

# The Influence of Values-Driven Learning-Centered Leadership on Educators' Attitudes and Professional Learning in Empowering Assessment Practices

*Pengaruh Kepimpinan Berpusatkan Pembelajaran yang Dipandu Nilai terhadap Sikap Pendidik dan Pembelajaran Profesional dalam Memperkasa Amalan Pentaksiran*

Noor Asiah Hassan<sup>a\*</sup>, Nor Hasnida Che Md Ghazali<sup>b</sup>, Emilia Man<sup>c</sup>, Norhashimah Abdul Rani<sup>d</sup>, Zailatul Nazirah Zakaria<sup>e</sup>

<sup>a</sup>*Faculty Engineering & Life Sciences, UNISEL, Malaysia*

<sup>b,c,d,e</sup>*Faculty Human Development, Universiti Pendidikan Sultan Idris, Malaysia*  
*Corresponding author: noorasiah@unisel.edu.my*

**Received:** 27 October 2025    **Accepted:** 7 November 2025    **Published:** 17 December 2025

**To cite this article:** Hassan, N. A., Che Md Ghazali, N. H., Man, E., Abdul Rani, N., & Zakaria, Z. N. (2025). The Influence of Values-Driven Learning-Centered Leadership on Educators' Attitudes and Professional Learning in Empowering Assessment Practices. *Management Research Journal, 14*(2), 62-78. <https://doi.org/10.37134/mrj.vol14.2.4.2025>

**To link to this article:** <https://doi.org/10.37134/mrj.vol14.2.4.2025>

## Abstract

*This research investigates the influence of values-oriented learning-focused leadership (LCL) on educators' attitudes, professional growth, and assessment practices within Malaysian universities underpinned by Bandura's Social Cognitive Theory. Using a multistage sampling approach, feedback was collected from 400 university instructors across Malaysia through organised surveys. Structural equation modelling (SEM) demonstrates that LCL notably shapes educators' attitudes ( $\beta = .37$ ) and fosters professional learning ( $\beta = .35$ ), while educators' perspectives also strongly forecast learning ( $\beta = .54$ ). Nevertheless, LCL insignificantly affects assessment practices ( $\beta = .09$ ). Furthermore, both attitudes ( $\beta = .31$ ) Professional development ( $\beta = .40$ ) act as important indicators of successful assessment practices, emphasizing the potential for mediating functions. The model exhibits a good fit ( $RMSEA = .078$ ,  $CFI = .948$ ,  $TLI = .933$ ,  $\chi^2/df = 2.534$ ) and explains 49% of the variance in evaluation methods, shaped by the impact of leadership, ongoing professional development, and perspectives. These results validate Bandura's claim that both environmental encouragement and self-regulatory frameworks influence professional conduct in educational settings. The findings provide insights for leadership development programs and organisational policies that advance quality assessment and educator growth, aligned with the MADANI principles of integrity and accountability.*

**Keywords:** *Assessment Practices, Educators' Attitudes, Learning-Centred Leadership, Professional Learning, Social Cognitive Theory*

## Abstrak

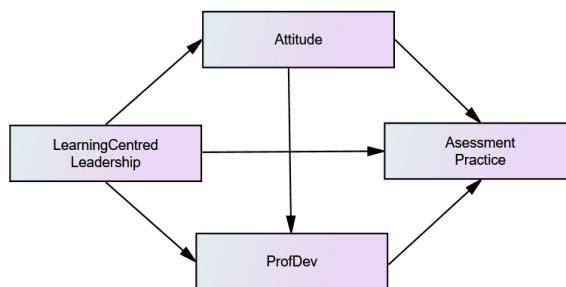
*Kajian ini bertujuan untuk mengkaji pengaruh kepimpinan berorientasikan nilai dan berfokuskan pembelajaran (Learning-Focused Leadership; LCL) terhadap sikap pendidik, perkembangan profesional, dan amalan pentaksiran dalam universiti di Malaysia, berasaskan Teori Kognitif Sosial Bandura. Dengan menggunakan pendekatan persampelan pelbagai tahap, maklum balas telah dikumpulkan daripada 400 orang pensyarah universiti di seluruh Malaysia melalui soal selidik yang disusun secara sistematis. Pemodelan persamaan berstruktur (SEM) menunjukkan bahawa LCL membentuk sikap pendidik secara signifikan ( $\beta = .37$ ) dan menggalakkan pembelajaran profesional ( $\beta = .35$ ), manakala perspektif pendidik turut meramal pembelajaran secara signifikan ( $\beta = .54$ ). Walau bagaimanapun, LCL tidak memberi kesan yang signifikan terhadap amalan pentaksiran ( $\beta = .09$ ). Selain itu, keduanya sikap ( $\beta = .31$ ) dan pembangunan profesional ( $\beta = .40$ ) bertindak sebagai petunjuk penting kepada amalan pentaksiran yang berkesan, sekali gus menonjolkan potensi peranan perantara (mediating). Model kajian menunjukkan kesepadan yang baik ( $RMSEA = .078$ ,  $CFI = .948$ ,  $TLI = .933$ ,  $\chi^2/df = 2.534$ ) dan menerangkan 49% varians dalam kaedah penilaian, yang dipengaruhi oleh kepimpinan, pembangunan profesional berterusan, dan perspektif. Dapatkan ini mengesahkan hujah Bandura bahawa galakan persekitaran dan kerangka kawal selia kendiri mempengaruhi tingkah laku profesional dalam konteks pendidikan. Implikasi kajian menyediakan panduan untuk program pembangunan kepimpinan dan dasar organisasi yang memperkuuh kualiti pentaksiran serta pertumbuhan pendidik, selaras dengan prinsip MADANI berteraskan integriti dan akauntabiliti.*

**Kata Kunci:** Amalan Pentaksiran, Sikap Pendidik, Kepimpinan Berpusatkan Pembelajaran, Pembelajaran Profesional, Teori Kognitif Sosial

## INTRODUCTION

The impact of leadership and the improvement of assessment methods continue to be issues in the progressing domain of education (Sariakin et al., 2025). Competent leaders foster environments where professional development and collective vision flourish and facilitate adaptation to student needs. Simultaneously, improved assessment approaches deliver feedback that helps educators customise assistance and boost student achievement. Recently, there has been a growing focus on learning-centred leadership (LCL) that emphasises creating settings that promote student achievement (Husien et al., 2022). Similarly, the assessment strategies employed by educators play a role in forming how evaluation tools are developed, applied and interpreted within educational settings (Hassan et al., 2022). Nevertheless, the success of both leadership and assessment is primarily impacted by educators' perspectives on assessment, which are developed through professional development. Based on these dynamics, a conceptual framework was developed (see Diagram 1). The model illustrates the interconnection of four key elements, namely LCL, professional learning, educators' attitudes, and assessment practices. LCL serves as the driving force in influencing educators' attitudes, professional learning, and assessment practices. These relationships are cyclical and mutually reinforcing, which emphasises the continuous interaction among all elements.

