

# The role of Teachers' Indigenous Knowledge and Cultural Competencies in Enhancing Students' Engagement and Learning Outcomes

*by I Made Suarta Et All*

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## The role of Teachers' Indigenous Knowledge and Cultural Competencies in Enhancing Students' Engagement and Learning Outcomes

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**Abstract:** Grounded in constructivism and considering the context of literature studies, the current research examines the direct and indirect impact of students' perception of their teachers' indigenous knowledge and cultural competencies on their learning outcomes via an underlying mechanism of student engagement. The current study aims to provide insightful recommendations for academicians and school administrative bodies to provide necessary teacher training and development facilities so they can better transfer their knowledge to the students. Furthermore, the current study brings several theoretical and practical advances in the context of literature studies. Utilizing a time-lagged quantitative research design, data were collected from the 536 literature students from the higher educational institutions of Indonesia. Moreover, data were analyzed using structural equation modeling in SmartPLS3 software. The results revealed that students' perception of their teachers' indigenous knowledge and cultural competency positively influences their learning outcomes in terms of cognitive, social, and interpersonal skills. Besides, no significant differences were found between the impact of teachers' indigenous knowledge and cultural competencies on students learning outcomes reflecting the utmost importance of both study constructs in enhancing students' abilities. Moreover, results also revealed the significant mediatory role of students' engagement between their perceptions of teachers' indigenous knowledge and cultural competencies to enhance their learning outcomes.

**Keywords:** Teachers Indigenous knowledge, teachers' cultural competencies, students' engagement, students' learning outcomes, theory of constructivism.

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Literature is about the feelings, thoughts, and experiences that help individuals enhance their cognitive, social, and interpersonal abilities (Yates et al., 2019). Cognitive skills allow individuals to improve their thinking skills and strengthen their mindset (Kuhmann et al., 2017). Besides, social capabilities facilitate individuals in recognizing society's norms and values. At the same time, literature also introduced different characters in individuals' lives that help them develop their personalities (Yates et al., 2019). Moreover, these cognitive, social, and interpersonal abilities are of utmost importance in the educational system (Hajhashemi et al., 2018). Research shows that many countries, i.e., the United States, Australia, and Japan, have been incorporating literature studies into their educational system for many years (Frank, 2020). In this regard, many kinds of literary works have been introduced in the teaching process, including poems, prose, songs, short stories, novels, picture books, among others (Frank, 2020).

However, research shows that regardless of the importance of literature to the students and achieving their learning outcomes, there are decreasing global trends regarding students reading habits (Skaar et al., 2018; Wintersparv, 2021). On the other side, research also suggests that teachers strive to incorporate culturally sustaining methods into their teaching practices (Burgess & Evans, 2017) so that they can engage the students to learn the literature and fulfill the learning outcomes that primarily include the building of social cognitive and interpersonal capacities among them (Wintersparv, 2021). Previously quality of teaching and facilities provided to the teachers were considered important predictors of literature students learning outcomes (Gillan et al., 2017; Skaar et al., 2018). The main focus of the current study is the literature students and their perceptions of teachers' indigenous knowledge and cultural competencies to engage them in literature studies and achieve the desired outcomes.

Teachers' indigenous knowledge depicts their knowledge and information regarding local communities' social, philosophical, economic, and traditional technology advancement and standings (Parmin et al., 2017). Research also shows that teachers' inclusion of indigenous knowledge in the classes positively impacts students and their parents (Prest et al., 2021). Teachers rich in indigenous knowledge are better positioned to guide their students about the literature of that particular area (Burgess et al., 2020; Sawatsuk et al., 2018). Even though teachers with indigenous knowledge can better guide literature students and facilitate them to accomplish their learning goals, no study to date, as per the authors' knowledge, has empirically investigated the impact of teachers' indigenous knowledge on literature students learning outcomes which have been explored in the current study.

Following the national education system, teachers' cultural competencies mean their ability to teach their students from different cultures and educational backgrounds (Hordijk et al., 2019). Teachers' cultural competencies involved their cultural knowledge skills interpersonal awareness that enhanced socialist teachings (Kumari et al., 2020). Previously teachers' cultural competencies have been examined to evaluate the achievements of the students of medicine (Hilty et al., 2020) and mathematics (Wilson et al., 2017) and in the context of ethnic and cultural diversity (Hordijk et al., 2019; Sadeghi et al., 2018). Besides, extensive study of the literature shows that when teachers spend more time building relationships with their students based on the social-cultural and historical backgrounds and cultural identities and incorporate quality teaching based on cultural competencies, the students perform better (Burgess & Evans, 2017). At the same time extending the previous body of knowledge, the current study uniquely considered teachers' cultural competencies in developing and enhancing the literature students learning outcomes.

