



**INVESTIGATING SELF-EFFICACY IN ARABIC VOCABULARY  
LEARNING THROUGH NEEDS ANALYSIS: EVIDENCE FROM THE  
ATEM FRAMEWORK**

**Widiya Yul<sup>\*1</sup>, Riko Andrian<sup>2</sup>**

<sup>1</sup>Institut Agama Islam Negeri Kerinci, Indonesia

<sup>2</sup>Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

**Article Information**

**Article History:**

Received : 31-March-2026  
Revised : 12-June-2026  
Accepted : 28-June-2026  
Published : 30-June-2026

**Keywords:**

Arabic vocabulary learning;  
Arabic teaching efficacy model  
(ATEM)  
Needs analysis;  
Self-efficacy.

**Articles Available Online:**



**ABSTRACT**

Self-efficacy plays an important role in vocabulary learning; however, little is known about learners' self-efficacy conditions before instructional interventions in Arabic as a Foreign Language (AFL) contexts. This study aimed to identify students' self-efficacy needs in Arabic vocabulary learning as a basis for developing interventions through the Arabic Teaching Efficacy Model (ATEM). A sequential exploratory mixed-methods design was employed. Qualitative data were collected through interviews, focus group discussions, and classroom observations. In contrast, quantitative data were obtained from an ATEM-based self-efficacy questionnaire administered to 56 undergraduate students and analyzed descriptively. The findings revealed that students experienced low self-efficacy in several internal dimensions, including problem-solving orientation, mastery experiences, and the use of peer models in vocabulary learning. In contrast, students showed a strong reliance on external reinforcement, particularly reward-punishment mechanisms. These results indicate an imbalance between students' internal self-regulation and their dependence on external support in learning Arabic vocabulary. The study suggests that difficulties in vocabulary learning are influenced not only by instructional factors but also by learners' psychological readiness before the intervention. Practically, Arabic vocabulary instruction should provide authentic mastery experiences, meaningful modeling opportunities, and strategies that foster learner autonomy and self-regulation. Overall, the findings highlight the importance of conducting self-efficacy needs analyses before implementing instructional innovations in AFL contexts.



**Copyright:**

© 2026 by the author(s).

This open-access article is distributed under the terms and conditions of the Creative Commons Attribution-ShareAlike (CC BY-SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).

**CORRESPONDING AUTHOR:**

**Widiya Yul,**

Departement of Arabic Education,

Institut Agama Islam Negeri Kerinci, Indonesia

Jl. Kapten Muradi, Koto Lolo, Pesisir Bukit, Kota Sungai Penuh, Jambi, Indonesia

Email: [widiyayul@iainkerinci.ac.id](mailto:widiyayul@iainkerinci.ac.id)

**How to Cite:**

Yul, W., & Andrian, R. (2026). Investigating Self-Efficacy in Arabic Vocabulary Learning Through Needs Analysis: Evidence from the Atem Framework. *Ta'lim al-'Arabiyyah: Jurnal Pendidikan Bahasa Arab & Kebahasaaraban*, 10(1), 17–35. <https://doi.org/10.15575/jpba.v10i1.55098>

## INTRODUCTION

Vocabulary mastery constitutes a fundamental component of foreign language learning, as it supports input comprehension, meaning expression, and the development of productive skills (Kosim et al., 2025). In Arabic language learning, vocabulary also enables learners to understand Islamic texts, linking linguistic competence with the development of religious understanding (Yul & Andrian, 2024). However, limited vocabulary remains a major barrier to communicative competence at the university level, particularly because speaking proficiency depends heavily on an adequate vocabulary repertoire (Zulharby et al., 2019). Despite years of study, many students still struggle to acquire and retain vocabulary, which ultimately hinders their overall language performance.

Previous studies on Arabic vocabulary learning have predominantly emphasized instructional methods, teaching materials, and curriculum development. In contrast, the psychological dimension of learners, particularly self-efficacy, has received relatively limited attention (Groothuisen et al., 2024). Self-efficacy plays an important role in shaping learners' motivation, persistence, and learning strategies (Bonghawan & Macalisang, 2024). Prior learning achievement contributes to the development of self-efficacy, which subsequently mediates learning strategies and academic performance (Honicke et al., 2023). Likewise, self-efficacy has been found to support higher-level text comprehension (Taufiq & Ratmanida, 2025), while the use of electronic dictionaries may enhance vocabulary acquisition, learner motivation, and self-confidence (Sarmila et al., 2023). Nevertheless, empirical investigations examining learners' self-efficacy conditions prior to instructional intervention in Arabic vocabulary learning remain scarce. As a result, instructional innovations are often implemented without a clear understanding of learners' psychological readiness and actual learning needs (Ghofur et al., 2026).

Addressing this gap, the present study explores students' self-efficacy profiles in Arabic vocabulary learning before the implementation of pedagogical interventions. The study offers a novel contribution by positioning learners' psychological readiness as an essential prerequisite for instructional design. Rather than attributing vocabulary difficulties solely to instructional factors, the study investigates how weaknesses in learners' self-efficacy may shape their engagement with vocabulary learning tasks. Through a mixed-methods approach, this research seeks to provide an empirical foundation for designing interventions that are more responsive to students' psychological conditions.

Addressing this gap, the present study explores students' self-efficacy profiles in Arabic vocabulary learning before the implementation of pedagogical interventions. The study offers a novel contribution by positioning learners' psychological readiness as an essential prerequisite for instructional design. Rather than attributing vocabulary difficulties solely to instructional factors, the study investigates how weaknesses in learners' self-efficacy may shape their engagement with vocabulary learning tasks. Through a mixed-methods approach, this research seeks to provide an empirical foundation for designing interventions that are more responsive to students' psychological conditions.

The investigation is guided by the Arabic Teaching Efficacy Model (ATEM), a framework grounded in Bandura's self-efficacy theory that incorporates mastery experiences, vicarious experiences, social persuasion, and physiological-affective states within Arabic language learning contexts (Andrian & Yul, 2023). In educational research, conceptual models are understood as theoretically grounded representations that systematically organize

concepts and guide the design of research and educational interventions (Tusquellas et al., 2025). Therefore, prior to the implementation of an instructional model, a needs analysis is necessary to determine whether learners' characteristics warrant specific interventions, in line with principles of needs-based instructional development (Xuan et al., 2026). This consideration becomes particularly relevant because Arabic language learning in higher education continues to face challenges related to limited learning resources, linguistic complexity, and insufficient opportunities for authentic language use (Annisa & Safii, 2023).

The analytical perspective adopted in this study is Bandura's self-efficacy theory, which emphasizes individuals' beliefs in their capability to organize and execute actions required to achieve desired outcomes (Siregar et al., 2026). Within this perspective, self-efficacy influences learners' choices, persistence, and responses when facing academic challenges. Consequently, identifying students' self-efficacy conditions prior to intervention may provide important insights into the psychological factors underlying vocabulary learning difficulties.

