Al-Ishlah: Jurnal Pendidikan
Vol.18, 2 (June, 2026), pp. 1806-1818
ISSN: 2087-9490 EISSN: 2597-940X, DOI: 10.35445/alishlah.v18i2.9940

Spiritual Values in Digital English Learning Media: Effects on Teaching Competence and Student Outcomes among Elementary School Teachers

Ishak*[1], Desri Arwen[2], Euis Yanah Mulyanah[3]

[1] Universitas Muhammadiyah Tangerang, Indonesia; ishak@umt.ac.id
[2] Universitas Muhammadiyah Tangerang, Indonesia; desri.arwen@umt.ac.id
[3] Universitas Muhammadiyah Tangerang, Indonesia; euis.yanah@umt.ac.id

ARTICLE INFO

Keywords:

spiritual value;
teaching competence;
teacher-perceived student outcomes;
digital english earning;
TPACK

Article history:

Received 2026-04-27
Revised 2026-05-22
Accepted 2026-06-03

ABSTRACT

The integration of spiritual values into digital English learning media offers a potential approach to strengthening teacher professionalism and improving student-related learning outcomes. However, empirical evidence explaining how spiritual values affect teaching competence and student outcomes in technology-supported elementary English instruction remains limited. This study employed a quantitative cross-sectional survey design involving 150 elementary school teachers in Tangerang Regency, Indonesia. Data were collected using a structured 5-point Likert-scale questionnaire measuring Spiritual Value, Teaching Competence, and Teacher-Perceived Student Outcomes. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4 to evaluate the measurement model, structural relationships, and mediating effect. The measurement model demonstrated satisfactory validity and reliability, with outer loadings above 0.70, AVE values above 0.50, composite reliability values above 0.90, and HTMT values below 0.90. The structural model showed that Spiritual Value significantly influenced Teaching Competence ($\beta = 0.592$, $p < 0.001$) and Teacher-Perceived Student Outcomes ($\beta = 0.179$, $p = 0.036$). Teaching Competence also had a strong positive effect on Teacher-Perceived Student Outcomes ($\beta = 0.724$, $p < 0.001$). Mediation analysis confirmed that Teaching Competence significantly mediated the relationship between Spiritual Value and Teacher-Perceived Student Outcomes ($\beta = 0.428$, $p < 0.001$). The findings suggest that spiritual values contribute to student-related outcomes primarily by enhancing teachers' instructional competence. This study extends the TPACK framework by emphasizing the role of value-based and ethical dimensions in digital English teaching. It also highlights the need for teacher development programs that integrate pedagogical, technological, and spiritual dimensions.

Corresponding authors:
Ishak
Universitas Muhammadiyah Tangerang, Indonesia; ishak@umt.ac.id

1. INTRODUCTION

English language education is increasingly recognized as a crucial component of the global education system due to its role as a lingua franca that facilitates communication across diverse social, academic, and professional contexts worldwide. This importance is closely associated with globalization, technological advancement, and the expansion of multilingual communication practices, particularly in non-native English-speaking countries, which underscores the need for effective language policies that address linguistic hegemony and promote multilingual pedagogies (Rose et al., 2022; Zeng & Yang, 2024). The shift towards Global Englisher and English Medium Instruction (EMI) reflects a growing emphasis on multilingualism and the need to challenge traditional native speaker norms, thereby promoting linguistic equity and social justice in English language teaching (ELT) (Rose et al., 2022; Rose & McKinley, 2025). This shift is further reinforced by frameworks such as the Common European Framework of Reference for Languages (CEFR), which support heteroglossic pedagogies and communicative competence in linguistically diverse contexts (Savski & Prabjandee, 2022).

The rapid development of digital technologies has transformed educational practices across all levels of schooling, including English language teaching (ELT). In contemporary educational environments, teachers are expected not only to possess technological and pedagogical competencies but also to demonstrate ethical and moral responsibility in facilitating meaningful learning experiences. The increasing integration of digital learning media into classroom instruction has created opportunities for more interactive, flexible, and student-cantered learning processes. However, technological advancement alone does not guarantee educational quality. Recent studies emphasize that effective teaching requires the integration of cognitive, pedagogical, and value-based dimensions to ensure that learning remains meaningful, ethical, and responsive to learners' developmental needs (Mishra & Koehler, 2006). Consequently, educational researchers have increasingly highlighted the importance of incorporating moral and spiritual dimensions into technology-enhanced learning environments.

Spiritual values represent an important aspect of teacher professionalism because they influence teachers' beliefs, attitudes, commitment, and ethical decision-making in educational settings. Previous studies have demonstrated that teachers who internalize strong spiritual and moral values tend to exhibit greater professional responsibility, instructional commitment, and sensitivity toward students' needs (Sunarya & Suryadi, 2025). Spiritual values may also contribute to the development of positive classroom climates by promoting discipline, respect, empathy, and social responsibility. In educational contexts characterized by rapid technological change, spiritual values can function as an internal guiding framework that supports teachers in balancing technological innovation with educational ethics. Therefore, the integration of spiritual values into digital learning environments may provide an important foundation for strengthening teacher competence and improving educational outcomes.

