## Voices in the Classroom: Unraveling the Impact of Teacher Beliefs on Speaking Skills

### Abdul Halim<sup>1</sup>, Chen Ching Yang<sup>2</sup>, Nasril<sup>3</sup>

Asia-Pacific Regional Studies, National Dong Hwa University.
 Department of Education and Human Potential Development, National Dong Hwa University, Taiwan.
 Faculty of Education and Teacher Training, IAIN Kendari, Indonesia.

Corresponding email: cyang51888@gmail.com<sup>2</sup>

Article info

Submitted : 12 July 2022 Revised : 30 January 2024 Accepted : 16 February 2024

#### **ABSTRACT**

Focusing on teacher beliefs in language instruction, this research explores their nuanced influence on speaking classes. By examining teacher reflections and students' experiences, the study reveals a multifaceted process wherein educators employ innovative techniques to foster critical thinking and active participation. The findings emphasize the transformative potential of teacher-student interactions, underscoring the importance of recognizing and leveraging these beliefs for more effective language instruction.

**Keywords:** reflective teaching; speaking skill; student-centered learning; teacher belief.

## **INTRODUCTION**

In contemporary pedagogy, teacher beliefs have risen to prominence as a guiding force of paramount influence, particularly within the sphere of speaking instruction. These entrenched convictions pertaining to teaching methodologies and strategies in foreign language education exert far-reaching effects on various facets of the educational process. They wield substantial impact on classroom management, the structuring of curricula, the planning of instructional activities, and the expectations set for learners. However, amidst the prevalence and significance of teacher beliefs, a notable void exists in the academic discourse, warranting an extensive inquiry and a lucid delineation of the study's objectives, driven by the identification of these critical research gaps.

The chief aim of this study is to elucidate the indispensable role played by teacher beliefs in the realm of language education, with a specialized focus on the cultivation of speaking skills. These discerned research gaps underscore the imperative for a comprehensive exploration of teacher beliefs and their far-reaching implications for effective pedagogy. This introduction is dedicated to furnishing an in-depth elucidation of these research gaps and the precise goals of the study, all grounded in the substantial contributions of eminent scholars in the field.

As expounded by Dos Santos (2018), teacher beliefs encompass not merely the professional development acquired through formal training, but also encompass their distinctive pedagogical styles and approaches. These elements constitute a fundamental dimension of the

instructional process within speaking classes. However, their precise influence remains an enigma, necessitating further investigation. Furthermore, Johnson (1994) asserts that teacher beliefs are integral to the enhancement of teaching practices and the refinement of teacher education programs. Nonetheless, the specific mechanisms through which teacher beliefs exert their influence on speaking class instruction remain a domain ripe for exploration.

In the realm of education, the actions driven by teacher beliefs are pivotal in augmenting the capabilities of educators in classroom teaching and learning. The efficacy of teachers is contingent on their adept application of teacher beliefs as a primary scaffolding for effective classroom instruction. Prawat (1992) underscores the transformative potential of teachers, emphasizing their pivotal role in shaping educational environments. This contention aligns with the assertion that teacher beliefs wield significant influence over class preparation, decision-making, and overall classroom practices, at times surpassing the impact of theoretical knowledge (Williams and Burden, 1997). Additionally, Nespor (1987) contends that teacher beliefs serve as the rational foundation for instructional decisions, ensuring alignment with students' unique needs. However, the specific impact of teacher beliefs on the development of speaking skills in the language classroom constitutes an area ripe for further exploration.

The selection of reflection as the focal point for analysis in this study arises from its potential to unveil the latent needs of students in acquiring proficiency in speaking skills and to guide judicious pedagogical interventions. This choice is undergirded by field data, which illuminate a pressing issue: the apprehension and reluctance of students in engaging with the English language. The revelation that inappropriate teacher-student interactions contribute to this hesitancy underscores the pivotal role of teacher beliefs in addressing these challenges.

