

## Dialogic Teaching Enhanced by SAMR model for Developing EFL Prospective Teachers' Reflective Teaching Skills

By

Dr. Eman Aly El-ssayed Diyyab

Lecturer of TEFL, Department of Curricula and Instructions,  
Faculty of Education, University of Sadat City

### ABSTRACT

This study investigated the effects of dialogic teaching enhanced by SAMR model on developing prospective teachers' reflective teaching skills. The experimental design was used where two groups of fourth-year, English section, Faculty of Education, University of Sadat City prospective teachers (PTs) were assigned as a control group and an experimental one (30 participants each). The study instruments were a Reflective Teaching Questionnaire (RTQ) and an observation checklist. The RTQ was administered to all participants of the study both before and after the experimental treatment and the observation checklist was applied to three participants of the experimental group before, during and after the treatment. For eight weeks, participants of the control group received regular instruction while those of the experimental group were taught using dialogic teaching enhanced by SAMR model. The findings of the current study revealed that PTs' reflective teaching skills at their four levels (pre, surface, pedagogical, and critical) were developed and dialogic teaching that was enhanced by SAMR model have proved to have significant and positive effects on developing PTs' reflective teaching skills.

**Key words:** *Dialogic teaching, SAMR model, reflective teaching skills, EFL prospective teachers*

## مستخلص البحث

هدف البحث الى التعرف على أثر التدريس الحوارى المعزز بنموذج (SAMR) على تنمية مهارات التدريس التأملى لدى الطلاب المعلمين. وقد استخدمت الباحثة التصميم التجريبي. وبلغ عدد الطلاب المعلمين الذين اشتركوا في هذا البحث ٦٠ طالباً وطالبة مقيدين بالفرقة الرابعة، شعبة اللغة الانجليزية، بكلية التربية، جامعة مدينة السادات في الفصل الدراسى الأول من العام الاكاديمى ٢٠٢١/٢٠٢٢. وقد تم تقسيم المشاركين في البحث الى مجموعتين (التجريبية، الضابطة) تشتمل كل مجموعة منهم على ٣٠ طالباً وطالبة. وقد قامت الباحثة بتصميم وتطبيق أدوات البحث التي اشتملت على مقياس مهارات التدريس التأملى الذي تم تطبيقه قبل وبعد التجربة وبطاقة ملاحظة تم تطبيقها على ثلاث مشتركين من المجموعة التجريبية قبل وأثناء وبعد الانتهاء من التجربة. وقد أظهرت النتائج بعد تحليل استجابات المشتركين على التطبيق البعدي لمقياس التدريس التأملى وتحليل نتائج بطاقة الملاحظه وجود تطور في اداء مشتركى المجموعة التجريبية التي درست باستخدام التدريس الحوارى المعزز بنموذج (SAMR) أعلى من اداء مشتركى المجموعة الضابطة التي تلقت تدريساً معتاداً.

**الكلمات المفتاحية:** التدريس الحوارى، نموذج (SAMR)، التدريس التأملى، الطلاب المعلمون

## Introduction

Teachers of English as a foreign language (EFL) are essential parts of learners' personal development, progression and achievement. They are the heart and the key features of any educational system. Currently, their roles have been mutated as they are supposed to be able to employ effective teaching methods to develop learners' English language proficiency, assess and analyze their teaching, and improve their teaching practices. Thus, they should be aware of various pedagogical techniques, teaching methods and knowledge skills. Besides, they should consider and understand the convenient roles that should be reformed according to the repercussions coinciding with the contemporary digital age. Time has come to prepare deep, thoughtful and autonomous teachers.

Prospective teachers (PTs) of English or pre-service English teachers share an important quantity among teachers' population and community. They should be professionally equipped with the knowledge and skills to be able to reach students' achievement in English as a foreign language due to the abundant changes that influence teaching approaches in this growing world (Koksal & Ulum, 2019). Teachers in general and PTs in particular are in progressive attempts to cope up with the latest developments in the field of teaching English as a foreign language (TEFL). They should be aware of their different roles as learners, facilitators, assessors, managers, evaluators and guides. It is significant for PTs to learn how to cover the skills that can pave a path for achieving the practical teaching approach (Archana & Rani, 2017). In this regard, there are some additional features and skills that do enhance PTs' professional experience as indicated by Partovi and Tafazoli (2016) including resilience, self-regulation and previous teaching experiences.

Among the necessary skills that have gained remarkable importance since the pioneering works of Dewey (1933) and Schon (1983, 1987) are reflective teaching skills. Reflective teaching has become a core point for teachers and educators for its significant impacts on developing teaching efficacy, enhancing positive attitudes and behaviours as well as fostering teachers' deep reflection on learning (Beaucham, 2015; Minott, 2015). It contributes to teachers' professional development as it has notable effects on teaching practices and attitudes inside EFL classrooms. Reflection helps EFL PTs gain new insights into their teaching process and teaching authorities as it requires paying attention to everyday practices, situations, actions and theories. In addition, it demands progressive evaluation of the teaching practices to increase learning outcomes (Bolton, 2010; Malmir, 2018). Accordingly, reflective teaching skills can help EFL PTs achieve pedagogical and professional progress through examining and evaluating their teaching, improving beliefs, managing their time, formulating positive attitudes, developing teaching practices and making decisions on definite educational situations (Pacheco, 2005; Malmir, 2018).

It has been pointed out by Postholm (2012) that reflective teaching skills enable EFL PTs to focus on two major points: a) their own learning or in other words "how they have learnt to learn" and b) how to transfer knowledge in EFL classrooms. These two major points can enrich their knowledge and teaching capabilities (Megawati, et al., 2020). Accordingly, researchers and educators should support PTs to gain reflective teaching skills. For this reason, researchers have recommended that distinguished approaches, models and activities that can help PTs acquire these skills should be applied. Among these approaches and models are dialogic teaching approach and SAMR model.

Dialogic teaching approach and SAMR model stress the vital role of positive interactions inside classrooms through boosting communications and collaborative engagement. Thus, the current study enhances dialogic teaching by SAMR model to foster reflective teaching skills among prospective teachers. Dialogic teaching, as indicated by Reznitskaya & Gregory (2013) and Richards and Pilcher (2016), focuses on planned conversations about beliefs and practices among instructors and learners to enhance learners' understanding, problem solving and collaborative planning through capitalizing the power of talk. In dialogic teaching both learners and instructors act as evaluators of other perspectives and claims, co-inquirers and generators of interpretations. It helps instructors develop their learners' thinking skills, social interactions as well as cognitive processes (Reznitskaya, 2012; Wegerif, 2013; Musa, 2019; Yaqubi & Rashid, 2019).

Along the same lines, SAMR model is beneficial for developing PTs' reflective teaching skills. It has been clarified by Romrell, Kidder and Wood (2014) that SAMR is a model that consists of some instructional enhancement and transformation activities. It relies on applying higher levels of technological tools to capture the attention and interest of PTs during teaching programs. Lyddon (2019) has indicated that SAMR model is characterized by its practical appeal, simplicity and modernized instructional techniques. In spite of the existence of some studies that dealt with the three variables of the research, very little if any empirical research exists on the relationship between dialogic teaching approach, SAMR model and reflective teaching skills. Hence, to fill the gap, the current study aimed at investigating the effects of enhancing dialogic teaching approach with SAMR model on developing PTs' reflective teaching skills.

## Literature Review

### Reflective Teaching

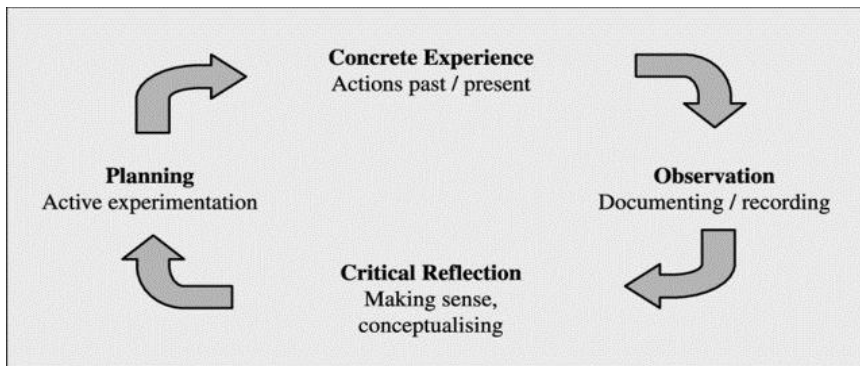
Reflection as a concept has a long history of use. Around eighty years ago, John Dewey (1933) presented the concepts of 'reflection', 'reflective thinking' and 'reflective thought'. His main emphasis was that persons should learn to reflect on their consequences and actions. He presented three prerequisites for reflection: 1) wholeheartedness, 2) open-mindedness, and 3) responsibility. In an illuminative analysis of Dewey's emphasis, Pacheco (2005) along with Li and Ye (2016) have illustrated that teachers should be able to differentiate between 'routine actions' that are automatically directed by traditions, habits as well as authority and 'reflective actions' that are mainly guided by careful acceptance of beliefs in light of their present grounds that support them. Later and based on Dewey's prerequisites of reflection, Schon in the 1980s presented two concepts of reflection: 1) reflection-in-action and reflection-on-action. Reflection-in-action takes place when teachers face an ambiguous situation that must be solved. In this kind of reflection, teachers should carefully think, discuss and study the situation to manage to deliver the planned learning material. In this regard, they can apply changes as the problematic situation demands. In the second kind of reflection 'reflection-on-action', reflection happens as a result of a deep analytical thinking process about a teaching event after it occurs. In other words, reflection-in-action is related to a current teaching situation, while reflection-on-action is related to an ended teaching situation.

### Features and Significance of Reflection

Reflective teaching represents a purposeful act of teaching (Loughran, 1996) as reflective teaching skills help teachers develop their self-confidence through being involved in reflection processes (Nichols et al., 2017). They are also found to enable teachers to judge

whether they have performed the appropriate actions in the appropriate ways based on self-evaluation and self-criticism criteria (Akbari & Allvar, 2010). In the same vein, Kolb (1984) has emphasized that reflection is an essential part of the learning cycle that cannot be neglected to ensure a successful learning environment as illustrated in the following figure:

**Figure (1): Kolb's Experiential Learning Cycle**



**Adopted from Kolb (1984)**

Reflective teaching skills are characterized by their notable contributions to teachers' capabilities and skills as they challenge their teaching practices. They empower teachers with essential pillars to get involved in purposeful in-action and on-action reflection that leads to progressive improvements. On top of that, reflective teaching goes beyond positivist-centered teaching that mainly focuses on transferring and producing knowledge to constructivist-centered teaching that emphasizes the teaching, learning and teacher learning theories (Crandall, 2000, pp. 34-35). They also strengthen teachers' potentials to learn how to consider current teaching situations, act with them immediately (in-action reflection) and appreciate the necessity of (on-action reflection). On-action reflection is reflected in reconsidering the previous teaching situation and thinking about various changes that need to be added or omitted when dealing with

similar situations in the future. Accordingly, reflective teaching is a notion that determines the thoughtful nature of instructors' work through enabling them to monitor their teaching practices before, during and after the teaching process in a conscious way. Thus, reflective teaching skills helps teachers become goal-oriented persons who can make immediate decisions to face ambiguous or complicated educational situations (Calderhead & Gates, 1993).

Subsequently, reflective teaching is regarded as an ongoing process of bridging the gap between teaching experiences and learning. Shalabi, Sameem and Almuqati (2018) have concluded that teachers should think about their own beliefs and teaching practices. In other words, they should progressively ask questions as "was the class good or bad?" and "were the students satisfactory or not?" Consequently, it becomes essential for them to seek recognition behind why some classes appear well while others do not. In this process, reflective practice occurs. According to Jay and Johnson (2002), reflective teaching is not an individual process rather it is a collaborative process in which teachers apply a handful of factors as their background knowledge, beliefs, values and uncertainty to reach new illustrations and clarifications. Such factors may change teacher's perspectives on certain actions in a process that has a great impact on the whole pedagogical field in general and ESL/EFL in particular.

It has become apparent that reflective teaching skills aim at scientifically uncovering the invisible hidden introspections of instructors about their teaching practices through developing their self-awareness of their own points of weaknesses and strengths before, during and after teaching. Reflective teachers can develop their self-awareness and internal monitors by continually checking and investigating recent literature research related to classroom issues (Mathew, Mathew & Peechattu, 2017). Further, reflection enables them to positively contribute to better English Language Teaching (ELT). Currently, reflective teaching skills have been clearly considered the essential outlets of evaluating the actual effectiveness



of teaching (Ahmed, 2019). They clarify the core of a common practice for teachers who possess the principles of EFL methodology (Eröz-Tuga, 2013). Thus for being an integral part of EFL teachers, PTs should be well equipped by reflective teaching skills to gain strong foundations of reflecting thoughts through: (1) identifying the current classroom problems, (2) observing and analyzing their consequences, (3) re-generalizing, and (4) verifying (Liu & Zhang, 2014; Ukrop, 2019). Without reflective teaching skills, PTs shall not avoid to overlook the actual relations between theory and practice when they join their authentic teaching environments (Susoy, 2015, p.164).

Another remarkable significance of reflective teaching is that it boosts teaching through applying various teaching tools that develops teaching practices such as: peer videoing, action research protocols and writing (journals/diaries) (Akbari, 2007; Abednia, et al., 2013). Writing in general is believed to be effective for being: (1) an act for recording daily thoughts and experiences; (2) a way of constructing and framing deep relations with both teachers and students; (3) a secure outlet of individuals' anxieties, frustrations and concerns; (4) a means of internal dialogues; (5) a path to students' thinking and learning; and (6) a tool of dialogic teaching (Spalding & Wilson, 2002). Due to its effectiveness for preparing EFL teachers who can encounter the demands of the fast growing world, researchers and educationalist have shed light on investigating different techniques and approaches to develop reflective teaching skills.

In a scientific categorization presented by Choy and Oo (2012), reflective teaching skills were classified into four main classifications:

- 1) **Reflection as a nonstop personal development:** It helps PTs learn how to introspectively and thoughtfully analyze their teaching practices and professional actions through self-monitoring, conscious concentration and systematic analysis (Lang, 2019).