Teacher competence remains one of the most influential factors affecting educational effectiveness and student development. Competent teachers are better able to design learning activities, manage classrooms, facilitate student participation, and create supportive learning environments. Previous research consistently indicates that pedagogical competence contributes significantly to student engagement, motivation, academic achievement, and overall learning experiences (Darling-Hammond et al., 2020; OECD, 2023). Within digital learning environments, teaching competence becomes even more critical because teachers are required to integrate technological resources with effective instructional strategies. Consequently, educational outcomes are often influenced not only by the availability of technology but also by teachers' ability to utilize such technology in pedagogically meaningful ways. In this study, Students' Effect Based on Teachers' Perspective refers to teachers' perceptions of student-related outcomes resulting from classroom instruction, including student engagement, classroom participation, learning motivation, discipline, and positive learning experiences. Therefore, the construct represents perceived student outcomes rather than direct measures obtained from students.

Despite the growing interest in value-based education and technology-enhanced learning,

empirical studies examining the structural relationships among Spiritual Value, Teaching Competence, and Students' Effect Based on Teachers' Perspective remain limited. Existing research has primarily focused on the integration of religious values in curriculum content, character education, or student development, while relatively few studies have investigated how spiritual values influence educational outcomes through teacher-related mechanisms (Muhalim, 2023; Nor et al., 2025). Furthermore, previous studies often rely on descriptive or qualitative approaches and rarely employ advanced statistical techniques to examine the mediating processes underlying educational effectiveness. Consequently, there remains a significant research gap regarding the empirical validation of structural models that explain how spiritual values contribute to student-related outcomes through the enhancement of teaching competence.

The present study addresses this gap by proposing a structural model in which Spiritual Value functions as an antecedent of Teaching Competence and indirectly influences Students' Effect Based on Teachers' Perspective through a mediating mechanism. The proposed framework is grounded in the Technological Pedagogical Content Knowledge (TPACK) model and Self-Determination Theory (SDT). While TPACK emphasizes the integration of technology, pedagogy, and content knowledge in teaching practices (Mishra & Koehler, 2006), SDT highlights the importance of intrinsic motivation, autonomy, competence, and relatedness in shaping professional behaviour and educational outcomes (Ryan & Deci, 2020). The integration of spiritual values may strengthen teachers' intrinsic motivation, professional identity, and pedagogical commitment, thereby enhance their teaching competence and contribute to more positive student outcomes. This perspective extends existing theoretical frameworks by incorporating value-based dimensions into technology-supported educational contexts.

The novelty of this study lies in the development and empirical validation of a value-based teacher development model in which Spiritual Value functions as an antecedent of Teaching Competence and indirectly enhances Students' Effect Based on Teachers' Perspective through a mediating mechanism. This model extends existing TPACK perspectives by incorporating spiritual dimensions into digital English language teaching and teacher professional development. Accordingly, this study seeks to: (1) examine the effect of Spiritual Value on Teaching Competence; (2) examine the effect of Spiritual Value on Students' Effect Based on Teachers' Perspective; (3) examine the effect of Teaching Competence on Students' Effect Based on Teachers' Perspective; and (4) investigate the mediating role of Teaching Competence in the relationship between Spiritual Value and Students' Effect Based on Teachers' Perspective. Through the application of Partial Least Squares Structural Equation Modelling (PLS-SEM), the study aims to provide empirical evidence regarding the role of spiritual values in strengthening teacher competence and improving student-related educational outcomes within technology-supported learning environments.

2. METHODS

The use of Partial Least Squares Structural Equation Modeling (PLS-SEM) in this study was applied as the primary analytical technique to examine the relationships among religious value integration, digital learning media, and teacher professional competence, rather than merely as a general methodological approach in educational research (Guillén-Gámez et al., 2023; Sofwan et al., 2024). This study employed a quantitative cross-sectional survey design, focusing on data collected from primary school teachers to analyze the structural relationships among the constructs. While previous studies have highlighted the usefulness of PLS-SEM in technology education (Tzafilkou et al., 2023), the present study specifically utilizes PLS-SEM to test both measurement and structural models within the proposed framework, including the evaluation of indicator loadings, composite reliability (CR), average variance extracted (AVE), and discriminant validity using the HTMT criterion (Suzer & Koc, 2024; Zhou, 2023).

The instrument used in this study was a structured questionnaire based on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) designed to measure key constructs, namely religious value

integration, pedagogical competence, and learning engagement. The questionnaire development followed established procedures in prior studies (Guillén-Gámez et al., 2023; Zhou, 2023), including pilot testing and validation to ensure construct reliability and validity, as indicated by acceptable Cronbach Alpha, CR, and AVE values. Although previous research discusses instrument development in general terms (Mercado Borja & Barrera Navarro, 2023), this study applies the validated instrument directly to assess teachers' perceptions and practices related to digital learning media integrated with religious values.

The participants of this study consisted of 150 primary school teachers (N = 150) in Tangerang Regency, Indonesia, selected through random sampling to ensure representativeness and minimize sampling bias (Sofwan et al., 2024; Sofyan et al., 2023). The selection of this sample size is consistent with PLS-SEM requirements for stable parameter estimation and adequate statistical power. The research context was chosen due to its relevance in terms of diverse educational settings and increasing adoption of digital learning technologies (Margely Rolón, 2023; Jazil et al., 2025).

Prior to data collection, ethical approval was obtained from the relevant institutional authority, and informed consent was secured from all participants, ensuring confidentiality and voluntary participation in accordance with research ethics standards. Data collection was conducted through the distribution of structured questionnaires, and responses were screened to ensure completeness and accuracy before analysis.