**Figure 1**  
*Research Framework*



This framework is based on Bandura's Social Cognitive Theory (SCT) which emphasises the reciprocal causality of personal factors (attitudes), behavioural factors (evaluation procedures), and environmental factors (leadership and professional learning). In keeping with SCT, the model highlights that effective educational change necessitates a whole approach that focussing on one factor in isolation is inadequate. Changes in any component can have an impact on the entire system emphasising the importance of integrated methods that align leadership, professional learning, and assessment reform.

### Problem Statement

Assessment approaches are becoming increasingly recognised as transformational drivers that direct instruction and improve student learning outcomes (Alonzo et al. 2023). Research repeatedly reveals that conducted exams increase student involvement, promote learning, and improve academic accomplishment. However, the success of assessment reform is heavily influenced by educators' perspectives, design decisions, and implementation strategies (Addow, 2023). Despite these advantages, many educators continue to oppose change leading to either acceptance or outright rejection of methodologies. Although decades of institutional promotion and legislative initiatives, Malaysia higher education sector has yet to adopt modern evaluation procedures (Damit et al., 2021). While earlier research has looked at individual characteristics that influence educators' evaluation behaviours, there is a lack of a complete framework that takes into account both individual and institutional influences. This work fills that gap by offering a comprehensive model that explains how these factors interact to affect evaluation methods. The findings are intended to guide strategic actions that encourage the effective adoption and implementation of assessment techniques throughout educational institutions.

### LITERATURE REVIEW

Educational institutions require their educators to develop assessment systems which track student development for improving their teaching approaches. The process of transformation depends on three essential factors which include leadership methods that focus on student achievement and teacher assessment practices and ongoing educational growth for staff members. Educational institutions across the world work to enhance student results while researchers' study how LCL and assessment methods and teacher perspectives and teacher development programs affect educational progress.

## Assessment Practices

Higher education institutions now use assessment methods which combine summative evaluation with formative assessment and self-assessment and continuous feedback to achieve two main goals of assessment which include performance measurement and learning improvement (Andersson et al., 2025). The formative methods help students develop self-motivation through their ability to meet their needs for competence and autonomy and relatedness. The success of these tools depends on how educators view them and how well they are designed and carried out in educational settings. People develop their assessment attitudes through individual characteristics which interact with their surrounding environment (Parmigiani et al., 2024). New educators tend to use established teaching approaches but experienced educators choose to use new educational methods (Doria et al., 2023). Healthcare professionals will use formative tools more often after they receive suitable training because this educational process enables them to build their confidence and readiness for tool implementation (Hamodi et al., 2017).

Assessment preferences are also influenced by culture. For instance, STEM prioritizes problem-solving whereas the humanities lean towards analytical assignments (Pereira et al. 2016). External influences also impact practice as leadership directs culture through policies, resource allocation and professional growth opportunities. Limitations, like class sizes, strict grading systems and accreditation requirements reduce adaptability. Additionally, student expectations play a role with grade-oriented students opposing formative assessments. These factors produce dynamics (Jensen et al. 2023). Veteran educators facing workloads might fall back on conventional methods whereas beginners in encouraging environments might introduce new ideas (Montgomery et al. 2023). Lasting reform necessitates tackling both skills and organizational frameworks. Training alone is absent enabling policies and policy modifications seldom achieve success without developing capabilities (Andrade, 2019). Enduring transformation calls for approaches such as focused education, encouraging management and adaptable institutions. Cultivating a learning-centered assessment culture is essential for enhancing student learning and development (Morris et al., 2021; Doria et al., 2023; Sun & Izadpanah, 2025).

## Learning-Centered Leadership (LCL)

Effective leadership is increasingly acknowledged as an element in determining the quality of teaching and learning. Learning-Centered Leadership (LCL) has developed as a model that combines the advantages of both instructional and transformational leadership (Hallinger, 2019). Instructional leadership focuses on coordinating curriculum, instruction and evaluation by means of guidance, supervision and assistance to encourage practices. Transformational leadership offers vision, motivation and an encouraging learning institutional environment to inspire both staff and students (Sun & Leithwood 2022). This combined approach harmonizes excellence with creativity. Core principles of LCL include a clear vision centered on student success (Cereno & Quinito, 2025); leaders modeling professional learning by engaging in their own development (Aslan & Gören, 2023); and providing resources alongside collaborative support to build professional learning communities. Ultimately, LCL holds leaders accountable not only for operational efficiency but for ensuring decisions meaningfully contribute to student learning outcomes.

### Professional Learning

The majority concur that professional development is crucial for progress in education. It helps educators gain the skills, expertise and attitudes to address changing teaching requirements and improve student performance. This involves growth opportunities such, as collaborative exchanges, mentoring and training sessions (Sims et al. 2025). Four fundamental elements of professional development include experimentation, learning, collaboration and reflection (Haniford et al., 2023). Educators can test tactics in the classroom through experimentation (Montgomery et al., 2023). Learning relates ideas to practical applications (Morris et al., 2021). Communities of practice that facilitate knowledge sharing are established through collaboration (Haniford et al., 2023). By encouraging educators to evaluate and modify their approaches, reflection enhances learning (Ismail et al., 2022).

Reflection strengthens learning by prompting educators to evaluate and modify their approaches (Ismail et al., 2022). Research shows that professional learning focused on formative assessment improves educator attitudes and fosters assessment for learning rather than accountability (Hamodi et al., 2017). It also enhances perceptions of leadership and encourages pedagogical innovation (Montgomery et al., 2023). Collaborative and reflective professional communities are especially effective in supporting educators as they move beyond traditional methods and embrace learning-centred assessment approaches.