- 2) **Reflection as a retrospective analysis:** Reflective teaching skills represent the tool for self-evaluation. They enable PTs to spot the points (included in teaching situations) in which they need to stop, step back or think deeply about to moving forward (Davoudi & Heydarnejad, 2020).
- 3) **Reflection as a problem solving:** It boosts PTs problem solving skills through grounding efficient understanding of the current actions and problems as well as putting into operations beneficial methods and approaches of solving them (Kapur, 2020).
- 4) **Reflection about self-efficacy:** Reflective teaching skills ensure PTs' attitudes towards regulating their own learning process and academic activities. They cultivate self-efficacy beliefs among PTs regarding academic achievement and consolidate their levels of motivation and aspirations (Guleker, 2015).

In an attempt to investigate reflective teaching, Swanwick et al., (2014) have presented a flexible framework of principles for teaching reflective practice and critical thinking skills for postgraduate students. The framework was constructed based on some selected learning activities that were later evaluated by the participants themselves. The findings of the study stressed the effectiveness of the presented framework in developing the reflective practice and critical thinking skills. Further, Bleakley et al., (2020) who have examined how reflective skills can be developed through iterations of a purpose-designed collaborative protocol. The findings of the study revealed that instructors' use of non-judgmental and self-evaluated protocol positively contributed to the development of reflective skills and teaching confidence.

Similarly, Choy et al. (2020) investigated how pre-service teachers understand reflective skills and to what extent do the policies and procedures in different institutions affect the acquisition of these

skills. Findings illustrated that policies and procedures of institutions have some effects but cultural values and pedagogical philosophies have the major impacts on the acquisition of reflective skills. Budak, Gecer and Topal (2021) have similarly conducted a study that aimed at determining the effects of digital story design made by students working on project in groups using Scratch program on their reflective and problem solving skills. The findings have asserted the positive influence of Scratch programming on students' reflective thinking towards problem solving skills.

Additionally, Tkavashvili (2021) in an investigative attempt examined whether teachers' reflective, communicative, and professional skills can be developed as a result of applying reflective diaries. The findings have indicated that there was a positive relationship between applying reflective diaries and the development of teachers' reflective, communicative, and professional skills. In the same harmony, Pieper et al., (2021) have also tested whether lecturers and tutors' feedback on initial reflective journal entries can enhance reflection skills among student teachers. The findings likewise have illustrated that lecturer and tutor's feedback on initial reflective journal has a significant impact on fostering reflection among student teachers.

From the previously stated related studies it can be concluded that:

- Reflective teaching skills have become irreplaceable in recent pedagogical environments enough that they have become under discussion and consideration recently.
- As previously indicated, reflective teaching skills have proved to confer upon opportunities for achieving higher levels of educational qualities.
- Reflective teaching helps teachers generate a great source of analyses related to everyday classroom practices. This comprehensible analysis of classroom practices can help

teachers determine what exactly can be necessary and meaningful and what simply can be a complete waste of time.

- Reflective teaching frameworks and techniques have undergone a series of investigations and studies and proved to be highly effective for optimization teaching performance and practices.

Multiple views have provided diverse levels of reflection. These levels are deeply related to classroom procedures tackled by instructors and learners.

### **Levels of Reflection**

The first one to present levels of reflection was believed to be Manen (1977). He categorized reflection into three levels: 1) Technical rationality that deals with context generalization about teaching, 2) practical rationality that presents reflection based on examples of teaching and learning experiences, and 3) critical rationality, the highest level of reflection, that covers multi-contextual actions across the teaching context (Nurfaidah, Lengkanawati & Sukyadi, 2017). The most common category of reflection was then presented by (Zwozdiak-Myeres, 2009). In this attempt, the three levels of reflection were modified to: 1) technical or practical reflection, 2) contextual, deliberate or conceptual reflection, and 3) critical, dialectical or transformative reflection.

Later, Mehay (2010) has illustrated another framework that highlighted the levels of reflection. Three other levels of reflection were provided, i.e. descriptive, analytical, and evaluative reflection along with four criteria for clarifying each level: 1) provided information, 2) critical analysis, 3) self-awareness, and 4) evidence of learning. These levels of reflection can be illustrated in the following table:

**Table (1): Levels of Reflection**

<b>LEVELS OF REFLECTION</b>		
<b>Not acceptable</b> <i>Descriptive</i>	<b>Acceptable</b> <i>Analytical</i>	<b>Excellent (in addition to acceptable column)</b> <i>evaluative</i>
<b>Information provided</b> Entirely descriptive e.g. lists of learning events/certificates of attendance with no evidence of reflection.	Limited use of other sources of information to put the event in context.	Uses range of sources to clarify thoughts and feelings.
<b>Critical analysis</b> No evidence of analysis (i.e. an attempt to make sense of thoughts, perceptions and emotions).	Some evidence of critical thinking and analysis. Describing own thought processing.	Demonstrates well-developed analysis and critical thinking e.g. using the evidence base to justify or change behavior.
Self-Awareness No self-awareness	Some self-awareness demonstrating openness and honesty about performance and some consideration of feelings generated.	Showing insight, seeing performance of what might be expected instructors.  Considerations of thoughts and feelings of others as well as himself/herself.
<b>Evidence of learning</b> No evidence of learning (i.e. clarification of what needs to be learned and why).	Some evidence of learning, appropriately describing what needs to be learned, why and how.	Good evidence of learning with critical assessment, prioritization and planning of learning.

**Adopted from (Mehay, 2010, p. 2)**

As the previous table illustrates, there are four criteria that should be considered when trying to figure out how reflective teaching skills work. During the first level (descriptive level) PTs will start reflection through preparing lists of teaching actions and events showing no sign of self-awareness or evidence of learning. They can observe behaviours to give insights and provide examples to figure out the situation with its surrounding perspectives without being deeply

engaged in a deep process of analysis and discrimination. In the second level of reflection (analytical level), PTs should start applying and accessing limited sources to get information. In this level, they begin to form critical thinking and analysis skills that ensure their abilities to generate feelings and describe their learning needs. They may show a primitive ability to illustrate evidence and interpret points of view. In the third level of reflection, PTs will be able to access a variety of sources to get the information and data that reflect their thoughts and feelings. Their critical thinking and analysis skills become apparently developed in a way that clearly reflects their thoughts, beliefs, insights and emotions. Finally, they become capable of planning for their teaching and evaluation procedures reflectively, making convenient judgments, and taking reasonable decisions.

### **Components of Reflective Teaching**

In an attempt to sort reflective teaching to its basic and principle components, Fat'hi and Behzadpour (2011, pp. 247-249), have presented six essential components of reflective teaching as follows:

#### **1. The learner**

The main concern of reflective teaching is focusing on learners' background knowledge, attitudes towards learning, personal interests as well as levels of understanding and progression. In addition, reflective teaching highly reflects on learners' cognitive and affective abilities, learning strategies and various learning styles that are related to learners' knowledge and type of intelligence (Hillier, 2005; Pollard, et al., 2006; Tice, 2011).

#### **2. The instructor**

Although, students are considered the core of the educational process in reflective teaching, instructors' affective factors should get more attention from researchers and specialists as instructors are necessary for the reflection process as they represent the pillars of applying reflection in teaching. Conversely, Akbari (2007) has

mentioned some factors that may hinder the reflection process on behalf of instructors in EFL classrooms as instructors': beliefs, views, anxiety, teaching styles, and the way they assess their own teaching practices.

### **3. Practical aspects**

The practical aspects of reflection as they were referred to in literature are numerous instruments, techniques and ways (e.g. discussion, journal writing, argumentative essays, video recordings, questionnaires , and observations) tackled by teachers in order to apply reflective teaching in and on teaching practices. These instruments are used to enhance pedagogical and professional knowledge of prospective teachers (Rodman, 2010; Wahyudi, Malik & Malang, 2012).

### **4. Cognitive development of the instructor**

Farrell (2004) has referred that EFL Reflective teachers should consolidate their professional development through continually participating in workshops, training programs, seminars, webinars, and discussion groups related to Teaching English as a Foreign Language (TEFL).

### **5. Contextual or critical aspects**

Thoughtful reflective teachers need to incorporate critical or contextual aspects of reflection into their teaching practices. They need to view teaching situations from different perspectives and understand themselves as social partners. Teachers should realize the gap between the neatness of teachers' preparation courses and the chaos of authentic experiences. Reflective teachers should be qualifiers who can add smoothness to teaching practices within a frame of challenging and uncovering hegemonic assumptions. Further, reflective critical teachers should be aware how learned and confirmed psychological mechanisms among young learners can largely affect their development as adult learners. Accordingly,

applying lateral and divergent learning strategies as well as multiple learning methods and tools is crucial for achieving critical reflective teaching skills (Brookfield, 2009)

## **6. Ethical or moral parameters**

As indicated by Willemse, Lunenberg and Korthagen (2008), reflective teachers should not rely only on teaching knowledge and skills but they should add an additional layer to their teaching practices. They are to help their learners develop values and norms. They ought to prepare moral or ethical preparation for their learners (e.g. taking responsibilities for one's own decisions and actions).

It is worth mentioning that reflective teaching skills can only be acquired by beginning teachers, PTs or experienced teachers who value critical reflection (Astica, 2014). PTs need to learn how to plan, observe, monitor, collect data, analyze and act in a way that reflects their decisions, feelings and judgments. Reflective teaching represents the highest-quality standards of teaching that have a powerful and comprehensive impact on the teaching practices. Reflective teaching skills help PTs form positive attitudes towards teaching through cultivating open-mindedness, responsibility and wholeheartedness in their personalities. They provide them with systematic series of teaching practices that begins with gathering new evidence, analyzing and interpreting data, making judgments and applying inquiry skills (Pollard et al., 2005). Accordingly, the current study tried to apply dialogic teaching to develop EFL PTs' reflective teaching skills during the methodology class.

### **Dialogic Teaching**

Dialogic teaching is an instructional approach that illustrates the importance of dialogue in the classroom. It emphasizes the power of talk among instructors and learners and helps the latter learn to argue, discuss, interpret, reason and interact. Thus it can be used to develop reflective teaching skills. Dialogic teaching approach owes debt to



Vygostsky (1896-1934) who crystalized the relationship between language, thought and socio-cultural environment (Jay et al., 2017, p. 6) . It differs from 'Initiation-Response-Feedback' (IRF) pattern or "monologic talk". Monologic talk occurs when instructors act as the whole authority in the classroom through asking a closed question (initiation) of a particular learner, then the learner provides an answer (response), and finally the instructor provides feedback for the given answer (feedback). The IRF pattern, monologic teaching, has been criticized for reducing learners' engagement in classrooms due to limiting their amounts of talk (Mercer, 2007; Lyle, 2008). Contrarily, dialogic teaching as referred by Alexander (2020) focuses on structured questions that provoke deep answers and generate further questions in a connected and coherent chain of talk that prompt instructor-learner and learner-learner social democratic engagement and interaction.

Evidence for the positive effects of dialogic teaching that enhances classroom talks can be found in research. Kuran, Andi and Yan (2017) have studied types of classroom dialogue (talk). They have indicated that classroom talk is categorized into teacher and learners' talk. Classroom dialogues cover teacher's questions, explanation, speech and feedback in addition to learners' questions and responses. The study findings revealed that classroom talks can be influenced by several factors such as teacher's linguistic competence and educational background. Further, Makar and Allmond (2018) have emphasized the importance of creating a culture of productive classroom talk in non-routine classroom situations. In the study of Khong, Thi Diem Hang, Saito, Eisuke, Gillies and Robyn (2019) it was found out that instructors talk prevails in classrooms while few verbal interactions take place among learners. Further, Sedova and Navratilova (2020) have illustrated the patterns of students' participation in classroom talks focusing on low-achieving silent students who prefer participating in whole class dialogues.

## Dialogic Teaching Features and Repertoires

Although dialogic teaching is not a specific method of teaching rather it is an approach that harnesses the power of dialogues and talks in EFL classes. It cannot be considered just talking, speaking and listening components, or communication skills. Dialogic teaching is a comprehensive approach that requires rethinking that should be grounded in principles and evidence (Alexander, 2018).

Alexander (2017, pp. 37-40) has presented six main repertoires of dialogic teaching for both teachers and students as follows:

- **Repertoire one (interactive settings):**

Repertoire one or the organizational setting encourages student-teacher and student-student various interactions in EFL classrooms. It is divided into six categories that may occur regularly in EFL classes: 1) Whole class teaching (teacher-student interaction), 2) Group work (teacher-student interaction- directed or guided by the teacher), 3) Group work (student-student interaction- students' independent work without teacher's guidance), 4) One-to-one (teacher-student- personal coaching), and 5) One-to-one (student-student- pair activities).

- **Repertoire two (everyday talk):**

The second repertoire is related to everyday life talk about authentic situations. This can help PTs develop six sorts of talk: 1) Expressive, 2) Expository, 3) Interrogatory, 4) exploratory, 5) Transactional, and 6) Evaluative talk. Students can learn to apply any kind of these sorts of talk when teachers apply different types of talk in EFL classes. Consequently, Mercer and Hodgkinson (2008) have classified talk in classrooms to three categories disputational, cumulative and exploratory: 1) Disputational talk in which many interactions are involved and few attempts to offer constructive criticism are offered. The educational environment in disputational talk seems to be competitive not cooperative. The second category is cumulative talk that encourages students to share their knowledge and

clarify their ideas in an educational environment free of any sort of criticism or evaluation. The third category is exploratory talk that requires that each student should carefully listen, ask questions, share knowledge, illuminate ideas, participate, offer points of view, make decisions and show respect for others.

Beauchamp, Kusnick and McCallum (2011) have presented the three formats of talk (dialogue) differently referring to the first format as the "dialogue stems". In stems students are asked to discuss the discrepant event while teachers should redirect conversations and generate answers. Additionally, teachers can use dialogue stems to teach students how to differentiate between opinions, inferences and observation. The second type of talk was named "say something". The "say something" format of talk should be applied with small groups of students of 3 or 4 students maximum in each group. The first member of the first small group should begin to comment on the discrepant event. Then, the other members of the group begin to subsequently add to the first original comment. This format helps students in making notes, comments and observations along with generating ideas and relating them to their background knowledge. The final talk format according to Beauchamp, Kusnick and McCallum is the "partner talk". In this format, students should start to practice using the language and transmitting thoughts while connecting with their partners in pair work.

- **Repertoire three (learning talk):**

Students can learn to talk in EFL classrooms through eleven categories: 1) Analyze, 2) Speculate, 3) Explain, 4) Imagine, 5) Explore, 6) Narrate, 7) Evaluate, 8) Question, 9), Justify 10) Argue, and 11) Discuss. These categories of talk can enhance PTs' abilities to listen, think, analyze and learn how to respect others' points of views.

