IRAQI Academic Scientific Journals
العراقية المجلات الأكاديمية العلمية
ISSN: 2663-9033 (Online) | ISSN: 2616-6224 (Print)
Journal of Language Studies
Contents available at: http://jls.tu.edu.iq

Scaffolding as a Teaching Strategy to Improve Students Translation Performance

Asst. Lect. Mahir Hussein Ali*
Dept. of Translation - College of Arts- Mosul University
mahir.h.a@uomosul.edu.iq

Recived: 16 /8 / 2022, Accepted**:** 21 /8/2022, **Online Published: 31 /8/ 2022**

Abstract

English as a foreign language classes are characterized by the cooperative nature between the teachers and the learners. Translation classes at university level form no exception since different types of assistance are expected from the teachers to their students while engaged in the varied translation tasks. As a result of teachers realizing the value of the assistance, they must give students activities to make translation assignments easier and progress them to the point where they can complete their translation work independently. The concept of scaffolding has emerged as a central idea in education. Scaffolding strategies form a variety of teachers' competent means to enable learners move progressively towards better understanding and, ultimately, noticeable independence in the learning/translation process. The current research aims at investigating the role of scaffolding in enhancing learners' performance in translation by the two-fold approach it has adopted. First, theoretical by attending to a set of topics and topics that are quite pertinent to the concept of scaffolding in education. Second, practical by administering a questionnaire to a sample of 27 teachers of translation so as to validate the following hypothetical points: The use of scaffolding strategies in translation classes at university level, if any; the use of different scaffolding strategies in such classes, and the role of teachers' gender and the students' study stage in any differences that might be in the use of the different scaffolding strategies. The results show that scaffolding is used in translation classes at university level, translation teachers use different scaffolding strategies and there is no effect of teachers' gender and students' study stage on the use of such strategies in terms of being different from one study stage to another.

Keywords: Scaffolding, Teaching Strategy, Students Performance, Translation.

* **Corresponding Author**: Asst. Lect. Mahir Hussein**, E.Mail**: mahir.h.a@uomosul.edu.iq
Tel: +9647708411680**, Affiliation**: Mosul University -Iraq

التدعيم كاستراتيجة تدريس لتطوير أداء الطلبة في الترجمة

م.م ماهر حسين علي

قسم الترجمة/ كلية الآداب/ جامعة الموصل

الملخص: تتميز دروس اللغة الإنجليزية كلغة أجنبية بالطابع التعاوني بين المدرسين والمتعلمين. ولا تشكل دروس الترجمة في المستوى الجامعي أي استثناء نظراً لأنه من المتوقع تقديم أنواع مختلفة من الدعم من المدرسين لطلبتهم أثناء مشاركتهم في مهام الترجمة المتنوعة. نتيجة لإدراك المدرسين قيمة الدعم، يجب عليهم إعطاء الطلبة نشاطات لتسهيل مهام الترجمة وتطويرها إلى الحد الذي يمكنهم من إكمال أعمال الترجمة بصورة مستقلة. ظهر مفهوم التدعيم كفكرة مركزية في التعليم. وتشكل استراتيجيات التدعيم مجموعة متنوعة من الوسائل المختصة للمدرسين لتمكين المتعلمين من التقدم تدريجياً نحو فهم أفضل، وفي النهاية استقلالية ملحوظة في عملية التعلم/الترجمة. يهدف البحث الحالي إلى البحث في دور التدعيم في تحسين أداء المتعلمين في الترجمة من خلال النهج ذي الشقين الذي اعتمدته. أولاً، نظري من خلال عرض مجموعة من الموضوعات ذات الصلة بمفهوم التدعيم في التدريس. وثانياً، من الناحية العملية عن طريق إعداد استبيان لعينة من 27 مدرساً في الترجمة من أجل التحقق من صحة الافتراضات التالية: استخدام استراتيجيات التدعيم في دروس الترجمة في المستوى الجامعي، إن وجدت؛ واستخدام استراتيجيات مختلفة للتدعيم في هذه الدروس، ودور جنس المدرس ومرحلة دراسة الطلبة في أي اختلافات قد تكون في استخدام استراتيجيات التدعيم المختلفة. تظهر النتائج، أن التدعيم يستخدم في دروس الترجمة في المستوى الجامعي، ويستخدم مدرسو الترجمة استراتيجيات تدعيم مختلفة ولا يوجد تأثير لجنس المدرسين ومرحلة دراسة الطلبة على استخدام مثل هذه الاستراتيجيات من حيث الاختلاف من مرحلة دراسية إلى أخرى.

الكلمات الدالة: التدعيم، استراتيجية التدريس، أداء الطلبة، الترجمة.

1. Introduction

Translation is a laborious task that necessitates patience, attention, and a workable strategy. On dealing with diverse types of texts, translators usually discover during the translating process that some texts are quite manageable and can be easily rendered, while others are difficult to manage and hence create much difficulty to the translators.

Educationally speaking, when students majoring in translation face any type of difficulty in understanding a text and rendering it as required, it is unfair to blame just the teachers but rather the techniques and methods of teaching they adopt and work accordingly.

In the 1960s, Jerome Bruner, a psychologist and instructional designer, invented the word "scaffolding." When learners are given the support they need while learning something new, they will be more able to use the knowledge independently. Originally, the term is derived from the requisite protection and materials required so as to continue constructing a building. The same applies to the domain of education, where teachers use the strategy to provide learners with the knowledge required for the growth of their cognitive skills. On this basis, scaffolding has become a very successful teaching strategy as it can really assist in developing and enhancing the learning process.

