Arabic Teaching Efficacy Model (ATEM): A Language Teaching Model Design

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Abstract: This study investigates the role of self-efficacy (S-e) in teaching Arabic and proposes a model for teaching that encompasses teaching goals, materials, and strategies. The study draws on Bandura's scientific works and other studies that develop S-e theory. The model is developed based on the characteristics of the materials that promote the growth of S-e in students, using three different methods. The resulting Arabic Teaching Efficacy Model (ATEM) improves objective thinking, critical thinking, responsiveness, and student persistence through active mastery experiences, vicarious experiences, verbal persuasion from others, social recognition, and reinforcement of physiological and affective aspects. ATEM recommends themes such as Science and technology, What do you think?, I can speak arabic, I speak arabic every day, What is your experience?, Other people's experiences, and Respect for others as teaching materials. Additionally, ATEM suggests teaching strategies such as social modeling, social persuasion, additional feedback, and group work.

Keywords: Arabic; ATEM; self-efficacy (S-e)

1. Introduction
The pursuit of improving the quality of education has been ongoing for a long time, and currently, teachers tend to focus solely on the teaching process, overlooking the psychological aspects of their students. This disregard for the psychological aspects of teaching Arabic is not only apparent during the teaching process but also extends to the neglect of research in this field.

Arifa and Faruq (2021:81) found that the most popular research themes among students were textbooks, Arabic speaking skills, linguistics, and vocabulary. However, the Arabic language teaching community and educators have unintentionally overlooked the psychological aspects of teaching Arabic.

In the 19th century, a similar situation occurred, where educators neglected the psychological aspects of teaching. In response, Bandura (1997:2) reconstructed Social Learning Theory (SLT) and introduced it as a protest against this neglect. SLT emphasizes the importance of considering students' psychological aspects in the teaching process, as ignoring them can cause students to feel uncertain about their ability to master the material they are studying.

The low attention of lecturers to the psychological aspects of students at Muhammadiyah University of Riau-Indonesia has resulted in students having low efficacy in using Arabic. To address this, researchers used SLT to objectively view the phenomenon and as a basis for designing ATEM.
2. Literature review
2.1 The existence of S-e in SLT
Social Learning Theory (SLT) is an educational theory that highlights the connection between environment, individual psychology, and behavior (Gredler 2009:350-391). Santrock (2013:7) has also contributed to the incorporation of SLT variables in several studies. The interplay between these three factors is a continuous process throughout a person's life, and reciprocal processes can begin and end at any point.

![Figure 1. Interrelated variables in SLT (Santrock 2013:7)](image)

The environment has an impact on individuals, including students, and conversely, students can also have an impact on and shape their environment. Students' internal cognitive processes play a critical role in their development, and their personalities can influence their behaviour. Similarly, behaviour is linked to students' internal cognitive processes and personalities. The environment is also linked to student behaviour, and situations that occur in their environment can act as a stimulus. Conversely, student behaviour is a response to environmental stimuli.

S-e is related to SLT as a part of the dimensions contained in theory;

![Figure 2. S-e existence in SLT](image)

The Social Learning Theory (SLT) emphasizes the reciprocal relationship between environment, individual psychology, and behavior. SLT includes six key components: environment, imitation modeling, cognition processing, experience, reinforcement, and self-efficacy (S-e) (Bandura 1971, 1993). S-e, in particular, directly or indirectly influences behavior or performance. In the context of teaching
Arabic speaking skills, S-e can be an ideal teaching model to achieve long-term learning goals (Eggen and Kauchak 2012:7-9). This research aims to examine the relationship between S-e and learning Arabic speaking skills to develop a learning model.

2.2 S-e in language teaching
Estrella (2016:1) designed the Teacher Self-efficacy Scale (ETSS) and found that teachers who had high self-efficacy (S-e) in learning English scored higher than others. Estrella (2016:1) also found that teacher S-e improved the quality of students' language learning. According to Köseo (2015:131), teacher S-e is influenced by their understanding of the language, experience, and psychological aspects.