### Educator Attitude

Educator mindsets strongly shape classroom practices, which in turn influence how educators understand, plan, and carry out assessments. Based on the Theory of Planned Behaviour (TPB), these mindsets reflect personal evaluations that impact decisions and actions (Ajzen, 2020; Harris & Brown, 2022). When educators feel positive, they tend to focus more on students' needs, whereas negative views often lead back to traditional testing. Feelings like self-assurance or stress also play a role, either helping or slowing the adoption of new teaching strategies (Alkharusi, 2023). The cognitive part links to how people think assessment helps learning and matches the course aims. Because it supports progress, educators may see its role more clearly. According to Expectancy Value Theory, whether instructors use new methods depends on how useful they believe the results will be (Wigfield et al., 2021). When assessments feel significant and connect to larger teaching purposes, they are seen as relevant since meaning drives engagement; this perception boosts follow-through (Ozan & Keles, 2022). As a result of emotional responses, thought patterns, and perceived importance, views on evaluation take shape and from those views come choices about using supportive strategies.

### Hypotheses Development

Leadership influences educators' reactions to new concepts, depending on their attitudes toward change. When leaders foster an atmosphere of openness, educators are more likely to participate openly (Kursunoglu & Tanriogen, 2009). Robust leadership is frequently associated with teacher effectiveness in numerous studies (Steele et al., 2021; Berkovich & Bogler, 2020; Ridwan, 2021). LCL affects views not only straightaway but also through promoting collaborative learning settings (Alanoglu, 2023) while at the same time boosting shared confidence in success (Liu et al., 2016; Hassan et al., 2023; Yu et al., 2019). If educators trust themselves and others, motivation goes up. As a result, involvement grows too. Intellectual challenges help so does personal guidance. These elements strengthen progress in different ways. Therefore:

***H1: LCL has a significant positive effect on educators' attitudes.***

LCL's educational approach uses student learning needs to develop its institutional improvement strategy, as it operates independently of administrative methods (Hallinger, 2019). Educators today have various leadership methods that enable them to start their own projects, work with others, and analyse their teaching practices for ongoing professional growth (Berkovich & Eyal, 2020; Liu et al., 2021). The professional groups LCL created enable members to work together to solve problems through reflective dialogue, which leads to their professional development over several years (Sun & Leithwood, 2022; Qadach et al., 2020). The educational environment enables educators to develop themselves while using their acquired knowledge to teach students in their classrooms. Thus:

***H2: LCL has a significant positive effect on professional learning.***

LCL shifts focus from grades to learning through ongoing evaluation. Formative assessment-focused leaders encourage feedback-driven strategies that promote development (Hallinger & Wang, 2022). Team-based planning, alongside analysis of classroom outcomes, leads educators to adjust their teaching using real data rather than guesswork (Qian, Walker, & Yang, 2020). Fairness and openness matter when leaders demonstrate these traits, easing stress associated with test results while strengthening mutual confidence (Berkovich & Eyal, 2021). When applied effectively, LCL supports practical tools such as student portfolios or hands-on projects that boost reasoning skills and active involvement (Zheng, Yin, & Liu, 2023). Hence:

***H3: LCL has a significant positive effect on assessment practices.***

Educators' attitudes have a significant impact on assessment implementation. Positive attitudes are linked to the development of interactive, student-centred classrooms (Nazim et al., 2024) and the regular application of formative practices (Ahmedi, 2023). As evidenced by Ghana's uneven adoption of self-evaluation, scepticism can stifle creativity (Osei & Schweisfurth, 2023). Systemic pressures shape these attitudes. For instance, Australian educators valued formative feedback but were constrained by accountability (Brown et al., 2024). Therefore:

***H4: Educators' attitudes have a significant positive effect on assessment practices.***

Educators who receive professional development are better equipped to see assessment as growth-oriented rather than accountability-driven. It encourages inclusive practice and assessment literacy (Chen et al., 2024). According to De Bruijn and Uerz (2025), collaborative communities prioritise formative techniques, cultivate positive attitudes, and co-create solutions. Innovative evaluation is encouraged by technology (Ninaus et al., 2025). Accountability and holistic development are balanced in Malaysian professional learning (Md Yusof et al., 2025). Thus:

***H5: Professional learning has a significant positive effect on educators' assessment practices.***

Educators' attitudes strongly influence their eagerness to pursue professional development. When educators see value in learning, they tend to welcome change. However, doubt can lead to disengagement. Those who appreciate fresh approaches usually actively apply what they learn on the job (Desimone & Garet, 2015). On the flip side, hesitation might cause only surface-level use of methods (Opfer & Pedder, 2011). Learning at work may shift how people think, stay motivated, or aim for growth (Sims et al., 2025). Because of this two-way link, settings that support staff and reflect shared principles help strengthen these outcomes. Thus:

**H6: Educators' attitudes have a significant positive effect on professional learning.**

## METHODOLOGY

This study adopted a cross-sectional causal research design to investigate the extent to which selected independent variables, namely attitude, professional learning, and LCL, predict educators' implementation of assessment practices. Data were gathered at a single point in time, allowing the study to examine the relationships among variables and to infer potential causal patterns within the limits of a cross-sectional approach. A set of hypotheses was developed to guide the analysis systematically. Statistical analyses were conducted using SPSS version 26 and AMOS version 24, enabling both preliminary and structural modelling to test the proposed relationships and support evidence-based conclusions.

### **Sampling**

Data were collected from 400 educators in Malaysian higher education institutions using a multistage sampling approach for practicality and feasibility. The process began with selecting diverse institutions by type and location, followed by random sampling of lecturers within them. This strategy ensured diversity while managing logistical constraints. As with all sampling methods, limitations still exist. The representativeness of the sample depends on the selection of institutions and lecturers, which may limit the generalizability of the findings to the broader educator population.

### **Data Collection**

Data were collected using structured questionnaires that were distributed to selected lecturers across higher education institutions in Malaysia. Before completing the questionnaire, participants were clearly informed of the study's purpose, the voluntary nature of their participation, and the measures taken to ensure confidentiality. To improve accessibility and encourage participation, the survey was administered online and in person. This combined approach enabled efficient data collection from institutions across different geographic areas.