- **Repertoire four (teaching talk):**

Teachers themselves can have good command over classroom talks through applying the following strategies: 1) Dialogue (interactions, questions and answers, feedback and contributions), 2) Exposition (clarifying things through providing adequate information), 3) Discussion (testing and exploring problems and

different issues), 4) Rote (repetition of facts and ideas), 5) Recitation (through applying short question- answer sequences), and 6) Instruction (informing PTs what to do and how to do it).

- **Repertoire five (questioning):**

Questions in dialogic teaching happen within the following techniques: tests, response (nomination- hands up to answer), participation (rotation), wait/thinking time, immediate formative feedback, and types of questions (closed- open-ended- discursive-leading- narrow).

- **Repertoire six (extending):**

This final repertoire was added by Michaels and O'Connor (2012) as it proved to be effective for the dialogic teaching approach. Instructors can help their students in the extending repertoire through providing them with time to think and speak, encouraging them to attentively listen to each other, asking them always to provide evidences accompanied with authentic examples and pushing them to be positive participants who can agree, add or illustrate others' points of views.

### **Significance of Dialogic Teaching in EFL Classrooms**

Dialogic teaching has proved its effectiveness in developing linguistic resources and language competencies among EFL learners. It is a powerful approach that equips EFL instructors with a variety of fruitful meta-language methods and techniques that help them get their learners fully engaged in EFL classes and develop self-awareness skills (Schleppegrell, 2013; Schleppegrell & Moore, 2018). Dialogic teaching fosters the use of creative activities taking into consideration learners' diversity in EFL language skills (Chow et.al, 2021). Further, Gibbson (2015) has emphasized that dialogic teaching offers various opportunities for EFL learners to explore new issues and situations, show understanding freely without being controlled by peers or teachers.

Importantly, dialogic teaching thus differs from other regular instruction approaches that heavily depend on monologic patterns where teachers represent the only source of authority in classrooms. They are the only ones who can direct dialogues or assess the quality of classroom interactions (Mercer & Howe, 2012). On the other hand,

dialogic teaching maximizes different types of classroom interactions to get EFL learners engaged in rich teaching and learning environments that promote their higher thinking skills (Carrion et.al. 2020). Similarly, Mercer (2019) has indicated that dialogic teaching cultivates democratic values and principles among EFL learners through encouraging them to appreciate the benefits behind working together. It helps EFL learners build positive attitudes towards group work that boosts their abilities to think, understand, reason and complete tasks together in EFL classes.

However, studies have revealed that the dominant discourse in current EFL classes is the monologic pattern that mainly hinders learners understanding and higher thinking skills as reflective thinking (Mercer & Howe, 2012). Accordingly, several researchers have investigated the effects of applying dialogic teaching in EFL classes as Barekat and Mohammadi (2014) who tested whether dialogic teaching can develop students' speaking abilities or not. The study findings have emphasized that dialogic teaching can contribute effectively to students' speaking abilities. Zayed (2016) has also examined the ways in which learners, texts and teachers as major components of the educational process interact with dialogic teaching. Findings have revealed that the application of dialogic teaching approach in EFL classes has a positive impact on developing learners' skills and generating meaning and understanding among them.

In addition, Elhassan and Adam (2017) aimed at examining the impact of dialogic teaching on developing EFL learners' speaking and critical thinking skills. Findings have illustrated that dialogic teaching was effective in developing debate, questioning, argumentation critical thinking skills as well as speaking skills among EFL students. In the same context, Tanis, Harman Sensoy and Atay (2020) have conducted an investigative trial to examine the effects of first language use and dialogic instruction on developing writing skills among EFL learners. Findings of the study have revealed that dialogic teaching has positively affected the development of EFL learners' writing skills more than the first language use. It is also worth noting that due to the rapidly growing world, PTs are circumstantially expected to be able to apply technological tools and models in

beneficial ways to enrich their learners' educational process. Their major challenge is to be able to implement new pedagogical approaches for coping up with the network age (the digital age) in order to reform the practices and current situations (Wegerif, 2007). Another essential fact is that technological and digital models and techniques have not become a luxury or a choice anymore, but an imperative necessity. Correspondingly, the current study presents an effective technological model (SAMR) to enhance dialogic teaching in developing prospective teachers' reflective teaching skills.

### **SAMR Model**

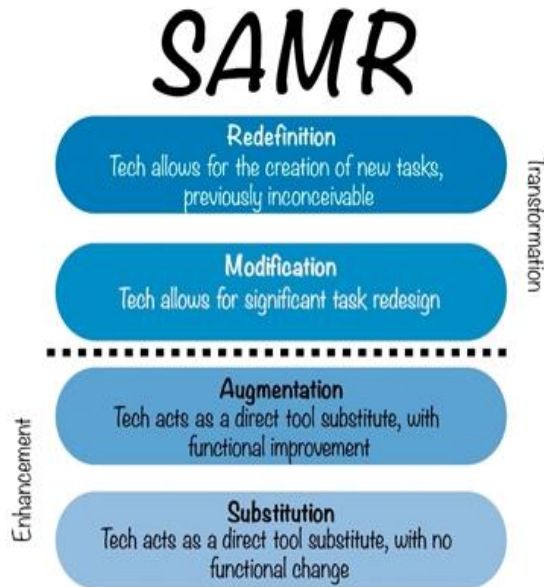
In the current digital era, teachers are spontaneously replacing traditional teachings techniques or tools with digital or technological ones. For instance, they may use electronic formats (e.g. websites, electronic books, PowerPoint, online dictionaries, electronic quizzes and examinations, etc.) instead of utilizing paper worksheets or textbooks. Similarly, students can answer their assignments or quizzes using Microsoft Word, PowerPoint presentations or similar programs. However, there are certain educational situations that require the application of traditional tools as papers, textbooks and handouts. Consequently, the integration of recent technological models and tools as SAMR model into regular teaching environments has become an essential teaching practice.

Hence, it has become a necessity to prepare prospective teachers to acquire good command of applying technology in their teaching practices. It is no longer a question whether it is effective to apply technology in teaching practices, but how (Lyddon, 2019). It was reported by the UNESCO (2017) that there are approximately 264 million individuals (kids and adolescents) who cannot attend regular schools. Further, the current COVID-19 pandemic has increased attitudes towards teaching online or applying online teaching methods as well as models. Consequently, the time has come for thinking seriously of reforming or redesigning the current educational systems to cope up with the current demanding needs (Martinez, 2020; Mishra, Gupta & Shree, 2020).

There are two possible futures for education as illustrated by Kash (2018). The first is that in which technology will duplicate what is regularly or traditionally done and the other is the one in which technology will transform learning. However, prospective teachers are not sufficiently equipped with the technological knowledge that can be reflected systematically and automatically in their teaching practices (Vogot & Mckenny, 2017). Researchers have declared that prospective teachers feel incapable to appropriately integrate technology in their various teaching practices (Tondeur et al., 2012). Technological integration in teaching practices has been recognized to move along four definite stages. These four stages were presented by Puentedura (2006) as stages that promote highest levels of affordance, namely, Substitution, Augmentation, Modification, and Redefinition (SAMR). These four stages are categorized into enhancement and transformative levels. The former is related to the substitution and augmentation stages, while the latter is related to modification and redefinition stages (See Figure 2). Djiwandono (2020) has explained the features of each stage as follows:

- 1) **Substitution:** This stage takes place when EFL prospective teachers use technology to substitute for conventional techniques as replacing ordinary dictionaries by PEDs or online dictionaries.
- 2) **Augmentation:** This stage supports prospective teachers with some functions that can booster the learning environment as asking them to read an electronic material in a webpage and simultaneously look up vague or unclear words in their PEDs or online dictionaries.
- 3) **Modification:** This is the stage in which EFL prospective teachers should allow for new digital-based learning tasks instead of regularly applied ones as using multimedia techniques to learn a new vocabulary set. In this stage, prospective teachers can prepare their learning projects, see their peers' projects and comment on them. This will lead them to create a learning milieu of their own without fully depending on their instructors.
- 4) **Redefinition:** This is the stage helps EFL prospective teachers create their new learning experiences.

**Figure (2): Puentedura's (2006) Substitution, Augmentation, Modification, and Redefinition (SAMR) model**



(Retrieved from: <http://www.hippasus.com/rrpweblog/>)

### Merits and Tools of SAMR Model

The SAMR model can be applied in different formats to match various courses. EFL instructors can find a variety of examples to apply the SAMR model within their courses to enhance students' language development. It is important for enhancing learning, developing performance, maximizing interest in continuing learning through technology and leading to transformational and life-long learning (Azama, 2015). There are various examples of applying SAMR model in action within EFL classes as indicated by Lyddon (2019) as it was pointed out that SAMR can positively affect the progressive development of the four main skills of the English language as follows:



**Table (2): Examples of SAMR (Substitution-Augmentation-Modification-Redefinition) Learning Activities for EFL Skills.**

Level	Communication skills			
	Listening	Speaking	Reading	Writing
<b>Redefinition</b>	Record and analyze online conversation with partner abroad	Engage in online discussions with peers abroad	Compare online news stories from various countries	Publish compositions and respond to comments online
<b>Modification</b>	Transcribe and analyze model recorded speech	Record, transcribe, and analyze own speech	Read user responses to online news articles	Create multimodal compositions
<b>Augmentation</b>	Record and re-listen to class lectures	Present multimodal slide shows	Read online texts with color images	Write and compare drafts with collaborative software
<b>Substitution</b>	Listen to MP3s instead of CDs	Use digital versions of activities instead of paper	Read traditional handouts as PDFs	Type in an app rather than write on paper

Adopted from (Lyddon, 2019, p. 189)

It is important to bear in mind that SAMR can be applied in EFL classrooms through certain technological tools as indicated by Mejias (2019):

- 1) **Google Docs** <https://docs.google.com/document/u/0/>: this tool helps students bring their texts to their mobile phones as fast as possible. Through inserting their Google account, email or phone number they can type, edit or comment on the texts immediately.
- 2) **Google slides** <https://docs.google.com/presentation/u/0/>: this tool helps them format texts, insert images, embed videos, apply hundreds of presentation animations and themes, draw charts and tables as well as import files.

- 3) **MoocNote** <https://moocnote.com/>: MoocNote helps both teachers and students optimize note taking, add and edit screen captures, grab texts from videos, add quizzes to videos and add edited screen captures.
- 4) **Lingro** <https://lingro.com/>: this tool offers learners with opportunities to enter a website address to make all words written on this website clickable, so that learners can click on vague words to get their meaning. Lingro is also called the coolest dictionary.
- 5) **YouGlish** <https://youglish.com/>: Youglish is a YouTube tool that helps learners develop their pronunciation in various useful ways. Learners who apply **YouGlish** can choose the language, the accent and the translation technique that are helpful for them to complete their tasks in the most appropriate way. Another major importance of this website that should be pinpointed is that it is not presenting English using machines or robots, instead learners will listen to the pronunciation of native speakers of English in various daily life situations and this will highly help their to improve their language skills in specific as well as their teaching skills in a broader meaning. However, one minor disadvantage of **YouGlish** was spotted as it is not available as a mobile app that can be simply installed and kept in mobile phones to be easily used. Actually, it should be accessed directly through its website only.

In the present study, Google slides, Google Docs, Lingro and Youglish were adopted from the SAMR model tools to be applied. Prospective teachers were introduced with these three significant SAMR tools via an introductory video in the orientation session. The video was immediately followed by guided practice activities to help them master these SAMR tools. Then in the rest of the sessions, collaborative and individual practices were also emphasized. These SAMR model tools, as was reported by the study participants, have proven to be crucial for their language progression and development.

Consequently, some researchers tried to apply SAMR model tools in EFL classes to benefit from their positive effects on language development as Doyle (2017) who proved that using Google slides is useful for developing students': 1. journal writing skills as clarifying ideas; 2. Reading comprehension skills; 3. Engagement with readings; and 4. Motivation to read. Besides, Savignano (2017) studied perceptions of teachers and administrators on integrating technology (SAMR model) into the classroom environment to enhance students' learning experience and outcomes. Tseng (2019) has also adopted the SAMR model to find out the degree to which EFL teachers enact their TPACK that describes teachers' knowledge related to the integration of technology in teaching and learning, with ipads. Fu and Yang (2019) have additionally tried to explore the effects of applying Youglish as an online video pronunciation dictionary that makes use of a variety of aspects to develop speaking skills based on the lexical approach of learning. The results have illuminated that Youglish has been found of a great benefit in developing learners' intonation, pronunciation, word choice, learning strategies and even reactions. It has helped learners be self-directed and active participants in language classrooms.

In addition, Djiwandono (2020) has also aimed at investigating the impact of the SAMR model on EFL learners' vocabulary learning. The findings have revealed that SAMR has increased EFL learners' abilities to accomplish their vocabulary tasks applying various vocabulary strategies. Kartal and Korucu-Kis (2020) have also studied the impact of Twitter and YouGlish on the learning as well as the retention of the words that are commonly mispronounced. In addition, they examined the attitude towards pronunciation and the various points of views regarding the application of Twitter (the micro-blogging tool) and YouGlish. Findings of the study revealed that using both Twitter and YouGlish was effective and it has positive impact on learning and retention of mispronounced words. Further, these results were highly agreed upon as indicated by the points of views collected from pre-service teachers.

## **Drawbacks of SAMR Model**

Although SAMR's increasing popularity has represented a vital way to integrate Information Communication Technology (ICT) in classrooms, it has some shortcomings. According to Hamilton, Rosenberg and Akcaoglu (2016) Puentedura has shared his SAMR model via his website with limited detailed illustrations and examples about its use and application. Moreover, few researchers have connected SAMR with prior research. Hence, three drawbacks were found during applying SAMR in the educational contexts. First, its prescriptive taxonomic structure as it does not clearly follow the definite aspects of context. Second, its disregard for contextual differences as it was found to be rigid for sometimes. Although it was developed as taxonomy of technology integration within four clear steps, it focuses on the hierarchical continuum of its steps rather on shifting classroom practices and pedagogy. Third, its focus on learning activities rather than processes has seemed to hinder its enhancement to students' achievement. Thus, in order to overcome such demerits of SAMR, instructors should take into account the unique educational environment is the ultimate guide that should be emphasized not the technological tools themselves.