The topic of this research is the increase in teachers' self-efficacy (S-e) following treatment. Pujaningsih and Ambarwati (2020:79) examined S-e changes in a collaborative course for inclusive education pre-service teachers and found that prospective teachers' S-e increased significantly after participating in a collaborative study. The sources of S-e are discussed in the first point as a factor that can increase teacher S-e, and treatment is another factor that may enhance teacher S-e. Furthermore, additional research is necessary to determine whether this also applies to students.

It is essential for educators to apply a treatment for high self-efficacy (S-e) achievement. Wyatt (2008:iii) found that the Teaching English to Speakers of Other Languages (TESOL) instrument is effective in developing teachers' practical knowledge and S-e. Additionally, Tobing (2013:i)ii demonstrated a positive relationship between reading skill strategies and self-efficacy in improving reading skills.

2.3 S-e in learning Arabic
Yahya et al. (2018:10) found that if the self-efficacy (S-e) of Arabic teachers is high, learning Arabic will be good. Ahmad and Safaria (2013:22) discovered that students with high S-e achieve high scores. Gandeel (2016:281) found that S-e is deeply related to speaking skill development. In addition, Smith-Justice (2017:357) revealed that the geographical location of Central Appalachia greatly influenced the improvement of teachers' and students' S-e. Furthermore, Mufidah and Nuryani (2019:13) found that S-e plays a significant role in the success of debates, with its presence accounting for 78%.

In conclusion, self-efficacy (S-e) in learning a second language occupies a significant place in the field of learning psychology. Azizli et al. (2015:85) found that S-e is closely related to a propensity to plan for the future, consider future consequences, and overall life satisfaction, with S-e acting as the axis. The relationship between the four variables begins with high S-e and ends with overall life satisfaction.

This linkage applies in every aspect of life, including education. Diseth (2011:191) found a strong relationship between self-efficacy (S-e) or goal orientations and surface learning strategies. A student's previous academic
achievement determines high/low efficacy and subsequent academic achievement.

Schunk and Pajares (2002:15) also found that self-efficacy (S-e) plays an essential role in achievement, and many studies support this idea. S-e can influence encouragement, direction, persistence, and outcomes of actions related to learning achievement.

Self-efficacy (S-e) plays a vital role in mastering all kinds of learning, including the four skills of language mastery, such as Arabic speaking skills. The influence of S-e on learning Arabic speaking skills implies that learning should not only focus on maximizing learning activities but also pay attention to the psychological aspects of students. Based on this, the researcher is interested in designing a model for learning Arabic speaking skills using S-e as a point of view, resulting in the ATEM model.

3. Material and methods
The open materials used to develop ATEM are limited to several key sources related to Bandura's social cognitive theory and perceived self-efficacy (S-e). These sources include Bandura's (1971, 1986, 1993, 1997:80-106) works which cover topics such as social learning theory, cognitive factors influencing human behavior (McLeod 2016), and the application of social cognitive theory to personal and social change. Additionally, Pajares' (1996:543) study examines the contribution of self-efficacy to self-regulation and motivation in academic settings, while Zimmerman's (2010:483) work provides a definition of self-regulated academic learning and its capabilities. While these sources offer valuable insights, it is important to consider a diverse range of research materials to ensure a comprehensive understanding of the topic.

The reason for the limitation of the above materials as the primary source for developing ATEM is the characteristics of the materials that display the principles for growing S-e in students and focus on the education field.

3.1 The method to design learning objectives
The researcher combines two principles and synthesizes them into several learning objectives (Knight et al. 2005:1-24). The first principle aims for students to achieve proficiency in Arabic speaking skills, while the second principle focuses on fostering high self-efficacy (S-e) values among students after participating in the learning process.