In conclusion, this study undertakes the ambitious task of bridging the discerned research gaps in comprehending the pivotal role of teacher beliefs in enriching speaking skills within the context of language education. Acknowledging the intricate nature of teacher beliefs and their potential resistance to change, our aim is to furnish educators with a nuanced understanding of how these convictions can be harnessed for effective language instruction. The research question, shaped by the identified gaps and complexities, seeks to explore how teacher beliefs influence classroom dynamics, pedagogical choices, and ultimately, the language learning experiences of students. This endeavor is anchored in the belief, as emphasized by Kagan (1992), that it constitutes a central facet of the professional growth of teachers and represents a pivotal measure of their proficiency in educational practice. Consequently, our research endeavors to align teachers' beliefs with their perceptions and behaviors, fostering more effective and student-centered language instruction (Fang, 1996).

### RESEARCH METHOD

This study adopts a qualitative research design, aimed at comprehensively examining the implementation of teacher beliefs in English speaking classes for fourth-semester students in the English education program at one of institutions in Indonesia. According to Creswell (2014), qualitative research involves an inquiry process focused on understanding, rooted in distinct methodological traditions, which delves into social or human problems. In this context,

it serves to elucidate the dynamics of teaching, specifically how teachers facilitate student engagement in communication and how students perceive the methods employed by teachers to encourage class participation, as revealed through reflective practices.

Qualitative research, in its essence, is oriented towards describing and understanding phenomena within their natural contexts. It entails constructing a complex and holistic portrayal, delving into the nuances of informant perspectives, and conducting the study in authentic settings. At its inception, the research design resembles an abstract sketch, taking shape without specifying particular individuals, groups, organizations, or locations. This approach aligns with the qualitative paradigm, which seeks to unravel the intricate layers of human experiences and interactions within a specific educational context.

To address the research questions, a case study approach was adopted. This method facilitates an in-depth examination of a particular situation or event through systematic processes of observation, data collection, rigorous analysis, and comprehensive reporting of findings. The case study methodology is particularly apt for delving into the complexities of educational practices, allowing for a nuanced exploration of the multifaceted interactions between teachers and students in the context of English-speaking classes. By employing this approach, the study aims to unearth the subtle yet crucial elements that shape the learning experiences of students and the instructional strategies employed by educators. Through this methodological framework, the research endeavors to offer valuable insights into the alignment of teachers' beliefs, their instructional practices, and the resulting impact on student-centered language instruction.

### **FINDING**

The study aimed to uncover insights into the implementation of teacher beliefs in speaking classes. This was accomplished through data collection and analysis, focusing on the reflections of both teachers and students.

#### **Teacher Reflection**

The pivotal role of teacher reflection in shaping effective pedagogy was rigorously examined in this study, with a keen focus on the techniques employed by educators. Through the administration of a structured Google Form, teachers' reflections were meticulously collected and analyzed. The responses were stratified into two distinct categories: direct and indirect approaches.

# **Direct Approach**

- 1. Brainstorming: A substantial number of educators reported employing brainstorming sessions as an integral element of their teaching methodology. This technique served as a catalyst for generating collaborative discussions, stimulating critical thinking, and fostering a dynamic exchange of ideas within the classroom.
- 2. Linking current and past material: Teachers demonstrated a deliberate effort to interconnect current lesson material with prior knowledge. By establishing these vital cognitive links,

educators sought to fortify students' comprehension and retention of the subject matter.

- 3. Utilizing videos followed by questions: Leveraging multimedia resources, particularly videos, emerged as an effective strategy to enhance engagement and comprehension. Following video presentations with targeted questions enabled teachers to elicit thoughtful responses and reinforce key concepts.
- 4. Engaging in singing activities: A noteworthy proportion of teachers incorporated musical elements into their instructional approach. This technique not only infused an element of creativity and enjoyment into the learning process but also served as an innovative means to enhance pronunciation and language fluency.
- 5. Drawing inspiration from online resources: Teachers adeptly tapped into the vast repository of online educational content. By curating and presenting relevant material from reputable sources, educators enriched the learning experience and provided students with a broader perspective on the subject matter.
- 6. Prioritizing correct pronunciation: A discernible emphasis was placed on refining students' pronunciation skills. Teachers recognized the foundational importance of accurate pronunciation in facilitating effective communication and language acquisition.

