers. Additionally, he carried out a pilot study (See Appendix 2) in which a group of 40 second-year EFL students were given a research skills test. They were required to respond to a series of questions designed to assess their research skills. The majority (95%) have poor research skills, according to the pilot study's findings.

Statement of the problem

EFL students lack research skills, such as the skill to formulate and solve the research problem, formulate research hypotheses, etc., despite the fact that research skills are crucial for all students, but particularly for those studying languages in higher education. For this reason, the current study aimed to improve their research skills and their contentment with the suggested program that was delivered via webinars.

Questions of the study

The primary question could be stated as follows:

What is the effect of using a webinar based program on developing EFL students' research skills in faculties and higher institutes of languages?

This main question can be divided into the following sub-questions:

1) What are the most important research skills targeted for second year languages higher institutes' students (English departments)?

2) How far would the use of a webinar based program develop EFL students' research skills in faculties and higher institutes of languages?

3) How far would second year languages higher institutes' students (English departments) be satisfied with the proposed program presented through webinars to develop research skills?

Purpose of the study

The researcher aimed to accomplish the following aims:

1. Identifying the most important research skills targeted for second year languages higher institutes' students (English departments).

2. Identifying the effect of using a webinar based program to develop EFL students' research skills in faculties and higher institutes of languages.

Hypotheses of the study

To accomplish the purposes of the study, the following hypotheses were formulated:

1- There are statistically significant differences between the experimental group and control groups' mean scores on writing research titles skill favoring the experimental group.

2- There are statistically significant differences between the experimental group and control groups' mean scores on writing problem statement skill favoring the experimental group.

3- There are statistically significant differences between the experimental group and control groups' mean scores on writing research objectives skill favoring the experimental group.

4- There are statistically significant differences between the experimental group and control groups' mean scores on writing research hypotheses skill favoring the experimental group.

Significance of the study

The current study could be useful to:

1- develop research skills for EFL students at higher institutes of languages in Egypt using webinars based program.

2- draw attention to the usage of webinars in EFL instruction and learning among faculty members.

3- present new opportunities for EFL teaching and learning researchers.

Delimitation of the study:

The current study is delimited to:

1. Specific research skills: formulating research titles, Identifying research objectives, writing research problem statements and making research hypotheses.

2. 40 EFL second-year language students (English department) in Madina Higher Institute of International Languages, Ministry of Higher Education, divided into two groups: 20 experimental and 20 control.

3. The academic year 2024–2025.

Definition of terms

Research skills

Research skills are the abilities needed to conduct research, including methods and resources that may be learned. They include problem-solving, critical thinking, analysis, and dissemination. These skills are essential for pre-service teachers because they will enable them to establish a solid theoretical and practical link between their own learning process and research. Research skills allow students to recognize an issue, gather relevant and useful information, assess the quality and applicability of these resources, and develop a workable solution (Prahmana, 2017).

In this study, the researcher defined research skills as the abilities required to support languages higher institutes' students (English departments) to formulate research titles, identify research objectives, write research problem statements and make research hypotheses. The researcher's objective was to examine the effect of functionalizing webinars based program to develop these skills for EFL students.

Webinars

Webinars are web-based seminars that are held online. Using shared virtual platforms, participants and facilitators interact synchronously and widely in real time while communicating live over the internet from vast geographic

distances. Webinars are more effective in promoting knowledge and skills (Gegenfurtner & Ebner, 2019).

In this study, the researcher's objective was to examine the effect of functionalizing webinars based program to develop these skills for EFL students.

Languages Higher Institutes' Students:

Students study languages and related subjects in Egypt's Language Higher Institutes. Madina Higher Institute of Languages in Giza, for instance, specializes in translation and language studies. Specialized programs in simultaneous interpretation are provided by other institutions, such as the Higher International Institute for Languages and Simultaneous Interpretation. Language-focused and allied higher education institutions are listed on the Ministry of Higher Education & Scientific Research website: https://mohesr.gov.eg/ar-eg/Pages/Home.aspx

In this study, the researcher investigated the effect of using webinar based program to develop EFL students' research skills in faculties and higher institutes of languages.