3.2 The method to design learning materials
Researchers adopted the Botswana Training Authority's (2005:n.p.) method. The following are the procedures that must be followed:
3.3 The method of determining learning strategies
The researcher adopted the effective instructional strategies developed by Shi (2018:477) namely: Social Modeling, Social Persuasion, Additional Feedback, and Group Work. In this study, the chosen strategy is further discussed to reinforce the reasons for its selection.

4. Results and discussion
The design below (Bandura 1986; 1997; Pajares 1996; Tschannen-Moran and Hoy 2002; Zimmerman 2010) will focus on students, not teachers:
First, providing a source of S-e information (مصادر الكفاءة الذاتية) consisting of (1) personal experience that constitutes success (الخبرة الشخصية في نجاح الكلام) (2) experience of others as a model (خبرة الآخرين في نجاح الكلام) (3) being praised and respected when he is skilled in speaking (الثناء والاحترام عندما هو ماهر في مهارة الكلام) (4) good psychological and emotional state of being skilled in speaking (الحالة النفسية والعاطفية الشخصية ليكون ماهراً في التكلّم).  

Second, the learning process (عملية التعليم) / Cognitive Processing was carried out based on the concept of S-e. This observation was to see the impact of S-e in teaching Arabic speaking skills and whether these sources contribute to creating the process of teaching Arabic speaking skills that is good or not.  

Third, the assessment of students (تقييم الطلبة) (Assessment of Personal Learning Skills). It is used to determine the extent to which students respond to information from the teacher.  

Fourth, after carrying out the previous three operations, it will show the students’ S-e.  

Fifth, knowledge about achieving educational goals (Consequences of S-e / أهداف التعليم) (목표의 향후), this category appears after knowing the four previous processes.  

It is important to note that S-e may widen or narrow depending on the researcher's approach. Additionally, S-e is limited to work experience, motivation effects, and cultural influences, as noted by Asri Usman et al. (2021:474).

4.1 Learning goals  
The success of a remedial program in improving students' self-efficacy (S-e) depends on the comprehension of the program's goals and effects, as noted by Schunk and Rice (1989:279). To achieve these goals, teachers should identify
learners' future goals, trust their abilities, and use appropriate learning strategies, as emphasized by Karbakhsh and Safa (2020:803). Additionally, when learning a second language, it is important to identify individual students' weaknesses and adjust the learning procedures accordingly, particularly with regards to psychological factors.

In this study, the students' weakness was identified as low S-e, which was assessed using Dubay' (2017:84) S-e assessment design.

Table 1. ATEM learning goals based on S-e

<table>
<thead>
<tr>
<th>Aims</th>
<th>Learning goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solving the problems of learning Arabic speaking skills wisely</td>
<td>Objective thinking</td>
</tr>
<tr>
<td>Creating confidence in success when facing problems</td>
<td>Critical thinking</td>
</tr>
<tr>
<td>Willing to deal with problems, not stay away from the problems</td>
<td>Responsibility</td>
</tr>
<tr>
<td>Increasing students S-e</td>
<td>Mastery experience/student personal experiences</td>
</tr>
<tr>
<td>Modelling other people's successful experiences in Arabic speaking</td>
<td>Vicarious experience aspect</td>
</tr>
<tr>
<td>Getting stimulants to increase S-e</td>
<td>Verbal persuasion and other related social recognition/social persuasion</td>
</tr>
<tr>
<td>Eliminate tension, anxiety, and fear.</td>
<td>Physiological and affective states</td>
</tr>
</tbody>
</table>

The values of learning goals in this study were adopted from various studies on self-efficacy based on Bandura's social learning theory (SLT) (Bandura, 1971, 1986, 1993, 1997; Pajares, 1996; Schunk and Pajares, 2002; Schunk and Rice, 1989). The Arabic Teaching Efficacy Model (ATEM) consists of seven learning objectives, which merge two-dimensional subjects based on the primary principle of high S-e and the second principle of high S-e, even though the latter is not explicitly found in Bandura's studies.