The aim of this study is to investigate teachers use of scaffolding in the teaching of translation at university level. It further aims at pointing out the scaffolding strategies used by the translation teachers. Finally, this research aims at identifying any differences between them in terms of their gender, i.e. male and female teachers, and the students' study stage in teachers' use of scaffolding in translation classes at university level.

On this basis, the research hypothesizes that

1. Teachers of translation scaffold their students in the translation classes at university level.
2. Teachers of translation use different strategies to scaffold their students in the translation classes at university level.
3. There are no differences between male and female teachers of translation in the scaffolding their students in the translation classes at university level.
4. There are no differences between teachers of translation in the use of different scaffolding strategies in teaching translation to the different study stages at university level.

To support and enhance the preceding aims and hypotheses, this research poses the following research questions: Do teachers of translation at university level use scaffolding in teaching translation? What scaffolding strategies are used by the translation teachers? What role is played by teachers' gender and students' study stage in translation teachers' use of scaffolding at university level?

This research is limited to the investigation of a selected sample of university teachers' use of scaffolding in translation classes during the second term of the academic year 2021-2022. Other topics are not accounted for since they are past the extent of this research.

Translation teachers and students are expected to benefit from this research. Teachers can find the current study useful by familiarizing themselves with this teaching strategy and how to incorporate it in their teaching techniques and methods in the classroom. Likewise, translation students are supposed to be more responsive and engaged with the varied techniques of scaffolding.

2. Theoretical Background

2.1 Scaffolding: Introductory Remarks

The concept of scaffolding has become a core theme in education through teachers' realization of the importance of the support they are supposed to provide to the students so as to make the translation task easier and take students to the extent of doing their translation tasks independently. Though scaffolding, as a teaching strategy, has been adopted by teachers for decades, it has recently got more recognition as an instructional strategy incorporated in the teaching/learning process so as to increase and enhance students' translation performance.

Scaffolding, according to Belland, Kim, and Hannafin (2013), aims at ensuring that the student would take partial responsibility for carrying out the tasks assigned to

them side by side with their acquisition of the skills required for the performance of such tasks. In other words, scaffolding is intended to create the ability to carry out a task and the motivation to work independently on it.

2.2. Scaffolding: Definition, Nature and Importance

According to Pea (2004), scaffolding is a term used in education to describe a set of teaching techniques that are utilized to direct students towards a deeper understanding and, ultimately, greater independence in the learning process. The supporting techniques are removed afterwards so as to enable students to work on their own.

The Glossary of Education Reform (n.d.) views scaffolding as a variety of teaching techniques that move learners progressively towards better understanding and, ultimately, noticeable independence in the learning process.

As a process, Wikipedia, the Free Encyclopedia, outlines the main characteristics of scaffolding to be (1) The collaborative partnership between the student and the teacher as the source of success; (2) Learning should take place within the students' proximal development zone (PDZ) to enable the teacher to identify their current level of understanding and (3) The gradual removal of the teacher's support as the student becomes more proficient and prepared for autonomous work. Finally, according to Wood, Bruner, and Ross (1976), scaffolding helps students develop an ability that allows them to work (learn) independently in the future. As a result, devices like electronic dictionaries cannot be called scaffolds because they are not built to do so. On their part, Collins, Brown, and Newman (1989) assume that scaffolding forms a source of temporary assistance as students work on problems. Wertsch and Kazak (2005) assume that scaffolding often involves intersubjectivity, or a common perception of what good performance of the goal task looks like between the scaffolder and the scaffoldee. According to Belland (2004), scaffolding not only simplifies tasks, but also illustrates the task's difficulty, since dealing with a complex task will lead to robust learning (stronger learning).

As for the importance of scaffolding in education, Roth and Lee (2007) view scaffolding as a crucial component of effective teaching that helps learners acquire higher-order skills and provide them with the opportunities to accommodate their problem-solving skills (e.g. argumentation ability). Scaffolding further expands learners' skill sets when interacting with other learners in the target role (Belland and Drake, 2013); develops learners' ability to apply discipline-specific techniques and provides a form that assists learners when engaging in the learning tasks (Belland, 2011); organizes failure as a learning event; fills the critical gaps in learners' skills and knowledge by allowing them to finish the learning tasks on their own; attracts learner's attention to particularly important task components (Reiser, 2004); evolves learners' current mental models so as to reflect more commonly accepted scientific theories and perspectives more effectively; enables learners to combine new content with pre-existing knowledge from the perspective of information integration (Linn, Clark, and Slotta, 2003); enhances learner's attention and sustaining their devotion to the task of learning (Belland, Gu, Armbrust and Cook, 2013); and reduces learners' negative feelings and self-perceptions as they are frustrated or threatened, especially in their attempt to carry out a challenging task without assistance, direction, or comprehension (The Great School Partnership, 2014).

2.3 Scaffolding Components

In the following lines, light will be shed on the three main components of scaffolding, namely Dynamic Assessment, Provision of Just the Right Amount of Assistance, and Intersubjectivity:

1. Dynamic Assessment

Dynamic Assessment and scaffolding, according to Tzuriel (2000), are inextricably associated. Dynamic assessment differs from traditional assessment in terms of objectives and procedures as it seeks to increase the level of the student's success, focuses on the student's existing and future level of performance, asks students to complete a target quest, explains their difficulties, creates tailoring assistance and assesses the student's capacity.