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Moreover, the current study considers the mediating role of students' engagement between the association of teachers' indigenous knowledge and cultural competencies with students learning outcomes. Student engagement "is a measure of a student's level of interaction with others, plus the quantity of involvement in and quality of effort directed toward activities that lead to persistence and completion" (Winstone et al., 2021, p. 637). Previously it has been considered as an outcome of student-teacher relationships (Roorda et al., 2017), online learning readiness (Raes et al., 2020), the school facilitation climate (Dalle et al., 2021), and perceived task difficulties (Lai, 2021). In contrast, the current study specifically focused on the engagement of literature students arising from their perception of teachers' indigenous knowledge and cultural competencies. Moreover, how that engagement leads to their learning outcome has rarely been empirically tested in previous studies.

Contextually, in terms of the literature studies, one main focus of the Indonesian government is the printed literature books (Ahmadi, 2019). Various Indonesian policies reveal that Indonesia has started strictly applying literature studies in the educational sector (Isnah et al., 2020). In addition, Indonesian literature is deep-rooted in Balinese literature (Nurjani & Dwijendra, 2020). Balinese literature refers to the written and oral Balinese language literature of Bali, Indonesia, which has been divided into two periods, i.e., traditional (*purwa*) and modern (*anyar*) (Suryasa & Dewi, 2018). Several higher education institutions in Indonesia have literature departments and teach Balinese literature (Suryasa & Dewi, 2018) based on the fact that literary work has become an integral part of societies and educational systems to develop and build a student's self-determination and abilities (Amka & Dalle, 2021; Cerasoli & Ford, 2014). Thus, this study is vital in examining linkages among teachers' indigenous knowledge and cultural competencies and engagement with students learning outcomes in Indonesia. Such scholarly investigation<sup>2</sup> are rare in this cultural context and will advance the literature in this domain.

The theoretical framework of the current study is grounded in the constructivism theory to support the role of teachers' indigenous knowledge and cultural competencies in engaging students in the literature studies and achieving their learning outcomes. The theory of constructivism postulates that individuals' positive experiences and perceptions help them construct their knowledge and enhance their learning abilities (Arifah & Marzuki, 2021; Gao, 2021; Nedal & Alcoriza, 2018). Furthermore, this research made a theoretical advance by suggesting the mediatory role of students' engagement to interlink their perception of teachers' indigenous knowledge and cultural competenci<sup>17</sup> with their learning outcomes. Hence, established in the theory of constructivism, the current study aims to answer the following questions;

1. To what extent do students' perceptions of teachers' indigenous knowledge and cultural competencies impact their engagement and learning outcomes in literature studies?
2. Is the students' engagement associated with their learning outcomes in literature studies?
3. Does students' engagement mediate the association of students' perception of teachers' indigenous knowledge and cultural competencies with their learning outcomes in literature studies?

## Review of the Literature and Theoretical Framework

### Teachers' Indigenous Knowledge, Teachers' Cultural Competencies and Students' Learning Outcomes

Students learning outcomes include attaining desired knowledge, and cognitive, social, and interpersonal skills (Dahleez et al., 2021). Various scholars have focused on the students' learning outcomes in different contexts. For instance, Sulasmi (2021) reported the effectiveness of modeling learning strategies in developing and achieving students learning outcomes. In other study, Deta et al. (2021) asserted that the application of modern technologies in the form of educational physics games, i.e., "board games and cards," depict a higher level of effectiveness in enhancing students' learning outcomes. At the same time, Alhadabi and Karpinski (2020) explained the significance of university students' self-efficacy and achievement orientation goals in achieving their learning outcomes and enhance performance. More recently, students learning outcomes are linked with the adoption of digital technologies (Alqahtani et al., 2021; Amedeker, 2020; Dahleez et al., 2021; Luczak & Kalbag, 2018; Walton et al., 2005).