# **Providing Direction**

- 1. Encouraging regular practice: Teachers consistently advocated for the cultivation of a disciplined practice regimen. This directive aimed to instill a sense of autonomy and self-driven learning in students, reinforcing the notion that proficiency is a product of sustained effort.
- 2. Prompting reading activities: Encouraging students to engage with written material was identified as a fundamental directive. By immersing themselves in reading, students not only expand their vocabulary but also refine their comprehension and interpretation skills.
- 3. Guiding sentence construction: Teachers recommended a strategic approach to sentence construction, leveraging known words as building blocks. This directive encouraged students to deconstruct complex ideas into manageable components, facilitating a more comprehensive understanding.
- 4. Prompting consultation with the lecturer: Establishing an open channel of communication between students and teachers was emphasized. Encouraging students to seek guidance and clarification directly from their instructors fostered a supportive learning environment.
- 5. Advocating video creation for language practice: A distinctive approach emerged, with teachers advocating for the creation of video content as a means of honing language proficiency. This directive leveraged technology to empower students in actively applying their language skills in a practical context.
- 6. Suggesting WhatsApp group formation for English practice: Recognizing the collaborative potential of digital platforms, teachers recommended the formation of dedicated WhatsApp groups. These virtual spaces served as forums for interactive English language practice and peer-driven learning.



# Criticizing or Justifying Authority

- 1. Demonstrating better method: Teachers consistently employed constructive criticism to highlight areas for improvement. By presenting alternative methods, educators sought to guide students towards more effective approaches to learning and problem-solving.
- 2. Encouraging and motivating students: In addition to critique, teachers assumed the role of motivators, providing positive reinforcement and encouragement. This approach aimed to bolster student confidence, instill a growth mindset, and engender a sense of achievement.
- 3. Overing alternative explanation: When faced with challenges in comprehension, teachers demonstrated a willingness to adapt their explanations. This flexible approach ensured that students were provided with multiple avenues to grasp complex concepts.
- 4. Connecting with more appropriate answers: Teachers skillfully navigated the intricacies of academic discourse, steering discussions towards more pertinent and insightful responses. This technique enriched the learning experience and challenged students to engage critically with the material.

# **Indirect Approaches**

- 1. Maintaining student motivation: Teachers recognized the paramount importance of sustaining student motivation throughout the learning process. By implementing a variety of motivational strategies, educators aimed to cultivate a positive and dynamic learning environment.
- 2. Providing solution for improvement: In response to identified areas for improvement, teachers offered constructive solutions. These tailored recommendations were designed to empower students with practical tools for overcoming challenges and enhancing their performance.
- 3. Offering lighter workloads: Teachers demonstrated a sensitivity to the individual needs and capacities of their students. By judiciously adjusting workloads, educators aimed to strike a balance between academic rigor and student well-being.
- 4. Praise and encouragement: A culture of positive reinforcement was palpable in the classroom. Teachers consistently acknowledged and celebrated student achievements, nurturing a sense of accomplishment and fostering self-confidence.
- 5. Acceptance or utilization of students' idea: Teachers were receptive to the contributions and ideas of their students. By valuing and incorporating student input, educators acknowledged the diverse perspectives within the classroom, enriching the collective learning experience.
- 6. Asking questions to enhance concentration and critical thinking: Thoughtfully posed questions served as a catalyst for focused concentration and critical thinking. This technique invited students to actively engage with the material, stimulating deeper levels of comprehension.