2. Delivering only the Right Amount of Assistance

The delivery of just the right amount of support is closely related to the scaffolding support, which is in turn required by dynamic support. Koedinger and Corbett (2006) state that such a delivery can be performed through the delivery of real-time customized assistance; an example of which is one-to-one scaffolding. This point is also advocated by Wood, et al. (1976) who point out that offering just the right amount of support requires adjustment to a) the adopted support methods, b) the sub-skill to focus on next, and c) the timing of the support provision.

Reference to "fading" as a stage or an aspect of the scaffolding process is worthwhile here. Collins, et al. (1989) state that in fading, the teacher starts the elimination of scaffolding through a step-by-step minimizing procedure, especially when students demonstrate increased efficiency and/or ability of independent learning. The same authors further outline that an indirect implicit objective behind fading is to make the student sense that the whole responsibility for their learning in not limited to the teacher but that they should take over a part of that responsibility so as to perform better.

3. Intersubjectivity

Intersubjectivity is critical as far as the philosophy of scaffolding is concerned since it ensures that students specify a suitable solution to problems just like those dealt with before and when they could perform the support function. In other words, students, in the absence of intersubjectivity, do not communicate individually (Wood, et al., 1976). According to Wertsch and Kazak (2005), it is worth mentioning that no two students can interpret the same task exactly the same way as each one of them approaches the task from a different angle.

2.4 Scaffolding Styles

According to Simons and Klein (2007), there are two styles of scaffolding, namely soft and hard scaffolding:

1. Soft Scaffolding

This form of scaffolding is also named as contingent scaffolding. It takes place in the classroom as a teacher moves around, hold discussions with the student, and provide them with positive input, i.e. needed assistance, for any difficult problematic translational point or issue they may be handling. Unfortunately, in large classes with students of different needs, scaffolding can be difficult to execute correctly and consistently. Most learners can benefit from additional scaffolding, but it is the teacher's duty to decide what additional scaffolding is required.

2. Hard Scaffolding

Hard or embedded scaffolding, as viewed by Saye and Brush (2002), runs opposite to soft or contingent scaffolding. A teacher usually pinpoints the difficulty of a translational task in advance and hence prepares the suitable technique to overcome such difficulty.

2.5 Types of Scaffolding

Belland (2014) classifies scaffolding into three main categories, namely one-to-one, peer, and computer-based scaffolding:

1. One-to-One Scaffolding

One-to-one scaffolding outlines one teacher working with one student so as to dynamically evaluate the student's current level, provide just the right amount of support to perform and improve skills on the target assignment, and customize the support as needed before the scaffolding is removed completely and the student works on their own.

2. Peer Scaffolding

The provision of peer support is referred to as peer scaffolding. It necessitates the provision of a scaffolding system by means of which scaffolders know how to use the scaffolding techniques and when to use them. Furthermore, according to Pifarré and Cobos (2010), empirical studies show that peer scaffolding improves cognitive outcomes and enables students with low self-regulation to solve the core problems more effectively.

3. Computer-Based Scaffolding (CBS)

Students may use computer-based scaffolding to develop their skills and engage in tasks that are beyond their unassisted abilities. Cho and Jonassen (2002) argue that CBS helps students in particular because it allows them to solve complex, poorly structured problems using a computer-based approach. This means that CBS aids in the development of new abilities, such as the ability to function at a higher level than they would otherwise.

In addition to the aforementioned types of scaffolding, the following are some more types identified by different scholars:

1. Reciprocal Scaffolding

Holton and Clarke (2006) describe reciprocal scaffolding as a process that outlines the collaborative work of a group of two or more students together. The participants or the members of the group would benefit from each other as they are all expected to use scaffolding and move together towards the completion of the task or project.

2. Technical Scaffolding

According to Yelland and Masters (2007), technical scaffolding a recent approach wherein teachers are replaced by computers as sources of input and guidance based on the web links, online tutorials, or help pages they provide. Educational software, according to Lai and Law (2005), can assist learners in properly planning and following a basic structure.

3. Directive and Supportive Scaffolding

These two types of scaffolding are identified by Wood, et al. (1976) under the title ‘‘supportive scaffolding’ which follows the Initiation-Response-Follows-up (IRF)

sequence, and 'directive scaffolding' which refers to the Initiation-Response-Evaluation (IRE) sequence. Under the IRE model, teachers have 'guideline scaffolding', with the function to convey knowledge and then assess its appropriateness by the students.

According to Reingold, Rimor, and Kalay (2008), the following are four other types of scaffolding:

1. **Conceptual scaffolding** helps students determine what they need to know and guides them to the main learning topics.
2. **Procedural scaffolding** enables students to use effective tools and resources more effectively.
3. **Strategic scaffolding** provides students with the potential strategies and methods for solving challenging problems.
4. **Metacognitive scaffolding** helps learners reflect on their learning experience while still allowing them to concentrate on what they have learned (self-assessment).

The preceding four types, according to Hill and Hannafin (1997), are mechanisms that can adequately assist learners in online learning settings as well. Technical support, material support, argumentation template, questioning, and modeling represent further scaffolding methods attended to by researchers.

2.6 Scaffolding Strategies

Educational scaffolding, according to Van de Pol, Volman, and Beishuizen (2010), may refer to teachers' utilization of some given methods to assist students in the filling of a cognitive gap or to achieve progress in learning. On their part, teachers develop these strategies in the light of the initial level of competence that students demonstrate. Then, they, i.e. teachers provide continuous feedback as the learning task progresses.