### **Instrument and Questionnaires**

The research utilised a survey comprising verified scales assessing four primary constructs: Learning-Centred Leadership, Professional Learning, Educators' Attitudes, and Assessment Practices. Questions were borrowed from known tools in earlier studies, guaranteeing content validity and suitability for the context. Every response was recorded using a ten-point Likert scale. Table 1 summarises the tools applied in the study, detailing the item counts for each subconstruct, the origins of the adapted questionnaires, and the scale ranges. The final section of the questionnaire collected demographic characteristics.

**Table 1**  
*Instruments Used in Research*

Construct	Subconstructs	No of items	Adapted from	Scale
Attitude	Affective	5	Suppian (2016)	1-10
	Course	5		
	Relevance	4		
Professional Learning	Knowledge	5	Liu, et al., (2016)	1-10
	Reflection	5		
	Experiment	4		
	Collaboration	5		
Learning-centred leadership	Vision	3	Liu et al., (2016)	1-10
	Learning support	6		
	Role Model	7		
Assessment Practices	Design	5	Hassan et al., (2022)	1-10
	Administration	5		
	Application	4		
	Interpretation	5		

## Data Analysis

Descriptive analysis was utilized to provide an overview of the data, presenting essential statistics and visual representations of the variables under investigation. Before moving on to construct the structural model for Structural Equation Modelling (SEM) and testing the hypotheses, we employed Confirmatory Factor Analysis (CFA) to validate the measurement model of the latent constructs. This initial step assessed whether the constructs were unidimensional, verified their validity, and ensured their reliability.

## RESULT

### Demographics

The research included 400 lecturers with females making up 63% (N = 239). Males 37% (n = 150). The majority group had 11–15 years of teaching experience (34%, n=130) followed by those with 16–20 years (23.6%, n= 90) 6–10 years (22.4%, n= 86) under 5 years (12%, n = 46) and, then 21 years (8%, n= 31). In terms of qualifications, most participants held Master's degrees (59%, n = 224), followed by PhDs (36%, n= 137) and Bachelor's degrees (5%, n = 18). Data normality was confirmed through skewness and kurtosis values within acceptable ranges supporting the reliability of Confirmatory Factor Analysis (CFA).

### Descriptive Analysis

The descriptive analysis reveals distinct performance patterns across the four main constructs measured in this study as shown in Table 2.

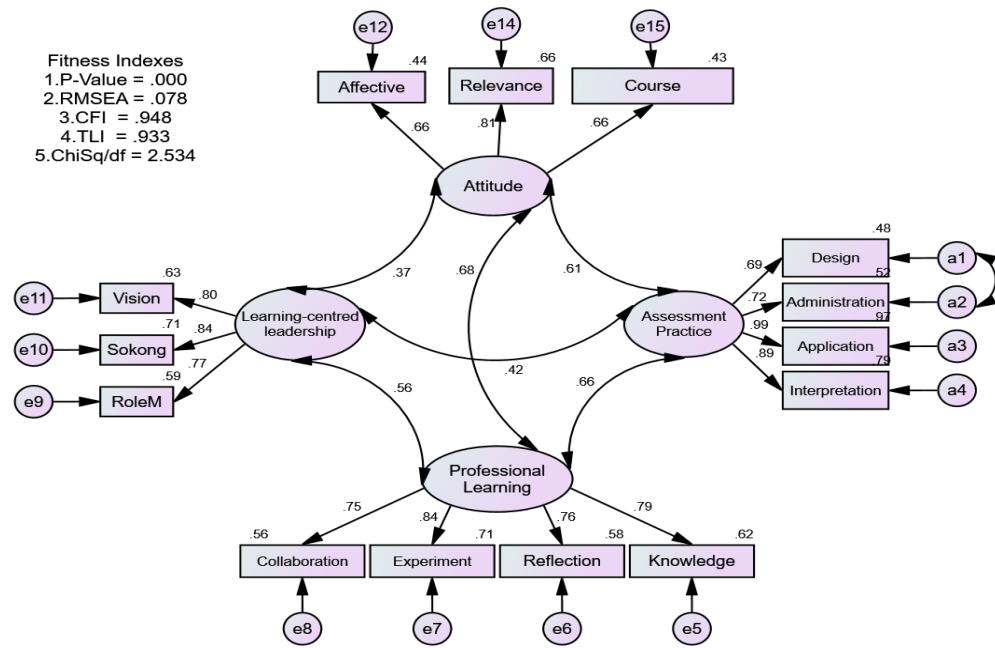
**Table 2***The Average Mean and Standard Deviation of Constructs and Sub-constructs*

Construct	Sub-construct	Average Mean	Std. Dev	Indicator
LCL	Vision	7.45	1.55	High
	Learning support	7.12	1.51	High
	Role Model	6.55	1.74	Moderate
Asst Practice	Design	8.24	0.96	Highly skilled
	Administration	7.75	1.02	Skilled
	Application	7.86	1.01	Skilled
	Interpretation	7.82	1.09	Skilled
Prof. Learning	Knowledge	8.07	1.21	Very High
	Reflection	7.82	1.28	High
	Experiment	7.86	1.24	Very high
	Collaboration	8.00	1.10	Very high
Attitude	Affective	8.86	0.84	Very high
	Course	8.40	0.99	Very high
	Relevance	8.06	1.04	Very high

The Attitude construct showed the strongest performance with all sub-dimensions rated “very high”: Affective ( $M = 8.86$ ,  $SD = 0.84$ ), Course ( $M = 8.40$ ,  $SD = 0.99$ ), and Relevance ( $M = 8.06$ ,  $SD = 1.04$ ). Professional Learning also scored strongly, particularly in Knowledge ( $M = 8.07$ ,  $SD = 1.21$ ) and Collaboration ( $M = 8.00$ ,  $SD = 1.10$ ), with overall means ranging from 7.82 to 8.07. Assessment Practice reflected consistent competencies with Design highest ( $M = 8.24$ ,  $SD = 0.96$ ). In contrast, LCL was more varied with Vision scoring highest ( $M = 7.45$ ,  $SD = 1.55$ ) and Role Model only moderate ( $M = 6.55$ ,  $SD = 1.74$ ). A key strength supporting methodological rigour is the minor standard deviations across constructs (0.84–1.74), all below  $\pm 2$ , indicating reliable clustering around the means. This consistency suggests participants responded reliably and that the instruments effectively measured the intended constructs. As Leavy (2017) emphasises, such descriptive statistics provide essential foundations for questionnaire reliability. Together, the meaningful mean scores and low variability validate construct measurement and strengthen confidence for subsequent analyses.