In addition, Naz and Rashid (2021) stated that effective instructional leadership and teachers' motivation facilitate students in achieving their learning outcomes. Simultaneously, research also shows that students' perception of teachers' effectiveness positively impacts their learning outcomes while studying quantitative subjects like mathematics (Robert & Owan, 2019). This further reflects the importance of how students perceive the teaching skills, abilities, and ways of teaching of their teachers effective in achieving their learning outcomes.

Extending the same line of research in the literature studies and following the theory of constructivism, the current study proposes the positive association of students' perception of teachers' indigenous knowledge and cultural competencies with their learning outcomes. Because the indigenous knowledge depicts the information of an individual regarding the social, economic, cultural, philosophical, traditional, and technological knowledge about local communities (Ogunniyi, 2000), hence, in literary studies, indigenous knowledge is the key to learning and success (Dalle et al., 2020; McLinden et al., 2016). In addition, teachers' cultural competencies show the teachers' capabilities in dealing with students belonging to multiple cultures (Hordijk et al., 2019). Hence, they can be very valuable in teaching literature to students of various cultural backgrounds but are collectively learning the literature of a particular region or country. For instance, in the current study, Balinese Literature. Therefore, this study would be a valuable addition to the existing body of literature.

### Teachers' Indigenous Knowledge, Teachers' Cultural Competencies and Students' Engagement

Student engagement refers to the degree of interest, curiosity, attention, passion, and optimism that students exhibit while being taught (Roorda et al., 2017). Research shows the importance of various factors to engage students, including learning environment (Ali et al., 2018), school quality ratings (Von Stumm et al., 2021), intrinsic motivation and perceived utility (Rodríguez et al., 2020), personal innovativeness, and attitude (Abdul Rahman et al., 2020). The current study considers the role played by students' perception of the teachers' indigenous knowledge and cultural competencies to engage them in the learning process. Previously, student

engagement has been studied in various contexts, i.e., online (Roorda et al., 2017; Yue & Le, 2012) and on-campus (Abdul Rahman et al., 2020; Lai, 2021). It has also been assessed in various subject areas, i.e., mathematics (Çağırğan & Soytürk, 2021), medicine (Alamri et al., 2021), and religious studies (deJonge-Kannan, 2021). However, it has not been empirically examined in the literature studies that the current study has done. Thus, based on the above arguments, literature support, and the theory of constructivism, the current study proposes that when students perceive that their teachers exhibit the required indigenous knowledge and has the diversified cultural competencies to deal with their queries and concerns while learning the Balinese literature, they are more engaged in the learning sessions.

### *Student Engagement and Learning Outcomes*

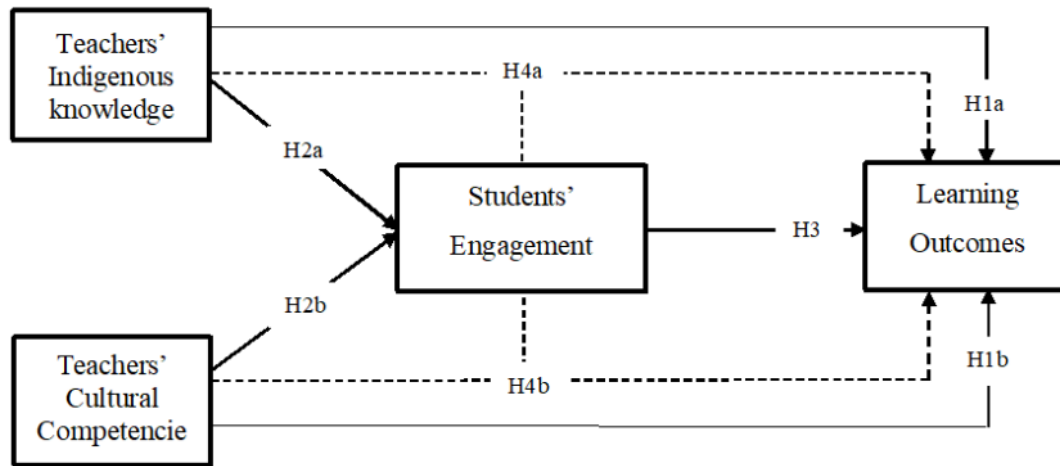
Student engagement reflects the students' observable behaviors like listening attentively, turning in work on time, participating in discussions, attending classes, and complying with the rules and regulations (Winstone et al., 2021). Research shows the importance of student engagement in enhancing their satisfaction (Alqahtani et al., 2021), performance (Tsay et al., 2020), and achievement (Mädamürk et al., 2020). These studies reflect the significance of student engagement to achieve positive academic outcomes in various contexts. Extending the previous knowledge regarding the construct of students' engagement, the current study is established on the theory of constructivism. Because the theory of constructivism relates the capabilities, efforts, and positive experiences with the achievements, we propose that when students are well engaged in the classroom while learning the literature studies, they are in a better position to achieve their learning outcomes.