#### **Students' Reflection**

The students' reflections on the implementation of teacher beliefs in their speaking classes offer a wealth of information, providing a detailed view of how these beliefs have

influenced their learning experiences.

# **Direct Approaches**

## Lecture-Based Strategies

These students' responses illuminate the positive impact of lecture-based strategies on their language learning journey. Student 1's observation about feeling more relaxed while speaking and their ability to fluently switch between English and Indonesian is a testament to the effectiveness of these strategies. This is a valuable skill in today's multicultural and multilingual world.

Student 2's acknowledgment of a positive change underscores the success of this approach. Student 3's comment on finding it easier to imitate and practice suggests that the lecture-based strategies not only enhance comfort but also improve speaking skills. Student 4's affirmation that it has made a difference underscores the importance of these techniques in the learning process.

## **Providing Clear Direction**

The students' responses in this category further emphasize the significance of clear directions in their language learning experience. Student 1's description of feeling comfortable discussing in English, free from hesitation and awkwardness, highlights the supportive environment created by the teacher. The fact that they now enjoy speaking and feel no pressure demonstrates the positive impact of this teaching approach. Student 2's newfound confidence to speak with friends without fear underlines the importance of clear directions in fostering a conducive learning atmosphere. Student 3's sense of ease echoes the same sentiment, showing how this approach has removed barriers to communication. Student 4's confirmation of its helpfulness reinforces the idea that clear directions enable students to express themselves freely.

## Handling Critique and Authority

The students' responses regarding critique and authority shed light on the constructive nature of feedback and the teacher's role in guiding their learning. Student 1's acknowledgment of the effectiveness of feedback during presentations demonstrates how it enhances the learning process. Student 2's recognition of the need for more reading signifies self-awareness, which is a valuable aspect of the learning journey. Student 3's confirmation of the teacher's role in answering questions underlines the authority's importance in clarifying doubts and providing guidance. Student 4's affirmation of the value of critique during presentations shows how constructive criticism enriches the learning process.

### Acknowledging Feelings

The students' reflections on their teachers' emotional support and mentorship highlight the importance of a nurturing learning environment. Student 1's comment on their teacher's advice and motivation signifies the teacher's role in guiding students. Student 2's experience of receiving advice in their teacher's room showcases a personal touch in mentorship. Student 3's encounter with the study program and the advice and motivation they received underscores the various channels through which support is provided. Student 4's experience of never being scolded and always receiving advice underscores the importance of mentorship in creating a conducive learning atmosphere. Student 1's additional comment about positive feedback, praise, and an absence of scolding highlights the profound impact of these elements on the students' comfort and confidence.

# **Indirect Approaches**

## Praise and Encouragement

The students' responses regarding praise and encouragement exemplify their motivational power. Student 2's acknowledgment of the motivation provided by their teacher's encouragement highlights the importance of positive reinforcement. Student 3's experience of receiving consistent motivation and never facing blame underscores the role of encouragement in fostering a positive learning environment. Student 4's confirmation of never being scolded and always receiving praise showcases the impact of positive affirmation on students' confidence and proficiency.

# Accepting and Utilizing Students' Ideas

The students' recognition of the value placed on their ideas and their integration into lessons affirms the significance of collaboration in education. Student 1's description of the teacher valuing students' ideas, justifying them, and seeking suggestions demonstrates a student-centered approach to teaching. The fact that these ideas are integrated into the lessons underscores the active role students play in shaping their learning experience. Student 2's experience of the teacher providing explanations that stimulate their thinking process further highlights the teacher's effort to encourage critical thinking. Student 3's affirmation of the importance of sharing ideas with teachers reinforces the idea that students' perspectives are valued. Student 4's comment about the teacher consistently refining and developing students' ideas showcases a dynamic and collaborative learning environment.