This interlinking of the two principles is used to ensure the success of the Arabic speaking skill course. A high S-e, which is the belief in one's ability to succeed, cannot be achieved without objective thinking, critical thinking, and a sense of responsibility.

The title emphasizes the belief that proficiency in Arabic speaking is achieved through a specific process, supported by Bouddage's and Elfitahi (2018:91) research on the beliefs of students and teachers regarding the use of Information and Communication Technology (ICT) to alleviate speaking anxiety in foreign language learners.

Teachers need to assess their students' needs and establish learning goals accordingly Abu Bakar et al. (2014:41). In ATEM, students' learning goals are
based on objective thinking, critical thinking, and responsibility values. This equips students to approach learning challenges wisely, build confidence, and take responsibility for solving problems. ATEM also incorporates Bandura's self-efficacy concept, which helps students build confidence through successful experiences and by emulating successful role models. Verbal persuasion and other forms of social recognition motivate and encourage students to increase their efficacy. Finally, the program aims to improve students' physiological and emotional states to help them overcome anxiety and fear when learning Arabic speaking skills.

Razmi et al. (2020:1047) examined the application of 'S-e' as an effort and persistence in developing metacognitive listening strategy, but did not discuss the relationship between perfectionism, S-e components, and metacognitive listening strategy.

4.2 Learning materials

Chapter 1: Science and technology (العلوم والتكنولوجيا)

The title of this chapter was chosen based on the value of objective thinking, which is important for students to develop. Odudukudu (2019:1) suggests that one way to promote objective thinking is by analyzing objects. The chapter focuses on science and technology (العلوم والتكنولوجيا) and covers key ideas related to the historical significance of Science and technology, their impact on society, and their importance in students' lives. These ideas, along with the learning materials provided, help shape students' objective thinking abilities.

The text is specifically related to learning Arabic speaking skills. To improve their ability, students are provided with exercises such as orally summarizing the central ideas of the text (Morrow 1985:647-661) and answering questions orally. These activities emphasize the development of speaking skills, which is an essential aspect of language learning (Hussain 2017:14-21).

A glossary was provided in the latter part of the book to make students able to find the meanings of vocabulary. The task related to this is to organize words into sentences, sentences into a paragraph, and express the students orally (Coady and Huckin 1997:273-290).

Chapter 2: What do you think? (ما رأيكم؟)

The selection of the title for this chapter is based on the critical thinking domain. The text under the title 'What do you think? (ما رأيكم؟)' focuses on the transition from offline to online learning since the outbreak of the COVID-19 pandemic, as well as the contributing factors and inhibitors to implementing online learning. The chapter encourages critical thinking by asking questions such as 'How do you feel about the transition from offline to online learning during the pandemic?' and 'What do you think about the supporting and inhibiting factors for implementing online learning?' The use of the question mark '?' is crucial in promoting critical thinking skills such as predictive questioning, analysis, evaluation, and inference (Santoso et al. 2018:1-6).
Chapter 3: I can speak Arabic

The displayed text with the title of 'Arabic is a Universal Language. It discusses the beginning of Arabic development. This theme is emerging to position students in learning. This text discussed the advancement of the Arabic language in its time, and learners are expected to be able to be responsible for keeping the Arabic language advanced. This concept is in direct contact with thinking (Cook-Sather 2010:555-575) regarding student failure in America because the way students are positioned in learning is inappropriate. Students re-explain the text orally in their way and aim to capitalize on enthusiasm while providing a rich experience (Moss 2004:710-718). The selection of the diction 'I can speak Arabic' as the title aims to make students receive a stimulus from the word 'can,' which means 'ability.' Furthermore, (The Education Hub 2019:n.p.) described students with low self-efficacy as students who say, "I am not sure I can do this."