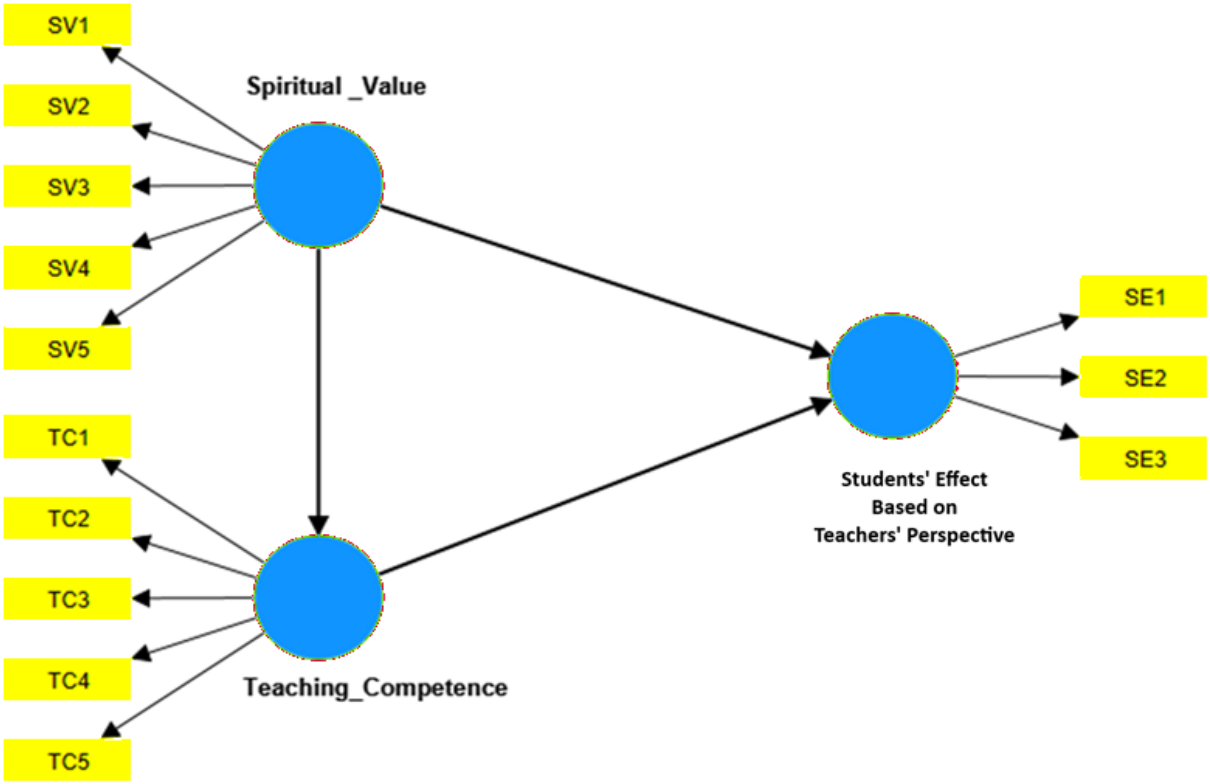

Figure 1. Research Model

Data analysis was conducted using SmartPLS 4.1, following standard PLS-SEM procedures, including measurement model evaluation (outer model) and structural model assessment (inner model). The measurement model was assessed based on indicator reliability (loading > 0.70), internal consistency reliability (Cronbach Alpha and CR > 0.70), and convergent validity (AVE > 0.50), while discriminant validity was evaluated using the Heterotrait–Monotrait Ratio (HTMT < 0.90) and the Fornell–Larcker criterion (Napontun et al., 2025; Sánchez-Ibáñez & Cimino, 2023). The structural model was evaluated through bootstrapping procedures to obtain path coefficients (β), t-values, p-values, and

coefficients of determination (R^2), enabling the testing of hypotheses related to the influence of digital learning media and religious value integration on teacher professional competence (Dybro Liengaard, 2024; Shi et al., 2024).

3. FINDINGS AND DISCUSSION

3.1 Findings

The findings of this study were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4 to examine the relationships among Spiritual Value, Teaching Competence, and Students' Effect Based on Teachers' Perspective. The measurement model evaluation demonstrated satisfactory validity and reliability across all constructs.

Table 1. Measurement Model Evaluation: Convergent Validity and Construct Reliability

Construct	Indicator	Outer Loading	AVE	Cronbach's Alpha	Composite Reliability	Interpretation
Spiritual Value	SV1	0.873	0.834	0.950	0.962	Valid and Reliable
	SV2	0.905				Valid
	SV3	0.928				Valid
	SV4	0.922				Valid
	SV5	0.937				Valid
Teaching Competence	TC1	0.911	0.839	0.952	0.963	Valid and Reliable
	TC2	0.885				Valid
	TC3	0.944				Valid
	TC4	0.931				Valid
	TC5	0.909				Valid
Students' Effect Based on Teachers' Perspective	SE1	0.940	0.873	0.927	0.954	Valid and Reliable
	SE2	0.938				Valid
	SE3	0.925				Valid

The outer loading values of all indicators exceeded the recommended threshold of 0.70, indicating strong indicator reliability and convergent validity. Specifically, the indicators of Spiritual Value ranged from 0.873 to 0.937, Teaching Competence ranged from 0.885 to 0.944, and Students' Effect Based on Teachers' Perspective ranged from 0.925 to 0.940. These findings confirm that all indicators adequately represented their respective latent constructs and were appropriate for further structural analysis.