It is reported that teachers resort to the use of a variety of scaffolding strategies that assist students' learning. The specification of teachers' use of the scaffolding strategies is the satisfactory assimilation of the context wherein the strategies are tested for use. The latter, which is based on the theoretical principles of scaffolding, was introduced in an attempt to outline and explain the educational objectives behind the use of scaffolding. It focuses on two dimensions of a teacher's use of scaffolding strategies. The first dimension pertains to the teacher's intentions, while the second pertains to the scaffolding process. The following two figures, adapted from Van de Pol, et al. (2010), **demonstrate the** intentions and means that emphasize the ways the teacher scaffolds:

Direction Maintenance (supporting learners metacognitive activities)	Maintaining the learner's constructive involvement with a clear objective and keeping the learning on track.
Explanatory and Belief Structures (Supporting learners cognitive activities)	Giving the underlying complexity of the system.
Reducing the Degree of Freedom (supporting learners cognitive activities)	Taking over the more challenging parts of the task so that the learners can finish it
Recruitment (supporting learners' affect)	Having learners engaged in a challenge and assisting them in achieving the task's requirements.

Contingency management (Supporting learners affect)	Encouraging learners' success and to keep learners motivated by a system of incentives and punishments.

Figure (1): Scaffolding Intentions

Providing Feedback	Providing information on the learner's performance to the learner him or herself.
Giving hints	Providing clues or suggestions but deliberately not including the full solution.
Instructing	Telling the learners what to do or explaining how something must be done and why.
Explaining	Providing more detailed information or clarification.
Modeling	Offering behavior for imitation, including demonstrations of particular skills.
Questioning	Asking learners questions that require active linguistic and cognitive answers.

Figure (2): Scaffolding Means

Based on Mulvahil (2018), the following strategies are recommended for use by teacher so as to scaffold students' translation performance:

1. **The teaching of mini-lessons**: This is done as a teacher breaks down new concepts into manageable chunks drawn on one another. Teaching a series of mini-lessons results in better deeper understanding on the part of students.
2. **Demonstration/Modeling**: Here the teacher gives an example of what the student can learn. The teacher's explanation and verbalization of their thought process would provide students with a framework to create their own inner output.
3. **Varied illustration of concepts**: The teacher can introduce new concepts from a range of viewpoints and integrate different learning styles. The teacher shows them, asks the students and pushes them to try it for themselves. The more a teacher approaches instruction, the more students understand it.
4. **The use of visual aids**: The teacher shows a video, hands out colorful images, or starts a new teaching session with a concrete object.
5. **Enabling students to talk**: The teacher gives students enough time to assimilate new information by dividing them into groups of two or more. The teachers first ask single students to express their thoughts; they then return to the whole group to express thoughts with their own words to each other and share any information that might be useful to the whole group. Such a procedure forms an ideal opportunity for the students to practice cooperative learning systems.
6. **Encouraging students to practice**: After the teacher explains the way to perform a translation task at hand, they ask the students to practice it with the teacher and

among themselves. The practice takes the form of writing a sentence to be translated on the board or to collectively translate a paragraph on map paper.

7. **Checking for understanding during lessons**: The teacher checks students' performance on a regular basis to ensure that they are engaged in the ongoing activities. For instance, a quick thumb up, a sticky note check-in, or a desktop flip map are some of the techniques a teacher might use to see the levels of students' involvement, being ready to go, who is almost there, and who wants some one-on-one time, in the class.
8. **Probing and triggering prior knowledge**: The teacher shows the students the grand picture, and asks them to build links to their prior knowledge, i.e. what students have already learned. Prior knowledge represents students' previous experiences that might be derived from different sources.
9. **Prior-provision of concept-specific vocabulary**: The teacher provides students with specific words in advance in an attempt to minimize or eliminate any negative effect of new vocabulary acquisition on higher-level performance.
10. **Creation and development of environments conducive to effective learning:** Students usually perform better when they understand what is required from them. As such, a teacher can define the purpose behind a translation task, present concrete examples pertinent to the goals that the learners are expected to achieve, provide concrete scenarios and instances of high-quality work, and give a rubric that makes students know exactly what they need to do to manage the task.

3. Translation:

Literary scholars, freelancers, and occasionally amateurs are no longer the only people who are engaged in translation. Translation is now viewed as a unique and autonomous profession and academic discipline that calls for greater attention and acknowledgment. In some bilingual and multilingual countries [such Canada, Belgium, Finland, Romania, South Africa, etc.], where interlinguistic communication is difficult without proper translation and interpretation, it is essential to maintain social equilibrium (Dollerup and Loddegaard, 1993).

According to Catford (1965) translation is "the replacement of textual material in one language (SL) by equivalent textual material in another language (TL)". Newmark (1988), further defines translation as "rendering the meaning of a text into another language in the way that the author intended the text". Accordingly, a person engaged in translation should be qualified enough in terms of knowledge of both the source and target languages taking into account the relevant cultures.