The study was conducted in the Arabic Language Education Program at IAIN Kerinci, Indonesia, where lecturers have reported persistent challenges related to students' initial Arabic proficiency. Many students enter the program with limited exposure to Arabic due to their non-pesantren educational backgrounds. Although various instructional approaches, including the direct method, have been implemented, a considerable proportion of students continue to experience difficulties in understanding Arabic explanations during classroom instruction. This issue is particularly important because competency standards within State Islamic Higher Education Institutions (PTKIN) require graduates to demonstrate active proficiency in speaking and writing Arabic (Nasir et al., 2026).

Against this backdrop, the present research aims to identify the characteristics of students' self-efficacy in Arabic vocabulary learning through an ATEM based needs analysis. By mapping learners' self-efficacy profiles before instructional intervention, the findings are expected to contribute both theoretically and pedagogically. Theoretically, the study extends the discussion of self-efficacy within Arabic as a Foreign Language (AFL) contexts by emphasizing the significance of psychological readiness prior to instructional innovation. Practically, the findings may inform the development of vocabulary instruction that strengthens mastery experiences, meaningful modeling, and learners' self-regulation in Arabic language learning.

## **METHOD**

### ***Research Design***

A sequential exploratory mixed-methods design was employed because learners' self-efficacy in Arabic vocabulary learning had not been adequately documented in the ATEM context. The qualitative phase enabled an in-depth exploration of students' experiences and psychological conditions underlying vocabulary learning difficulties, whereas the subsequent quantitative phase was used to confirm and describe the prevalence of the patterns identified qualitatively across a broader group of participants. This design was considered appropriate because it allowed the development of a contextually grounded understanding of self-efficacy needs prior to instructional intervention.

### ***Participants***

The quantitative phase involved 56 undergraduate students from the Arabic Language Education Program at IAIN Kerinci. Purposive sampling was employed because participants

had experienced Arabic vocabulary learning as part of their academic program and were considered capable of providing relevant information regarding their learning experiences and self-efficacy conditions.

For the qualitative phase, purposive sampling was used to select information-rich participants. Semi-structured interviews were conducted with ten students who had experience in Arabic language learning and were able to reflect on the challenges encountered in vocabulary acquisition. In addition, two focus group discussions (FGDs) were conducted: one involving eight students representing diverse learning experiences and another involving four Arabic language lecturers selected based on their teaching experience and familiarity with students' vocabulary learning difficulties.

### ***Qualitative Data Collection***

Qualitative data were collected through semi-structured interviews, FGDs, and non-participant classroom observations. The interviews explored students' experiences, strategies, and perceptions regarding difficulties in Arabic vocabulary learning. The FGDs were conducted to obtain collective perspectives from students and lecturers concerning students' self-efficacy needs and learning challenges. Classroom observations were carried out to capture students' learning behaviors, classroom interactions, and instructional practices related to self-efficacy in vocabulary learning. The use of multiple data sources enabled methodological triangulation and enhanced the credibility of the qualitative findings.

### ***Quantitative Instrument***

The quantitative phase employed a self-efficacy identification questionnaire developed based on Bandura's sources of self-efficacy and contextualized within the Arabic Teaching Efficacy Model (ATEM) framework. The instrument was designed to identify students' psychological conditions in Arabic vocabulary learning across five dimensions: problem-solving orientation, mastery experience, vicarious experience, social persuasion, and physiological–affective states.

The questionnaire consisted of a set of statements measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Item development followed a theory-driven procedure in which each statement was constructed to represent the indicators derived from Bandura's self-efficacy theory and adapted to the context of Arabic vocabulary learning. Prior to administration, the instrument underwent content validation through expert review involving specialists in Arabic language education and educational psychology to ensure the clarity, relevance, and representativeness of the items. Since the instrument was intended to identify students' self-efficacy conditions in a needs analysis context, the analysis emphasized descriptive interpretation rather than comprehensive psychometric validation.

### ***Data Analysis***

Qualitative data were analyzed using thematic analysis. All interview and FGD recordings were first transcribed verbatim and examined alongside classroom observation notes. Open coding was independently conducted by the two researchers to identify meaningful units related to students' self-efficacy in Arabic vocabulary learning. The resulting codes were subsequently discussed until consensus was reached and then grouped into broader categories through data reduction. Finally, themes were developed and interpreted based on the self-efficacy dimensions within the ATEM framework, namely problem-solving orientation, mastery experience, vicarious experience, social persuasion, and physiological–

affective states. Source and methodological triangulation were employed to enhance the credibility and consistency of the qualitative findings.

Quantitative data were analyzed using descriptive statistics, including Mean (M) and Standard Deviation (SD). To facilitate interpretation, mean scores were classified into three categories using equal interval ranges on the five-point Likert scale: 1.00–2.33 (low), 2.34–3.66 (moderate), and 3.67–5.00 (high). These categories were used to describe students' self-efficacy profiles across the ATEM dimensions.

The integration of qualitative and quantitative findings followed a connecting strategy consistent with the sequential exploratory mixed-methods design. Themes identified during the qualitative phase informed the development and organization of the ATEM-based self-efficacy questionnaire. Subsequently, the quantitative findings were used to confirm and describe the prevalence of the qualitative patterns identified earlier. Meta-inferences were generated by comparing the convergence between qualitative themes and quantitative trends to obtain a comprehensive understanding of students' self-efficacy conditions prior to instructional intervention.

## **RESULT AND DISCUSSION**

### **Result**

#### **Identification of Students' Self-Efficacy in Vocabulary Mastery**

To identify students' self-efficacy conditions in Arabic vocabulary learning, an ATEM-based self-efficacy identification instrument was administered prior to the implementation of the instructional intervention. The instrument was designed to capture students' psychological responses when encountering vocabulary learning challenges and to map their self-efficacy profile across several dimensions derived from Bandura's self-efficacy framework and contextualized within the Arabic Teaching Efficacy Model (ATEM).

Through this identification process, the study aimed to obtain an initial mapping of students' self-efficacy profiles prior to pedagogical intervention. The results of this identification were then analyzed descriptively to examine the distribution of students' self-efficacy across ATEM dimensions, which provides an empirical basis for understanding the psychological conditions underlying vocabulary learning difficulties. The quantitative overview of these findings is presented in the following section.

#### **Quantitative Overview of ATEM-Based Self-Efficacy (Item-Level Analysis)**

The quantitative phase aimed to identify students' self-efficacy conditions in Arabic vocabulary learning through an item-level descriptive analysis. This analysis examines students' responses to each item of the ATEM-based self-efficacy instrument in order to capture the distribution of psychological tendencies across different self-efficacy dimensions. The analysis focuses on descriptive statistics, including the mean score (M) and standard deviation (SD), which provide an overview of students' responses to each item related to problem-solving orientation, mastery experience, vicarious experience, social persuasion, and physiological–affective states. By examining responses at the item level, this analysis allows for a more detailed identification of specific behavioral patterns that characterize students' self-efficacy conditions prior to pedagogical intervention.