Furthermore, the convergent validity assessment using Average Variance Extracted (AVE) revealed that all constructs exceeded the recommended value of 0.50. Spiritual Value obtained an AVE of 0.834, Teaching Competence achieved 0.839, and Students' Effect Based on Teachers' Perspective reached 0.873. These results indicate that each construct explained more than 50% of the variance of its indicators, thereby confirming satisfactory convergent validity. In addition, the reliability assessment showed high internal consistency, with Cronbach's Alpha and Composite Reliability values exceeding 0.90 for all constructs. Such results indicate that the research instrument possesses strong reliability and measurement stability.

The discriminant validity assessment using the Heterotrait-Monotrait Ratio (HTMT) also

demonstrated acceptable results.

Table 2. Discriminant Validity Assessment Using HTMT Ratio

Construct	Spiritual Value	Teaching Competence	Students' Effect Based on Teachers' Perspective
Spiritual Value	—	0.819	0.684
Teaching Competence	0.819	—	0.803
Students' Effect Based on Teachers' Perspective	0.684	0.803	—

All HTMT values were below the threshold of 0.90, indicating that each construct was empirically distinct from the others. This finding suggests that Spiritual Value, Teaching Competence, and Students' Effect Based on Teachers' Perspective represent conceptually different dimensions within the proposed structural model. Consequently, the measurement model fulfilled all requirements for validity and reliability testing in PLS-SEM analysis.

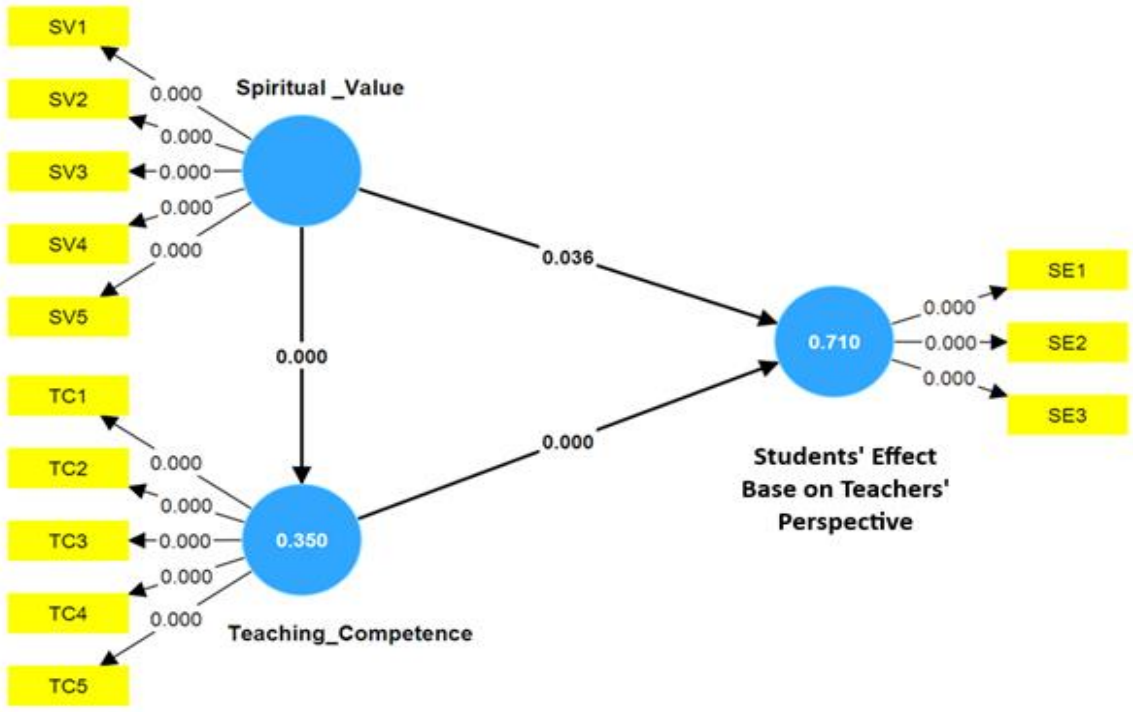

Figure 2. Final Structural Model (PLS-SEM Output)

The structural model evaluation revealed statistically significant relationships among the constructs. The path coefficient analysis showed that Spiritual Value had a positive and significant effect on Students' Effect Based on Teachers' Perspective ($\beta = 0.179$, $T = 2.100$, $p = 0.036$). In addition, Spiritual Value significantly influenced Teaching Competence ($\beta = 0.592$, $T = 5.487$, $p = 0.000$). The strongest relationship was identified between Teaching Competence and Students' Effect Based on Teachers' Perspective ($\beta = 0.724$, $T = 8.708$, $p = 0.000$). These findings indicate that teaching competence plays a central mediating role in enhancing student outcomes within the educational process.