3.1 Translation Teaching:

Teaching is a laborious task that requires a set of skills, knowledge and competencies on the part of teachers so as to impart knowledge to the learners in an efficient and effective manner. Added to that, teachers' interaction with their students forms a paramount aspect of successful teaching. As such, teaching translation requires advanced skills because the person doing the teaching must be an expert in the field, capable of approaching the subject matter of translation as both a science and an art. In other words, they need to possess a set of skills, the most important of which are the capacity of teaching translation as a theoretical subject and having professional experience in the practical teaching of translation. Because of this, translation teachers need to be qualified to conduct their jobs (i.e. teaching and translation) in an effective

and efficient manner. The latter can be brought about especially when students in translation classes find in their teachers a good and rich source of assistance that helps them in doing the translation tasks both individually and collectively.

4. Methodology

4.1 Procedures and Data Collection

The procedure adopted in the present research is two-fold. First, it is theoretical in terms of tackling a number of topics and subtopics that are relevant to the subject under discussion, i.e. scaffolding. Second, it is practical as a questionnaire comprising items that stand for different aspects of scaffolding used by translation teachers at university level was administered to a sample of 27 translation teachers at the university level during the academic year 2021-2022.

4.2 Research Tool

The selected university translation teachers were asked to give responses to a questionnaire that was constructed on the basis of the information **(1)** elicited from the answers to a question posed to the sample of EFL university teachers asking them about the scaffolding strategy that they use, **(2)** the related literature and **(3)** any previous questionnaire(s) that is/are relevant to the topic under research. The construction of the questionnaire in its draft version was followed by its administration to a panel of juries[1] to make the questionnaire obtain validity. That was followed by the piloting the questionnaire to a sample of 6 teachers selected from among the population on two occasions with an interval of 2 weeks. The Cronbach's alpha stability equation was applied and the value of Cronbach's alpha coefficient was 0.83, hence indicating that the questionnaire items were stable and ready for administration to the main sample.

4.3 Population and Sample

The population of the present research comprised the teachers of translation, males and females, teaching different study stages at the Departments of Translation/ Colleges of Arts and Basic Education/ Universities of Mosul and Tikrit during the academic year 2021-2022. As for the sample of the research, it was selected from among the population already referred to and included 27 university teachers of translation from the departments and colleges already referred. Consider table (1) for the distribution of the sample of the Research:

([1]) Jury members:

- Prof. Dr. Abdulrahman A. Abdulrahman/ Dept. of Translation/ College of Arts/ University of Mosul.
- Prof. Dr. Salim Y. Fathi/ Dept. of Translation/ College of Arts/ University of Mosul.
- Prof. Dr. Luqman A. Nasir/ Dept. of Translation/ College of Arts/ University of Mosul.
- Dr. Mahir S. Hasan/ Dept. of Translation/ College of Arts/ University of Mosul.
- Dr. Aus A. Abdulwahab/ Dept. of Translation/ College of Arts/ University of Mosul.

Table (1): Description of the Research Sample according to the Relevant Variables

Variables	Classification	Frequency
Scientific Degree	M.A.	19
	Ph.D.	8
Academic Status	Assistant Lecturer	4
	Lecturer	13
	Assistant Professor	8
	Professor	2
University	Mosul	20
	Tikrit	7
College	College of Arts	25
	College of Basic Education	2
Gender	Male	17
	Female	10
Study Stage	First Stage	2
	Second Stage	7
	Third Stage	5
	Fourth Stage	13

5. Data Analysis and Discussion of Results

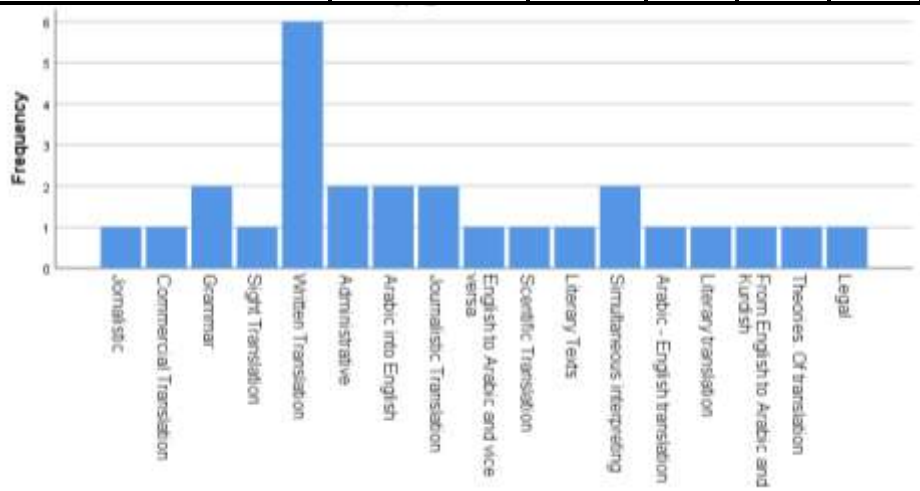
The analysis of the data will be based on the hypotheses, aims and research questions relevant to the translation teachers' use of scaffolding in teaching translation at university level.

- **Aim (1):** Investigating teachers use of scaffolding in the teaching of translation at university level.
- **Hypothesis (1):** Teachers of Translation scaffold their students in the translation classes at university level.
- **Research Question (1):** Do teachers of translation at university level use scaffolding in teaching translation?