### Confirmatory Factor Analysis Results

Figure 2 presents the initial measurement model, which demonstrated acceptable model fit ( $\chi^2/df = 2.534$ ,  $CFI = 0.948$ ,  $TLI = 0.933$ ,  $RMSEA = 0.078$ ). All indices met recommended thresholds (Hair et al., 2014), indicating satisfactory construct validity. Table 3 summarises the fit indices, whereby Table 4 shows that all factor loadings exceeded the 0.60 threshold, confirming unidimensionality. Composite Reliability (CR) values ranged from 0.783 to 0.890 while Average Variance Extracted (AVE) values ranged from 0.549 to 0.681, surpassing the minimum cut-off values ( $CR > 0.60$ ,  $AVE > 0.50$ ). These results indicate good convergent validity and internal consistency reliability. Discriminant validity was also established, as shown in Table 5. The square root of each construct’s AVE exceeded its inter-construct correlations, and no correlation coefficient exceeded 0.90, confirming the absence of multicollinearity. The final measurement model (Figure 2) consisted of 49 items with fitness indices again satisfying recommended standards, thereby validating the measurement model.

**Figure 2***The Pooled-CFA Results to validate three constructs simultaneously***Table 3***Assessment of Model Fit*

Category	Name of Index	Fit Criteria	Present model	Comment
Parsimonious Fit	Chisq/df	$1.0 \leq \chi^2 / df \leq 5$	2.749	Min requirement < 3.0
Incremental fit	CFI	0.90 or greater	0.955	Min requirement > 0.9
	TLI	0.90 or greater	0.937	Min requirement > 0.9
Absolute fit	RMSEA	$\leq 0.10$	0.084	Min requirement < 0.1

**Table 4***Convergent Validity and Reliability*

Construct	Item	Factor Loading	CR (above 0.6)	AVE (above 0.5)
LCL	Vision	0.80	0.855	0.663
	Learning support	0.84		
	Role Model	0.77		
Professional learning	Knowledge	0.79	0.873	0.634
	Reflection	0.76		
	Experiment	0.84		
	Collaboration	0.75		
Attitude	Affective	0.66	0.783	0.549
	Course	0.66		
	Relevance	0.81		
Asst Practice	Design	0.69	0.890	0.681
	Administration	0.72		
	Application	0.99		
	Interpretation	0.89		

**Table 5**  
*Discriminant Validity*

Construct	LCL	professional learning	Attitude	AsstPractice
LCL	<b>0.81</b>			
Professional learning	0.56	<b>0.80</b>		
Attitude	0.37	0.64	<b>0.74</b>	
Asst Practice	0.42	0.66	0.61	<b>0.83</b>

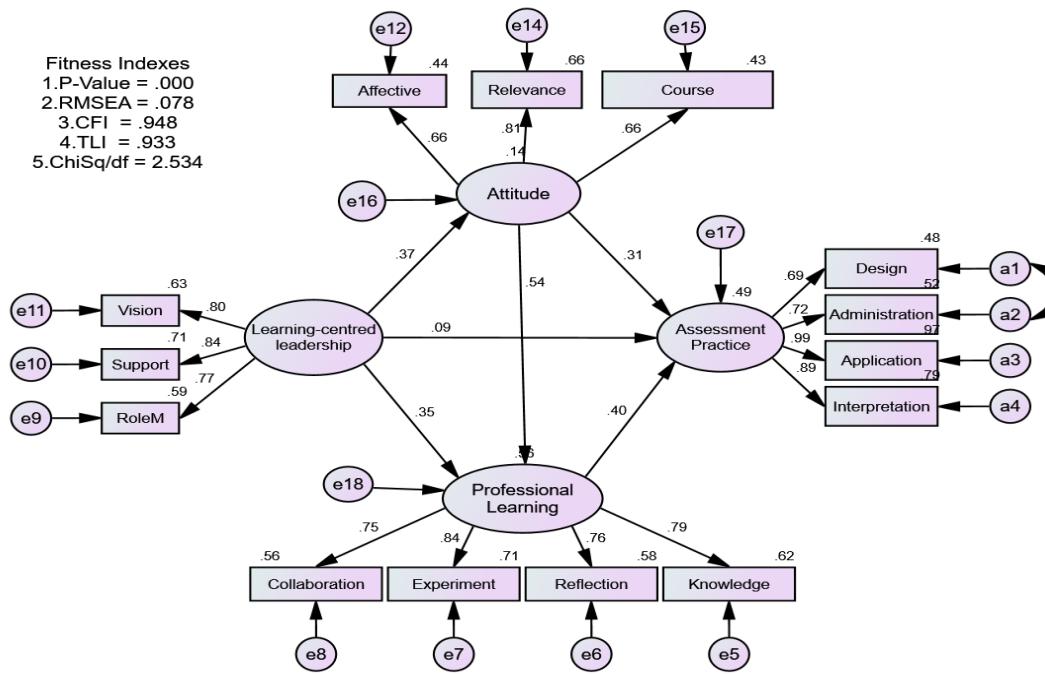
## Model Testing

The proposed structural model (Figure 3) was then evaluated. Hair et al. (2014) reported that the model fit indices remained satisfactory ( $\chi^2/df = 2.534$ , CFI = 0.948, TLI = 0.933, RMSEA = 0.078), indicating a strong match to the data. Table 6 presents the standardised route coefficients. LCL led to significant improvements in professional learning ( $\beta = 0.35$ ,  $p < .005$ ) and attitude ( $\beta = 0.37$ ,  $p < .005$ ). Attitude was found to be substantially related to professional learning ( $\beta = 0.54$ ,  $p < .005$ ). Professional learning ( $\beta = 0.40$ ,  $p < .005$ ) and attitude ( $\beta = 0.31$ ,  $p < .005$ ) had substantial effects on assessment procedures. However, the direct relationship between LCL and evaluation procedures was not significant ( $\beta = 0.09$ ,  $p = .199$ ).