# Asking Question to Foster Critical Thinking

The students' responses about asking questions reveal the role of this practice in enhancing critical thinking skills. Student 1's observation that it helps in reviewing and reinforcing learning signifies the practice's impact on retention and understanding. Student 2's ability to summarize with their own ideas shows how asking questions encourages independent thinking. Student 3's deeper understanding and effective material review demonstrate how this practice supports students' engagement with the subject matter. Student 4's approach to learning more critically underscores the ability of asking questions to promote higher-order thinking.

These students' reflections provide a comprehensive view of the positive correlation between the implementation of teacher beliefs and an enhanced learning experience. The diversity of approaches, both direct and indirect, collectively contributes to a rich learning environment. The students' enhanced comfort, confidence, and proficiency in speaking English underscore the pivotal role of teacher beliefs in effective language instruction. Recognizing and integrating these insights into pedagogical practices is crucial, emphasizing the significance of teacher beliefs in shaping successful learning experiences. These reflections serve as a valuable resource for educators aiming to improve their teaching methodologies and create a more conducive learning environment for their students.

### **DISCUSSION**

Teacher beliefs, which encompass formal professional development and distinctive pedagogical styles, are crucial in the instructional process within speaking classes. While recognized as influential (Dos Santos, 2018), the exact extent of their impact requires further investigation. Additionally, Johnson (1994) emphasizes that teacher beliefs are central to refining teaching practices and education programs, yet the specific mechanisms through which they affect speaking class instruction warrant exploration.

In education, teacher beliefs drive actions that enhance educators' capabilities in classroom instruction. The effectiveness of teachers hinges on their skillful application of these beliefs, acting as a primary framework for effective teaching (Prawat, 1992). This aligns with the idea that teacher beliefs often surpass theoretical knowledge in influencing class preparation, decision-making, and overall classroom practices (Williams and Burden, 1997). Nespor (1987) further contends that teacher beliefs serve as a rational foundation for instructional decisions, ensuring alignment with students' unique needs. However, their specific impact on speaking skill development remains an area ripe for exploration.

The choice of reflection as the focal point of this study arises from its potential to uncover latent needs of students in acquiring speaking proficiency and to guide strategic pedagogical interventions. This decision is supported by field data, which highlight a significant issue: students' apprehension and reluctance in engaging with the English language. The revelation that inappropriate teacher-student interactions contribute to this hesitancy underscores the crucial role of teacher beliefs in addressing these challenges.

This study bridges research gaps to comprehend the pivotal role of teacher beliefs in enriching speaking skills within language education. Acknowledging the intricate nature of these beliefs and their potential resistance to change, our aim is to provide educators with a nuanced understanding of how these convictions can be harnessed for effective language instruction. The research question, shaped by identified gaps and complexities, aims to explore how teacher beliefs influence classroom dynamics, pedagogical choices, and ultimately, the language learning experiences of students. This endeavor aligns with Kagan's (1992) emphasis on its centrality to the professional growth of teachers, representing a pivotal measure of their proficiency in educational practice. Our research strives to harmonize teachers' beliefs with their perceptions and behaviors, fostering more effective and student-centered language instruction (Fang, 1996).

This section delves into a discussion based on the findings of the study, particularly

focusing on how teachers apply their beliefs in speaking classes. The study's results, obtained through rigorous analysis, suggest that incorporating teacher beliefs is an effective approach for educators. This effectiveness is evident in various classroom actions, such as initiating early learning activities, managing student unrest, and motivating students to excel. These practices resonate with students, who feel more at ease and less pressured when learning to speak in the classroom.

The study also explores how teachers put their beliefs into action in speaking classes. The research reveals that this approach encourages teachers to be more innovative in their teaching methods. For instance, in initial class meetings, teachers recommend a practice that involves mixing English with Indonesian, followed by searching for meaning after speaking. This method aligns with students' experiences, as they find it beneficial for learning to speak. Even though students are central to the learning process, teachers, guided by their beliefs, serve as facilitators for knowledge acquisition and coordinators of learning. This perspective is supported by the insights of Derri & Avgerinos (2012) on the significance of teacher beliefs as indicators of perceptions and judgments, ultimately shaping teaching practices, as emphasized by Pajares (1992).