Histogram (1) demonstrates the sample's use of scaffolding distributed according to the different translation subject they teach:

SN	Strategies	Description	Options					Mean
			VHE	HE	ME	LE	VLE	
5	Give the meanings of the difficult words in the source text.	Freq.	12	13	2			4.37
		%	44.4	48.1	7.4			
8	Simplify the source text by analyzing the complex sentences and structures.	Freq.	13	11	3			4.37
		%	48.1	40.7	11.1			
4	Ask students to read the source text.	Freq.	13	11	2		1	4.30
		%	48.1	40.7	7.4		3.7	
9	Help the students in finding the equivalent lexical items in the target language.	Freq.	12	11	4			4.30
		%	44.4	40.7	14.8			
1	Determine the type of the text.	Freq.	11	8	8			4.11
		%	40.7	29.6	29.6			
13	Explain the text both semantically and grammatically.	Freq.	8	15	2	2		4.07
		%	29.6	55.6	7.4	7.4		
10	Familiarize the students with the collocations, expressions, and terms relevant to the text to be translated.	Freq.	8	12	5	2		3.96
		%	29.6	44.4	18.5	7.4		
7	Give the students the synonyms of the difficult words in the source text.	Freq.	7	13	6	1		3.96
		%	25.9	48.1	22.2	3.7		
20	Propose my own translation.	Freq.	8	13	4	1	1	3.96
		%	29.6	48.1	14.8	3.7	3.7	
14	Explain the source text pragmatically in order to know the writer's intentionality.	Freq.	8	8	7	4		3.74
		%	29.6	29.6	25.9	14.8		
15	Simplify the source text by paraphrasing it.	Freq.	4	11	11	1		3.67
		%	14.8	40.7	40.7	3.7		
6	Allow the students to use the dictionary and/or any other means.	Freq.	7	8	7	2	3	3.52
		%	25.9	29.6	25.9	7.4	11.1	
17	Help the students reword the translated text.	Freq.	3	10	9	4	1	3.37
		%	11.1	37.0	33.3	14.8	3.7	
3	Read the source text for the students more than once.	Freq.	4	11	5	4	3	3.33
		%	14.8	40.7	18.5	14.8	11.1	
19		Freq.	2	9	9	5	2	

	Recommend one of the student's translation as the final product.	**%**	**7.4**	**33.3**	**33.3**	**18.5**	**7.4**	**3.15**
2	**Read the source text for the students only once.**	**Freq.**	**2**	**10**	**8**	**2**	**5**	**3.07**
		%	**7.4**	**37.0**	**29.6**	**7.4**	**18.5**	
8	**Divide the students into groups to collaboratively translate.**	**Freq.**	**5**	**1**	**14**	**3**	**4**	**3.00**
		%	**18.5**	**3.7**	**51.9**	**11.1**	**14.8**	
12	**Explain the text only semantically.**	**Freq.**		**6**	**6**	**10**	**5**	**2.48**
		1%		**22.2**	**22.2**	**37.0**	**18.5**	
16	**Show the students a short video on the same topic.**	**Freq.**	**3**	**2**	**5**	**7**	**10**	**2.30**
		%	**11.1**	**7.4**	**18.5**	**25.9**	**37.0**	
11	**Explain the text only grammatically.**	**Freq.**	**1**	**2**	**5**	**13**	**6**	**2.22**
		%	**3.7**	**7.4**	**18.5**	**48.1**	**22.2**	



Histogram (1): The Frequency of Translation Teachers' in terms of Using Scaffolding

It is evident from Histogram (1) that scaffolding is used to varied degrees and with no exception by the sample of teachers who were teaching varied subjects that lie under translation specialization. As such, hypothesis No.1 which states: Teachers of Translation scaffold their students in the translation classes at university level, is accepted.

- Aims (2): Identifying the extent of translation teachers' use of the scaffolding strategies in teaching translation university level.
- Hypothesis (2): Teachers of Translation use different strategies to scaffold their students in the translation classes at university level.
- Research Question (2): What are the different scaffolding strategies used by the translation teachers in the translation classes at university level?

To identify the extent of the use of different scaffolding strategies by translation teachers at university level, teachers' responses to the items of the administered question, which stand for the strategies they use in scaffolding students in translation classes can illustrate the relevant aim to be brought about, the hypothesis to be validated and the research question to be answered. Consider table (2):

Table (2): The Frequencies, the Percentages and the Mean Scores of the Use of Scaffolding Strategies by Translation Teachers Listed from the Highest to the Lowest

It is evident from table (2), where the mean scores of the 20 items of the administered questionnaire are listed from the highest to the lowest, that 17 items have scored values well beyond the mid-point 2.5. This outlines the positive responses by the sample of the translation teachers as far as their use of different scaffolding strategies in the translation classes at university level is concerned. Three items only, namely items 12, 16 and 11 out of 20 items which respectively read (explain the text only semantically. show the students a short video on the same topic and explain the text only grammatically) have got mean scores less than the mid-point 2.5. This may be due to the handling of one aspect of language namely, grammar and semantics and also teachers facing difficulty in providing the required technology in the translation classes.

To further validate hypothesis No.2 and enhance its truthfulness, the arithmetic and hypothetical means and the standard deviation of the sample's responses, the t-test for one sample has been applied. The results are demonstrated in table (3):

Table (3): The T-value for one Sample

N	Mean calculation	Hypothetical mean	Std. Deviation	T-value		Sig.
				Calculated	Tabulated	
27	71.26	60	8.641	6.67	2.05	0.00

Since the t-calculated value is higher than the tabulated value, there is a difference between the arithmetic mean and the hypothetical mean in favour of the calculated mean; which means that the sample of translation teachers are using scaffolding strategies in the translation classes at university level. On this basis, hypothesis No.2 which reads: Teachers of translation use different strategies to scaffold their students in the translation classes at university level is accepted.