## **Context of the Problem**

EFL Teachers' preparation courses in the Egyptian faculties of education consists of three kinds of instructional courses: (1) Academic (e.g. Phonetics, Translation, Grammar, Conversation, Essay writing, etc.), (2) Cultural (e.g. teaching French as a second foreign language and Arabic), and (3) Educational (e.g. Comparative education, Educational psychology, Methodology, etc.). It has been noticed that main concern of teaching the methodology class is to prepare EFL prospective teachers (PTs) to be proficient teachers equipped with content knowledge, language skills and teaching competencies to cope up with the tremendously changing world. However, it has been noticed that EFL PTs lack reflective teaching skills. For instance, they often cannot support beliefs with evidence from their experience and they ignore the interdependence between

teacher and students' actions. Besides, they frequently deal with sudden classroom circumstances as beyond their control. They are not active inquirers who critique current conclusions and generate new hypotheses. According to Gupta and Lee (2015) university courses do neglect the cultivation of skills other than language skills as pedagogical and reflective teaching skills among their learners.

Although reflective teaching skills are related to daily teaching practices, they are essential for PTs as indicated by (Bawaneh, Moumene & Aldalalah, 2020), it seems not simple for PTs to learn how to get rid of their unconsciously and erroneous teaching beliefs, habits and assumptions that are heavily grounded in them. They do believe that they should teach as they were taught applying the same procedures, and teaching practices. Consequently, they become fully surrounded by long-life preservations and negative solidification in an era that requires flexible as well as reflective teaching skills. Reflective teaching skills are neglected in teacher preparation courses due to several reasons such as: lack of learners', instructors' or institutional enthusiasm on spending much time on practicing reflection, courses design or construction, PTs' anxiety regarding the evaluation procedures, regular teaching approaches that depend heavily on note taking strategies and conventional observations if found, as well as the lack of authentic teaching samples (Paker, 2011; Eröz-Tuga, 2013). In addition, Nodoushan (2011) has illustrated other factors that negatively affect the development of reflective teaching skills in EFL classrooms as: (1) program types, (2) part time workforce, (3) limited financial capabilities and resources devoted for training workshops and programs, and (4) the solid requirements and policies for credentialing or professional certification.

To document the problem, a pilot study was conducted. It comprised a reflective teaching questionnaire (Appendix A). The questionnaire was administered to 100 fourth-year student teachers enrolled in the English section at Faculty of Education, University of Sadat City at the end of the second semester of the 2020/2021 academic year. The questionnaire posed 10 questions. Prospective teachers had to tick one choice from the five-point Likert scale (Very

important, Important, Somewhat important, Little important and Unimportant). After analyzing the responses, it has been revealed that the majority of the participants (80%) have marked reflective teaching skills as very important, (14%) have marked them important and only (6%) have marked them as somewhat important.

### **Statement of the problem**

The problem of the current study was the poor level of faculty of education EFL PTs in reflective teaching skills. Correspondingly, the present study was an attempt to help them develop their reflective teaching skills through the implementation of the dialogic teaching enhanced by the SAMR model.

### **Questions**

The present study attempted to answer the following questions:

1. To what extent do EFL fourth year, faculty of education prospective teachers master reflective teaching skills?
2. How can dialogic teaching enhanced by SAMR model be used to develop EFL fourth year, faculty of education prospective teachers' reflective teaching skills?
3. To what extent does using dialogic teaching enhanced by SAMR model affect the development of EFL fourth year, faculty of education prospective teachers' reflective teaching skills?

### **Hypotheses:**

1. There is a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the experimental and control groups on the post administration of the overall Reflective Teaching Questionnaire in favour of the experimental group. This main hypothesis has the following sub-hypotheses:

A1 There is a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the experimental and control groups on the post administration of the Reflective Teaching Questionnaire (pre-reflection level) in favour of the experimental group.

- B1 There is a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the experimental and control groups on the post administration of the Reflective Teaching Questionnaire (surface level) in favour of the experimental group.
- C1 There is a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the experimental and control groups on the post administration of the Reflective Teaching Questionnaire (pedagogical level) in favour of the experimental group.
- D1 There is a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the experimental and control groups on the post administration of the Reflective Teaching Questionnaire (critical level) in favour of the experimental group.

### Significance

The current study is significant for:

1. **Prospective teachers:** it helps them develop and appreciate reflective teaching skills.
2. **EFL instructors:** it provides them with a pedagogical approach (dialogic teaching) and an instructional technology-based model (SAMR) that can help them develop their students' reflective teaching skills.
3. **Curriculum planners:** it highlights the dialogic teaching approach and the SAMR model as being effective and efficient for being integrated in EFL curriculum.

### Terms of the Study

#### Reflective teaching skills

Reflective teaching skills are operationally defined as fourth year faculty of education prospective teachers' abilities to make decisions and take suitable actions in and on various classroom situations in a way that reflects their capabilities to put into practice what they have learnt theoretically.

## **Dialogic Teaching**

Dialogic teaching is an instructional approach that promotes the use of various types of systematic and organized talks, in which all participants are equally considered and heard, in effective and creative ways. These talks are considerably applied to enhance fourth year, faculty of education PTs' engagement and learning through developing their reflective teaching skills.

## **SAMR Model**

SAMR is a technology-based model that is categorized into four stages, namely, Substitution, Augmentation, Modification, Redefinition that are classified under two main learning levels: 1) enhancement (Substitution-Augmentation) and 2) transformative (modification-redefinition). It is used for developing EFL fourth year, faculty of education PTs' reflective teaching skills.

## **Prospective Teachers**

Prospective teachers (also called student teachers) are faculty of education students who have not been accredited to teach yet because they have not been certified.

## **Method**

### **Participants**

Participants of the current study were 60 prospective teachers. They were drawn from fourth year student teachers enrolled in the English section at Faculty of Education, University of Sadat City, during the first semester of the academic year 2021/2022. Their ages ranged from 21 to 22 years old. They were divided into two groups: experimental and control (30 participants each). The Participants of the experimental group were taught using dialogic teaching approach enhanced by SAMR model. They all had smartphones with Internet access as well as g-mail accounts. The participants of the control group received regular instruction. Before the treatment, the Reflective Teaching Questionnaire (RTQ) was administered to the participants of the experimental and control groups on October 17<sup>th</sup>, 2021, to ensure that the two groups were homogeneous and identical



within their reflective teaching skills before the beginning of the experimentation. PTs' responses on the pre-administration of the RTQ did not reflect any major differences between the mean scores of the experimental and control groups. Table three displays t-value, standard deviations, and level of significance of the research participants on the pre-administration of the RTQ:

**Table (3): t-value and Level of Significance on the Pre-administration of the RTQ**

Levels of Reflective Teaching	Group	No	Mean	SD	df	F. Value	Sig.	t-value	Level of sig.
Level 1: Pre-reflection	Control	30	20.4	4.5	58	1.74	Not sig.	1.2	Not. Sig. at 0.05 level
	Experimental	30	19.0	3.8					
Level 2: Surface Reflection	Control	30	15.8	3.3	58	0.12	Not sig.	1.42	Not. Sig. at 0.05 level
	Experimental	30	14.6	3.1					
Level 3: Pedagogical Reflection	Control	30	19.4	3.9	58	0.53	Not sig.	1.81	Not. Sig. at 0.05 level
	Experimental	30	17.7	3.2					
Level 4: Critical Reflection	Control	30	15.3	3.8	58	0.11	Not sig.	0.55	Not. Sig. at 0.05 level
	Experimental	30	15.9	4.5					
Overall Scale	Control	30	71.4	11.7	58	1.03	Not sig.	1.66	Not. Sig. at 0.05 level
	Experimental	30	67.4	5.6					

\* The tabular value of t-test at the level of (0.05) and 58 df is (2.02).

Table (3) indicates that no statistically significant differences were found between the two groups in the pre-administration of the RTQ. Accordingly, data shown in table (3) emphasizes that both groups were equivalent in their entry level of reflective teaching skills before the beginning of the experimental treatment.

## Design

The current study is a quasi-experimental one that relied on the mixed research methodology through applying the descriptive and experimental approaches. The descriptive approach was utilized to determine the significant reflective teaching skills appropriate for faculty of education, English section prospective teachers in light of the comprehensive review of literature. Besides, the quasi-experimental design was applied to investigate the effects of dialogic teaching enhanced by SAMR model for developing the dependent variable of the research (prospective teachers' reflective teaching skills).

## Variables

**Independent variables:** Dialogic teaching enhanced by SAMR model

**Dependent variable:** Reflective teaching skills

## Instruments and Material

The researcher prepared and used the following instruments and material:

1. A reflective teaching questionnaire
2. An observation checklist
3. A teacher's guide

### 1. The Reflective Teaching Questionnaire (RTQ)

#### 1.1 Aim of the RTQ

The RTQ was prepared by the researcher and aimed to investigate the reflective teaching skills applied by fourth year, faculty of education, English section prospective teachers.

#### 1.2 Description of the RTQ

The RTQ (Appendix B) items covered four levels of reflection: pre-reflection, surface reflection, pedagogical and critical reflection. It is a 36-item questionnaire with a five-point Likert Scale (Often, Usually, Sometimes, Rarely, or Never).

### 1.3 Validity of the RTQ:

The face validity of the RTQ was established after submitting it to a panel of jurors to judge it in terms of the accuracy of its instructions, the appropriateness of its items and the suitability of its items to the level of the participants. The jury members have indicated that the RTQ can be used as a valid instrument for measuring prospective teachers' reflective teaching skills. Moreover, the validity of internal consistency of the questionnaire's items was also calculated through applying the Spearman Brown equation and the results are shown in table (4):

**Table (4): Values of the Correlational Validity Coefficients for the items of the RTQ**

Item	Level correlation coefficient	Scale correlation coefficient	Item	Level correlation coefficient	Scale correlation coefficient
<b>Level 1: Pre-reflection</b>					
1	0.86**	0.72**	6	0.84**	0.56**
2	0.76**	0.85**	7	0.74**	0.78**
3	0.80**	0.81**	8	0.91**	0.92**
4	0.48**	0.57**	9	0.77**	0.68**
5	0.72**	0.60**	10	0.84**	0.71**
<b>Level 2: Surface Reflection</b>					
11	0.59**	0.55**	15	0.72**	0.74**
12	0.85**	0.71**	16	0.69**	0.71**
13	0.63**	0.83**	17	0.51**	0.77**
14	0.58**	0.76**	18	0.78**	0.80**
<b>Level 3: Pedagogical Reflection</b>					
19	0.77**	0.78**	24	0.75**	0.72**
20	0.90**	0.73**	25	0.80**	0.85**
21	0.63**	0.90**	26	0.66**	0.74**
22	0.67**	0.48**	27	0.83**	0.77**
23	0.73**	0.50**	28	0.70**	0.82**
<b>Level 4: Critical Reflection</b>					
29	0.58**	0.74**	33	0.71**	0.68**
30	0.82**	0.66**	34	0.57**	0.77**
31	0.78**	0.72**	35	0.72**	0.83**
32	0.64**	0.79**	36	0.90**	0.64**

\*\* Significant at (0.01)

Table (4) illustrates that all the items of the RTQ are highly related to the level of reflection which they belong to and to the questionnaire as a whole at the (0.01) level of significance. This indicates that the RTQ has a high degree of validity of internal consistency and all its items were prepared to achieve its main aim.

**Table (5): Values of the Correlational Validity Coefficients of the Levels of the RTQ**

Levels of Reflective Teaching	Level 1	Level 2	Level 3	Level 4
Level 1: Pre-reflection	--	0.83**	0.77**	0.69**
Level 2: Surface Reflection	0.83**	--	0.72**	0.81**
Level 3: Pedagogical Reflection	0.77**	0.72**	--	0.75**
Level 4: Critical Reflection	0.69**	0.81**	0.75**	--
Overall Scale	0.83**	0.76**	0.68**	0.71**

\*\* Significant at (0.01)

As table (5) clarifies, all the levels of reflection in the RTQ are related to each other and to the questionnaire as a whole at the (0.01) level of significance. This also ensures all the levels of the RTQ are characterized by internal consistency.

#### 1.4 Reliability of the RTQ:

The Cronbach's Alpha and Guttman Split-Half Coefficients were utilized to determine the reliability of the RTQ. To calculate the value of the reliability factor of the RTQ, the values of the coefficients of Cronbach's Alpha and Guttman Split-Half were calculated through using the Statistical Package for Social Sciences (SPSS) program, version (22) and the results were shown in the following table:

**Table (6): The Reliability of the RTQ**

Levels of Reflective Teaching	No. of level items	Cronbach's Alpha value	Guttman Split-Half Coefficient value	Sig.
Level 1: Pre-reflection	10	0.804	0.799	High
Level 2: Surface Reflection	8	0.816	0.730	High
Level 3: Pedagogical Reflection	10	0.780	0.884	High
Level 4: Critical Reflection	8	0.751	0.703	High
Overall Scale	36	0.729	0.761	High

Table (6) indicates that the Cronbach's Alpha coefficient is 0.729 and the Guttman Split-Half Coefficient is 0.761. These results emphasize that the RTQ was highly reliable.

### **1.5 Piloting and Scoring the RTQ**

Piloting of the RTQ was conducted to determine readability, familiarity and clarity of its items. The researcher prepared the RTQ and elaborated it according to five-point Likert scale (Often: 5, Usually: 4, Sometimes: 3, Rarely: 2, and Never: 1). This instrument aimed at measuring the level of reflective teaching skills among EFL prospective teachers.

### **1.6 Administering the RTQ**

The RTQ was administered to the participants of the experimental and control groups before the implementation of the treatment on October 17<sup>th</sup>, 2021. Then, it was re-administered to them after the implementation of the treatment on December 21<sup>st</sup>, 2021. The pre-administration of the RTQ was to determine the homogeneity of the study groups before the treatment, while the post-administration was to investigate the effects of dialogic teaching enhanced by SAMR model on developing prospective teachers' reflective teaching skills.

## **Experimental Procedures**

### **Pre-administration**

After drawing the participants of the research, the RTQ was pre-administered to them on October 17<sup>th</sup>, 2021 at Faculty of Education, University of Sadat City.

### **Experimentation**

The experiment was applied to the participating prospective teachers of the experimental group to develop their reflective teaching skills. The treatment took place within the Methodology course delivered for fourth-year, faculty of education, English section prospective teachers. The first session of the experimentation was a two-hour orientation and introductory session that was applied to familiarize the participants with reflective teaching skills, dialogic teaching and SAMR model. Tutorial videos were presented in order

to make it easy for prospective teachers to apply the SAMR tools. The videos are available at

(<https://www.common sense.org/education/videos/introduction-to-the-samr-model>).