Method

Participants

The current study's participants were EFL second year languages higher institutes' students (English departments) in Madina higher institute of international languages, ministry of higher education in Egypt (N=40, 20 in the experimental group, and 20 in the control group).

Design

The researcher employed a mixed-method research design. The choice between several quantitative and qualitative methodologies to achieve research objectives is determined

by the research topic, which is the beginning point in this new approach (Creswell, 2003). As a result, both quantitative and qualitative research methodologies are used in this study's research framework for data collecting and analysis. Before distributing the functional writing skills list to a few Egyptian EFL professors and educators, a brief qualitative preparatory step of literature study and data theme analysis is required.

Instruments

An EFL research skills checklist, a research skills pre-post test, a reflection log, a satisfaction questionnaire, and a webinar-based program were all constructed in order to achieve the current study's purposes.

1- Checklist of the Research Skills

In preparing this checklist, the researcher depended on the following:

- The Jury members (See Appendix 1)
- Reviewing of literature and related studies.

So, the researcher constructed a checklist of research skills. Through the jury members and previous studies, the researcher was able to learn more about the needs of the students. These approaches entailed visiting both EFL professors and students who took part in the educational process. The researcher was careful to clarify the reason for his visit and to state that the data collected will be utilized to raise the standard of English instruction and learning. Regarding the recommendations of the jury members and the theoretical part of the study, a checklist of the research skills was built up. The academic requirements of EFL students were translated into the

needed research skills that would be included in the suggested program as follows:

1- Formulating research titles

2- Writing research problem statements

3- Identifying research objectives

4- Making research hypotheses

A panel of jury members reviewed the research skills checklist. Their task was to assess the checklist's validity in terms of its clarity and appropriateness for the students' level. After implementing the necessary modifications, they stated that the research skills checklist was valid.

The checklist's reliability was assessed using the test-retest method. It was given to ten second-year EFL students who were enrolled in ministry of higher education, Madina higher institute of international languages, Egypt. After two weeks, it was given to the same group once more. The calculated Pearson correlation between the two administrations, which was 0.82 at the 0.01 level, showed the checklist's reliability.

In order to assess the checklist's clarity, reliability, and time requirements, it was piloted. Ten students who were not receiving the primary treatment were used to test the checklist. The checklist needed fifteen minutes to complete. Based on the students' responses, each item on the checklist is assigned a score between 0 and 5.

2- EFL research skills pre-post test

After developing a preliminary research skills checklist (see appendix 3) and having a panel of jury members (See Appendix 1) validate it, the researcher created an EFL

research skills pre-posttest. The purpose of this test was to evaluate the study group's research skills before the intervention. It was pre- and post-tested. It served as a pre-test to determine the study group's current level of research proficiency. As a post-test, it sought to determine how well a webinar-based program developed the research skills of EFL students at language faculties and higher education institutions. In order to assess the students' functionalization of research skills, the researcher then gathered their final research products. The following were the elements of the EFL research skills pre-posttest (see appendix 8):

- Part one, students were required to formulate a good research title for an EFL topic.
- Part two, students were required to write a good research problem statement for an EFL topic.
- Part three, students were required to identify 2 good research objectives for an EFL topic.
- Part four, students were required to make 2 good research hypotheses for an EFL topic.

2.1. Validity of the Test

A panel of four EFL specialists was given the preliminary EFL research skills test (see appendix 7). They were required to evaluate the test's validity based on its appropriateness for the learners' level and clarity. They were required to change, include, or exclude any section as they considered appropriate. After several insightful comments were made, they were taken into account (Face Validity). In order to establish content validity, the test was created based on a thorough and precise review of the items. The test's format and scoring methodology were

established by this well-organized, precise, and methodical review. As a result, the test's content accurately reflected the skills that were meant to be assessed. The test was therefore valid.