### *Student Engagement as a Mediator*

Along with the direct associations, the study also proposes an indirect impact of students' perception of their teachers' indigenous knowledge and cultural competencies with their learning outcomes via their engagement in learning. Previously, student engagement has been considered a bridge between the association of their socio-economic status with their performance (Tomaszewski et al., 2020). Dahleez et al. (2021) demonstrated the role of students' engagement as a bridge between the teachers' behaviors and students' outcomes. They further stated that the way teachers communicate and treat their students in the classroom is essential to engage them in the learning process and enhance their learning outcomes. Roorda et al. (2017) described the significance of the student-teacher relationship in motivating students to increase their achievements. They further explained that student engagement is an underlying mechanism to transmit the student-teacher relationship to their high achievement.

Extending the existing body of research in the literature studies established on the theory of constructivism, this study proposes that students' perceptions of their teachers' indigenous knowledge and cultural competencies will function as positive learning opportunities and experiences that will impact their engagement level; as a result, they will be able to achieve their cognitive social and interpersonal skills as a part of the learning outcomes. Figure 1 presents the theoretical framework of the current study established on the literature review and the theory of constructivism.

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**Figure 1***Theoretical Framework of the Study*

## Methodology

The current study has been conducted in Indonesia, where the government devised strict policies regarding applying literature studies in the educational sector (Isnah et al., 2020). In addition, Indonesian literature is deep-rooted in Balinese literature (Nurjani & Dwijendra, 2020), and much higher education institutions in Indonesia have literature departments and teach Balinese literature (Suryasa & Dewi, 2018). This further reflects the significance of literary work in developing students' intellectual abilities (Amka & Dalle, 2021; Cerasoli & Ford, 2014). Hence, this study would be a valuable addition to examine the extent to which students' perceptions of teachers' indigenous knowledge and cultural competencies impact their engagement and learning outcomes in literature studies. It also examines the mediatory role of students' engagement for the association of their perception of teachers' indigenous knowledge and cultural competencies with their learning outcomes in Indonesia.

Moreover, applying a quantitative field survey, data were collected from the literature students studying at different colleges and universities in Indonesia. We approached the academic departments of various colleges and universities to get permission for surveying literature students. A detailed note carrying the information and reason for conducting the research was shared with all administrative departments. Most colleges and universities allowed researchers to approach their literature students except a few busy with student exams.

After receiving consent from the administration departments, we met with the literature students and requested that they participate in a time-lagged survey, where they had to fill the questionnaire at two separate times. The proficiency of those who agreed to participate in the English language was checked. As a result, a few were dropped based on the authors' judgment that they had difficulty reading and understanding. Those who remained were given the Time 1 survey comprising questions related to their demographic information and survey items related to three study constructs, i.e., teachers' indigenous knowledge, cultural competencies, and students' engagement.

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This data collection process started on February 1, 2021, and lasted until April 15, 2021. We approached about 850 students and collected 679 responses from 15 different colleges and universities. On May 15, 2021, we visited the same universities and colleges again. We approached all those students who had filled out the Time 1 survey and asked them to complete the Time 2 survey comprised of 8 items related to students' outcomes. Some students were missing due to their absence, so they could not fill out the Time 2 survey. After six weeks ending on Jun 23, 2021, 580 responses were received from the Time 1 and 2 surveys. These 580 responses were further scrutinized for missing values and unengaged responses that resulted in a final data set of 536 paired questionnaires, generating a final response rate of 63%.