The findings indicate that professional learning plays an important role in linking LCL with assessment practices. Although LCL was found to enhance professional learning and positively influence lecturers' attitudes, its direct effect on assessment processes was weak and not statistically significant. Instead, both professional learning and lecturer attitude showed strong associations with assessment techniques, suggesting that these factors may serve as key pathways through which LCL influences assessment practices. In practical terms, LCL appears to contribute to more effective assessment when meaningful professional development opportunities and positive lecturer attitudes accompany it. While these relationships are consistent with a potential mediating effect, further research using formal mediation procedures such as bootstrapping is required to statistically confirm this mechanism (Hassan et al., 2023).

**Figure 3**

The Standardized Regression Path Coefficient Among Constructs in the Model.

**Table 6.***The Regression Coefficient and Its Significance*

Construct	Path	Construct	Std estimate	p-value	Result
ProfLearn	<---	LCL	0.35	0.001	Significant
ProfLearn	<---	Attitude	0.54	0.001	Significant
Attitude	<---	LCL	0.37	0.001	Significant
AsstPractice	<---	Attitude	0.31	0.001	Significant
AsstPractice	<---	ProfLearn	0.40	0.001	Significant
AsstPractice	<---	LCL	0.09	0.199	Non-Significant

## DISCUSSION

The influence of LCL on educators' assessment practices is complex. Findings indicate that LCL strengthens professional learning and attitudes toward assessment, which in turn improve assessment practices. This aligns with earlier studies showing that leadership fosters environments in which educators are motivated to adopt innovative approaches (Cereno & Quinito, 2025; Karakose et al., 2025). Attitudes were also found to shape the adoption of effective methods consistent with prior work on the role of beliefs in assessment behaviours (Panadero et al., 2018). Collectively, these results suggest that while LCL drives assessment reform, its effectiveness depends on professional learning opportunities and positive educator attitudes, which mediate the translation of leadership into practice. The absence of a strong direct effect further underscores that leadership operates mainly through mediating pathways—attitudes and professional learning function as key mechanisms by which leadership influence is enacted. Although mediation was not formally tested, future studies using bootstrapping could

provide stronger evidence of indirect effects in clarifying how leadership shapes practice through changes in beliefs and professional growth.

## CONCLUSIONS

This study shows that values-driven LCL strengthens educators' attitudes and professional learning, which serve as precursors to effective assessment practices. Yet, leadership influence alone does not ensure direct behavioral change. Bridging this gap requires reshaping educators' assessment conceptions and providing sustained institutional support. An integrated model combining vision, facilitation, reflective dialogue, and collaboration offers strong potential to empower educators to improve assessment quality and enhance student learning. In particular, mentoring programs, structured reflective dialogue, and collaborative assessment communities can operationalise this model and provide practical avenues for sustained improvement. The study also extends Social Cognitive Theory (SCT) by demonstrating that leadership as an environmental factor that shapes assessment practices indirectly through personal factors such as attitudes and professional learning.

The results of this research carry consequences for educational practice, policy and investigation. For education leaders and administrators, the outcomes emphasise the importance of concentrating on leadership development initiatives that emphasise role modelling, effective communication of vision and robust support frameworks. These components are vital in motivating educators to engage with assessment procedures. In practical terms, this can be implemented through mentoring programs, reflective dialogue sessions, and collaborative assessment communities where educators can learn from each other's experiences and work together to develop innovative strategies. At the institutional level, policies should embrace values-driven leadership principles within professional development initiatives and governance frameworks. By recognising the connections between leadership, professional learning, and assessment, institutions can promote lasting improvements in assessment quality, boost educator satisfaction, and ultimately enhance student learning outcomes.

This study has several limitations despite its contributions. First, the sample was restricted to higher education lecturers in Malaysia, which limits generalizability to other levels and international contexts. Differences in cultural values, governance, and leadership styles may produce different outcomes. Second, the cross-sectional design prevents causal inference, leaving the temporal processes through which leadership shapes professional learning and assessment practices unclear. Third, using self-reported questionnaires may lead to response bias, as individuals may overestimate their positive views or habits. To address this constraint, future research should integrate survey data with qualitative techniques such as interviews, classroom observations, and document analysis. This would help to generate a more real and nuanced understanding of instructors' practices. Furthermore, the analysis focused primarily on direct impacts between behavioural elements, without investigating potential mediating mechanisms, such as the role of intentions. Future research could delve into these issues to better understand the processes at play.

Future studies should address these constraints by doing comparative and cross-cultural research across multiple educational systems. Longitudinal studies may help us understand how leadership affects assessment procedures over time. Additionally, mixed-methods approaches could improve surveys by incorporating information from observations, interviews, or student

results. Specifically, combining self-reported data with qualitative methods, including interviews, classroom observations, and document analysis, can assist in eliminating response bias and provide a more comprehensive picture of how leadership and professional learning influence educators' perspectives on assessment. Qualitative research could elucidate the mechanisms by which leadership and professional development shape these perceptions. Addressing these gaps enables us to refine leadership practices and support long-term, context-specific assessment reforms. Overall, this study emphasises the critical role of values-driven, learning-centred leadership in encouraging professional growth and attitudes, and in altering assessment processes, laying the groundwork for more successful and lasting educational transformation.

## ACKNOWLEDGEMENT

Thank you to the Faculty of Engineering and Life Sciences at UNISEL, Malaysia, for the support and resources provided for this study.