- **Aim (3):** Identifying any differences between the teachers' use of scaffolding in translation classes at university level in terms of their gender, i.e. male and female teachers.
- **Hypothesis (3):** There are no differences between male and female teachers of translation in the scaffolding their students in the translation classes at university level.
- **Research Question (3):** What role is played by teachers' gender in their use of scaffolding in translation classes at university level?

To investigate aim No.3, validate hypothesis No.3 and give answer to the relevant research question, the arithmetic mean and the standard deviation of the samples' responses have been calculated by applying the Independent-sample text variable followed by the t-test for two independent samples. Consider table (4):

Table (4): The t-test for Two Independent Variables/Gender Variable

Variable	Descriptive	N	Mean	Std. Deviation	T-value	
					Calculated	Tabulated
Gender	Male	17	72.41	7.246	0.90	2.06
	Female	10	69.30	10.750		

Table (4) shows that the calculated t-value is less than the tabulated value as far as the sample's gender, male or female, is concerned. As such, it can be stated that there are no differences between the male and female translation teachers in the use of scaffolding in translation classes at university level. On this basis, hypothesis No.3 which reads: There are no differences between male and female teachers of translation in the scaffolding their students in the translation classes at university level, is accepted.

- **Aim (4):** Identifying any differences between the teachers of translations use of scaffolding in terms of the different study stages.
- **Hypothesis (4):** There are no differences between teachers of translation in the use of scaffolding in teaching translation to the different study stages at university level.
- **Research Question (4):** What role is played by students' study stage in translation teachers' use of scaffolding at university level?

As for the study stage variable, the one-way ANOVA test has been applied in the analysis of the data collected from the sample of the teachers of translation. Consider tables (5) and (6) for the results of the data analysis:

Table (5): The Results of One-Way ANOVA Test in terms of the Study Stage

Study Stage	N	Mean	Std. Deviation
First	2	64.50	0.707
Second	7	67.57	9.676
Third	5	73.20	11.234
Fourth	13	73.54	7.078
Total	27	71.26	8.641

Table (6): The Results of the F-Test in terms of the Study Stage

Stages	Sum of Squares	df	Mean Square	F-value	
				Calculated	Tabulated
Between Groups	272.940	3	90.980	1.254	3.03
Within Groups	1668.245	23	72.532		
Total	1941.185	26			

It is evident from Tables (5 and 6) that the calculated f-value is less than the tabulated f-value. This entails that there are no differences between the use of scaffolding strategies by the sample of teachers in terms of the study stage. As such, hypothesis No.4 which reads: There are no differences between teachers of translation in the use of scaffolding in teaching translation to the different study stages at university level, is accepted.

6. Findings

1. Teachers of Translation at university level use scaffolding strategies in the translation classes at university level.
2. They use different strategies to scaffold their students in the translation classes at university level.
3. Both male and female teachers of translation similarly scaffold their students in the translation classes at university level.
4. Translation teachers of the different study stages similarly scaffold their students in the translation classes at university level.

7. Conclusion

Scaffolding is a teaching strategy that outlines teachers' assistance to their students until the latter, i.e. students can work on their own. On this basis, the current research has set out, first theoretically to address the meaning, features, components, advantages, levels, and forms of scaffolding have all been discussed, with focus on its role in the teaching/learning process. To enhance and validate it in translation classes at university level, the practical part of the research has been launched through the distribution of a questionnaire to a sample of translation at university level. The findings deduced from the analysis of the collected data have outlined translation teachers' use of scaffolding at university level; their use of varied scaffolding techniques and that teachers' gender and students' study stage have no role to play in the use of different techniques.

REFERENCES

Belland, B. R. (2004). **Instructional Scaffolding in STEM Education Strategies and Efficacy Evidence**. New York, Springer.

_____ (2011). "Distributed cognition as a lens to understand the effects of scaffolds: The role of transfer of responsibility". ***Educational Psychology Review***, *23*(4), 577–600.

_____ (2014). Scaffolding: Definition, current debates, and future directions. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop (Eds.), ***Handbook of research on educational communications and technology*** (4th ed.). New York: Springer, 505–518.

Belland, B. R. and Drake, J. (2013). "Toward a framework on how affordances and motives can drive different uses of computer-based scaffolds: Theory, evidence, and design implications". ***Educational Technology Research & Development***, *61*, 903–925.

Belland, B. R., Gu, J., Armbrust, S. and Cook, B. (2013). Using generic and context-specific scaffolding to support authentic science inquiry. In *Proceedings of*

the IADIS International Conference on Cognition and Exploratory Learning in Digital Age (CELDA 2013), 185–192

Belland, B. R., Kim, C. and Hannafin, M. (2013). "A framework for designing scaffolds that improve motivation and cognition". ***Educational Psychologist****, 48*(4), 243–270.

Catford, J. C. (1965). A Linguistic Theory of Translation. Oxford: Oxford University Press.

Cho, K. and Jonassen, D. H. (2002). "The effects of argumentation scaffolds on argumentation and problem-solving". ***Educational Technology Research and Development****, 50*(3), 5–22.

Collins, A., Brown, J. S., and Newman, S. E. (1989). Cognitive apprenticeship: Teaching the crafts of reading, writing, and mathematics. In L. B. Resnick (Ed.), ***Knowing, learning, and instruction: Essays in honor of Robert Glaser,*** 453–494). Hillsdale, NJ, USA: Lawrence Erlbaum Associates.