Table 3. Hypothesis Testing Results of the Structural Model

Hypothesis	Relationship	Path Coefficient (β)	T-Statistics	P-Values	Decision
H1	Spiritual Value → Students' Effect Based on Teachers' Perspective	0.179	2.100	0.036	Supported
H2	Spiritual Value → Teaching Competence	0.592	5.487	0.000	Supported
H3	Teaching Competence → Students' Effect Based on Teachers' Perspective	0.724	8.708	0.000	Supported

As shown in Table 3, all hypothesized relationships were positive and statistically significant. Spiritual Value significantly influenced Students' Effect Based on Teachers' Perspective ($\beta = 0.179$, $T = 2.100$, $p = 0.036$), indicating that higher spiritual value contributes positively to student outcomes. Furthermore, Spiritual Value demonstrated a significant positive effect on Teaching Competence ($\beta = 0.592$, $T = 5.487$, $p < 0.001$). The strongest relationship was identified between Teaching Competence and Students' Effect Based on Teachers' Perspective ($\beta = 0.724$, $T = 8.708$, $p < 0.001$), confirming the dominant role of teaching competence in improving student-related outcomes. Therefore, all proposed hypotheses were supported

The coefficient of determination (R-square) analysis further demonstrated that the model possesses substantial explanatory power. The Students' Effect Based on Teachers' Perspective construct obtained an R-square value of 0.710, indicating that 71.0% of the variance in Students' Effect Based on Teachers' Perspective can be explained by Spiritual Value and Teaching Competence. Meanwhile, Teaching Competence obtained an R-square value of 0.350, meaning that 35.0% of its variance is explained by Spiritual Value. These results suggest that the proposed model has strong explanatory capability for student outcomes and moderate explanatory power for teaching competence. The effect size (f-square) analysis indicated varying levels of influence among the relationships in the model. Spiritual Value showed a small direct effect on Students' Effect Based on Teachers' Perspective ($f^2 = 0.072$), but demonstrated a large effect on Teaching Competence ($f^2 = 0.538$). Furthermore, Teaching Competence exhibited a very large effect on Students' Effect Based on Teachers' Perspective ($f^2 = 1.176$), confirming its dominant role within the structural model. Additionally, the predictive relevance assessment using Q-square showed that Students' Effect Based on Teachers' Perspective achieved a Q^2 value of 0.608, while Teaching Competence obtained 0.278, indicating strong and moderate predictive relevance respectively. These findings confirm that the proposed model possesses adequate predictive capability and structural robustness.

Table 4. Significant Mediation effect

Indirect Relationship	Indirect Effect (β)	Interpretation
Spiritual Value → Teaching Competence → Students' Effect Based on Teachers' Perspective	0.428	Significant indirect effect

The mediation analysis revealed that Teaching Competence partially mediates the relationship between Spiritual Value and Students' Effect Based on Teachers' Perspective. The indirect effect of Spiritual Value on Students' Effect Based on Teachers' Perspective through Teaching Competence was 0.428, which was substantially larger than the direct effect ($\beta = 0.179$). This finding suggests that spiritual values primarily influence student-related outcomes by enhancing teachers' instructional competence rather than affecting students directly.

Table 5. Mediation Analysis Results

Indirect Relationship	β	STDEV	t-value	p-value	Result
Spiritual Value → Teaching Competence → Students' Effect Based on Teachers' Perspective	0.428	0.078	5.492	0.000	Supported

An important contribution of this study is the identification of Teaching Competence as a mediating mechanism through which Spiritual Value influences Students' Effect Based on Teachers' Perspective. Although Spiritual Value demonstrated a direct influence on Students' Effect Based on Teachers' Perspective, the indirect effect through Teaching Competence (β = 0.428) was considerably stronger. This finding suggests that spiritual values do not automatically translate into improved student outcomes. Instead, such values first enhance teachers' pedagogical practices, classroom management, and instructional effectiveness, which subsequently foster more positive student learning experiences. Therefore, Teaching Competence functions as the primary pathway through which value integration contributes to educational effectiveness.

Table 6. Structural Model Assessment Including R-Square, f-Square, and Q-Square Values

Construct / Relationship	R^2	f^2	Q^2	Interpretation
Teaching Competence	0.350	0.538	0.278	Moderate explanatory power, large effect size, and moderate predictive relevance
Students' Effect Based on Teachers' Perspective	0.710	1.176	0.608	Strong explanatory power, very large effect size, and strong predictive relevance
Spiritual Value → Students' Effect Based on Teachers' Perspective	—	0.072	—	Small effect size
Spiritual Value → Teaching Competence	—	0.538	—	Large effect size
Teaching Competence → Students' Effect Based on Teachers' Perspective	—	1.176	—	Very large effect size

As presented in Table 6, the Students' Effect Based on Teachers' Perspective construct achieved a strong explanatory power with an R-square value of 0.710, indicating that 71.0% of its variance is explained by Spiritual Value and Teaching Competence. Meanwhile, Teaching Competence demonstrated moderate explanatory power with an R-square value of 0.350. The f-square analysis revealed that Teaching Competence had a very large effect on Students' Effect Based on Teachers' Perspective ($f^2 = 1.176$), while Spiritual Value showed a large effect on Teaching Competence ($f^2 = 0.538$) and a relatively small direct effect on Students' Effect Based on Teachers' Perspective ($f^2 = 0.072$). Furthermore, the Q-square values confirmed the predictive relevance of the structural model, particularly for Students' Effect Based on Teachers' Perspective ($Q^2 = 0.608$), indicating strong predictive capability. Overall, these findings demonstrate that the proposed model possesses substantial explanatory and predictive strength.

Table 7. Inner VIF Values

Structural Relationship	VIF
Spiritual Value → Students' Effect Based on Teachers' Perspective	1.538
Spiritual Value → Teaching Competence	1.000
Teaching Competence → Students' Effect Based on Teachers' Perspective	1.538

The inner VIF values ranged from 1.000 to 1.538, which are substantially below the threshold of 3.3. These results indicate the absence of multicollinearity among the predictor constructs. Following the full collinearity assessment approach proposed in PLS-SEM research, the low VIF values also suggest that common method bias is unlikely to pose a serious threat to the validity of the study's findings.