The item-level descriptive analysis indicates that most items representing internal regulatory dimensions particularly problem-solving orientation and mastery experience fall within the low category. These findings highlight students' limited independent initiative, low persistence, and the lack of personal mastery experiences in Arabic vocabulary learning. In contrast, items within the social persuasion dimension consistently appear in the high category, indicating the strong influence of reward–punishment mechanisms on students' learning behavior. Meanwhile, items related to physiological–affective states are categorized as moderate, suggesting that affective conditions do not constitute a primary barrier in vocabulary learning. This item-level pattern reinforces the qualitative findings and provides a more detailed explanation of the mechanism underlying the pre-pedagogical self-efficacy deficit, in which learning behavior is driven more by external control than by internal self-regulation. The distribution of students' self-efficacy across ATEM dimensions is presented in the table below:

**Table 2. Descriptive Statistics of Students' Self-Efficacy across ATEM Dimensions**

ATEM Dimension	Mean (M)	SD	Category
Problem-Solving Orientation	2.65	0.47	Moderate
Mastery Experience	2.32	0.43	Low
Vicarious Experience (Modeling)	2.65	0.44	Moderate
Social Persuasion (Reward–Punishment)	3.85	0.39	High
Physiological–Affective States	3.64	0.46	Moderate

The results of the descriptive analysis reveal an asymmetrical self-efficacy profile among students. The Mastery Experience dimension recorded the lowest mean score ( $M = 2.32$ ,  $SD = 0.43$ ) and falls within the low category, indicating students' limited personal experiences of success in Arabic vocabulary learning.

The Problem-Solving Orientation dimension ( $M = 2.65$ ,  $SD = 0.47$ ) and the Vicarious Experience dimension ( $M = 2.65$ ,  $SD = 0.44$ ) fall within the moderate category, indicating that although students demonstrate certain efforts in problem-solving and respond to modeling, these internal regulatory mechanisms have not yet developed optimally.

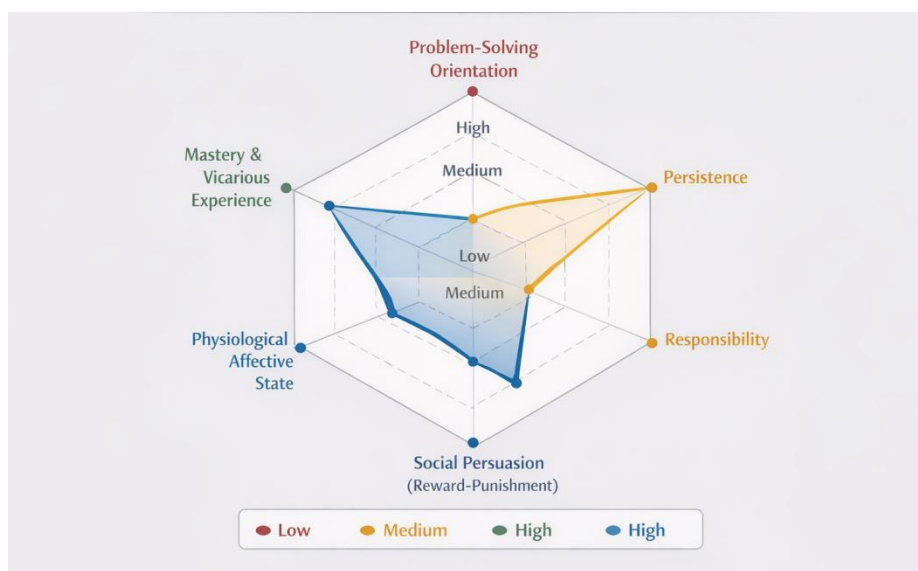
In contrast, Social Persuasion shows the highest mean score ( $M = 3.85$ ,  $SD = 0.39$ ) and falls within the high category, indicating the strong influence of reward–punishment mechanisms on students' learning behavior. Meanwhile, Physiological–Affective States are categorized as moderate ( $M = 3.64$ ,  $SD = 0.46$ ), suggesting relatively stable affective conditions that do not constitute a primary obstacle in vocabulary learning.

Overall, these quantitative findings are consistent with the qualitative analysis and confirm the presence of a pre-pedagogical self-efficacy deficit, particularly within the internal regulatory dimensions, accompanied by a relatively high dependence on external reinforcement.

### Asymmetrical Self-Efficacy Profile in Arabic Vocabulary Learning

The results indicate that students' self-efficacy in Arabic vocabulary learning varies across dimensions, with generally low levels in problem-solving orientation, persistence, responsibility, mastery experience, and modeling. These findings align with previous studies showing that effort and persistence support the activation of metacognitive strategies and

predict second language achievement (Razmi et al., 2020; Karbakhsh & Safa, 2020) Such limitations may hinder the development of cognitive and metacognitive processes in vocabulary acquisition. In contrast, students' responses to reward–punishment mechanisms and their affective conditions appear relatively stable, suggesting that cognitive engagement has not yet developed optimally (Arce et al., 2022). This pattern is visualized in an asymmetrical self-efficacy profile at the pre-intervention stage, as illustrated in the following Figure:



**Figure 1 : Profile of Asymmetric Self-Efficacy in Arabic Vocabulary Learning**

This figure illustrates the asymmetric profile of students' self-efficacy across ATEM dimensions at the pre-intervention stage. Internal regulatory dimensions such as problem-solving orientation, persistence, mastery experience, and vicarious experience appear weaker compared to external responsiveness to reward–punishment and relatively stable physiological–affective conditions. This profile indicates an imbalance between internal self-regulation and external reinforcement in Arabic vocabulary learning.

### Limited Autonomous Problem-Solving in Arabic Vocabulary Learning

Problem-solving orientation in this study refers to students' responses when encountering unfamiliar Arabic vocabulary, encompassing motivation for action, direction of action, persistence, and outcomes of action as indicators of self-regulated learning. This perspective aligns with Social Cognitive Learning Theory, which positions self-efficacy as a central mechanism of self-regulation (Neroni et al., 2022). In this context, learning environments that rely heavily on external reinforcement may limit the development of sustained vocabulary retention and autonomous learning (Whiteford et al., 2021; Yul et al., 2023; Nurhidayah et al., 2025).

From the perspective of motivation for action, most students tend to adopt immediate and practical solutions. When encountering unfamiliar vocabulary, they commonly rely on peers or wait for the lecturer's explanation rather than engage in independent search. This pattern indicates low autonomous problem-solving and a reactive learning orientation. Consistent with previous findings, learning motivation is often shaped by external factors, particularly the role of the teacher (Rochmat et al., 2025), suggesting that without internally

grounded self-efficacy, students' engagement remains dependent on external support and less likely to develop into autonomous self-regulation.

In terms of the direction of action, students tend to rely heavily on external assistance, while the use of digital dictionaries is generally undertaken only when immediate help is unavailable. Alternative strategies, such as inferring meaning from context or substituting unfamiliar words with known vocabulary, are rarely observed, indicating that the cognitive process has not yet reflected a reflective problem-solving approach. This condition contrasts with the findings of Roslan & Sahrir (2020) who demonstrate that interactive visual media can enhance vocabulary acquisition through the activation of visual and auditory channels. Similarly, Rabie-Ahmed & Mohamed, (2022). emphasize that interaction and collaboration strengthen vocabulary acquisition through processes of meaning negotiation.

From the perspective of persistence, students tend to discontinue their efforts when they do not immediately find an answer and instead rely on the lecturer's explanation. As a result, vocabulary that has been previously searched for independently is often not recalled or reused in subsequent language use. This condition is consistent with the findings of Ashari (2020) which indicate that the selection of mufradāt that is not aligned with the principles of availability and familiarity limits learners' active engagement, preventing vocabulary from developing into meaningful learning experiences.