Chapter 4: I speak Arabic every day

The title selection in this chapter is based on Enactive Mastery Experience/student personal experiences in the form of success and failure in learning Arabic speaking skills. Re-discovering enactives mastery experience in students is an effort to increase S-e (Bandura 1971:3). Proximal environmental factors contributed more to developing a second language (Paradis et al. 2020:1255-1281). Therefore, the title 'I speak Arabic every day' aims to recover students' past experiences when living in an Arabic environment. The text on this theme is a conversation that discusses 'Getting used to speaking in Arabic.'

Chapter 5: What is your experience?

The experiences of other students can be used as models by students and increase S-e (Bandura 1971:3). Therefore the title 'What is Your Experience?' aims to find out the experiences of other students when they learn Arabic speaking.

Chapter 6: Other people's experiences

The title concept and the application of the text in this chapter have the same discussion in chapter 5.

Chapter 7: Respect for others

This title was chosen to eliminate students' tension, anxiety, and fear (Bandura 1986:n.p.). Reward increases human motivation to learn a new language (Marcopallare et al. 2014:2606-2611) and is a force in overcoming obstacles to change (Tohidi and Jabbari 2012:820-824).

Teaching materials are a collection of scientific information that is factual, trending and constitutes values (Tuaima 1998:160)

4.3 Teaching strategy

Designing teaching strategies in ATEM is crucial because a teacher's instructional strategies clearly affect students' self-efficacy (Alsuhaiibani 2019:377). The
following strategies are commonly used for teaching language skills in the context of S-e (Shi 2018:477-496):

First, Social Modeling (Shi 2018:477-496). Social modeling involves five general steps: inputs, methods, outputs, purpose, and contributions (The Education Hub 2019:n.p.). These steps are related to various aspects, such as other people's abilities, how other people use verbal communication, how students use other people's abilities as a model, and whether students' verbal communication skills improve after using other people's abilities as a model, and how students can become a model for others (Saad 2015:3-4).

Second, Social Persuasion (Shi 2018:477-496). Persuasion plays an important role in social change, and various variables can influence people's behavior when they are highly motivated (high elaboration), not motivated (low elaboration), or in an indeterminate state of processing capability (moderate elaboration) (Vaughan-Johnston et al. 2020:2). Introducing the cultural aspects of the language's country of origin can increase foreign language learning outcomes (Papadopoulos and Shin 2021:158-202).

Third, Additional Feedback (Shi 2018:477-496). Error correction (corrective feedback) is the most common form of feedback in language classes, aimed at improving learners' accuracy (Kerr 2020:1-24). Feedback can serve multiple purposes, such as improving fluency, accuracy, or complexity of learners' speaking and writing, motivating learners, and developing learner autonomy.

Fourth, Group Work (Shi 2018:477-496). Group work is an effective way to engage students in language learning (Sajidin and Ashadi 2021:480-494). Various activities, such as games, role play, projects, information gap, jigsaw, think pair and share, debate, inquiry, prioritizing, and fishbowl, can be used for group work (Kasim 2015:97-106).

The table below shows the design of ATEM, which includes learning goals, teaching materials, and strategies. But more research is needed to see if it really helps students improve their speaking skills. Teacher need to test how ATEM affects learners' oral proficiency and find ways to improve it. This research gives valuable insights to develop better language teaching methods in the future.

5. Conclusion
ATEM is supposed to improve the learner's ability well. The teaching process with this model must bring up the elements of enactive mastery experience, vicarious experience, verbal persuasion, other related social recognition, and physiological and affective aspects in the learning goals, teaching materials, and teaching strategies. Learning materials in ATEM such as; Chapter 1: Science and technology (العلوم والتكنولوجيا), Chapter 2: What do you think? (ما رأيك؟), Chapter 3: I can speak arabic (أستطيع تكلّم العربية), Chapter 4: I speak arabic every day (أتكلّم العربية كلّ يوم), Chapter 5: What is your experience? (ما خبرتك؟), Chapter 6: Other people's experiences (خبرة الآخرين), Chapter 7: Respect for others (احترام الآخرين). Teachers can use strategies such; social modeling, social persuasion, additional feedback, or group work to teach this material.
Table 2. Learning model of Arabic speaking skill based on self-efficacy