## Study Measure

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A questionnaire comprising respondents' demographic characteristics and items related to the main study constructs was developed. The demographic variables include respondents' age, gender, study level, and semester. Standard measures from the well-established research studies were adapted to measure the main study constructs. For instance, we adapted a 6-item scale developed by Spanierman et al. (2011) to measure the teachers' indigenous knowledge. The sample items include "Our teacher/teachers have a clear understanding of culturally responsive pedagogy". A 10-item scale was adapted from Spanierman et al. (2011) to measure teachers' cultural competencies. The sample items include "Our teacher/teachers integrate the cultural values and lifestyles of racial and ethnic minority groups into teachings". At the same time, students' engagement was measured with a seven items scale developed by Krause and Coates (2008). The sample items include "Class discussion with teachers and other students is very useful" and "To contact teachers and other students is very useful to enhance learning." We also used two scales, i.e., 4 items from Young et al. (2003) and 4 from Abdullah and Primus (2021), to measure the students' learning outcomes. The sample items include "My teachers helped me gain more knowledge about the subjects" and "My teachers promoted my desire to learn more about the subject. The items of all study variables were measured using "a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree".

## Demographic Characteristics of the Respondents

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A detailed summary of the respondents' demographic characteristics is presented in Table 1. The number of male and female participants had no significant differences. About 70% of the respondents were 18-25 years of age. Simultaneously, almost half of the participants were graduate-level students. In contrast, participants were almost equally distributed in terms of the semester of study.

## Data Analysis and Results

### Measurement Model Assessment

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Smart PLS 3.0 was used to test the simulation, validity, and reliability analysis. The results revealed that students' degree level had a significant positive impact on their learning outcomes. Therefore, the degree level was controlled during the further analysis. To establish the constructs' reliability, the study assessed Cronbach's alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE) (Hair et al., 2010; Mansoor & Paul, 2021). The measurement model



results revealed that all the values of CA were under the recommended range, i.e., above 0.70 (Hair et al., 2010; Henseler et al., 2015).<sup>7</sup> Simultaneously, the factor loadings of the items of study constructs were above 0.7,<sup>8</sup> and AVE values of all the study constructs were above 0.50, as recommended by Sarstedt et al. (2017). Likewise, the CR values of all the study variables were above 0.70, representing the good reliability of the study variable (Mansoor, 2021; Sarstedt et al., 2017). A summary of factor loadings, CR, CA, and AVE is presented in Table 2.

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**Table 1***Respondents' Demographic Characteristics*

| Variables            |               | Number<br>(N=536) | %      |
|----------------------|---------------|-------------------|--------|
| Gender               | Male          | 279               | 52.1%  |
|                      | Female        | 257               | 47.9%  |
| Age                  | 18-25 years   | 377               | 70.4%  |
|                      | 26-35 years   | 108               | 20.1%  |
|                      | 36-45 years   | 31                | 05.8%  |
|                      | 45 and above  | 20                | 03.7%  |
| Studying in Semester | 1-2           | 120               | 22.4%  |
|                      | 3-4           | 142               | 26.5%  |
|                      | 5-6           | 151               | 28.2%  |
|                      | 7- more       | 123               | 22.9%  |
| Degree level         | Undergraduate | 159               | 29.7%  |
|                      | Graduate      | 243               | 45.3%  |
|                      | Post-graduate | 134               | 25.00% |

The validity of the study constructs is also essential to establish before proceeding to structural model assessment (Noor et al., 2021). Validity presents the accuracy. Scholars consider Heterotrait-Monotrait Ratio and Fornell-Larcker-Criterion among the most measure of the discriminant validity (Henseler et al., 2009). Henseler et al. (2015) asserted that the value of the HTMT-ratio should be less than 0.90. The Fornell-Larcker Criterion is met when the square root of each construct's AVE is more than its correlation with another construct (Fornell & Larcker, 1981; Henseler et al., 2015; Mansoor et al., 2020). The values of the HTMT ratio and Fornell-Larcker, as given in Table 3, show that the measures' discriminant validity is established.