3.2 Discussion

The findings demonstrate that spiritual value plays a significant role in improving teaching competence and teacher-perceived student outcomes within digital English learning environments. Although the direct effect of Spiritual Value on Students' Effect Based on Teachers' Perspective was statistically significant ($\beta = 0.179$, $p = 0.036$), its indirect influence through Teaching Competence was substantially stronger ($\beta = 0.428$, $p < 0.001$). These results indicate that spiritual values do not directly transform students' learning experiences; rather, they enhance teachers' professional competence, which subsequently contributes to more effective teaching practices and improved student-related outcomes. This finding supports the view that educational quality depends not only on technological innovation but also on teachers' ethical commitment, professional responsibility, and value-based instructional practices (Darling-Hammond et al., 2020).

The significant relationship between Spiritual Value and Teaching Competence ($\beta = 0.592$, $p < 0.001$) suggests that teachers who internalize spiritual and moral values are more likely to demonstrate higher instructional competence. Spiritual values appear to strengthen teachers' commitment to their professional responsibilities by encouraging integrity, empathy, discipline, and reflective practice. These characteristics are particularly important in digital learning environments, where teachers are expected to balance technological innovation with pedagogical effectiveness and ethical decision-making. This finding is consistent with previous studies reporting that teachers' spiritual intelligence and moral commitment positively influence professional performance and instructional quality (Sunarya & Suryadi, 2025). Likewise, research on religious value integration in English language teaching has emphasized that value-based instruction promotes meaningful educational experiences by connecting cognitive development with character formation (Muhalim, 2023; Nor et al., 2025).

The present findings also extend the Technological Pedagogical Content Knowledge (TPACK) framework by introducing spiritual value as a complementary dimension supporting effective technology integration. Traditionally, TPACK explains successful teaching through the interaction of technological, pedagogical, and content knowledge (Mishra & Koehler, 2006). However, the current study demonstrates that teachers' internal values also contribute to instructional effectiveness by shaping how pedagogical knowledge is enacted in classroom practice. Teachers with stronger spiritual values may be more committed to designing inclusive learning activities, encouraging positive classroom interactions, and using digital technology responsibly. Consequently, spiritual value functions as an enabling factor that strengthens pedagogical implementation rather than replacing existing TPACK components. This theoretical extension suggests that technology-enhanced education should be understood not only as a technical process but also as a value-driven educational practice that integrates ethical responsibility with instructional competence.

The findings likewise support the assumptions of Self-Determination Theory (SDT), which proposes that intrinsic motivation, competence, autonomy, and relatedness are essential determinants of professional behaviour and educational performance (Ryan & Deci, 2020). Spiritual values may reinforce teachers' intrinsic motivation by providing a deeper sense of professional purpose and personal responsibility. Teachers who perceive teaching as a meaningful vocation rather than merely an occupational obligation are likely to invest greater effort in lesson preparation, classroom management, and continuous professional development. Such internal motivation enhances teaching competence, which ultimately improves students' classroom participation, engagement, and learning experiences. Therefore, the present findings illustrate how spiritual values contribute indirectly to educational effectiveness through motivational mechanisms consistent with SDT.

An important contribution of this study is the identification of Teaching Competence as the principal mediating mechanism linking Spiritual Value and teacher-perceived student outcomes. The mediation analysis revealed that the indirect effect ($\beta = 0.428$) was considerably larger than the direct effect ($\beta = 0.179$), indicating that the influence of spiritual values is primarily transmitted through improvements in instructional competence. This finding emphasizes that values alone are insufficient to improve educational outcomes unless they are translated into effective pedagogical practices. Teachers who possess strong ethical principles but lack pedagogical competence may be unable to create meaningful learning experiences. Conversely, when spiritual values reinforce instructional planning, classroom management, assessment practices, and technology integration, they become powerful drivers of educational quality. The mediation effect therefore provides empirical evidence that teacher competence serves as the operational mechanism through which internal values generate observable educational benefits.

Another notable finding is the exceptionally strong influence of Teaching Competence on Students' Effect Based on Teachers' Perspective ($\beta = 0.724$, $p < 0.001$). This result reinforces extensive educational literature identifying teacher competence as one of the strongest predictors of student engagement, motivation, and learning achievement (Darling-Hammond et al., 2020; OECD, 2023). Even within technology-supported learning environments, the availability of digital tools alone does not guarantee successful learning outcomes. Instead, teachers' ability to design pedagogically sound instruction, facilitate interaction, provide constructive feedback, and integrate technology meaningfully remains the critical determinant of educational success. The large effect size ($f^2 = 1.176$) further confirms that strengthening teaching competence should remain a central priority in teacher professional development initiatives.