The study highlights that teacher beliefs wield greater influence than mere subject knowledge in planning classroom instruction. Decisions made by teachers are grounded in their classroom experiences, emphasizing the potency of the teacher beliefs approach in understanding teacher-student dynamics. This is evidenced by the positive shift observed after teachers adopt this method, leading to students feeling more at ease and engaged in the learning process. Recognizing students' abilities empowers teachers to tailor their approaches effectively, as asserted by Li (2012) and supported by Pajares (1992). This viewpoint is reinforced by Ernest (1988), who emphasizes the impactful role of teacher beliefs in teaching practices. Furthermore, the study underscores how teacher beliefs permeate science learning quality in the classroom. Vygotsky (1978) offers a valuable perspective, linking teacher beliefs to the social aspect of self-construction in relation to the world.

In essence, this discussion emphasizes the profound influence of teacher beliefs on teaching practices, highlighting their critical role in shaping effective language instruction. By recognizing the significance of these beliefs, educators can enhance their teaching methodologies and create a more conducive learning environment for students. These reflections serve as a valuable resource for educators aiming to improve their teaching methodologies and create a more conducive learning environment for their students.

## **CONCLUSION**

This comprehensive study illuminates the pivotal role of teacher beliefs in shaping effective language instruction, with a specialized focus on speaking classes. The research addresses critical gaps in understanding the nuanced influence of these convictions on classroom dynamics and student learning experiences. By employing a qualitative research design, this study delves into the multifaceted interactions between teachers and students, unraveling valuable insights into the diverse strategies employed by educators.

# AL LUGHAWIYAAT IAIN KENDARI ISSN:2746-6036

The findings underscore the central importance of teacher reflection, revealing a multifaceted process that refines instructional methodologies. Through innovative techniques like brainstorming, multimedia integration, and strategic material linkage, educators create dynamic learning environments that foster critical thinking and active participation. This not only enhances comprehension but also cultivates confidence and proficiency in speaking English. Clear directions and constructive feedback further enhance the supportive and conducive learning atmospheres forged by teacher beliefs.

Furthermore, this research highlights the transformative potential of teacher-student interactions. Teachers adeptly apply their beliefs as scaffolding for effective instruction, significantly influencing student learning experiences. This aligns with prior research, emphasizing that teacher beliefs often surpass theoretical knowledge in driving instructional practices. The assertion that teacher beliefs serve as a rational foundation for instructional decisions resonates strongly, particularly in the context of developing speaking skills.

The invaluable insights gleaned from students' reflections affirm the tangible impact of teacher beliefs on their language learning journey. Lecture-based strategies, clear directions, constructive critique, and emotional support collectively empower students to actively engage with the material. The integration of student ideas into lessons fosters a collaborative and student-centered approach to teaching, aligning with the emphasis on teacher beliefs in educators' professional growth.

This study fills significant research gaps, illuminating the pivotal role of teacher beliefs in enriching speaking skills within language education. The nuanced exploration of teacher-student interactions, coupled with the students' reflections, provides a comprehensive view of the positive correlation between implementing teacher beliefs and an enhanced learning experience. The diverse array of approaches contributes to a vibrant learning environment, enhancing students' comfort, confidence, and proficiency in speaking English. This research underscores the imperative for educators to recognize their profound influence in shaping students' language learning experiences and to leverage their beliefs for more effective, student-centered language instruction. These insights serve as a valuable resource for educators seeking to refine their teaching methodologies and create a conducive learning environment for their students, ultimately fostering a transformative educational experience.