The findings indicate that students' problem-solving orientation in vocabulary mastery remains weak and does not yet reflect strong self-efficacy. The low level of internal motivation, dependence on external assistance, and limited persistence suggest that vocabulary learning difficulties are not solely related to instructional methods but also to students' psychological readiness. This observation aligns with Bandura's perspective that low self-efficacy is characterized by a tendency to avoid cognitively demanding efforts and to easily discontinue attempts when encountering difficulties. In practice, students tend to ask their peers or wait for the lecturer's explanation when encountering unfamiliar vocabulary, while the use of digital dictionaries or contextual inference strategies is rarely employed. As a consequence, vocabulary learned independently is not retained for long and is seldom reused in communication.

#### *Mastery Experience and the Development of Self-Efficacy in Vocabulary Learning*

Personal mastery experience constitutes the primary source of self-efficacy formation, as it provides direct evidence of an individual's capability to successfully accomplish learning tasks. In Arabic vocabulary learning, this dimension is examined through students' learning experiences, vocabulary expansion strategies, and their perceptions of learning outcomes. Research indicates that effective learning experiences strengthen self-efficacy, whereas difficulties in understanding academic language may reduce learners' confidence (Hengki & Ratna, 2025). This finding is consistent with the view that mastery experience represents the most influential source of efficacy, as success or failure in learning directly affects individuals' motivation and persistence (Wang & Zhang, 2024). Moreover, learning experiences supported by motivation, social environments, and integrated learning practices can enhance performance through the mediating role of self-efficacy (Usman et al., 2021). Other studies also demonstrate that practical experiences and training integrated with learning activities can further strengthen self-efficacy by reinforcing instructional strategies and promoting learner engagement in the language learning process ( Penner-Williams & Karami, 2025).

The findings indicate that students' limited mastery experiences in Arabic vocabulary acquisition influenced by non-pesantren educational backgrounds, low learning intensity, and a predominantly memorization-based approach—hinder the development of sustained self-efficacy. This condition is reinforced by students' tendency to remain passive in the learning process (Hood et al., 2021), as well as by the quality and quantity of mufradāt in instructional textbooks that do not yet fully meet pedagogical principles (Akhiryani et al., 2024). As a result, vocabulary mastery has not developed into communicative competence. Conversely, learning environments characterized by clear objectives and constructive feedback have been shown to enhance students' motivation and engagement (Honicke et al., 2020). In addition, vocabulary is often learned as isolated units without contextualized use, making it easily forgotten and preventing the formation of progressive mastery experiences. This condition reinforces learners' perceptions of difficulty and is associated with the use of less effective cognitive strategies as well as weak self-monitoring (Han et al., 2022).

These findings indicate that students' low self-efficacy in vocabulary learning is not solely caused by limited initial proficiency, but also by the lack of authentic mastery experiences. Learning practices that are mechanical and non-contextual fail to establish a meaningful connection between effort and success, resulting in vocabulary that is not internalized as a personal achievement. This condition aligns with the findings of (Bouddage & Elfatihi, 2018). which suggest that limited vocabulary knowledge and low self-confidence can trigger anxiety and reduce participation in communication. From a theoretical perspective, this reinforces Bandura's view that self-efficacy develops through sustained mastery experiences; without such experiences, learners' confidence in their learning abilities tends to weaken. Therefore, the weakness of mastery experience becomes a primary factor contributing to students' low self-efficacy at the pre-intervention stage.

#### *Modeling Process and Vicarious Experience in Vocabulary Learning*

Vicarious experience plays an important role in the development of self-efficacy, particularly when learners have not yet acquired sufficient personal mastery experiences. Through modeling, individuals develop confidence in their abilities by observing the successful performance of others whom they perceive as relevant or comparable to themselves.

The findings indicate that students tend to feel admiration toward individuals who are proficient in Arabic; however, this response does not develop into active modeling behavior. Instead, some students avoid interaction and display a lack of self-confidence. This condition contradicts the principles of modeling-based learning, which emphasize active engagement in utilizing models as sources of learning experiences (Constantinou et al., 2019). It also differs from the findings of Sulasmi, (2021) who demonstrate that structured modeling and communicative engagement significantly enhance the quality of learning strategies. Consequently, the potential of vicarious experience within this context is not utilized optimally. From a theoretical perspective, the effectiveness of vicarious experience depends on the perceived similarity between the observer and the model (Bandura, 1993). When the model is perceived as excessively superior, the modeling process loses its function in strengthening self-efficacy. This suggests that students' low self-efficacy is not only the result of limited personal experience but also reflects the suboptimal functioning of social learning mechanisms.

The low intensity of instruction and the predominance of memorization-based approaches have prevented vocabulary knowledge from developing significantly and from being applied in authentic communication. Some students who had previously memorized a larger number of vocabulary items also indicated that such memorization did not necessarily improve their ability to speak or comprehend texts. Classroom observations further revealed that the vocabulary actively used in discussions remained limited and did not reflect the cumulative learning acquired in earlier educational experiences.

*Social Persuasion and the Illusion of Self-Efficacy through Reward–Punishment*

Social persuasion represents a source of self-efficacy derived from verbal support, social recognition, and external reinforcement. In Arabic vocabulary learning, this dimension is reflected in students' responses to reward–punishment mechanisms and shows a relatively strong response compared to other dimensions. Students reported that punishment encourages improvement in learning behavior, while rewards generate pride and motivation to maintain achievement, thereby increasing compliance and the frequency of vocabulary memorization. These findings align with studies indicating that rewards and feedback strengthen motivation and engagement in language learning (Mochlas et al., 2023). Moreover, learners' self-belief during the learning process plays a crucial role in sustaining motivation and learning interest (Pratt et al., 2020). as motivation functions as a driving force that directs and maintains the intensity of learning behavior toward achieving educational goals (Ryan & Deci, 2020).

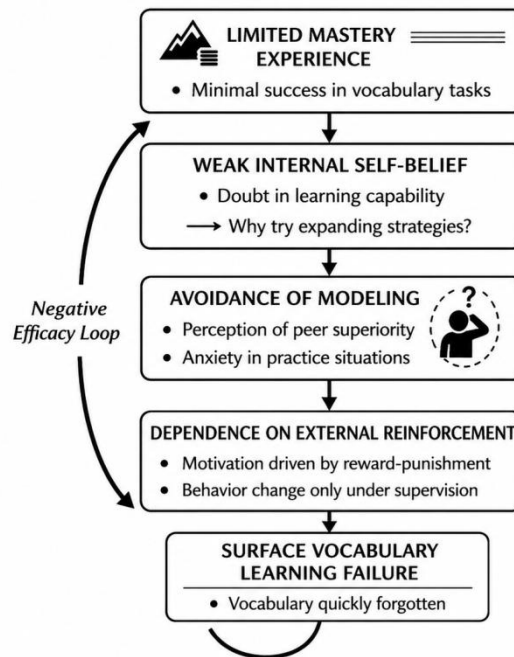
Further analysis indicates that these behavioral changes are situational and dependent on external control. Classroom observations show that when reinforcement is not consistently provided, students' effort declines, reflecting the limited role of social persuasion compared to mastery experience within self-efficacy (Bandura, 1993). This condition is reinforced by the persistence of traditional teaching practices that restrict students' autonomy and communicative engagement (Prasetya et al., 2025). Consistent with previous findings, self-efficacy influences motivation and learning strategies (Hitches et al., 2022) and is closely related to academic performance (Hinduja et al., 2024), while sustained learning depends on self-regulation (Luo et al., 2024). In Arabic vocabulary learning, the effectiveness of learning strategies is also influenced by the alignment between instructional methods and students' learning styles (Amilya & Yul, 2025). Therefore, reward–punishment mechanisms tend to function only as temporary triggers and are insufficient to sustain long-term self-regulation without authentic mastery experiences.