2.3. Reliability of the Test

The test–retest method was used to measure the test reliability.In addition to the participants in the intervention, the test was given to twenty-five EFL second-year learners in Ministry of Higher Education at Madina Higher Institute of International Languages in Egypt. After two weeks, it was given to the same group once more. The calculated Pearson correlation between the two administrations, which was 0.81 at the 0.01 level, proved the test's reliability.

2.4. Piloting and Scoring the Test

The test was piloted in order to assess its reliability, clarity, and estimated time required to complete. Twenty-five students who were not receiving the primary treatment were used to pilot the test. The researcher noted how long each student took in order to determine the test's time. The following formula was then applied:

$$T1+T2/2.$$

So, the time of the test was 120 minutes plus 5 minutes for instructions. The total time was 125 minutes.

2.5. Validity of the test

A panel of jury members was given an EFL research skills test. They were asked to evaluate the test's validity in light of its clarity and appropriateness for the learners' level. They confirmed that the directions and test were understandable and appropriate for the learners' skill levels.

2.6. Scoring the test

Using inter-rater reliability, students' research papers were graded by two raters, who assigned each skill a score out of 25. The test has a total score of 100. Two distinct raters—the researcher and his colleague—evaluated students' research products with an emphasis on the functionalization of research skills in order to guarantee test reliability. The rubric's reliability was determined to be (0.74), which is an acceptable level.

3- A research skills rubric

For scoring the test, the researcher created a rubric. There are four skills on the rubric. There are sub-skills inside each skill. Three points are available on the scale: excellent, satisfactory, and insufficient. The jury panel reviewed the preliminary version of the rubric to determine its validity (see appendix 6). The final version of the rubric was created once the suggested changes were made (see appendix 7).

4- Webinars based program

4.1. Aims and objectives of the webinar based program

Through webinars, the program sought to improve the research skills of second-year EFL students (see appendix 14). Following the webinars, students would have the ability to:

1- Formulate research titles
2- Write research problem statements
3- Identify research objectives
4- Make research hypotheses

4.2. The Framework of the Program:

In designing the framework of the webinars based program, the following steps were taken into considerations:

- Table of specifications (See Appendix 12)
- Reviewing previous studies and literature relevant to designing programs taught by webinars based program, then selecting and teaching materials and evaluation.
- Identifying the students' needs for the program through the checklist of EFL research skills selected by EFL professors and students

The results obtained from the previous points have greatly affected the components of the program which are specified as follows:

1-The general aim of the program.

2-Intended Learning Outcomes of the Designed program.

3-Content and teaching material.

4-Methods of teaching and learning activities.

5-Supplementary material.

6-Evaluation.

These components will be dealt with in details in the following steps.

4.2.1. The General Aim of the webinars based program:

The general aim of the suggested webinars based program was formulated considering the academic needs of the EFL students at Madina Higher Institute for International Languages (English Department). The intention was primarily to provide a program to those learners to improve the EFL research skills they need to succeed academically at the university level, and generally in their field of specialization.

4.2.2. Intended Learning Outcomes of the Designed program: (See Appendix 13)

By completing the program, students will be able to:

1- Formulate research titles

2- Write research problem statements

3- Identify research objectives

4- Make research hypotheses

4.2.3. The Content of the Proposed Webinars Based Program:

As the program should be satisfactory in the sense that it should meet students' needs, the identified needs determined the working construction of the program. To reflect the differences of the various topic subjects, materials were prepared and selected with special care so that they can serve the students in their field of specialization. The researcher depended heavily on his colleagues and professors in Higher Institutes of Languages (English department) who teach the students for the information that makes up the content of the program (See Appendix 14). The following table displays the content of webinars:

Table (1) The Content of Webinars

No. of Webinar	The Content of Webinars
Webinar 1	The study instruments' pre-administration
Webinar 2 **Webinar 3**	Formulating research titles to achieve the following objectives: 1- Provide precise information about the study's topic and scope. 2- Steer clear of abbreviations. 3- Functionalize words that make a good impression

	and pique the reader's curiosity functional. 4- Make use of the most recent terminology used in the field of research. 5- Determine the important independent and dependent variables.
Webinar 4 **Webinar 5**	Writing research problem to achieve the following objectives: 5- Identify a broad area of interest in a general field or topic that interests students. 6- Narrow the focus to a specific sub-area or issue. 7- Conduct preliminary research by exploring existing literature, studies, and data related to students' chosen sub-area to identify knowledge gaps and potential research questions.
Webinar 6 **Webinar 7**	Identifying research objectives to achieve the following objectives: 8. Identify the primary topic, explain its significance, and provide references to earlier research on the topic. 9. Identify the research topic, outline the goals, and specify the gap or gaps in the current body of knowledge. 10. Describe the current study and highlight its importance and novelty. 11. Steer clear of restating the abstract, adding extraneous details, and asserting novelty without sufficient evidence.
Webinar 8 **Webinar 9**	Making research hypotheses to achieve the following objectives: 12- Identify a research question 13- Formulate a null hypothesis by a statement that means the variables under investigation have no link with one another and serves as a baseline for comparison when testing the research hypothesis. 14- Determine the dependent variable, which is the variable that is measured or observed, and the independent variable, which is the variable that is altered or manipulated.
Webinar 10	the post administration of the study instruments

A session on the pre-administration of the study instruments preceded these webinars, and a second session was held afterward to discuss the post-administration of the study instruments. Ten webinars were held in all.

4.2.4 Sources of Content Selection:

The content of the webinars based program is selected from different sources. The EFL research skills are chosen from content areas relevant to students' special interests for the job market in translation and teaching English. The major sources of the materials are the following:

Arif, S., Ali,A., Chandani, S ; Shafi, Z. (2025). Exploring the Effectiveness of Student-Led Webinars and Workshops as Teaching Strategies Using Kirkpatrick Model Among MSN Students. Journal of Asian Development Studies 14(1). Retrieved from: 10.62345/jads.2025.14.1.30

Meerah , T. ; Osman, K.; Zakaria, E; IKhsan, Z. Krish, P.; Lian, D. & Mahmod, D. (2011). Measuring graduate students research skills .Procedia – Social and Behavioral Science.

Meerah, T. & Arsad , N. (2010). Developing research skills at secondary school. Procedia - Social and Behavioral sciences 9.

Pandey , P. & Pandey , M. (2015). Research methodology: Tools and techniques. Romania: Bridge center.

Paul D.L. & Jeanne E.O. (2004). Practical Research: Planning and Design. (8th ed.). Texas:Pearson Prentice Hall

Prahmana , R. (2017). The role of research based learning to enhance students' research and academic writing skills. Journal of Education and Learning. 11 (3).

Vieno, K. ; Rogers, K. & Campbell, N. (2022). Broadening the Definition of 'Research Skills' to Enhance Students' Competence across Undergraduate and Master's Programs. Education Sciences 12(10):642. Retrieved from: 10.3390/educsci12100642

The input from the students was also valuable when selecting materials, as they could provide information about aspects of their studies that interest them. Professors in the specialized field were also a good source of the topics that would interest the students and would be of great benefit to them at the same time. So, the activities have been prepared to make English appealing in the sense of what the students have interest in and need in their specialized field. The emphasis is on giving learners enough time to practice the skills needed in content that appeals to them. Thus the syllabus of the program consists of the following sessions.

- **Session (1)** Formulating Research Titles
- **Session (2)** Writing Research Problem statements
- **Session (3)** Identifying Research Objectives
- **Session (4)** Making Research Hypotheses

4.2.5. Teaching Techniques, Aids and Materials:

The following techniques and materials were used when teaching the sessions of the program:

(Google classrooms - Whatsapp application – pdf files – PowerPoint presentations – Educational videos - Working in groups – Repeating - Getting the idea quickly – Brainstorming - Problem Solving)

Each session is taught using the most suitable of the above techniques; usually a mixture of more than one technique is used in the same session.