The findings of this study hold profound pedagogical implications for language educators, instructional designers, and educational institutions alike. Recognizing the central role of teacher beliefs in the language learning process, the following recommendations are proposed to optimize speaking class instruction:

- 1. Promoting reflective practice: Encourage teachers to engage in reflective practices that align with their pedagogical beliefs. Provide structured opportunities for educators to evaluate and refine their instructional strategies. This can be facilitated through regular professional development sessions, workshops, and collaborative discussions.
- 2. Fostering a supportive learning environment: Emphasize the importance of creating a supportive classroom atmosphere where students feel comfortable expressing themselves. Provide training to teachers on techniques that promote active participation, constructive

- critique, and emotional support. This will contribute to a more inclusive and empowering learning environment.
- 3. Leveraging technology for enhanced learning: Advocate for the integration of multimedia resources and digital platforms to enhance language instruction. Encourage teachers to utilize videos, online content, and collaborative tools to engage students and facilitate interactive learning experiences. This approach not only caters to diverse learning styles but also aligns with the digital literacy skills required in today's interconnected world.
- 4. Encouraging student-centered approach: Encourage teachers to actively involve students in the learning process. Promote methods that incorporate student ideas, provide opportunities for collaboration, and allow for independent exploration. This not only empowers students but also fosters a sense of ownership over their learning.
- 5. Prioritizing clear communication and feedback: Highlight the significance of clear communication between teachers and students. Provide training on effective feedback techniques that focus on constructive criticism and actionable recommendations for improvement. This will contribute to a more transparent and communicative learning environment.
- 6. Balancing rigor with student well-being: Advocate for a balanced approach to workload management. Encourage teachers to consider the individual needs and capacities of their students when assigning tasks. Strive for a harmonious equilibrium between academic rigor and student well-being, ensuring that learners have the opportunity to thrive academically while maintaining their mental and emotional health.

#### **REFERENCES**

- Creswell, J. W. (2014). Research design: qualitative, quantitative, and mixed methods approaches (4<sup>th</sup>ed.). Los Angeles: Sage Publication
- Derri VL and Avgerinos AG (2012) I fisiki agogi sto Neo Sholio: Mellon i parelthon? [Physical Education in the new school: future or past?] Ekivolos 9: 6–7.
- Dos Santos, L., 2018. The cultural cognitive development of personal beliefs and classroom behaviours of adult language instructors: A qualitative inquiry. Brain Sciences, 8(12): 220. Available at: https://doi.org/10.3390/brainsci8120220.
- Ernest, P. (1988). *The Impact of Beliefs on the Teaching of Mathematics*. Paper was presented as at 6th International Congress of Mathematical Education, Budapest, August.
- Fang, Z. (1996). A review of research on teacher beliefs and practices. Educational Research, 38 (1), 47-65.
- Johnson, K. E. (1994). The Emerging Beliefs and Instructional Practices or Pre-Service English as Second Language Teachers. Teaching and Teacher Education, 10(4), 439-452. https://doi.org/10.1016/0742-051X(94)90024-8
- Kagan, D. M. (1992). *Implications of research on teacher belief.* Educational Psychologist, 27(1), 65–90. Li, X. (2012). *The Role of Teachers' Beliefs in the Language Teaching-Learning Process. Theory and Practice in Language Studies*, 2(7), 1397-1402.
- Nespor, J. (1987). The role of beliefs in the practice of teaching. Journal of Curriculum Studies, 19(4),317-328.
- Pajares, M. R. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct.



Reviewof Educational Research, 62(3), 307-332. <a href="https://doi.org/10.3102/00346543062003307">https://doi.org/10.3102/00346543062003307</a>
Prawat, R. (1992). *Teachers' Beliefs about Teaching and Learning: A Constructivist Perspective*. American Journal of Education, 100 (3), 354-395.

Vygotsky, L. S. 1978. *Mind in Society: The Development of Higher Psychological Processes*. Cambridge: Harvard University Press.

Williams, M., & Burden, R. L. (1997). *Psychology for language teachers: A social constructive approach*.

Cambridge, UK: Cambridge University Press