Cross-dimensional analysis reveals an imbalance between the theoretical framework of self-efficacy and the learning realities observed at the pre-intervention stage. A comparison between these theoretical expectations and empirical findings is summarized in the following table:

**Table 3. Theoretical–Empirical Comparison of Self-Efficacy Dimensions**

Self-Efficacy Dimension	Theoretical Expectation	Empirical Finding
Mastery Experience	Strengthens self-belief	Limited & fragmented
Vicarious Experience	Facilitates modeling	Dysfunctional modeling
Social Persuasion	Supportive reinforcement	Dominant but external
Affective State	Potential barrier	Relatively stable

The table highlights a consistent discrepancy between the theoretical assumptions of self-efficacy and the empirical conditions of Arabic vocabulary learning at the pre-intervention stage. The pattern of imbalance across these dimensions is subsequently synthesized into a conceptual model of low self-efficacy at the pre-intervention stage, as illustrated in the following figure.



**Figure 2. Conceptual Model of Pre-Pedagogical Self-Efficacy Deficit in Arabic Vocabulary Learning**

This figure illustrates the pattern of low self-efficacy in Arabic vocabulary learning prior to pedagogical intervention. It shows a negative efficacy loop in which limited mastery experience and dysfunctional vicarious experience weaken learners' internal self-belief, causing them to rely on external reinforcement through reward–punishment mechanisms. As a result, learning behavior tends to produce short-term compliance rather than sustained vocabulary retention, reflecting the pre-pedagogical nature of the self-efficacy deficits identified in this study.

This study offers a conceptual contribution by identifying a pattern of pre-pedagogical self-efficacy deficit in Arabic vocabulary learning. The findings reveal an asymmetrical self-efficacy profile. This pattern indicates that difficulties in vocabulary mastery are not solely attributable to instructional strategies, but also to psychological deficits that emerge prior to pedagogical intervention. The conceptual model proposed through the negative efficacy loop illustrates how limited mastery experiences evolve into a dependence on reward–punishment mechanisms, resulting in short-term compliance without the internalization of self-belief. Therefore, this study extends the self-efficacy literature in the context of Arabic as a Foreign Language (AFL) by emphasizing the importance of needs analysis based on psychological constructs at the pre-intervention stage.

## Discussion

The present study investigated students' self-efficacy in Arabic vocabulary learning prior to pedagogical intervention through an ATEM-based needs analysis framework. The findings revealed an asymmetrical self-efficacy profile characterized by weak internal regulatory dimensions, particularly mastery experience, problem-solving orientation, and vicarious experience, alongside a relatively strong dependence on social persuasion through reward–punishment mechanisms. This pattern suggests that students' difficulties in Arabic vocabulary acquisition are rooted not only in instructional limitations but also in psychological conditions that exist before the learning intervention. Such findings support Bandura's social cognitive theory, which emphasizes that self-efficacy functions as a central determinant of learners' motivation, persistence, and self-regulated learning behaviors. When learners possess low efficacy beliefs, they tend to avoid challenging tasks, exert limited effort, and withdraw quickly when encountering difficulties, ultimately hindering long-term learning development (Bandura, 1993).

One of the most significant findings of this study is the low score of mastery experience, which emerged as the weakest dimension of self-efficacy. According to Bandura, mastery experience represents the most influential source of self-efficacy because successful experiences provide direct evidence of competence and strengthen learners' confidence in performing future tasks. The present findings indicate that students rarely experience meaningful success in Arabic vocabulary learning, resulting in fragile efficacy beliefs and limited confidence in their language abilities. This finding is consistent with recent studies demonstrating that mastery experience significantly predicts language-learning self-efficacy and academic achievement. For example, Wang et al. (2022) found that learners who accumulated successful language-learning experiences exhibited stronger self-regulation and higher achievement outcomes. Similarly, Teng and Zhang (2022) reported that mastery experiences enhance vocabulary retention and learning engagement through increased confidence and persistence. The absence of such experiences in the present study may explain why students tend to perceive Arabic vocabulary learning as difficult and discouraging.

The weakness of mastery experience appears to be closely related to students' educational backgrounds and previous learning experiences. Many participants came from non-Pesantren educational environments and reported limited exposure to Arabic outside the classroom. Furthermore, vocabulary learning was predominantly conducted through memorization-based practices without sufficient contextualized use. Such instructional practices may facilitate short-term recall but often fail to promote meaningful vocabulary acquisition and communicative competence. Recent research in second-language acquisition highlights that vocabulary knowledge develops more effectively when learners repeatedly use words in authentic communicative contexts rather than merely memorizing isolated lexical items. Webb and Nation (2022) argue that contextualized vocabulary learning encourages deeper cognitive processing, thereby strengthening retention and transferability. Consequently, the limited mastery experiences identified in this study may stem from instructional environments that do not adequately support meaningful vocabulary use and successful language performance.

The findings also reveal moderate but underdeveloped problem-solving orientation. Students tended to rely on lecturers or peers when encountering unfamiliar vocabulary rather than independently searching for solutions through dictionaries, contextual inference, or strategic learning behaviors. This tendency reflects weak self-regulated learning and limited learner autonomy. Previous studies have consistently shown that self-efficacy and self-regulated learning are strongly interconnected. Learners with higher self-efficacy are more likely to employ metacognitive strategies, monitor their learning progress, and persist when facing difficulties (Teng & Zhang, 2022).

In contrast, learners with lower efficacy beliefs often depend on external assistance and avoid cognitively demanding tasks. The present findings, therefore, suggest that students' vocabulary difficulties are not merely linguistic problems but also manifestations of insufficient self-regulatory capacity. This interpretation is supported by recent evidence showing that self-regulation significantly predicts vocabulary learning success and foreign language achievement (Zhou & Wang, 2024).

Another important finding concerns the moderate level of vicarious experience. However, students expressed admiration for peers or individuals who demonstrated strong Arabic proficiency; such admiration rarely translated into active modeling behaviors. Instead of using successful peers as learning references, some students reported feelings of inferiority and avoidance. This finding partially contradicts Bandura's proposition that observing successful models should enhance efficacy beliefs, particularly when learners perceive similarity between themselves and the model. Recent studies suggest that modeling is effective only when learners view the model as attainable and relatable. If the perceived competence gap becomes too large, observation may produce discouragement rather than motivation (Schunk & DiBenedetto, 2021). Therefore, the present findings indicate that the social learning mechanisms necessary for effective vicarious experience have not yet functioned optimally within the observed learning environment. This condition further contributes to the persistence of low self-efficacy among students.