Handouts and soft copies of the necessary websites and links were also handed and sent for the participants via e-mails and on the WhatsApp group. Other sessions of the experiment were devoted to training the participants on dialogic teaching techniques along with SAMR model tools. Each session took one hour. Face-to face and online sessions were carried out and the experimentation took about eight weeks. The first week included the pre-administration of the RTQ and the introductory session that included an illustration of the general aims of the treatment. The rest of the sessions were devoted to consolidate dialogic teaching pillars among prospective teachers and direct PTs to apply various SAMR model techniques in their EFL classrooms. They were encouraged to:

- Share a common purpose or goal with their learners and peers.
- Speak up, imitate, record and carefully listen to each other.
- Continually ask questions and not to take anything for granted.
- Reflect on each classroom issue and situation.
- Support their ideas through getting involved in purposeful discussions and argumentations.
- Show respect.
- Express uncertainty and provide details
- Recognize numerous ways to ask questions, provide "wait-time" and give positive feedback.
- Activate background knowledge and relate it to new topics.
- Be role models in language, behaviour and skills.
- Appreciate the significant role of technological tools in the educational environment.
- Reflect social issues in EFL classes.
- Introduce multiple teaching methods and techniques.
- Take care of individual differences, interests and learning styles.

For further illustrations, before the treatment, three participants have agreed to be observed in order to find out the impact of dialogic teaching and SAMR model on their reflective teaching skills in authentic classroom settings. They were observed during their practical education training at Al Farouk Secondary School, Sadat City, Menoufia Governorate.

## Results and Discussion

In order to answer the third research question and in light of the quantitative results of the post administration of the RTQ on the participants of the experimental and control groups, this section tackles the results of the research in terms of the research hypotheses.

### 1. Verifying the study main hypothesis:

The study main hypothesis stated that there is a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the experimental and control group in the overall reflective teaching skills on the post administration of the reflective teaching questionnaire in favour of the experimental group. Accordingly, t-test was applied to determine the statistical significance and compare the mean scores of the participants of two the groups (experimental and control) on the post administration of the Reflective Teaching Questionnaire. The results are illuminated in the following table:

**Table (7): t- test differences between the participants' mean scores on the post administration of the RTQ**

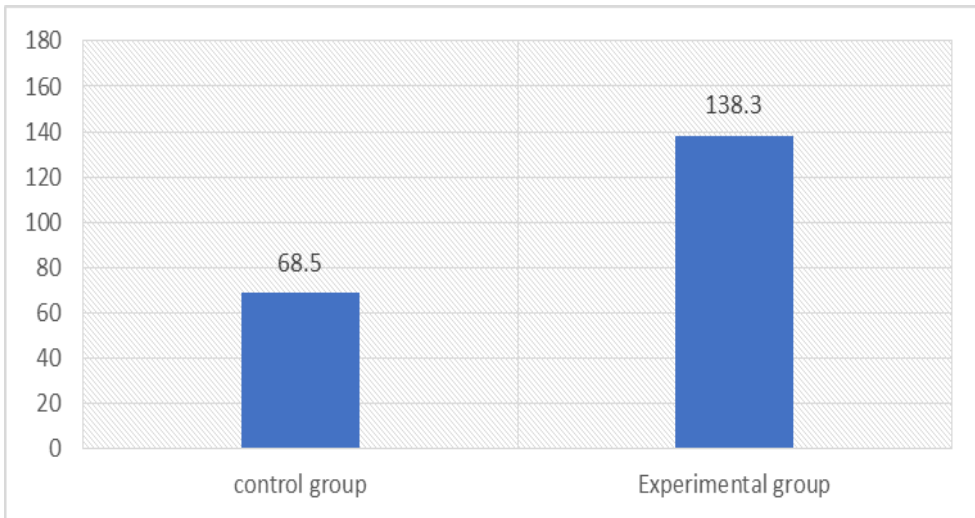
Group	No	Mean	S. D	df	t-value	Sig	Level of sig.
Control	30	68.5	6.33	58	24.3	sig.	0.01
Experimental	30	138.3	14.3				

\* The tabular value of t-test at the level of (0.01) and 58 df is (2.66).

The previous table clarifies that the calculated t-value is 24.3, exceeding its tabular value (2.66) at a degree of freedom 58 and ( $\alpha \leq 0.01$ ) level of statistical significance. These results indicate that there is a real difference between the mean scores of the study participants

of the experimental and control groups, on the post administration of the overall RTQ in favor of the experimental group. This finding of the study can be clarified using the following statistical representation:

**Figure (3): The Statistical Representation of the Study Participants' Mean Scores on the Post-administration of the Overall RTQ**



Consequently, it was confirmed that there is a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the study participants of the experimental group that was taught using dialogic teaching enhanced by SAMR model and the control group that received regular instruction on the post-administration of the overall RTQ in favour of the experimental group. In order to calculate the effect size of applying dialogic teaching enhanced by SAMR model for developing reflective teaching skills for fourth-year, English section, faculty of education prospective teachers, the statistical significance was not sufficient in determining the significance of the study. Thus, the practical and pedagogical significance of the study results were highlighted by identifying the value and significance of ETA square and the effect size. The results are illustrated as follows:



**Table (8): The Effect Size of Dialogic Teaching Enhanced by SAMR Model for Developing Prospective Teachers' Reflective Teaching Skills**

Group	D. F	t-value	Sig.	η <sup>2</sup> value		Effect size	
				value	Sig.	Value	Level
Control	58	24.3	0.01	0.91	Sig.	6.38	Large
Experimental							

Based on the previous results, the value of ETA square for the results of the participants of the experimental group on the post administration of the RTQ exceeds the value that indicates the pedagogical importance of the statistical results in educational and psychological research, which is estimated at (0.15). Accordingly, dialogic teaching enhanced by SAMR model was found to positively affect the development of reflective teaching skills for fourth-year, English section, faculty of education prospective teachers. Furthermore, the effect size has reached (6.38), which presents a large (high) level of influence, as the size of the effect is considered large if its value is greater than or equal to (0.8), which also indicates the practical and educational significance of the research results. Hence, utilizing dialogic teaching enhanced by SAMR model was effective in developing prospective teachers' reflective teaching skills and the main hypothesis of the study was confirmed.

### 1.1 verifying the first sub-hypothesis:

The first sub-hypothesis stated that there is a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the experimental and control groups on the post administration of the RTQ (pre-reflection level) in favour of the experimental group. Thus, t-test was applied to determine the statistical significance and compare the mean scores of the participants of two groups (experimental and control) on the post administration of the RTQ (pre-reflection level). The results are illuminated in the following table:

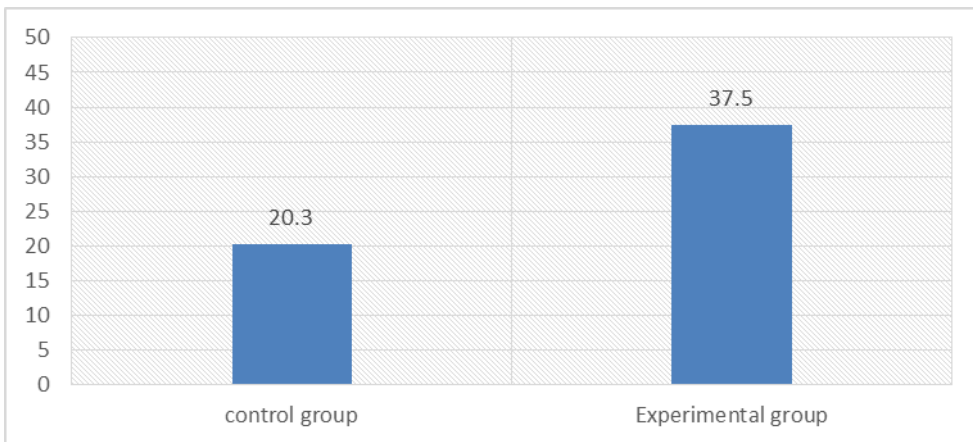
**Table (9): t- test differences between the participants' mean scores on the post administration of the RTQ (pre-reflection level)**

Group	No	Mean	S. D	df	t-value	Sig	Level of sig.
Control	30	20.3	3.31	58	14.51	sig.	0.01
Experimental	30	37.5	5.58				

\* The tabular value of t-test at the level of (0.01) and 58 df is (2.66).

As previously indicated, the calculated t-value is 14.51, exceeding its tabular value (2.66) at a degree of freedom 58 and at (0.01) level of statistical significance. These results illuminate that there is a real difference in the study participants' mean scores on the post administration of the RTQ (Pre-reflection level) in favor of the experimental group. This finding is clarified in the following statistical representation:

**Figure (4): The Statistical Representation of the Study Participants' Mean Scores on the Post-administration of the RTQ (pre-reflection level)**



As a result, it was confirmed that there is a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the study participants of the experimental group that received instruction based on dialogic teaching enhanced by SAMR model and the control group that received regular instruction on the post-administration of the RTQ (pre-reflection level) in favour of the experimental group. In addition, the effect size of applying dialogic

teaching enhanced by SAMR model for developing pre-reflection skills for fourth-year, English section; faculty of education prospective teachers was calculated. The value and significance of ETA square and the effect size are illustrated in table (10):

**Table (10): The Effect Size of Dialogic Teaching Enhanced by SAMR Model for Developing Prospective Teachers' Pre-reflection Skills**

Group	D. F	t-value	Sig.	η <sup>2</sup> value		Effect size	
				value	Sig.	Value	Level
Control	58	14.51	0.01	0.89	Sig.	3.81	Large
Experimental							

The results of table (10) show that the value of ETA square of the participants of the experimental group on the post administration of the RTQ (pre-reflection level) exceeds the value that indicates the pedagogical significance of the statistical results in educational and psychological research, which is estimated at (0.15). So, dialogic teaching enhanced by SAMR model was considerably effective in developing pre-reflection skills for fourth-year, English section, faculty of education prospective teachers. Additionally, the effect size has reached (3.81), which indicates a large (high) level of influence and weight for the research results. Therefore, dialogic teaching enhanced by SAMR model has proved to be effective in developing prospective teachers' pre-reflection skills as it:

- Provided PTs with lists of instructions, tutorials and resources that are beneficial for encountering sudden issues and challenges.
- Presented various student response strategies to make their classrooms alive (e.g. keeping classroom rules easy to follow, activating effective discussions, and helping over-dependent students).
- Helped PTs not to trust their knowledge or take anything for granted instead they learnt how to search effectively for anything.

- Offered many methods that help PTs capitalize on individual differences and interests through involving learners in educational goals and designing various activities to keep all learners involved.
- Supported PTs with multiple strategies for activating prior knowledge and pre-existing beliefs (e.g. applying visual representations, share experiences with their peers, and relate the topics to their culture).

### 1.2 verifying the second sub-hypothesis:

The second sub-hypothesis stated that there is a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the experimental and control groups on the post administration of the Reflective Teaching Questionnaire (surface reflection level) in favour of the experimental group. Hence, to verify the second sub-hypothesis, t-test was applied to determine the statistical significance and to compare the mean scores of the participants of the two groups on the post administration of the Reflective Teaching Questionnaire (surface level). The results are presented in the following table:

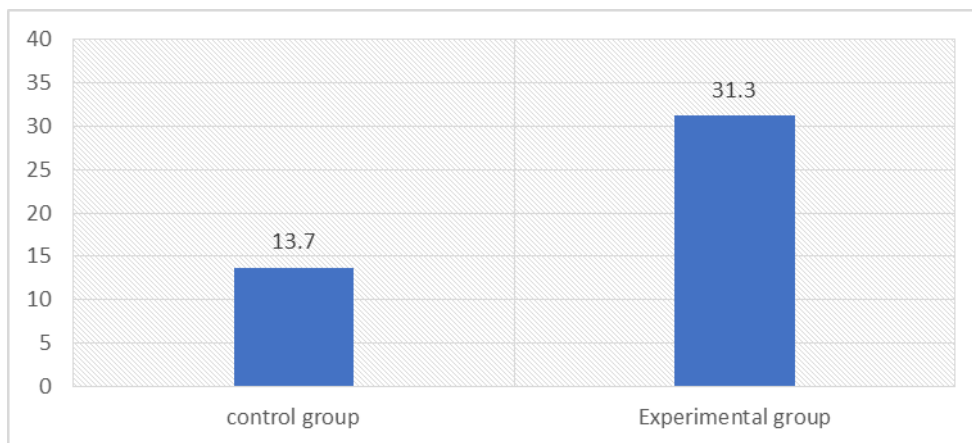
**Table (11): t- test differences between the participants' mean scores on the post administration of the RTQ (surface reflection level)**

Group	No	Mean	S. D	D. F	t-value	Sig	Level of sig.
Control	30	13.7	2.83	58	17.89	sig.	0.01
Experimental	30	31.3	4.58				

\* The tabular value of t-test at the level of (0.01) and 58 df is (2.66).

Table (11), points out that the calculated t-value is 17.89 and this value exceeds its tabular value (2.66) at a degree of freedom 58 and at (0.01) level of statistical significance. These results articulate that there is a real difference in the research participants' mean scores on the post administration of the RTQ (surface reflection level) in favor of the experimental group. This finding is elucidated in the following statistical representation:

**Figure (5): The Statistical Representation of the Study Participants' Mean Scores on the Post-administration of the RTQ (surface reflection level)**



It was verified that there was a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the research participants of the experimental group that received instruction based on dialogic teaching enhanced by SAMR model and the control group that received regular instruction on the post-administration of the RTQ (surface reflection level) in favour of the experimental group. Moreover, the effect size of applying dialogic teaching and SAMR model together to develop surface reflection skills for fourth-year, English section; faculty of education prospective teachers was calculated. The value and significance of ETA square and the effect size are presented in table (12):

**Table (12): The Effect Size of Dialogic Teaching Enhanced by SAMR Model for Developing Prospective Teachers' Surface Reflection Skills**

Group	D. F	t-value	Sig.	η <sup>2</sup> value		Effect size	
				Value	Sig.	Value	level
Control	58	17.89	0.01	0.84	Sig.	4.69	Large
Experimental							

The previously illustrated results in table (12) explain that the value of ETA square of the participants of the experimental group on the post administration of the RTQ (surface reflection level) exceeds the value that indicates the pedagogical significance of the statistical results in educational and psychological research estimated at (0.15). Accordingly, dialogic teaching enhanced by SAMR model have significant effects on developing surface reflection skills for fourth-year, English section, faculty of education prospective teachers. Further, the effect size is (4.69) and this result indicates a large (high) level of influence and significance for the research results. So, dialogic teaching enhanced by SAMR model has emphasized being necessary for developing prospective teachers' surface reflection skills as it:

- Helped PTs search for recent up-to-date teaching methods, approaches and techniques that can affect EFL learners' progression and achievement.
- Trained PTs to support their learners' beliefs and theirs with evidence form their experiences, theory and research.
- Supported PTs with Immediate Feedback Assessment Techniques (IF-AT) to promote learning (e.g. online quizzes).