4.2.6. Evaluation:

Both formative and summative evaluations were employed by the researcher. The primary question, its sub-questions, and the webinar activities that aided students all included formative evaluation. The post-tests given to the students at the conclusion of the sessions served as a representation of the summative assessment (For Raw Scores of the Pre-Post Test for Control and Experimental Group, See Appendix 11). Each session ends up with an evaluation item, in order to provide feedback for the teacher and the students. These evaluation items were designed in a way that would tell whether the students can use the skills taught in the sessions or not. It is also of great importance to indicate that a pre and posttest in EFL research skills was administered twice to the students before and after the program. Detailed information about the pre and posttest was given before. To see samples of students' works, (See Appendix 15). The following points will address the results and discussion of the statistical treatment of the data.

5. The Reflection Log:

After each session of the program, students were asked to complete some information to reflect on what they were learning (See Appendix 9). They have got some useful experiences such as: how to identify EFL research titles, problems, objectives and hypotheses. The most interesting things they learned were how to write research problems. As a result of these sessions, the students have changed their mind about some points related to EFL research skills. The students expressed their ideas freely and the researcher made use of these ideas to help them understand the proposed program more effectively.

6. Satisfaction Questionnaire:

The satisfaction questionnaire is divided into three parts i.e. Information about the proposed program, the researcher, and comments. (See Appendix 10)

Table (2) Results of Satisfaction Questionnaire

Part (1) The Program	No. of students N=20	%
1- The proposed Program serves as a worthwhile guide to you as students in English department:		
▪ Strongly Agree	20	100
▪ Agree	0	0
▪ Disagree	0	0
▪ Strongly disagree	0	0
2- The content/material is well organized.		
▪ Strongly Agree	20	100
▪ Agree	0	0
▪ Disagree	0	0
▪ Strongly disagree	0	0
3- The material is appropriately challenging.		
▪ Strongly Agree	16	80
▪ Agree	4	20
▪ Disagree	0	0
▪ Strongly disagree	0	0
4- The Program pace was Satisfactory.		
▪ Strongly Agree	20	100
▪ Agree	0	0
▪ Disagree	0	0
▪ Strongly disagree	0	0
5- This Program met my goals/expectations.		
▪ Strongly Agree	20	100
▪ Agree	0	0
▪ Disagree	0	0
▪ Strongly disagree	0	0
6- The instructions for tests and assignments are clear.	20	100
▪ Strongly Agree	0	0
▪ Agree	0	0
▪ Disagree	0	0
▪ Strongly disagree		

Part (2) The Researcher		
7- The researcher uses concrete, understandable examples.	20	100
▪ Strongly Agree	0	0
▪ Agree	0	0
▪ Disagree	0	0
▪ Strongly disagree		
8- The researcher is enthusiastic.		
▪ Strongly Agree	20	31
▪ Agree	0	0
▪ Disagree	0	0
▪ Strongly disagree	0	0
9- The researcher is courteous and considerate.		
▪ Strongly Agree	20	100
▪ Agree	0	0
▪ Disagree	0	0
▪ Strongly disagree	0	0
10- The students are encouraged to ask questions and express ideas.	20	
▪ Strongly Agree	3	100
▪ Agree	0	9
▪ Disagree	0	0
▪ Strongly disagree		0
11- The researcher is prepared for each class session.	20	100
▪ Strongly Agree	0	0
▪ Agree	0	0
▪ Disagree	0	0
▪ Strongly disagree		
12- I can get individual help from the researcher when I need it.	20	100
▪ Strongly Agree	0	0
▪ Agree	0	0
▪ Disagree	0	0
▪ Strongly disagree		
13- I have learned a lot from this researcher.		
▪ Strongly Agree	20	100
▪ Agree	0	0
▪ Disagree	0	0
▪ Strongly disagree	0	0
Part (3) Comments ……		

From the above table we notice that (100%) of the students strongly agree that the proposed program serves as a worthwhile guide to them as translators and English teachers, the content or material is well organized and the instructions for tests and assignments are clear. Most of them (100%) strongly agree that this program met their goals and expectations. (80%) strongly agree that the material is appropriately challenging. All of them (100%) strongly agree that the researcher uses concrete, understandable examples and prepares for each class session and they are encouraged to ask questions and express ideas. As for their comments, they confirm the importance of the proposed program and the necessity to be applied within specialized EFL research skills courses in the bylaws of English departments in higher languages institutes.