## REFERENCES

Ahmedi, A. (2023). The relationship between educators' attitudes towards formative assessment and their assessment practices. *Journal of Social Studies Education Research*, 14(1), 273–291. <https://jsser.org/index.php/jsser/article/view/1233>

Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314–324. <https://doi.org/10.1002/hbe2.195>

Alanoglu, M. (2023). Creating learning schools through learning-centered leadership: Understanding the moderating role of teacher performance. *Educational Management Administration & Leadership*. <https://doi.org/10.1177/17411432231188641>

Alkharusi, H. (2023). Educators' attitudes toward classroom assessment: The role of affective and contextual factors. *Studies in Educational Evaluation*, 76, 101222. <https://doi.org/10.1016/j.stueduc.2022.101222>

Andersson, C., Granberg, C., Palmberg, B., & Palm, T. (2025). Basic psychological needs satisfaction as a mediator of the effects of a formative assessment practice on behavioral engagement and autonomous motivation. *Frontiers in Education*, 10, 1523124. <https://doi.org/10.3389/feduc.2025.1523124>

Andrade, H. L. (2019). A critical review of research on student self-assessment. *Frontiers in Education*, 4, 87. <https://doi.org/10.3389/feduc.2019.00087>

Aslan, M., Arisoy, E., & Gören, T. (2023). The Relationship Between Learning-Centered Leadership and Professional Learning: A Study on SAC Educators. *Kuramsal Eğitimbilim*, 16(1), 142–162. <https://doi.org/10.30831/akukeg.1179861>

Berkovich, I., & Eyal, O. (2020). The effects of principals' learning-centered leadership on educators' professional learning: The mediating role of teacher agency. *Educational Administration Quarterly*, 56(5), 707–745. <https://doi.org/10.1177/0013161X20909854>

Berkovich, I., & Eyal, O. (2021). School leaders and learning-centered leadership: A systematic review. *Educational Management Administration & Leadership*, 49(5), 708–727. <https://doi.org/10.1177/1741143220945702>

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74.

Brown, G. T. L., Gebril, A., & Watterston, J. (2024). Secondary educators' conceptions of feedback and assessment practices under policy pressure. *Australian Educational Researcher*, 51(1), 53–72. <https://doi.org/10.1177/00049441231214022>

Cereno, R. V., & Quinito, D. I. (2025). Learning-Centered Leadership Practices: Its Influence to Educators' Professional Development. *International Journal of Research and Innovation in Social Science*, IX(II), 1778–1786. <https://doi.org/10.47772/ijriss.2025.9020144>

Chen, J., Xu, L., & Luo, Y. (2024). Professional learning communities and their impact on teacher performance: Empirical evidence from public primary schools in Guiyang. *Teaching and Teacher Education*, 148, Article 104715. <https://doi.org/10.1016/j.tate.2024.104715>

de Brujin, E., & Uerz, D. (2025). Professional development for vocational educators to design formative assessments aligned with learning progressions. *Vocations and Learning*. Advance online publication. <https://doi.org/10.1007/s41686-025-00107-4>

Doria, B., Grion, V., & Paccagnella, O. (2023). Assessment approaches and practices of university lecturers: A nationwide empirical research. *Italian Journal of Educational Research*, 30, 129-143. <https://doi.org/10.7346/sird-012023-p129>

Hair, J. F., Gabriel, M., & Patel, V. (2014). AMOS covariance-based structural equation modeling (CB-SEM): guidelines on its application as a marketing research tool. *Brazilian Journal of Marketing*, 13(2). <https://doi.org/10.5585/remark.v13i2.2718>

Hallinger, P. (2019). Learning-centered leadership and teacher professional learning: A global perspective. *Educational Management Administration & Leadership*, 47(6), 792–811. <https://doi.org/10.1177/1741143217717270>

Hallinger, P., & Wang, W. C. (2022). Assessing the effects of principal leadership on assessment for learning practices. *Educational Administration Quarterly*, 58(3), 355–390. <https://doi.org/10.1177/0013161X211050234>

Hamodi, C., López-Pastor, V. M., & López-Pastor, A. T. (2017). If I experience formative assessment whilst studying at university, will I put it into practice later as a teacher? Formative and shared assessment in initial teacher education (ITE). *European Journal of Teacher Education*, 40(2), 171–190. <https://doi.org/10.1080/02619768.2017.1281909>

Harris, L. R., & Brown, G. T. L. (2022). Beliefs and practices about assessment: An international review of teacher perspectives. *Assessment in Education: Principles, Policy & Practice*, 29(3), 293–314. <https://doi.org/10.1080/0969594X.2021.2002666>

Hassan, N. A. B., Ghazali, N. H. C. M., & Hassan, R. M. (2022). Exploratory Factor Analysis (EFA) of Assessment Practice Skill Among Lecturers in Malaysia. *Selangor Science & Technology Review (SeSTER)*, 6(2), 24-33.

Hassan, N. A., Ghazali, N. H. C. M., Idris, I., Hassan, R. M., & Man, E. (2023). The relationship between Malaysian university lecturers' conceptions of Assessment Practice: Hubungan konsepsi pensyarah universiti di Malaysia terhadap Amalan Pentaksiran. *Jurnal Pendidikan Bitara UPSI*, 16, 136-146. <https://doi.org/10.37134/bitara.vol16.sp2.13.2023>

Hassan, N. A., Ghazali, N. H. C. M., Hassan, R. M., Wahab, Y. A. A., & Hashim, H. (2023). The Mediator Role of Professional Learning in the Relationship Between Learning-Centered Leadership and Attitude on Assessment Practices. *ICELAM*, 3(2-13).

Ibarra-Sáiz, M. S., Rodríguez-Gómez, G., & Boud, D. (2021). The quality of assessment tasks as a determinant of learning. *Assessment & Evaluation in Higher Education*, 46(6), 943-955. <https://doi.org/10.1080/02602938.2020.1828268>

Ismail, S. M., Rahul, D. R., Patra, I., & Rezvani, E. (2022). Formative vs. summative assessment: Impacts on academic motivation, attitude toward learning, test anxiety, and self-regulation skill. *Language Testing in Asia*, 12, 1-23. <https://doi.org/10.1186/s40468-022-00191-4>

Jensen, L. X., Bearman, M., & Boud, D. (2023). Characteristics of productive feedback encounters in online learning. *Teaching in Higher Education*, 1-15. <https://doi.org/10.1080/13562517.2023.2213168>

Karakose, T., Gurr, D., Tülbüş, T., & Kanadlı, S. (2025). What factors mediate the relationship between leadership for learning and teacher professional development? Evidence from meta-analytic structural equation modelling. *Educational Management Administration & Leadership*, <https://doi.org/10.1177/17411432241308461>

Keithwood, K., & Jantzi, D. (2005). Transformational leadership. In B. Davies (Ed.), *The Essentials of School Leadership* (pp. 31–43). London: SAGE.