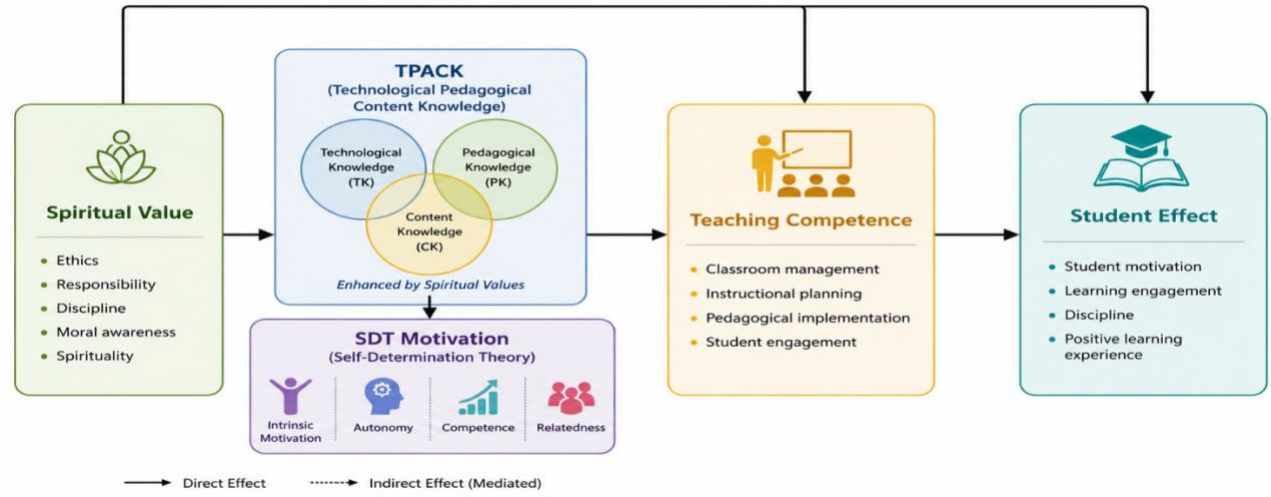

Figure 3. Proposed Value-Based TPACK Extension Model for Enhancing Teaching Competence and Student Outcomes

The structural model also demonstrated substantial explanatory and predictive capability. The coefficient of determination showed that Spiritual Value and Teaching Competence jointly explained 71.0% of the variance in teacher-perceived student outcomes, indicating strong explanatory power. Meanwhile, the Q^2 values confirmed that the model possesses satisfactory predictive relevance, particularly for student-related outcomes. Furthermore, the low inner VIF values (1.000–1.538) indicate that multicollinearity and common method bias were unlikely to threaten the validity of the structural relationships. Collectively, these statistical indicators demonstrate that the proposed model is both theoretically meaningful and empirically robust, providing strong support for integrating value-based variables into educational research using PLS-SEM.

From a practical perspective, these findings suggest that teacher education and professional development programs should move beyond emphasizing technological competence alone. While digital literacy remains essential, teachers also require opportunities to cultivate ethical awareness, spiritual reflection, and professional identity. Educational institutions should therefore design integrated development programs that simultaneously strengthen technological proficiency, pedagogical expertise, and value-based professional dispositions. Such holistic preparation is particularly important in digital English language teaching, where technological innovation must be accompanied by empathy, responsibility, inclusivity, and ethical instructional practice. By integrating these dimensions, schools can create learning environments that not only improve academic performance but also foster students' character development and long-term educational well-being.

Finally, this study contributes theoretically by proposing a Value-Based TPACK Extension Model, which positions Spiritual Value as an antecedent of Teaching Competence and ultimately of teacher-perceived student outcomes. This model expands conventional TPACK by incorporating ethical and motivational dimensions derived from Self-Determination Theory, thereby offering a more comprehensive framework for understanding teacher effectiveness in technology-supported education. The findings suggest that future research should continue refining this integrated framework by examining additional contextual variables, such as institutional support, digital readiness, leadership, teacher self-efficacy, and direct measures of student achievement. Longitudinal and cross-cultural studies would also help validate the stability and generalizability of the proposed model across diverse educational contexts.

4. CONCLUSION

This study demonstrates that Spiritual Value significantly contributes to enhancing Teaching Competence and Students' Effect Based on Teachers' Perspective, with teaching competence serving as a key mediating mechanism through which value integration strengthens educational effectiveness. The findings highlight that educational quality is shaped not only by pedagogical and technological expertise but also by the internalization of ethical and spiritual values that support teachers' professional performance and positive student-related outcomes. By proposing a value-based extension of the TPACK framework, the study contributes to the growing discourse on holistic and humanistic education while reinforcing the role of internalized values in fostering teacher motivation and competence development. However, the findings should be interpreted cautiously due to the study's limited sample, context-specific focus, and cross-sectional design, which constrain broader generalization and causal inference. Future research is therefore recommended to validate the proposed model across diverse educational and cultural contexts, employ longitudinal approaches, and incorporate additional variables such as technological readiness, institutional support, digital literacy, and student engagement to provide a more comprehensive understanding of value-based pathways to educational quality and teacher professionalism.