Dollerup, C. and Loddegaard, A. (1993). "Teaching Translation and Interpreting: Training, Talent, and Experience". **International Journal on World Peace**, Vol. 10, No. 3), pp. 113-120. Reviewed by: Singh, R. K..

Hill, J. and Hannafin, M. (1997). Cognitive strategies and learning from the World Wide Web. **Educational Technology Research & Development** 45(4): 37–64.

Holton, D. and Clark, D. (2006). Scaffolding and metacognition. International Journal of Mathematical **Education in Science and Technology**, 37, 127–143.

Koedinger, K. R., & Corbett, A. (2006). Cognitive tutors: Technology bringing learning sciences to the classroom. In K. Sawyer (Ed.), ***The Cambridge handbook of the learning sciences*** (pp. 61–78). Cambridge, UK: Cambridge University Press.

Lai, S. Y. R. and Law, L. Y. L. (2005), *Paradigm shifts in English language teaching and learning: selected papers from the Inaugural CELC International Symposium.* Centre for English Language Communication, National University of Singapore.

Linn, M. C., Clark, D., and Slotta, J. D. (2003). WISE design for knowledge integration. ***Science Education****, 87*(4), 517–538.

Mulvahill, E. (2018). 10 ways to scaffold learning. https://www.weareteachers.com/ways-to-scaffold-learning

Newmark (1988). A Textbook of Translation. Hertfordshire: Prentice-Hall International.

Pea, R. (2004). The social and technological dimensions of scaffolding and related theoretical concepts for learning, education, and human activity. **Journal of the Learning Sciences**, 13, 423-451.

Pifarré, M. and Cobos, R. (2010). "Promoting Metacognitive Skills through peer scaffolding in a Collaborative Computer-based environment". **International Journal of Computer Supported Collaborative Learning** 5(2), 237-253.

Reingold, R.; R. Rimor, and A. Kalay (2008), "Instructor's scaffolding in support of learner's metacognition through a teacher education online course: a case study," **Journal of Interactive Online Learning**, vol. 7, no. 2, 139-151.

Reiser, B. J. (2004). Scaffolding complex learning: The mechanisms of structuring and problematizing learner work. ***Journal of the Learning Sciences****, 13*(3), 273–304.

Roth, W. and Lee, Y. (2007). "Vygotsky's neglected legacy": Cultural-historical activity theory. ***Review of Educational Research****, 77*(2), 186–232.

Saye, J. W. and Brush, T. (2002). Scaffolding critical reasoning about history and social issues in multimedia-supported learning environments. ***Educational Technology Research and Development***, *50*(3), 77–96.

Simons, K. D., and Klein, J. D. (2007). The impact of scaffolding and learner achievement levels in a problem-based learning environment. **Instructional Science**, 35, 41–72.

The Glossary of Education Reform (n.d.). https://www.edglossary.org/ scaffolding/.

The Great School Partnership (2014). https://www.greatschoolspartnership.org/ *vermont-seminar-series-2014-2015.*

Tzuriel, D. (2000). Dynamic assessment of young children: Educational and intervention perspectives. ***Educational Psychology Review***, *12*(4), 385–435.

Van de Pol, J., Volman, M. and Beishuizen, J. (2010). Scaffolding in Teacher–Learner Interaction: A Decade of Research. **Educational Psychology Review**, 22:271–296.

Wertsch, J. V. and Kazak, S. (2005). Intersubjectivity through the mastery of semiotic means in teacher-learner discourse. ***Research and Clinical Center for Child Development Annual*** *Report, 27*, 1–11.

Wood, D., Bruner, J. S., and Ross, G. (1976). The role of tutoring in problem solving. ***Journal of Child Psychology and Psychiatry***, *17*(2), 89–100.

Yelland, N. and Masters, J. (2007). Rethinking scaffolding in the information age. **Computers and Education**, 48, 362–382.

APPENDIX

Questionnaire

Dear Professors of Translation,

I am conducting a research entitled "Scaffolding as a Teaching Strategy to Improve Students Translation Performance". Would you please state your frank answers to the items of the following questionnaire?

Thank you for your cooperation and assistance.

The Researcher

No.	On teaching translation, I …….	Applies to me to a ….				
		Very High Extent	High Extent	Medium	Low Extent	Very Low Extent
1.	determine the type of the text.					
2.	read the source text for the students only once.					
3.	read the source text for the students more than once.					
4.	ask students to read the source text.					
5.	give the meanings of the difficult words in the source text.					
6.	allow the students to use the dictionary and/or any other means.					
7.	give the students the synonyms of the difficult words in the source text.					
8.	simplify the source text by analyzing the complex sentences and structures.					

No.	On teaching translation, I …….	Applies to me to a ….				
		Very High Extent	High Extent	Medium	Low Extent	Very Low Extent
9.	help the students in finding the equivalent lexical items in the target language.					
10.	familiarize the students with the collocations, expressions, and terms relevant to the text to be translated.					
11.	explain the text only grammatically.					
12.	explain the text only semantically.					
13.	explain the text both semantically and grammatically.					
14.	explain the source text pragmatically in order to know the writer's intentionality.					
15.	simplify the source text by paraphrasing it.					
16.	show the students a short video on the same topic.					
17.	help the students reword the translated text.					
18.	divide the students into groups to collaboratively translate.					
19.	recommend one of the student's translation as the final product.					
20.	propose my own translation.					