In contrast to the weakness of internal efficacy dimensions, social persuasion emerged as the strongest dimension in the study. Students demonstrated a high responsiveness to rewards, praise, and punishment, suggesting that their learning behavior is strongly influenced by external reinforcement. This finding aligns with previous research indicating that rewards and positive feedback can increase motivation and classroom participation in foreign language learning (Mochklas et al., 2023). However, Bandura emphasized that social persuasion alone is insufficient for developing durable self-efficacy unless authentic mastery experiences accompany it. The present study confirms this theoretical argument. Although students appeared motivated when rewards or punishments were implemented, their effort often decreased once external reinforcement was removed. Consequently, learning behavior became compliance-oriented rather than self-regulated. Similar findings were reported by Mercer and Dörnyei (2020), who argued that excessive dependence on external motivational factors may undermine the development of autonomous learning behaviors in language education.

Interestingly, physiological–affective states were found to be relatively stable and did not emerge as the primary obstacle in vocabulary learning. This finding differs from many foreign-language anxiety studies that identify anxiety as a significant barrier to language acquisition. The moderate score in this dimension suggests that students' difficulties are more

strongly associated with cognitive and motivational deficits than with emotional disturbances. In other words, students do not necessarily avoid vocabulary learning because of anxiety; rather, they struggle because they lack sufficient confidence, successful learning experiences, and effective learning strategies. This interpretation is consistent with recent findings indicating that self-efficacy exerts a stronger influence on language achievement than affective variables when learners possess limited prior learning success (Warnis et al., 2019).

Theoretically, this study contributes to the self-efficacy literature by proposing the concept of a pre-pedagogical self-efficacy deficit in Arabic vocabulary learning. Existing studies generally examine self-efficacy after instructional interventions or in relation to learning outcomes. In contrast, the present study identifies a psychological condition that exists before pedagogical intervention takes place. The conceptual model developed in this study demonstrates how limited mastery experiences and dysfunctional vicarious experiences weaken internal efficacy beliefs, forcing learners to depend heavily on external reinforcement. This creates a negative efficacy loop in which students engage in learning primarily to obtain rewards or avoid punishment rather than to develop competence. Such a pattern may explain why vocabulary retention remains low despite repeated instructional exposure.

From a pedagogical perspective, the findings suggest that Arabic vocabulary instruction should move beyond memorization-oriented approaches and focus on strengthening internal sources of self-efficacy. Learning activities should be designed to provide frequent mastery experiences through achievable tasks, contextualized vocabulary use, collaborative problem-solving activities, and reflective learning practices. In addition, instructors should create opportunities for effective peer modeling by exposing learners to relatable examples of successful language users. Rather than relying predominantly on reward–punishment mechanisms, educators should gradually foster learner autonomy and self-regulation. Such instructional practices may help transform external motivation into internalized efficacy beliefs that support sustainable vocabulary development.

Overall, the findings demonstrate that students' difficulties in Arabic vocabulary learning cannot be explained solely by linguistic or instructional factors. Instead, they reflect a broader psychological phenomenon characterized by weak internal efficacy beliefs and excessive reliance on external reinforcement. By identifying this asymmetrical self-efficacy profile, the study provides empirical evidence that needs analysis should incorporate psychological dimensions before instructional interventions are designed. Consequently, the ATEM framework offers a valuable foundation for developing more responsive and psychologically informed approaches to Arabic vocabulary instruction in higher education contexts.

## CONCLUSION

This study identified students' self-efficacy conditions in Arabic vocabulary learning before the instructional intervention through an ATEM-based needs analysis. The findings revealed weaknesses in internal self-efficacy dimensions, particularly mastery experience, problem-solving orientation, and vicarious experience, alongside a stronger reliance on external reinforcement through reward–punishment mechanisms. These results suggest that difficulties in Arabic vocabulary learning are influenced not only by instructional factors but also by learners' psychological readiness before the intervention. The study highlights the importance of mapping learners' self-efficacy profiles as a basis for designing instructional

innovations in Arabic as a Foreign Language (AFL). Pedagogically, Arabic vocabulary instruction should provide authentic mastery experiences, opportunities for peer modeling, and learning activities that strengthen students' autonomy and self-regulation. This study was limited to participants from a single institution and employed descriptive quantitative analysis within a needs analysis framework. Future research is recommended to examine the effectiveness of ATEM-based interventions across diverse educational contexts using experimental or longitudinal designs. Overall, assessing learners' self-efficacy needs before the intervention may contribute to the development of more responsive, psychologically informed Arabic vocabulary instruction.

## ACKNOWLEDGMENT

The authors would like to express their sincere gratitude to the students of the Arabic Language Education Program at the State Islamic Institute (*LAIN*) *Kerinci* for their active participation in this study. Special appreciation is also extended to fellow lecturers who contributed valuable insights during the qualitative data collection process, particularly through interviews and focus group discussions. The authors also acknowledge the institutional support provided by *LAIN Kerinci* in facilitating this research, including access to classrooms and academic resources. Finally, the authors are grateful to all reviewers and colleagues for their constructive feedback, which has significantly improved the quality of this manuscript.

## AUTHOR CONTRIBUTIONS STATEMENT

[WY] contributed as the principal investigator, responsible for conceptualizing the study, developing the research framework, conducting data analysis, and writing the original manuscript. [RA] contributed to the development of the Arabic Teaching Efficacy Model (ATEM) framework, supported the research design, participated in data interpretation, and critically reviewed and revised the manuscript for important intellectual content. Both authors have read and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

## REFERENCES

- Akhiryani, A., Nur Rahma Cahyani, A., & Ahmad Asse. (2024). Analisis Buku Ajar Bahasa Arab Madrasah Tsanawiyah: Tinjauan Mufradat dalam Perspektif Rusydi Ahmad Thu'aimah. *Albariq: Jurnal Pendidikan Bahasa Arab*, 5(1), 45–60. <https://doi.org/10.24239/albariq.v5i1.79>
- Amilya, A., & Yul, W. (2025). Analyzing vocabulary learning through the lens of students' learning styles: A framework for Arabic language teaching. *Shant Al-'arabiyah*, 13(1), 88–102. <https://doi.org/10.24252/saa.v13i1.56156>
- Andrian, R., & Yul, W. (2023). Arabic Teaching Efficacy Model (ATEM): A language teaching model design. *International Journal of Arabic-english Studies*, 23(2), 369–384. <https://doi.org/10.33806/ijaes.v23i2.468>
- Annisa, M., & Safii, R. (2023). Analisis kebutuhan belajar endid Arab sebagai endid asing dalam konteks endidikan tinggi. *ELOQUENCE: Journal of Foreign Language*, 2(2), 313–328. <https://doi.org/10.58194/eloquence.v2i2.861>