Therefore, the program's effectiveness in improving the EFL research skills under investigation was demonstrated by the analysis of the current study's data, which showed a 1.03 gain ratio and a very significant impact size (8.89). Thus, the study's primary question " What is the effect of using a webinar based program to develop EFL students' research skills in faculties and higher institutes of languages?" and the three sub-questions " What are the most important research skills targeted for second year languages higher institutes' students (English departments)?, How far would the use of a webinar based program develop EFL students' research skills in faculties and higher institutes of languages?, How far would second year languages higher institutes' students (English departments) be satisfied with the proposed program presented through webinars to develop research skills?"

are answered, and the four hypotheses are investigated based on the following findings of this study.

Results of the study:

The results of the study are presented in light of the hypotheses using the statistical package for social sciences (SPSS) version 22.

1-The first hypothesis

The first hypothesis claims that "There are statistically significant differences between the mean scores of the experimental group and the control group on the pre-post targeted research skills test (the skill of formulating research titles), favoring the experimental group"

Table (3) The study group's "t" value before and after the research skills test was administered (the skill of formulating research titles).

Group	N	Mean	S.D	T-Value	D.F	Sig.
pre	40	2.022	1.517	5.152	29	0.01
post	40	3.659	1.461			

Table (3) demonstrates that the research skills (the skill of formulating research titles) posttest scores of study group students are substantially higher than their pretest results. Their posttest mean score (3.659) was higher than their pretest mean score (2.022). The difference is significant at the (.01) level, with a T-value of 5.152. Consequently, the study's first hypothesis was valid.

2-The second hypothesis

The second hypothesis claims that "There are statistically significant differences between the mean scores of the experimental group and the control group on the pre-post

targeted research skills test (the skill of writing research problems), favoring the experimental group".

Table (4) The study group's "t" value before and after the research skills test was administered (the skill of formulating research problems).

Group	N	Mean	S.D	T-Value	D.F	Sig.
Pre	40	15.03	8.92	4.619	29	0.01
post	40	24.70	7.20			

Table (4) demonstrates that the research skills posttest scores of study group students are noticeably higher than their pretest results (the skill of writing research problems). Their posttest mean score was higher (24.70) than their pretest mean (15.03). The difference is significant at the (.01) level, and the t-value is (4.619). Consequently, the study's second hypothesis was valid.

3-The Third hypothesis:

The third hypothesis claims that "There are statistically significant differences between the mean scores of the experimental group and the control group on the pre-post targeted research skills test (the skill of identifying research objectives), favoring the experimental group".

Table (5) The study group's "t" value before and after the research skills test was administered (the skill of formulating research objectives).

Group	N	Mean	S.D	T-Value	D.F	Sig.
pre	40	2.80	1.56	2.46	29	0.05
post	40	3.67	1.12			

In the research skills test, study group students' posttest results are noticeably higher than their pretest results, as indicated in table (5), (the skill of identifying research objectives). Their posttest mean score (3.67) was higher

than their pretest mean score (2.80). The difference is significant at the (.01) level, and the T-value is (2.46). This hypothesis was thus valid.

4-The Fourth hypothesis:

The fourth hypothesis claims that "There are statistically significant differences between the mean scores of the experimental group and the control group on the pre-post targeted research skills test (the skill of making research hypotheses), favoring the experimental group".

Table (6) The study group's "t" value before and after the research skills test was administered (the skill of formulating research hypotheses).

Group	N	Mean	S.D	T-Value	D.F	Sig.
Pre	40	2.00	1.24	2.55	29	0.05
post	40	2.87	1.07			

In the research skills test, study group students' posttest results are noticeably higher than their pretest results, as indicated in table (6), (the skill of making research hypotheses). Their posttest mean score (2.87) was higher than their pretest mean score (2.00). The difference is significant at the (.01) level, and the t-value is (2.55). Consequently, this study's hypothesis was valid.