### 1.3 verifying the third sub-hypothesis:

The third sub-hypothesis stated that there is a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the experimental and control groups on the post administration of the RTQ (pedagogical reflection level) in favour of the experimental group. To test the third sub-hypothesis, t-test was applied to determine the statistical significance and compare the mean scores of the participants of the experimental and control groups on the post administration of the RTQ (pedagogical reflection level). The results are shown in table (13):

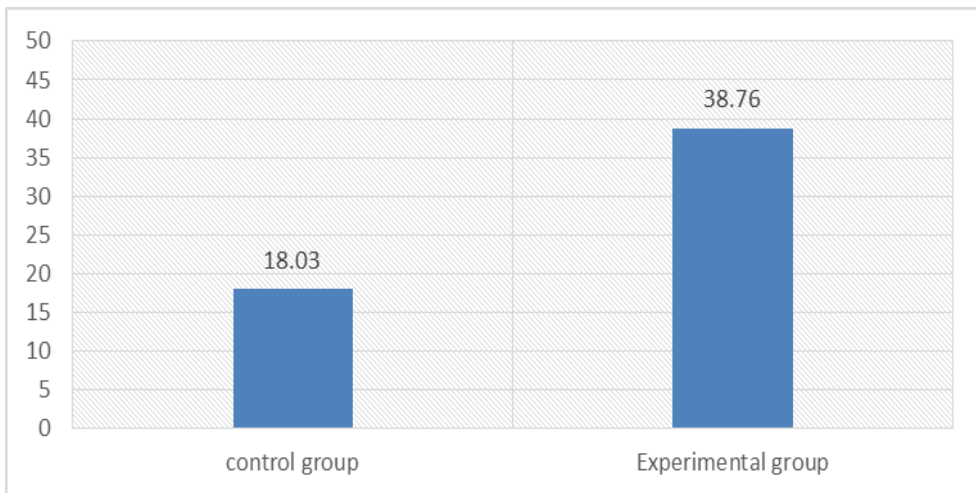
**Table (13): t- test differences between the participants' mean scores on the post administration of the RTQ (pedagogical reflection level)**

Group	No	Mean	S. D	D. F	t-value	Sig	Level of sig.
Control	30	18.03	3.46	58	19.51	sig.	0.01
Experimental	30	38.76	4.67				

\* The tabular value of t-test at the level of (0.01) and 58 df is (2.66).

As the previous table indicates, the calculated t-value is 19.51 exceeding its tabular value which is (2.66) at a degree of freedom 58 and at (0.01) level of statistical significance. These results show that there is a real difference in the research participants' mean scores on the post administration of the RTQ (pedagogical reflection level) in favor of the experimental group. This finding is explained in the following statistical representation:

**Figure (6): The Statistical Representation of the Study Participants' Mean Scores on the Post-administration of the RTQ (pedagogical reflection level)**



Thus, it was verified that there was a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the research participants of the experimental and control groups on the post-administration of the RTQ (pedagogical reflection level) in favour of the experimental group. Besides, the effect size of applying dialogic teaching enhanced by SAMR model for developing pedagogical reflection skills for fourth-year, English section; faculty of education prospective teachers was calculated. The value and significance of ETA square and the effect size are shown in the following table:

**Table (14): The Effect Size of Dialogic Teaching Enhanced by SAMR Model for Developing Prospective Teachers' Pedagogical Reflection Skills**

Group	D. F	t-value	Sig.	η <sup>2</sup> value		Effect size	
				value	Sig.	Value	level
Control	58	19.51	0.01	0.86	Sig.	5.12	Large
Experimental							

Based on the previously presented results, the value of ETA square of the participants of the experimental group on the post administration of the RTQ (pedagogical reflection level) exceeds the value that indicates the pedagogical significance of the statistical results in educational and psychological research estimated at (0.15). As a result, dialogic teaching enhanced by SAMR model proved to be significant and efficient to develop pedagogical reflection skills for fourth-year, English section, faculty of education prospective teachers. Also, the effect size is (5.12) and this value indicates a large (high) level of influence and significance for the research results. Accordingly, dialogic teaching enhanced by SAMR model has emphasized being crucial for developing prospective teachers' pedagogical reflection skills as it:

- Enabled PTs to apply after class follow up procedures in advanced and simple way using the available SAMR model tools.
- Offered remarkable opportunities for EFL PTs to attend seminars, webinars, workshops related to TEFL in order to develop my teaching skills and knowledge.
- Helped PTs compare learning outcomes of various classroom settings.
- Assisted PTs to appreciate lifelong learning and always seek to improve their teaching practices.

#### **1.4 verifying the fourth sub-hypothesis:**

The fourth sub-hypothesis stated that there is a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the experimental and control groups on the post administration of the RTQ (critical reflection level) in favour of the experimental group. To verify the fourth sub-hypothesis, t-test was



applied to determine the statistical significance and compare the mean scores of the participants of the experimental and control groups on the post administration of the RTQ (critical reflection level). The results are illuminated as follows:

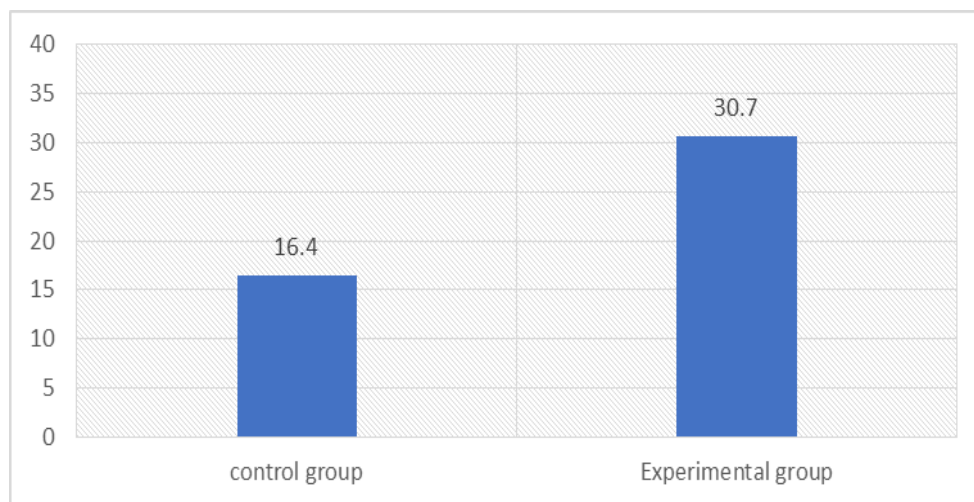
**Table (15): t- test differences between the participants' mean scores on the post administration of the RTQ (critical reflection level)**

Group	No	Mean	S. D	D. F	t-value	Sig	Level of sig.
Control	30	16.4	1.37	58	15.64	sig.	0.01
Experimental	30	30.7	4.81				

\* The tabular value of t-test at the level of (0.01) and 58 df is (2.66).

As table (15) shows, the calculated t-value is 15.64 exceeding its tabular value which is (2.66) at a degree of freedom 58 and at (0.01) level of statistical significance. These results ensure that there is a real difference in the research participants' mean scores on the post administration of the Reflective Teaching Questionnaire (critical reflection level) in favour of the experimental group. This finding is demonstrated in the following statistical representation:

**Figure (7): The Statistical Representation of the Study Participants' Mean Scores on the Post-administration of the Reflective Teaching Questionnaire (critical reflection level)**



Thereby, the fourth sub-hypothesis was confirmed and the significance between the mean scores of the research participants of the experimental and control groups in the critical reflection level was due to the implementation of dialogic teaching enhanced by SAMR model. Further, the effect size of the study independent variable on developing critical reflection skills for fourth-year, English section; faculty of education prospective teachers was calculated. The value and significance of ETA square and the effect size are shown in the following table:

**Table (16): The Effect Size of Dialogic Teaching Enhanced by SAMR Model for Developing Prospective Teachers' Critical Reflection Skills**

Group	D. F	t-value	Sig.	$\eta^2$ value		Effect size	
				value	Sig.	Value	level
Control	58	15.64	0.01	0.81	Sig.	4.11	Large
Experimental							

As can be concluded from table (16), the value of ETA square of the participants of the experimental group on the post administration of the RTQ (critical reflection level) exceeds the value that indicates the pedagogical significance of the statistical results in educational and psychological research estimated at (0.15). As a result, dialogic teaching and SAMR model have proved to be significant and efficient to develop critical reflection skills for fourth-year, English section, faculty of education prospective teachers. Additionally, the effect size is (4.11) and this value indicates a large (high) level of influence and significance for the research results. As a consequence, dialogic teaching enhanced by SAMR model has corroborated to be effective in developing prospective teachers' critical reflection skills as it:

- Empowered PTs to relate their teaching practices to the broader sociological, cultural, historical, and political contexts.
- Trained them to bear in mind the ethical ramifications of classroom policies and practices.
- Urged them to address social issues as poverty, suicide, school violence and other issues that arise in and outside of the classroom.
- Taught them to continually ask, analyze and generate hypotheses about current circumstances.

## 2. The Observation Checklist (Direct Observation)

Three participants from the experimental group were selected randomly and they have agreed to be observed in order to find out the impact of dialogic teaching enhanced by SAMR model on their reflective teaching skills. Both the researcher and a cooperating evaluator have kept an eye on the teaching practices of cases one, two, and three on basis of the fifteen-item observation checklist (appendix C). The observation checklist was intended to measure how the participants managed to systematize and prioritize their teaching practices in light of the development of their reflective teaching skills within the four levels of reflection (pre, surface, pedagogical and critical). The observation process took place during some practical education sessions at Al-Farouk school, Sadat City, Menoufia Governorate, Egypt. The selected participants were observed three times. The first time was before the implementation of the treatment on October 21<sup>st</sup>, 2021, the second was during the treatment on November 18<sup>th</sup>, 2021, while the last and third time was after the implementation of the process on December 23<sup>rd</sup>, 2021.

### 2.1 Before the Treatment

The first observation was held before the treatment. It aimed to find out how the observed participants got involved in the teaching activities and practices. Besides, it aimed also at determining to what extent were reflective teaching skills reflected in their classroom performance. The three participants were observed separately in three practical education sessions. It took approximately one hour to finish each observation session. At the first time, the observed participants made use of the Grammar Translation Method (GTM) for their instruction. The main focus of their teaching was to deliver certain concepts and grammatical rules through applying the translation technique (everything was regularly translated into Arabic). The whole sessions were teacher-oriented. They presented the new material directly without providing various examples to correspond to the numerous learning styles and individual differences among the learners. In addition, they did not pay any attention to the learners'

pre-existing beliefs or background knowledge related to the topic of the session. On the other hand, the participant tried to give immediate positive feedback for learners' responses or behaviors inside the class in an attempt to stress the need of consolidating some classroom ethical values (e.g. sharing mutual respect and promoting non-discrimination as well as equality). During the first session the three participants lack some reflective teaching skills as:

- Applying problem solving techniques.
- Managing the classroom.
- Using a variety of teaching methods and techniques.
- Providing long-term or systematic solutions for sudden classroom problems.

To sum up, the three participants lack about 95% of the reflective teaching skills that were stated in the observation checklist.

## **2.2 During the Treatment**

After four weeks from the first observation session and during the implementation of the treatment (that was applied in the methodology class) it was observed that some remarkable developments in the participants' reflective teaching skills have occurred. The following changes in the participants' teaching practices were noticed:

- The GTM was no longer applied instead; some other teaching methods and approaches were used as (differentiated instruction- inverted education).
- The participants used the brain storming technique to activate learners' background knowledge.
- Learners were encouraged to speak up to address their own comments, ideas and questions with the teacher or with their peers (dialogic teaching).
- The participants provided three activities devoted for learners with different learning styles.
- Some SAMR model tools and websites were introduced to help learners develop their English language skills.

### 2.3 After the Treatment

After the end of the treatment, the three cases were observed for the last time. They were obviously following classroom regulations. They managed to apply online assignments and extracurricular activities. They significantly were able to get the whole class engaged in a dialogue to discuss the major comments sent by the teacher. Learners were enthusiastic to show their new explored concepts about the previous topic to the teacher who provided immediate positive feedback through praise, approval and reinforcement rewards. The observed participants started the new lesson by presenting major political, cultural or social events that could be related to the topic of the session and started to get learners' perspectives and beliefs about the events. Further, some other teaching methods and multiple-intelligence based activities, that obviously were diverse and technology based, have been used. They were truly creative in the final sessions. One of them has applied a new technique called "fishbone" a visual organizer technique used as a means of recognizing the possible reasons and causes behind a problem and suggesting long-term solutions for it. Another one has encouraged the learners to provide visual attractive presentations for their home assignments in a systematic way. It was apparent that dialogic teaching enhanced by SAMR has considerably affected the teaching performance and practices of the three cases.

### Discussion

Reflective teaching skills are necessary for EFL prospective teachers to help them encounter the demands and learning needs of their learners in the future and improve their teaching practice and performance in EFL classrooms. Prospective teachers are the future teachers who need to gain useful insights and experiences towards teaching. When prospective teachers get sufficient training to be reflective teachers, they will automatically and deeply observe, think, discuss and evaluate their teaching practices. They will learn how to keep asking about everything and sharing their thoughts and beliefs with their learners, peers and leaders in positive ways. Reflective teaching skills represent a pedagogical shift from simply focusing on the minimum learning outcomes in EFL classrooms to affirming the

priority of lifelong learning and higher levels of thinking. Anchoring the culture of reflective teaching among prospective teachers is considerable in strengthening the quality of teaching and learning. Reflective teaching skills cultivate proactive teaching norms among teachers as: figuring out learners' requirements and demands, being creative and innovative, obtaining the courage to admit mistakes and being hard workers who always challenge themselves to achieve goals and control challenges related to EFL classrooms. Thus, the present study aimed at detecting the effects of dialogic teaching enhanced by SAMR model on developing EFL prospective teachers' reflective teaching skills.