REFERENCES

Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, *24*(2), 97–140. https://doi.org/10.1080/10888691.2018.1537791

Dybro Liengaard, B. (2024). Measurement invariance testing in partial least squares structural equation modeling. *Journal of Business Research*, *177*, 114581. https://doi.org/10.1016/j.jbusres.2024.114581

Guillén-Gámez, F. D., Ruiz-Palmero, J., & García, M. G. (2023). Digital competence of teachers in the use of ICT for research work: development of an instrument from a PLS-SEM approach. *Education and Information Technologies*, *28*(12), 16509–16529. https://doi.org/10.1007/s10639-023-11895-2

Jazil, S., Zahro, A., A'la, B. A., Rahman, Moh. R., Sholihuddin, Muh., Ni'am, S., & Nurhayati, A. (2025). Enhancing Critical Thinking in Fiqh Learning: The Role of Strategies and Media Integration in Islamic Higher Education. *Malaysian Journal of Learning and Instruction*, *22*(2), 51–81. https://doi.org/10.32890/mjli2025.22.2.3

Margely Rolón. (2023). Transformación Educativa En La Era Digital: La Integración De Las Tic Y Las Competencias Digitales Del Docente En La Educación Primaria. *DIALÉCTICA*, *1*(21). https://doi.org/10.56219/dialctica.v1i21.2320

Mercado Borja, W. E., & Barrera Navarro, J. R. (2023). Diseño, construcción y validación de un instrumento que evalúa acciones innovadoras mediadas con TIC. *Sophia*, *19*(2). https://doi.org/10.18634/sophiaj.19v.2i.1287

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record, 108*(6), 1017–1054. https://doi.org/10.1111/j.1467-9620.2006.00684.x

Muhalim, M. (2023). Negotiating Religious Discourses in English Language Teaching: Reorienting and Reframing Dominant English Ideologies. *Changing English*, *30*(3), 209–222. https://doi.org/10.1080/1358684X.2023.2217424

Napontun, K., Sophachit, W., & Senachai, P. (2025). Systematic Literature Review: The Use of SEM in Business and Social Sciences – Insights from ABAC Journal 2021–2024. *ABAC Journal*, *45*(2), 1–21. https://doi.org/10.59865/abacj.2025.5

Nor, H., Asfihana, R., Sari, A. L., & Mahardika, F. (2025). Incorporating Religious Moderation Values into Effective English Language Teaching Practices. *Intensive Journal*, *7*(2), 1. https://doi.org/10.31602/intensive.v7i2.16544

Organisation for Economic Co-operation and Development (OECD). (2023). *Teachers and teaching in a changing world: Professional competence, policy, and practice*. OECD Publishing.

Rose, H., & McKinley, J. (2025). Global Englishes and <scp>TESOL</scp> : An Editorial Introduction to Innovating Research and Practice. *TESOL Quarterly*, *59*(1), 5–23. https://doi.org/10.1002/tesq.3373

Rose, H., Sahan, K., & Zhou, S. (2022). Global English Medium Instruction: Perspectives at the crossroads of Global Englishes and EMI. *Asian Englishes*, *24*(2), 160–172. https://doi.org/10.1080/13488678.2022.2056794

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

Sánchez-Ibáñez, R., & Cimino, A. (2023). Validation of an Instrument on Perceptions of Heritage Education through Structural Equation Modeling. *Sustainability*, *15*(8), 6865. https://doi.org/10.3390/su15086865

Savski, K., & Prabjandee, D. (2022). CEFR: A Global Framework for Global Englishes? *Teaching English as a Second or Foreign Language Journal--TESL-EJ*, *26*(3). https://doi.org/10.55593/ej.26103a1

Shi, G., Li, J., & Yang, J. (2024). A study on the influencing factors of university students' online persistent learning supported by intelligent technology in the post-pandemic era: an empirical study with PLS-SEM. *Interactive Learning Environments*, *32*(9), 4789–4811.

https://doi.org/10.1080/10494820.2023.2205901

Sofwan, M., Habibi, A., Attar, R. W., Alqahtani, T. M., Alahmari, S. A., & Alhazmi, A. H. (2024). Factors Affecting Teachers' Behavior of Innovative Teaching with Technology: Structural Equation Modelling. *Sustainability*, *16*(19), 8496. https://doi.org/10.3390/su16198496

Sofyan, S., Habibi, A., Sofwan, M., Yaakob, M. F. M., Alqahtani, T. M., Jamila, A., & Wijaya, T. T. (2023). TPACK–UotI: the validation of an assessment instrument for elementary school teachers. *Humanities and Social Sciences Communications*, *10*(1), 55. https://doi.org/10.1057/s41599-023-01533-0

Sunarya, A., & Suryadi, A. (2025). Pengaruh Kecerdasan Kerohanian, Literasi Digital, dan Motivasi Kerja Terhadap Kinerja Guru SMP Muhammadiyah Se-Kabupaten Cianjur. *SULIWA: Jurnal Multidisiplin Teknik, Sains, Pendidikan Dan Teknologi*, *2*(2), 175–179. https://doi.org/10.62671/suliwa.v2i2.92

Suzer, E., & Koc, M. (2024). Teachers' digital competency level according to various variables: A study based on the European DigCompEdu framework in a large Turkish city. *Education and Information Technologies*, *29*(16), 22057–22083. https://doi.org/10.1007/s10639-024-12711-1

Tzafilkou, K., Perifanou, M., & Economides, A. A. (2023). Assessing teachers' digital competence in primary and secondary education: Applying a new instrument to integrate pedagogical and professional elements for digital education. *Education and Information Technologies*, *28*(12), 16017–16040. https://doi.org/10.1007/s10639-023-11848-9

Zeng, J., & Yang, J. (2024). English language hegemony: retrospect and prospect. *Humanities and Social Sciences Communications*, *11*(1), 317. https://doi.org/10.1057/s41599-024-02821-z

Zhou, C. (2023). An application of information and communication technologies upon professional training of primary school teachers. *Interactive Learning Environments*, *31*(8), 5307–5316. https://doi.org/10.1080/10494820.2021.2005103