- Arce, E., Suárez-García, A., López-Vázquez, J. A., & Fernández-Ibáñez, M. I. (2022). Design Sprint: Enhancing STEAM and engineering education through agile prototyping and testing ideas. *Thinking Skills and Creativity*, 44, 101039. <https://doi.org/10.1016/j.tsc.2022.101039>
- Ashari, K. (2020). Problematika pemilihan materi mufrodat menurut perspektif Rusydi Ahmad Thu'aimah. *El-tsaqafah: Jurnal Jurusan PBA*, 19(2), 216–228. <https://doi.org/10.20414/tsaqafah.v19i2.2370>
- Bandura, A. (1993). Perceived Self-Efficacy in Cognitive Development and Functioning. *Educational Psychologist*, 28(2), 117–148. [https://doi.org/10.1207/s15326985ep2802\\_3](https://doi.org/10.1207/s15326985ep2802_3)
- Bonghawan, R. G. G., & Macalisang, D. (2024). Teachers' learning reinforcement: Effects on students' motivation, self efficacy and academic performance. *International Journal of Scientific Research and Management (IJSRM)*, 12(02), 3218–3228. <https://doi.org/10.18535/ijssrm/v12i02.el08>
- Bouddage, S., & Elfatihi, M. (2018). Foreign language speaking anxiety among 2<sup>nd</sup> year baccalaureate students in Morocco. *International Journal of Arabic-english Studies*, 18, 91–110. <https://doi.org/10.33806/ijaes2000.18.1.5>
- Constantinou, C. P., Nicolaou, C. Th., & Papaevripidou, M. (2019). A Framework for Modeling-Based Learning, Teaching, and Assessment. In A. Upmeyer Zu Belzen, D. Krüger, & J. Van Driel (Eds.), *Towards a Competence-Based View on Models and Modeling in Science Education* (Vol. 12, pp. 39–58). Springer International Publishing. [https://doi.org/10.1007/978-3-030-30255-9\\_3](https://doi.org/10.1007/978-3-030-30255-9_3)
- Ghofur, A., Bahrodin, A., Naseha, S. D., Kaprawiran, I. A. M., Rahman, R. F., Haitsumakunti, I., Imanuddin, A. S., & Jannah, R. (2026). Enhancing Self-Efficacy Through Gamified Learning: Evidence from Arabic Morphology (Şarf) Instruction in Higher Education. *Al-Ta'rib : Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab LAIN Palangka Raya*, 14(1), 169–184. <https://doi.org/10.23971/altarib.v14i1.10599>
- Groothuisen, S., Van Den Beemt, A., Remmers, J. C., & Van Meeuwen, L. W. (2024). AI chatbots in programming education: Students' use in a scientific computing course and consequences for learning. *Computers and Education: Artificial Intelligence*, 7, 100290. <https://doi.org/10.1016/j.caeai.2024.100290>
- Han, S., Eum, K., Kang, H. S., & Karsten, K. (2022). Factors Influencing Academic Self-Efficacy Among Nursing Students During COVID-19: A Path Analysis. *Journal of Transcultural Nursing*, 33(2), 239–245. <https://doi.org/10.1177/10436596211061683>
- Hengki, . & ., & Ratna, . (2025). Self-efficacy and self-confidence strengthening training for high school students and equivalent in activating transactional and interpersonal communication. *NEAR: Jurnal Pengabdian Kepada Masyarakat*, 4(2), 180–189. <https://doi.org/10.32877/nr.v4i2.2368>
- Hinduja, P., Fakir Mohammad, R., & Siddiqui, S. (2024). Factors Influencing Students' Academic Self-Efficacy in Related Domains. *Sage Open*, 14(4), 21582440241289738. <https://doi.org/10.1177/21582440241289738>
- Hitches, E., Woodcock, S., & Ehrich, J. (2022). Building self-efficacy without letting stress knock it down: Stress and academic self-efficacy of university students. *International Journal of Educational Research Open*, 3, 100124. <https://doi.org/10.1016/j.ijedro.2022.100124>

- Honicke, T., Broadbent, J., & Fuller-Tyszkiewicz, M. (2020). Learner self-efficacy, goal orientation, and academic achievement: Exploring mediating and moderating relationships. *Higher Education Research & Development*, 39(4), 689–703. <https://doi.org/10.1080/07294360.2019.1685941>
- Hood, S., Barrickman, N., Djerdjian, N., Farr, M., Magner, S., Roychowdhury, H., Gerrits, R., Lawford, H., Ott, B., Ross, K., Paige, O., Stowe, S., Jensen, M., & Hull, K. (2021). “I Like and Prefer to Work Alone”: Social Anxiety, Academic Self-Efficacy, and Students’ Perceptions of Active Learning. *CBE—Life Sciences Education*, 20(1), ar12. <https://doi.org/10.1187/cbe.19-12-0271>
- Karbakhsh, R., & Safa, M. A. (2020). Basic psychological needs satisfaction, goal orientation, willingness to communicate, self-efficacy, and learning strategy use as predictors of second language achievement: A structural equation modeling approach. *Journal of Psycholinguistic Research*, 49, 803–822. <https://doi.org/10.1007/s10936-020-09714-7>
- Kosim, N., Fauzia, E. L., Annisa, D. N., Nugraha, J. S., & Aljanadbah, A. (2025). The Effectiveness of Thinkable-Based Mobile Learning on Arabic Vocabulary Mastery. *Ta’lim al-‘Arabiyah: Jurnal Pendidikan Bahasa Arab & Kebahasaaraban*, 9(2), 224–242. <https://doi.org/10.15575/jta.v9i2.52274>
- Luo, Q., Ahmadi, R., & Izadpanah, S. (2024). Exploring the mediating role of self-efficacy beliefs among EFL university language learners: The relationship of social support with academic enthusiasm and academic vitality. *Heliyon*, 10(12), e33253. <https://doi.org/10.1016/j.heliyon.2024.e33253>
- Mercer, S., & Dörnyei, Z. (2020). *Engaging language learners in contemporary classrooms*. Cambridge University Press.
- Mochklas, M., Ngongo, M., Sianipar, M. Y., Kizi, S. N. B., Putra, R. E., & Al-Awawdeh, N. (2023). Exploring factors that impact motivation in foreign language learning in the classroom. *Studies in Media and Communication*, 11(5), 60–70. <https://doi.org/10.11114/smc.v11i5.6057>
- Munir, M. (2022). *Rusydi Ahmad Thu’aimah’s and Mahmud Kamil An-Naqah’s opinions on Arabic teaching based on the communicative theory perspective*. *Arabiyatuna: Jurnal Bahasa Arab*, 6, 613–632. <https://doi.org/10.29240/jba.v6i2.4060>
- Nasir, A., Falah, A., & Ali, M. A. M. A. (2026). Holistic Arabic Teaching Materials for Kurikulum Merdeka at State Islamic Higher Education Institutions (PTKIN): A Multisite Study. *Jurnal Al Bayan: Jurnal Jurusan Pendidikan Bahasa Arab*, 18(1), 312–330. <https://doi.org/10.24042/zkbmcg73>
- Neroni, J., Meijs, C., Kirschner, P. A., Xu, K. M., & De Groot, R. H. M. (2022). Academic self-efficacy, self-esteem, and grit in higher online education: Consistency of interests predicts academic success. *Social Psychology of Education*, 25(4), 951–975. <https://doi.org/10.1007/s11218-022-09696-5>
- Nurhidayah, N., Andrian, R., & Yul, W. (2025). A critical analysis of vocabulary acquisition in the absence of contextual language environments: Implications for effective pedagogy. *Ajamiy: Jurnal Bahasa Dan Sastra Arab*, 14(2), 424–440. <https://doi.org/10.31314/ajamiy.14.2.424-440.2025>
- Prasetya, R., Yul, W., & Andrian, R. (2025). An analytical study on the direction and implementation of Arabic as a foreign language instruction at the Ma’had of IAIN