Limbaga, M.J. E., & Monteroso, R.C. Jr. (2024). Learning-Centered Leadership of School Heads and Its Moderating Effect on Organizational Culture and Organizational Performance. *International Journal of Innovative Research in Multidisciplinary Education*, 03(10). <https://doi.org/10.58806/ijirme.2024.v3i10n06>

Liu, S., Hallinger, P., & Feng, D. (2021). Learning-centered leadership and teacher professional learning: Evidence from China. *International Journal of Leadership in Education*. <https://doi.org/10.1080/13603124.2021.1889033>

Lu, Q., & Mustafa, Z. (2021). Toward the impact of EFL educators' self-efficacy and collective efficacy on students' engagement. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.744586>

Luo, X., Alias, B. S., & Adnan, N. H. (2024). Exploring the Interplay between Teacher Leadership and Self-Efficacy: A Systematic Literature Review (2013–2024). *Education Sciences*, 14(9), 990. <https://doi.org/10.3390/educsci14090990>

Md Yusof, A. M., Razali, A. B., & Kabilan, M. K. (2025). Investigating the interrelationship between educators' grading practices and classroom-based assessment strategies among Malaysian preservice educators. *International Journal of Instruction*, 18(1), 357–376. <https://doi.org/10.29333/iji.2025.18120a>

Montgomery, L., MacDonald, M., & Houston, E. S. (2023). Developing and evaluating a social work assessment model based on co-production methods. *British Journal of Social Work*, 53(6), 3665–3684. <https://doi.org/10.1093/bjsw/bcad154>

Morris, R., Perry, T., & Wardle, L. (2021). Formative assessment and feedback for learning in higher education: A systematic review. *Review of Education*, 9(1), 1-26. <https://doi.org/10.1002/rev3.3292>

Nazim, M., Chaudhry, M. A., & Malik, A. H. (2024). Exploring EFL educators' attitudes towards assessment practices in learner-centered pedagogy. *International Journal of Evaluation and Research in Education*, 13(2), 424–432. <https://doi.org/10.11591/ijere.v13i2.28139>

Ninaus, M., Klein, E. D., & Hochleitner, C. (2025). Effective professional development for educators: A systematic review of informal and formal learning approaches. *Education Sciences*, 15(2), 146. <https://doi.org/10.3390/educsci15020146>

Osei, M., & Schweißfurth, M. (2023). Educators' beliefs and attitudes towards students' self-assessment: A Ghanaian perspective. *International Journal of Educational Research Open*, 4, 100267. <https://doi.org/10.1016/j.ijedro.2023.100267>

Ozan, C., & Keles, E. (2022). Educators' perceptions of assessment relevance and its impact on instructional practices. *Educational Assessment, Evaluation and Accountability*, 34(2), 205–224. <https://doi.org/10.1007/s11092-022-09377-3>

Özdemir, N., Gün, F., & Yirmibeş, A. (2023). Learning-centred leadership and student achievement: Understanding the mediating effect of the teacher professional community and parental involvement. *Educational Management Administration & Leadership*. <https://doi.org/10.1177/174114322211386>

Parmigiani, D., Nicchia, E., Murgia, E., & Ingersoll, M. (2024). Formative assessment in higher education: An exploratory study within programs for professionals in education. *Frontiers in Education*, 9, 1366215. <https://doi.org/10.3389/feduc.2024.1366215>

Pereira, D., Flores, M. A., & Niklasson, L. (2016). Assessment revisited: A review of research in assessment and evaluation in higher education. *Assessment & Evaluation in Higher Education*, 41(7), 1008-1032. <https://doi.org/10.1080/02602938.2015.1055233>

Qadach, M., Schechter, C., & Da'as, R. (2020). The impact of learning-centered leadership on educators' professional learning: The mediating role of trust and collaborative culture. *Teaching and Teacher Education*, 95, 103129. <https://doi.org/10.1016/j.tate.2020.103129>

Qian, H., Walker, A., & Yang, X. (2020). Learning-centered leadership and the promotion of formative assessment in schools. *Professional Development in Education*, 46(1), 84–97. <https://doi.org/10.1080/19415257.2018.1557245>

Sariakin, S., Yeni, M., Usman, M. B., Mare, A. S., Munzir, M., & Saleh, M. (2025, February). Fostering a productive educational environment: The roles of leadership, management practices, and teacher motivation. In *Frontiers in Education* (Vol. 10, p. 1499064). Frontiers Media SA. <https://doi.org/10.3389/feduc.2025.1499064>

Sehgal, P., Nambudiri, R., & Mishra, S. K. (2017). Teacher effectiveness through self-efficacy, collaboration and principal leadership. *International Journal of Educational Management*, 31(4), 505–517. <https://doi.org/10.1108/IJEM-05-2016-0090>

Sims, S., Allen, R., & Robinson, D. (2025). Designing effective teacher professional development: Insights from research and practice. *Educational Research Review*, 39, 100529. <https://doi.org/10.1016/j.edurev.2025.100529>

Sun, J., & Leithwood, K. (2022). Developing professional learning communities through learning-centered leadership: A multi-level analysis. *School Leadership & Management*, 42(1), 5–25. <https://doi.org/10.1080/13632434.2021.1967263>

Sun, N., & Izadpanah, S. (2025). The role of formative assessment and corrective feedback in shaping meaning of education, academic hardiness, and love of learning among English foreign language learners. *Journal of Psychology*, 251, 350213. <https://doi.org/10.1177/00315125251350213>

Suppian, Z., & Ahmad, J. (2016). Teacher trainees' attitude validity degree and reliability instrument analysis towards education assessment (25-34). *Jurnal Pendidikan Bitara UPSI*, 9(2), 25-34

Wigfield, A., Rosenzweig, E. Q., & Eccles, J. S. (2021). Achievement values: Interactions, interventions, and future directions. *Journal of Educational Psychology*, 113(7), 1300–1318. <https://doi.org/10.1037/edu0000602>

Xie, Z., Wu, R., Liu, H., & Liu, J. (2022). How does teacher-perceived principal leadership affect teacher self-efficacy between different teaching experiences through collaboration in China? A multilevel structural equation model analysis based on threshold. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.933838>

Zheng, X., Yin, H., & Liu, Y. (2023). Values-driven leadership and assessment reform: Exploring pathways of influence. *Teaching and Teacher Education*, 124, 104042. <https://doi.org/10.1016/j.tate.2023.104042>