<table>
<thead>
<tr>
<th>No</th>
<th>Part</th>
<th>Learning goals#1</th>
<th>Teaching materials#2</th>
<th>Teaching strategies#3</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Chapter 1</td>
<td>Objective thinking</td>
<td>Science and technology (العلوم والتكنولوجيا)</td>
<td>Social modeling/social persuasion/ additional feedback/ group work.</td>
</tr>
<tr>
<td>II</td>
<td>Chapter 2</td>
<td>Critical thinking</td>
<td>What do you think? (ما رأيك؟)</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Chapter 3</td>
<td>Responsive</td>
<td>I can speak Arabic (أستطيع تكلّم العربية)</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Chapter 4</td>
<td>Mastery experience/student personal experiences</td>
<td>I speak Arabic every day (العربية كلّ يوم)</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>Chapter 5</td>
<td>Vicarious experience aspect</td>
<td>What is your experience (ما خبرتكم)</td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>Chapter 6</td>
<td>Verbal persuasion and other related social recognition/social persuasion</td>
<td>Other people's experiences (خبرة الآخرين)</td>
<td></td>
</tr>
<tr>
<td>VII</td>
<td>Chapter 7</td>
<td>Physiological and affective states</td>
<td>Respect for others (احترام الآخرين)</td>
<td></td>
</tr>
</tbody>
</table>

#1 The learning Arabic speaking goals are based on self-efficacy
#2 The learning materials designed by the researcher
#3 The teaching strategies designed by Shi (2018:477)

### 6. Replication package

#### 6.1 Detailed description of ATEM

ATEM (Arabic Teaching Efficacy Model) is a learning model designed for teaching Arabic speaking skills. It's based on Bandura's Social Cognitive Learning Theory and focuses on developing self-efficacy in students. The main goal is to help students feel more confident in their ability to learn Arabic, but it can also be used to teach objective and critical thinking skills.

This model is adaptable to different contexts, such as a school or university's specific vision and mission. It can be used to teach students at a medium level, but it's also flexible enough to be adapted for teaching other foreign languages.

#### 6.2 Main content of ATEM

ATEM consists of three main components:

First, the learning objectives. As previously mentioned, the objectives are mapped based on the sources of high self-efficacy, which include mastery experience, vicarious experience, social persuasion, and physiological and affective states.

Second, the ATEM teaching materials. These materials emphasize values related to objective thinking, critical thinking, and high self-efficacy. They are
organized into themes, and currently, there are seven themes available: Science and technology (العلوم والتكنولوجيا), What do you think? (ما رأيك؟), I can speak arabic (أستطيع تكلّم العربية), I speak arabic every day (أتكلّم العربية كلّ يوم), What is your experience? (ما خبرتكم؟), Other people's experiences (خبرة الآخرين), and Respect for others (احترام الآخرين).

Third, the recommended teaching strategies for using ATEM. There are four strategies included in ATEM: social modeling, social persuasion, additional feedback, or group work. These strategies are adapted from Shi (2018:477), but this doesn't mean that the researchers didn't make an effort to determine the best strategies for ATEM. The choice of teaching strategies is subjective and depends on the preference of the teacher. Therefore, other teaching strategies are allowed as long as they are suitable for teaching a foreign language.

6.3 How to use ATEM?
To use ATEM effectively, it is recommended to apply it to students who have been identified as having low S-e. Therefore, a need analysis based on the four sources previously mentioned is essential before starting the learning process. Lastly, improving the use of ATEM is a crucial study to ensure that the hypothesis that ATEM is an effective language learning model is accurate.

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References


Diseth, Åge. (2011). ‘Self-Efficacy, goal orientations and learning strategies as mediators between preceding and subsequent academic achievement’. 381
Learning and Individual Differences, 21(2).
https://doi.org/10.1016/j.lindif.2011.01.003


SAGE Open. https://doi.org/10.1177/2158244019844086