- Kerinci. *Al Mi'yar: Jurnal Ilmiah Pembelajaran Bahasa Arab dan. Kebahasaaraban*, 8(2), 509–517. <https://doi.org/10.35931/am.v8i2.5021>
- Pratt, C., Zaier, A., & Wang, Y. (2020). Foreign language teachers' self-efficacy beliefs and perspectives about maintaining their students' interest. *International Journal of Instruction*, 13(4), 1–16. <https://doi.org/10.29333/iji.2020.1341a>
- Razmi, M. H., Jabbari, A. A., & Fazilatfar, A. M. (2020). Perfectionism, self-efficacy components, and metacognitive listening strategy use: A multicategorical multiple mediation analysis. *Journal of Psycholinguistic Research*, 49(6), 1047–1065. <https://doi.org/10.1007/s10936-020-09733-4>
- Rochmat, C. S., A'yun, Q., Ahmad Hidayatullah Zarkasyi, & Zahirah, S. A. (2025). Analysis of Teacher Self-Efficacy on Increasing Student's Learning Motivation in Arabic Speaking Skill. *International Journal of Arabic Language Teaching*, 7(01), 59–72. <https://doi.org/10.32332/ijalt.v6i02.9351>
- Roslan, N. N. A., & Sahrir, M. S. (2020). The effectiveness of ThingLink in teaching new vocabulary to non-native beginners of the Arabic language. *IIUM Journal of Educational Studies*, 8(1), 32–52. <https://doi.org/10.31436/ijes.v8i1.274>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic And Extrinsic Motivation from a Self-Determination Theory Perspective: Definitions, Theory, Practices, and Future Directions. *Contemporary Educational Psychology*, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Sajidin., & Ashadi, . (2021). How do their group work works as an active learning strategy of EFL learning. *Cakrawala Pendidikan*, 40, 480–491. <https://doi.org/10.21831/cp.v40i2.36234>
- Sarmila, N., Yauri, A. M., & Resyadi, H. (2022). The effectiveness of electronic dictionary in learning vocabulary at Indonesian junior high school context. *International Journal of Research on English Teaching and Applied Linguistics (IJRETAL)*, 3(2), 40–44. <https://doi.org/10.30863/ijretal.v3i2.3903>
- Schunk, D. H., & Dibenedetto, M. K. (2021). Self-efficacy and human motivation. *Advances in Motivation Science*, 8, 153–179. <https://doi.org/10.1016/bs.adms.2020.10.001>
- Siregar, F. H., Siregar, N. I., & Chandra, A. (2026). Self-efficacy as a predictor of teachers' innovative work behavior in Medan City. *Jurnal Psikologi*, 3(2), 1–10. <https://doi.org/10.47134/pjp.v3i2.5452>
- Sulamsi, E. (2021). Effectiveness of Modeling Learning Strategies to improve Student Learning Outcomes. *Budapest International Research and Critics Institute (birci-journal): Humanities and Social Sciences*, 4(1), 926–936. <https://doi.org/10.33258/birci.v4i1.1694>
- Taufiq, A. U., & Ratmanida, . (2025). The role of reading self-efficacy in enhancing high school students' comprehension of argumentative texts. *Al-ishlah: Jurnal Pendidikan*, 17(4), 6087–6096. <https://doi.org/10.35445/alishlah.v17i4.7193>
- Teng, L. S., & Zhang, L. J. (2022). Development of self-regulated learning in language education. *System*, 106, 102772. <https://doi.org/10.1016/j.system.2022.102772>
- Tusquellas, N., López-Villanueva, D., Palau, R., & Santiago, R. (2025). Educational Conceptual Model Design Research Methodology. *Universitas Tarraconensis Revista De Ciències De L Educació*, 2, e4103. <https://doi.org/10.17345/ute.2025.4103>

- Usman, A., Kusumawati, A., & Mannan, A. (2021). The effect of work experience, motivation, and culture on auditor performance mediated by self-efficacy. *Psychology and Education*, 58(1), 474–489. <https://doi.org/10.17762/pae.v58i1.796>
- Wang, Y., & Zhang, W. (2024). The relationship between college students' learning engagement and academic self-efficacy: A moderated mediation model. *Frontiers in Psychology*, 15, 1425172. <https://doi.org/10.3389/fpsyg.2024.1425172>
- Warnis, W., Triana, H. W., Kustati, M., Remiswal, R., & Nelmawarni, N. (2019). Arabic Language as the Icon of Islamic Higher Education: A Study of the Implementation of Arabic Intensive Program. *Tarbiya: Journal of Education in Muslim Society*, 6(1), 103–116. <https://doi.org/10.15408/tjems.v6i1.10910>
- Webb, S., & Nation, P. (2022). Vocabulary learning through meaning-focused input and output. *Language Teaching*, 55(3), 346–365. <https://doi.org/10.1017/S0261444821000545>
- Whiteford, C., Kelly, N., Queensland University of Technology, Dawes, L., & Queensland University of Technology. (2021). Why Become a Teacher? Exploring Motivations for Becoming Science and Mathematics Teachers in Australia Science and Mathematics Teachers in Australia. *Australian Journal of Teacher Education*, 46(3), 1–19. <https://doi.org/10.14221/ajte.2021v46n3.1>
- Xuan, Q., Qin, L., Huang, R., Wang, Y., & Derakhshan, A. (2026). Factors affecting novice and experienced teachers' implementation of task-based language teaching under a framework of fidelity of implementation. *Language Teaching Research*, 13621688251407235. <https://doi.org/10.1177/13621688251407235>
- Yul, W., & Andrian, R. (2024). Indonesian Muslims and Arabic language: Leaves and light in the realm of religi-linguistics. *Alsinatuna: Journal of Arabic Linguistics and Education*, 10(1), 20–43. <https://doi.org/10.28918/alsinatuna.v10i1.8499>
- Yul, W., Rofingah, U., Andrian, R., Muhlasin, M., & Rozanie, J. F. (2023). Unlocking the secret to Arabic fluency: Exploring the critical role of language environment in maximizing Arabic-speaking outcomes. *Journal of Arabic Studies*, 8(1), 2–10. <https://doi.org/10.24865/ajas.v8i1.584>
- Zhou, Y., & Wang, C. (2024). *Self-regulated learning and foreign language achievement: A meta-analysis. System*, 121, 103245. <https://doi.org/10.1016/j.system.2024.103245>
- Zulharby, P., Rasyid, Y., & Nuruddin, N. (2019). The Characteristics of Teaching Material Arabic Speaking Skills in Higher Education. *Jurnal Al-Bayan: Jurnal Jurusan Pendidikan Bahasa Arab*, 11(2), 194–213. <https://doi.org/10.24042/albayan.v11i2.5175>