Consequently, the four hypotheses of this study were validated. It means that webinars transform the conventional notion of a teacher-centered learning environment into a student-centered one. Inquiry habits, dependent language acquisition, and the pursuit of new knowledge are all facilitated for students. Furthermore, webinars provide a novel learning environment that prioritizes the use of digital tools and technology to promote communication between educators and learners.

Thus, the research group attested to the fact that the webinar-based program aids in their mastery of the course material.

Discussion of the Results

The current study's aim was to use webinars-based program to help EFL second-year students improve their research skills. The study group's general research skills were enhanced by the webinar-based training, according to the study's findings. This is because the program, which was built on webinars, allowed students to learn in a technologically advanced, flexible, collaborative, and fun setting. Furthermore, the program demonstrated a significant impact on the development of research skills among second-year students. These findings are consistent with those of Zahro, Muzazzinah, and Ramli (2025), who looked into the implementation of research skills training and the difficulties faced by undergraduate students. They came to the conclusion that technology methods greatly improved the students' research skills.

To reflect the differences of the various topic subjects, materials were prepared and selected with special care so that they can serve the students in their field of specialization. The researcher depended a lot on his colleagues and professors in Higher Institutes of Languages (English department) who teach the students for the information that makes up the content of the program. The content of the webinars based program is selected from different sources. The EFL research skills are chosen from content areas relevant to students' special interests for the job market in translation and teaching English. The input from the students was also valuable when selecting materials, as they could provide information about aspects

of their studies that interest them. Professors in the specialized field were also a good source of the topics that would interest the students and would be of great benefit to them at the same time. So, the activities have been prepared to make English appealing in the sense of what the students have interest in and need in their specialized field. Each session is taught using the most suitable of EFL techniques; usually a mixture of more than one technique is used in the same session. Both formative and summative evaluations were employed by the researcher. The primary question, its sub-questions, and the webinar activities that aided students all included formative evaluation. The post-tests given to the students at the conclusion of the sessions served as a representation of the summative assessment. Each session ends up with an evaluation item, in order to provide feedback for the teacher and the students. These evaluation items were designed in a way that would tell whether the students can use the skills taught in the sessions or not. It is also of great importance to indicate that a pre and posttest in EFL research skills was administered twice to the students before and after the program.

Conclusions

The study's findings demonstrated that the use of the webinars-based program considerably developed the research skills of the study groups. It was determined that the webinars-based program was successful in fostering the research skills of second-year EFL students. The four hypotheses of this study were validated. It means that webinars transform the conventional notion of a teacher-centered learning environment into a student-centered one. Inquiry habits, dependent language acquisition, and the

pursuit of new knowledge are all facilitated for students. Furthermore, webinars provide a novel learning environment that prioritizes the use of digital tools and technology to promote communication between educators and learners. Thus, the research group attested to the fact that the webinar-based program aids in their mastery of the course material. The study group's general research skills were enhanced by the webinar-based training, according to the study's findings. This is because the program, which was built on webinars, allowed students to learn in a technologically advanced, flexible, collaborative, and fun setting. So, the program demonstrated a significant impact on the development of research skills among second-year students.

Recommendations of the study

The following recommendations are presented for the sake of teachers and students in light of the previous results:

❖ **For EFL Students:**

1- New approaches such as webinars-based program of teaching research skills should be regarded, functionalized and investigated.

2- The necessity of functionalizing webinars-based program in EFL classrooms for developing language skills should be taken into consideration.

3- Webinars-based program should be accredited in various educational stages.

❖ **For EFL Teachers:**

1- Teachers have to support learners to conduct research in order to foster inquiry and a lifelong love of learning.

2- It is important to highlight the shift from teacher-centered to student-centered classrooms.

Suggestions for further research

Considering the findings of the current study, the following suggestions are presented:

1- Examining how webinar-based programs affect the development of useful language skills like writing and speaking.

2- The impact of webinar-based programs on increasing learners' motivation and autonomy.

3- Utilizing webinar-based programs to improve college students' critical thinking and problem-solving skills.

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