The study participants were assigned into two groups: a control group and an experimental one. The participants of the control group received regular instruction while the participants of the experimental group were exposed to dialogic teaching enhanced by the SAMR model. The implementation of dialogic teaching in the current study was undertaken in accordance with its five key principles as the participants of the experimental group: 1) start the sessions by addressing the learning tasks together in collaborative dialogues (collective), 2) learn how to listen carefully to each other, share their beliefs and experiences along with respecting alternative perspectives (reciprocal), 3) realize how to express the points of views freely without any anxiety or embarrassment (supportive), 4) relate their answers in coherent and cohesive ways of thinking (cumulative), and 5) participate effectively in open, structured and well planned classroom talk (purposeful). For consolidating dialogic teaching principles in EFL classrooms, some SAMR model tools as Lingro and YouGlish were addressed to the research participants. Each session in the treatment was devoted to developing one or more reflective teaching skills.

The researcher hypothesized one main hypothesis with four sub-hypotheses. The main hypothesis stated that there would be a statistically significant difference ( $\alpha \leq 0.01$ ) level of significance between the mean scores of the experimental and control groups on the post administration of the RTQ in favour of the experimental group. To test the main hypothesis of the research, the two groups'

mean scores on the post-administration of the RTQ were compared using t-test. Statistically significant differences were found between the mean scores of the two groups in favour of the experimental group. This result reflected the positive effects of dialogic teaching enhanced by SAMR model on developing prospective teachers' overall reflective teaching skills with its four levels or reflection (pre, surface, pedagogical and critical).

The positive effects of dialogic teaching enhanced by SAMR model on developing prospective teachers' reflective teaching skills can be traced back to the following drivers: 1) promoting positive participation, cooperation and collaboration in EFL classrooms, 2) applying instructive technological tools to develop English language skills, 3) developing creativity and innovation, 4) consolidating deep thinking, 5) enhancing motivation and positive attitudes towards learning English as a foreign language, schools, teachers and classmates, 6) providing multiple activities that support learners to speak freely and listen carefully, 7) utilizing visual technological tools, and 8) appreciating learners' voices.

Despite the fact that dialogic teaching enhanced by SAMR model has proved to be effective in developing EFL prospective teachers' reflective teaching skills, some obstacles have arisen while conducting the experimental treatment as: 1) reflective teaching skills have proved to be acquired and developed gradually and do not brought a radical sudden shift. 2) At the beginning prospective teachers were not aware that they ought to teach their learners to inquire, make alternatives and think in critical ways. Their progress encountered phases of acceleration and other phases of regression. 3) Although dialogic teaching is not teacher-centered but teacher-directed, prospective teachers could not sometimes distinguish between ordinary communication and dialogic teaching that relies upon instructor's initiations, learners' responses and instructors' immediate feedback. The previous findings of the research are in line with the findings of other studies as Farrell (2013), Sedova, Salamounova and Svaricek (2014), Tajik and Pakzad (2016), Teo

(2016), Mathew, Mathew and Peechattu (2017), Gupta, Mishra and Shree, (2019), Zahid and Khanam (2019), Bawaneh, Ahmed and Aldalalah (2020), and Garcia-Mila, Remesal and Goncalves (2021).

The results of the present study can be interpreted as follows: the implemented dialogic teaching framework included its essential conceptual tools: 1) indicators (in the current research, the indicators were: PTs' capabilities to express their ideas and beliefs with reasoning, their abilities to teach learners to build on what has been proved by others, and their abilities to activate and lead open discussions in EFL classrooms characterized by higher levels of thinking, expression and memorizing (Gayle, Preiss & Allen, 2006; Pimentel & McNeill, 2013; Sedova, 2017), 2) principles (collective, reciprocal, supportive, cumulative, and purposeful) as proposed by Alexander (2006), and 3) methods as collaborative reasoning (Reznitskaya et al., 2009). In addition, applying SAMR model tools was beneficial for PTs who become aware of their multiple roles in EFL teacher-guided and student-oriented classrooms. Each one of them acted as a proper guide, a motivator, a facilitator, a role model, a learners' mirror, a communicator, a promoter, and a reflective thinker. However, regular instruction's benefits of direct instruction and role modeling were not left out in the treatment.

## Conclusion

This study applied dialogic teaching enhanced by SAMR model with the purpose of developing fourth year, English section, faculty of education EFL prospective teachers' reflective teaching skills with their four levels of reflection (pre, surface, pedagogical, and critical). Despite the short period taken for implementing and fulfilling the experimental treatment, the results of the post administration of the RTQ along with the findings of the observation checklist have indicated that the selected dialogic teaching indicators (PTs' abilities to express their ideas and beliefs with reasoning, their resilience to teach learners to build on what has been proved by others, and their persistent to activate and lead open discussions in EFL classrooms characterized by higher levels of thinking, expression and



memorizing), principles and methods were beneficial and influential. Mention should also be made of the SAMR model tools (Google Docs, Google Slides, Lingro, and YouGlish) that were productively applied in a results-oriented and a constructive manner. On the basis of these findings, it is fervently hoped that dialogic teaching and SAMR model tools will be used as reference pillars when planning and designing EFL courses and activities at variegated educational levels.

### **Recommendations**

Based on the results of the study, it is recommended that:

- 1) Dialogic teaching and SAMR model need to be applied in different EFL classrooms.
- 2) PTs' preparation courses should be periodically refurbished and re-designed to keep up with instructors' spiraling requirements and demands in the current era.
- 3) EFL instructors should be well equipped by up-to-date and constructive instructional methods and models as dialogic teaching and SAMR model to help EFL PTs develop their reflective teaching skills.
- 4) EFL PTs should be familiarized with reflective teaching skills (their pedagogical relevance, ways of implementations and evaluations).

### **Suggestions for further research**

The current study is considered a convenient starting point for further research related to its main topic as:

- 1) Investigating the effects of dialogic teaching and SAMR model on other language and teaching skills.
- 2) Examining the effects of dialogic teaching and SAMR model on the development of reflective thinking skills among EFL learners at various educational levels.
- 3) Exploring the effects of other instructional methods and models on developing PTs reflective teaching skills.

## References

- Abednia, A., Hovassapian, A., Teimournezhad, S. & Ghanbari, N. (2013). Reflective journal writing: Exploring in-service EFL teachers' perceptions. *System*, 41, 503-514.
- Ahmed, A. M. (2019). Students' reflective journaling: An impactful strategy that informs instructional practices in an EFL writing university context in Qatar. *Reflective Practice*, 20(4), 483-500.
- Akbari, R. (2007). Reflections on reflection: A critical appraisal of reflective practices in L2 teacher education. *System*, 35(2), 192-207.
- Akbari, R., & Allvar, N. K. (2010). L2 teacher characteristics as predictors of students' academic achievement. *Test-Ej*, 13(4).
- Akbari, R., Bhezadpoor, F. & Dadvand, B. (2010). Development of English language teaching reflection inventory. *System*, 38, 211-227.
- Alexander, R. J. (2017). Dialogic teaching and the study of classroom talk: A developmental Bibliography. Available at: <http://www.robinaalexander.org.uk/wp-content/uploads/2017/01/Alexander-dialogicteaching-bibliography.pdf>. (Accessed on Sep 30<sup>th</sup>, 2021).
- Alexander, R. J. (2018). Developing dialogic teaching: genesis, process, trial. *RESEARCH PAPERS IN EDUCATION*, 1-37.
- Alexander, R. J. (2020). *A dialogic teaching companion*. London: Routledge.
- Archana, S., & Rani, K. U. (2017). Role of a teacher in English language teaching (ELT). *International Journal of Educational Science and Research (IJESR)*, 7(1), 1-4.
- Ashraf, H., & Zolfaghari, S. (2018). EFL teachers' assessment literacy and their reflective teaching. *International Journal of Instruction*, 11(1), 425-436.
- Astica, G. (2014). Reflective teaching as alternative assessment in teacher education: A case study of pre-service teachers. *TEFLIN Journal*, 25(1).
- Azama, Y. (2015). *Effective integration of technology in a high school beginning Japanese class*. Unpublished M.A Thesis. Monterey Bay: California State University. Available at: [https://digitalcommons.csumb.edu/caps\\_thes/517/](https://digitalcommons.csumb.edu/caps_thes/517/)

- Barekat, B., & Mohammadi, S. (2014). The contribution of the teachers' use of dialogic discourse pattern to the improvement of the students' speaking ability. *Procedia - Social and Behavioral Sciences*, 98, 353 – 362
- Bawaneh, A. K., Moumene, A. B. H., & Aldalalah, O. (2020). Gauging the Level of Reflective Teaching Practices among Science Teachers. *International Journal of Instruction*, 13(1), 695-712. <https://doi.org/10.29333/iji.2020.13145a>
- Beauchamp, A., Kusnick, J., & McCallum, R. (2011) *Success in science through dialogue, reading and writing*. Davis, CA: The Regents of the University of California, Davis.
- Beauchamp, C. (2015). Reflection in teacher education: issues emerging from a review of current literature. *Reflective Practice*, 16(1), 123-141.
- Behzadpour, F. (2007). *Developing a measuring instrument for reflective teaching*. Unpublished MA thesis, Tarbiat Modares University, Tehran, Iran.
- Bleakley, J., Woolcott, G., Yeigh, T., & Whannell, R. (2020). Reflecting on emotions during teaching: Developing affective-reflective skills in novice teachers using a novel critical moment protocol. *Australian Journal of Teacher Education*, 45(10), 54-72.
- Brookfield, S. (2009). The concept of critical reflection: Promises and contradictions. *European Journal of Social Work*, 12(3), 293-304.
- Bolton, G. (2010). *Reflective practice, writing and professional development* (3rd Ed.). California: SAGE Publications.
- Calderhead, J., & Gates, P. (1993). *Conceptualizing Reflection in Teacher Development*. London: Falmer Press.
- Carrion, R. G., Aguilera, G. L., Padros, M., & Salas, M. R. (2020). Implications for social impact of dialogic teaching and learning. *Front. Psychol.* doi: 10.3389/fpsyg.2020.00140
- Chow, B. W., Hui, A. N., Li, Z., & Dong, Y. (2021). Dialogic teaching in English-as-a-second-language classroom: Its effects on first graders with different levels of vocabulary knowledge. *Language Teaching Research*, 1-23.

- Choy, S. C., & Oo, P. C. (2012). Reflective thinking and teaching practices: A precursor for incorporating critical thinking into the classroom. *International Journal of Instruction*, 5(1), 167-182.
- Choy, S. C., Dinham, J., Yim, J. S. C., & Williams, P. (2020). Comparing reflective practices of pre-service teachers in Malaysia and Australia: A mixed-methods approach. *Issues in Educational Research*, 30(4), 1264- 1285.
- Crandall, J. A. (2000). Language teacher education. *Annual Review of Applied Linguistics*, 20, 34-55.
- Davoudi, M., & Heydarnejad, T. (2020). The interplay between reflective thinking and language achievement: A case of Iranian EFL learners. *Language Teaching Research Quarterly*, 18, 70-82
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. New York: D.C. Heath and Company.
- Djiwandono, P., I. (2020). How SAMR-based vocabulary teaching shapes vocabulary learning strategies. *Teaching English with Technology*, 20(4), 41-58.
- Doyle, M. (2017). Writing in the library? Why not! Using Google Slides to reinvent the library checkout period. *Knowledge Quest*, 46(2).
- Elhassan, I. B. M., & Adam, M. I. (2017). The impact of dialogic teaching on English language learners' speaking and thinking skills. *Arab World English Journal*, 8(4), 49-67.
- Eröz-Tuga, B. (2013). Reflective feedback sessions using video recordings. *ELT Journal*, 67(2), 175-183.
- Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2010). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. *Journal of Research on Technology in Education*, 42(3), 255-284.
- Farrell, T. (2004). *Reflective Practice in Action: 80 Reflection Breaks for Busy Teachers*. California: Corwin press.
- Farrell, T. (2013). Reflective Teaching. Retrieved from ERIC database (ED549562).

- Fu, J. S., & Yang, S. (2019). Exploring how YouGlish facilitates EFL learners' speaking competence. *Educational Technology & Society*, 22(4), 47-58.
- Gayle, B.M., Priess, R.W., Burrell, N., & Allen, M. (2006). Classroom communication and instructional processes: advances through meta-analysis. In B.M. Gayle R.W. Priess N. Burrell & M. Allen (Eds.), *How effective are teacher-initiated classroom questions in enhancing student learning?* (pp. 279-293). Mahwah, NJ: Lawrence Erlbaum Associates.
- Garcia-Mila, R. C., Remesal, M., and Goncalves, A. (2021). The challenge of inclusive dialogic teaching in public secondary school. *Comunicar*, 29(66), 9-20.
- Gibbons, P. (2015). *Scaffolding language, scaffolding learning: Teaching English language learners in the mainstream classroom*. 2<sup>nd</sup> ed. Portsmouth, NH: Heinemann.
- Guleker, R. (2015). Promoting habits of reflection and self-efficacy through guided reflection in an EFL writing course. *European Journal of Language and Literature Studies*, 1(2), 78-81.
- Gupta, A., & Lee, G. (2015). Dialogic teaching approach with English language skills in content areas. *International Journal of Language and Linguistics*, 2(5), 10-17.
- Gupta, T., Mishra, L., & Shree, A. (2019). Reflective teaching as a strategy for effective instruction. *Educational Quest*, 10(1), 37-43.
- Hamilton, E. R., Rosenberg, J. M., & Akcaoglu, M. (2016). The Substitution Augmentation Modification Redefinition (SAMR) model: A critical review and suggestions for its use. *Tech Trends*, 60, 433-441.
- Hillier, Y. (2005). *Reflective Teaching in Further and Adult Education*. London: Continuum.
- Jay, J. K., & Johnson, K. L. (2002). Capturing complexity: a typology of reflective practice for teacher education. *Teaching and Teacher Education*, 18, 73-85.

- Jay, T., Willis, B., Thomas, P., Taylor, R., Moore, N., Burnett, C., Merchant, G., & Stevens, A. (2017). Dialogic teaching: Evaluation report and executive summary July 2017. Retrieved from ERIC database. (ED581114).
- Kartal, G., & Korucu-Kis, S. (2020). The use of Twitter and Youglish for the learning and retention of commonly mispronounced English words. *Education and Information Technologies*, 25, 193–221.
- Kapur, R. (2020). Problem solving skills: Essential skills in providing solutions to personal and professional problems. Available at: [https://www.researchgate.net/publication/343690626\\_Problem\\_Solving\\_Skills\\_Essential\\_Skills\\_in\\_Providing\\_Solutions\\_to\\_Personal\\_and\\_Professional\\_Problems](https://www.researchgate.net/publication/343690626_Problem_Solving_Skills_Essential_Skills_in_Providing_Solutions_to_Personal_and_Professional_Problems) Retrieved on (28th of September, 2021).
- Khong, Thi Diem Hang, Saito, Eisuke, Gillies and Robyn, M. (2019). Key issues in productive classroom talk and interventions. *Educational Review*, 71(3), 334-349.
- Köksal, D., & Ulum, Ö. G. (2019). Pre-service EFL teachers' conceptions of language proficiency: Entry and exit level qualifications. *Journal of Language and Linguistic Studies*, 15(2), 484-495.
- Kolb, D. A. (1984). *Experiential learning*. London: Prentice-Hall.
- Kuran, P., Andi, A., & Yan, C. (2017). Classroom talk in bilingual class interaction. *Research in Pedagogy*, 7(1), 106-121.
- Lang, M. D. (2019). *The Guide to Reflective Practice in conflict resolution*. London: Rowman & Littlefield.
- Li, Z., & Ye, Z. (2016). On reflective teaching of EFL teachers in local universities of China - a case study of Leshan Normal University, Sichuan. *English Language Teaching* 9(6) 154-161.
- Liu, L., & Zhang, Y. (2014). Enhancing teachers' professional development through reflective teaching. *Theory and Practice in Language Studies*, 4(11), 2396-2401.
- Loughran, J. (1996). *Developing reflective practice: Learning about teaching and learning through modeling*. London: Falmer.

- Lyddon, P., A. (2019). A Reflective approach to digital technology implementation in language teaching: Expanding pedagogical capacity by rethinking substitution, augmentation, modification, and redefinition. *186 CANADA JOURNAL/REVUE TESL DU CANADA*, 36(3), 186–200.
- Lyle, S. (2008). Dialogic teaching: Discussing theoretical contexts and reviewing evidence from classroom practice. *Language and Education*, 22(3), 222–240.
- Makar, K., & Allmond, S.(2018). Creating a culture of productive classroom talk. *Australian Mathematics Teacher*.79(4),19-25.
- Malmir, A. (2018). Teachers' reflective teaching and self-efficacy as predictors of their professional success: A case of Iranian EFL teachers. *Research in English Language Pedagogy*, 6(1), 117-138.
- Martinez, J. (2020). Take this pandemic moment to improve education. *EdSource*. Retrieved from: <https://edsourse.org/2020/take-this-pandemic-moment-to-improve-education/633500> on 23rd of September, 2021.
- Mathew, P., Mathew P., & Peechattu, P. J. (2017). Reflective practices: A means to teacher development. *Asia Pacific Journal of Contemporary Education and Communication Technology*, 3(1), 126-131.
- Megawati, F., Mukminatien, N., Anugerahwati, M., Indrayani, N., & Unsiah, F. (2020). Critical incidents: Exploring EFL prospective teachers' teaching experiences. *European Journal of Educational Research*, 9(3), 943-954.
- Mehay, R. (2010). Levels of reflection and learning log entry. Available at: <file:///C:/Users/ok/Downloads/Documents/levels%20of%20reflection%20and%20log%20entries%20by%20ramesh%20mehay.pdf> (accessed 29 2021).
- Mejias, J. E. (2019). The SAMR model to using technology innovatively in the EFL classroom. *Proceedings of the III English Teaching Congress*, Huetar Northern Region.
- Mercer, N., & Hodgkinson, S. (2008). *Exploring talk in school*. London: SAGE.

- Mercer, N. (2019). *Language and the joint creation of knowledge: The selected works of Neil Mercer*. Abingdon: Routledge.
- Mercer, N. and Littleton, K. (2007) *Dialogue and the Development of Children's thinking: a socio-cultural approach*. London: Routledge.
- Mercer, N., & Howe, C. (2012). Explaining the dialogic processes of teaching and learning: the value and potential of sociocultural theory. *Learn. Cult. Soc. Interact. 1*, 12–21. doi: 10.1016/J.LCSI.2012.03.001
- Michaels, S., & O'Connor, C. (2012). *Talk Science Primer*. Cambridge MA: TERC.
- Minott, M.A.(2015). Encouraging secondary students' deep reflection-on learning: a case for a reflective approach to evaluating students' learning. *Reflective Practice, 16(4)*, 487-496.
- Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open, 1*, 1-8.
- Musa, H. I. (2019). Dialogic vs. formalist teaching in developing argumentative writing discourse and reducing speaking apprehension among EFL majors. *Journal of Language Teaching and Research, 10(5)*, 895-905.
- Nichols, S. L., Schutz, P. A., Rodgers, K., & Bilica, K. (2017). Early career teachers' emotion and emerging teacher identities. *Teachers and Teaching, 23*, 406-42.
- Nodoushan, M. A. S. (2011). Reflective teaching in EFL classes: An overview. *i-manager's Journal on School Educational Technology, 61(31)*, 1-6.
- Nurfaidah, S., Lengkanawati, N., & Sukyadi, D. (2017). Levels of reflection in EFL pre-service teachers' teaching journal. *Indonesian Journal of Applied Linguistics, 7(1)*, 80-92
- Pacheco, A. Q. (2005). Reflective teaching and its impact on foreign language teaching. *Numero Extraordinario, 5*, 1-19.
- Pieper, M., Roelle, J., Vom, H. R., Salle, A., & Berthold, k. (2021). Feedback in reflective journals fosters reflection skills of student teachers. *Psychology Learning and Teaching, 20(1)*, 107-127.



- Pimentel, S.D., & McNeill, K.L. (2013). [Conducting talk in secondary science classrooms: Investigating instructional moves and teachers' beliefs](#). *Science Education*, 97(3), 367-394.
- Pollard, A., Collins, J., Maddock, M., Simco, N., Swaffield, S., Warin, J., & Warwick, P. (2005). *Reflective teaching*. Continuum: London.
- Postholm, M. B. (2012). Teachers' professional development: A theoretical review. *Educational Research*, 54(4), 405-429.
- Priddis, L., & Rogers, S. L. (2018). Development of the reflective practice questionnaire: preliminary findings. *Reflective Practice*, 19(12), 1-16.
- Puentedura, R. (2006). Transformation, technology, and education. [Blog post]. Retrieved from education. Available at: <http://hipassus.com/resources/tte>. (Accessed on Oct 1, 2021)
- Puentedura, R. (2009). As we can teach, educational technology from theory into practice. Available at: <http://hipassus.com/blog/archives/25>. (Accessed on Oct 1, 2021).
- Reznitskaya, A. (2012). Dialogic teaching: Rethinking language use during literature discussions. *The Reading Teacher*, 65(7), 446-456.
- Reznitskaya, A., & Gregory, M. (2013). Student thought and classroom language: Examining the mechanisms of change in dialogic teaching. *Educational Psychologist*, 48(2), 114-133.
- Richards. K. & Pilcher. N., (2016). An individual subjectivist critique of the use of corpus linguistics to inform pedagogical materials. *Dialogic Pedagogy: An International Online Journal*. 4, 122-141.
- Reznitskaya, A., Kuo, L., Clark, A., Miller, B., Jadallah, M., Anderson, R.C., & Nguyen-Jahiel, K. (2009). Collaborative reasoning: a dialogic approach to group discussions. *Cambridge Journal of Education*, 39(1), 29-48.
- Rodman, G.J. 2010. Facilitating the teaching-learning process through the reflective engagement of pre-service teachers. *Australian Journal of Teacher Education*, 35(2), 19-34.
- Romrell, D., Ridder, L., & Wood, E. (2014). The SAMR model as a framework for evaluating m-learning. *Journal of Asynchronous Learning Network*, 18(2), 1-14.

- Safari I., Davaribina M., & Khoshnevis I. (2020). The influence of EFL teachers' self-efficacy, job satisfaction and reflective thinking on their professional development: A structural equation modeling. *Journal on Efficiency and Responsibility in Education and Science*, 13(1), 27-40.
- Savignano, M. A. (2017). Educators' perceptions of the Substitution, Augmentation, Modification, Redefinition model for technology integration. Retrieved from ERIC database (ED 579995).
- Schleppegrell, M.J. (2013). The role of meta-language in supporting academic language development. *Language Learning*, 63, 153–170.
- Schleppegrell, M.J., & Moore, J. (2018). Linguistic tools for supporting emergent critical language awareness in the elementary school. In Harman, R. (Ed.), *Bilingual learners and social equity: Critical approaches to systemic functional linguistics* (pp. 23–43). Cham: Springer International.
- Schön, D. A. (1983). *The reflective practitioner*. New York, NY: Basic Books.
- Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass.
- Sedova, K., Salamounova, Z., & Svaricek, R. (2014). Troubles with dialogic teaching. *Learning Culture and Social Interaction*, 3(4), 274-285.
- Sedova, K. (2017). A case study of a transition to dialogic teaching as a process of gradual change. *Teaching and Teacher Education*, 67, 278-290.
- Sedova, K., & Navratilova, J. (2020). Silent students and the patterns of their participation in classroom talk. *Journal of the Learning Sciences*, 29(4-5), 681-716.
- Shalabi, M. M., Sameem, M., & Almuqati, A. N. (2018). Reflective teaching as a practical approach. *Journal of Literature, Languages and Linguistics*, 43, 40-48.

- Spalding, E., & Wilson, A. (2002). Demystifying reflection: A study of pedagogical strategies that encourage reflective journal writing. *Teachers College Record*, 104(7), 1393-1421.
- Swanwick, R., Kitchen, R., Jarvis, J., McCracken, W., O'Neil, R., & Powers, S. (2014). Following Alice: Theories of critical thinking and reflective practice in action at postgraduate level. *Teaching in Higher Education*, 19(2), 156-169.
- Susoy, Z. (2015). Watch your teaching: A reflection strategy for EFL pre-service teachers through video recordings. *Procedia - Social and Behavioral Sciences*, 199, 163 – 171.
- Taniş, A., Harman Şensoy, F., & Atay, D. (2020). The effects of L1 use and dialogic instruction on EFL writing. *Eurasian Journal of Applied Linguistics*, 6(1), 1-21.
- Tajik, L., & Pakzad, K. (2016). Designing a reflective teacher education course and its contribution to ELT teachers' reflectivity. *Australian Journal of Teacher Education*, 41(9).
- Teo, P. (2016). Exploring the dialogic space in teaching: A study of teacher talk in the pre-university classroom in Singapore. *Teaching and Teacher Education*, 56, 47–60.
- Tice, J. (2011). Reflective teaching: Exploring our own classroom practice. Retrieved from: <https://www.researchgate.net/deref/http%3A%2F%2Fwww.teachingenenglish.org.uk%2Farticles%2Freflective-teaching-exploring-our-own-classroom-practice%2520Accessed%2520May%252016%20on%20December%2016%202021> on December 16<sup>th</sup> 2021.
- Tkavashvili, E. (2021). The impact of teacher professional diary on their reflective, communicative and professional skills. *Problems of Education in the 21st Century*, 79(2), 273-295. <https://doi.org/10.33225/pec/21.79.273>
- Tondeur, J., Van Braak, J., Sang, G., Voogt, J., Fisser, P., Ottenbreit-leftwich, A., & Ottenbreit-Leftwich, A. (2012). Preparing pre-service teachers to integrate technology in education: A synthesis of qualitative evidence. *Computers & Education*, 59(1), 134-144.

- Tseng, J. (2019). Do EFL teachers transform their teaching with iPads? A TPACK-SAMR approach. In C. N. Giannikas, E. Kakoulli Constantinou & S. Papadima-Sophocleous (Eds), *Professional development in CALL: a selection of papers* (pp. 71-85).Research-publishing.net.  
<https://doi.org/10.14705/rpnet.2019.28.871> (17) (PDF) *Do EFL teachers transform their teaching with iPads? A TPACK-SAMR approach.* Available at: [https://www.researchgate.net/publication/331789649\\_Do\\_EFL\\_teachers\\_transform\\_their\\_teaching\\_with\\_iPads\\_A\\_TPACK-SAMR\\_approach](https://www.researchgate.net/publication/331789649_Do_EFL_teachers_transform_their_teaching_with_iPads_A_TPACK-SAMR_approach) [accessed Oct 06 2021].
- Ukrop, M., Švábenský, V., & Nehyba, J. (2019). Reflective diary for professional development of novice teachers. *In Proceedings of the 50th ACM technical symposium on computer science education teachers.* <https://doi.org/10.1145/3287324.3287448>
- Voogt, J., & McKenney, S. (2017). TPACK in teacher education: Are we preparing teachers to use technology for early literacy? *Technology, Pedagogy and Education*, 26(1), 69–83.
- Wahyudi, R., Malik, U. M., & Malang, I. (2012). Reflective teaching, post method pedagogy and teacher professional development and how these interrelate to each other and improve classroom teaching. *Conference: CONAPLINAt: Bandung.* 1-9.
- Wegerif, R. (2007). *Dialogic education and technology: Expanding the space of learning.* Boston, MA: Springer.
- Wegerif, R. (2013). *Dialogic: Education for the internet age.* London: Routledge.
- Willemse, M., Lunenberg, M., & Korthagen, F. (2008). The moral aspects of teacher educators' practices. *Journal of Moral Education*, 37(4), 45–466.
- Yaqubi, M., & Rashidi, N. (2019). Comparative evaluation of dialogic versus monologic pedagogy among EFL instructors and teacher educators in Iran. *Iranian Journal of English for Academic Purposes*, 8(2), 13-33.

- Zahid, M., & Khanam, A. (2019). Effect of reflective teaching practices on the performance of prospective teachers. *Turkish Online Journal of Educational Technology - TOJET*, 18(1), 32-43.
- Zayed, J. (2016). Dialogic teaching to improve students' learning: A discussion with reference to teacher education in KSA. Retrieved from ERIC data base (ED583668).
- Zwozdiak-Myers, P. (2009). An analysis of the concept reflective practice and an investigation into the development of student teachers' reflective practice within the context of action research. Unpublished dissertation. London: Brunel University. (16) (PDF) *Levels of reflection in EFL pre-service teachers' teaching journal*. Available at: [https://www.researchgate.net/publication/317767225\\_Levels\\_of\\_reflection\\_in\\_EFL\\_pre-service\\_teachers'\\_teaching\\_journal](https://www.researchgate.net/publication/317767225_Levels_of_reflection_in_EFL_pre-service_teachers'_teaching_journal) (accessed Sep 29 2021).