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**Table 2**

*Factor Loadings, Reliability, and Validity*

| Constructs/indicators                  | Factor Loadings |       |       |       | AVE   | CR    | CA    |
|--|-----------------|-------|-------|-------|-------|-------|-------|
|  | 1               | 2     | 3     | 4     |       |       |       |
| <b>Teachers' Indigenous knowledge</b>  |                 |       |       |       | 0.648 | 0.917 | 0.809 |
| TIK1                                   | 0.793           |       |       |       |       |       |       |
| TIK2                                   | 0.784           |       |       |       |       |       |       |
| TIK3                                   | 0.829           |       |       |       |       |       |       |
| TIK4                                   | 0.876           |       |       |       |       |       |       |
| TIK5                                   | 0.707           |       |       |       |       |       |       |
| TIK6                                   | 0.831           |       |       |       |       |       |       |
| <b>Teachers' Cultural Competencies</b> |                 |       |       |       | 0.630 | 0.944 | 0.831 |
| TCC1                                   |                 | 0.736 |       |       |       |       |       |
| TCC2                                   |                 | 0.743 |       |       |       |       |       |
| TCC3                                   |                 | 0.711 |       |       |       |       |       |
| TCC4                                   |                 | 0.791 |       |       |       |       |       |
| TCC5                                   |                 | 0.880 |       |       |       |       |       |
| TCC6                                   |                 | 0.823 |       |       |       |       |       |
| TCC7                                   |                 | 0.769 |       |       |       |       |       |
| TCC8                                   |                 | 0.870 |       |       |       |       |       |
| TCC9                                   |                 | 0.791 |       |       |       |       |       |
| TCC10                                  |                 | 0.807 |       |       |       |       |       |
| <b>Students' Engagement</b>            |                 |       |       |       | 0.570 | 0.903 | 0.778 |
| SE1                                    |                 |       | 0.751 |       |       |       |       |
| SE2                                    |                 |       | 0.768 |       |       |       |       |
| SE3                                    |                 |       | 0.745 |       |       |       |       |
| SE4                                    |                 |       | 0.790 |       |       |       |       |
| SE5                                    |                 |       | 0.726 |       |       |       |       |
| SE6                                    |                 |       | 0.787 |       |       |       |       |
| SE7                                    |                 |       | 0.716 |       |       |       |       |
| <b>Learning Outcomes</b>               |                 |       |       |       | 0.616 | 0.927 | 0.826 |
| LO1                                    |                 |       |       | 0.822 |       |       |       |
| LO2                                    |                 |       |       | 0.740 |       |       |       |
| LO3                                    |                 |       |       | 0.754 |       |       |       |
| LO4                                    |                 |       |       | 0.709 |       |       |       |
| LO5                                    |                 |       |       | 0.856 |       |       |       |
| LO6                                    |                 |       |       | 0.890 |       |       |       |
| LO7                                    |                 |       |       | 0.713 |       |       |       |
| LO8                                    |                 |       |       | 0.777 |       |       |       |

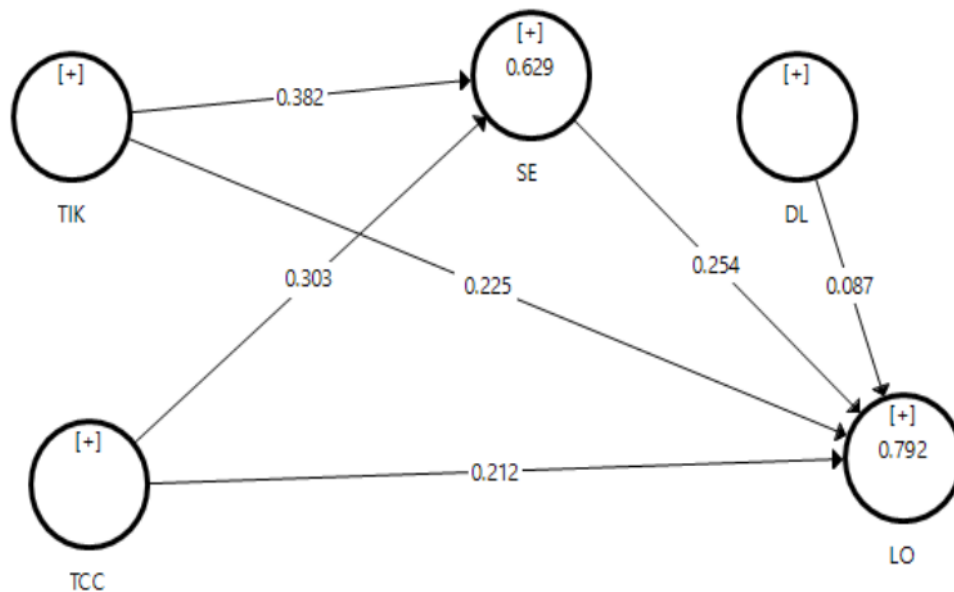
Note. CR, composite reliability; AVE, average variance extracted.

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**Table 3**  
*Heterotrait-Monotrait Ratio*

| Constructs                      | Mean | STD. | 1            | 2            | 3            | 4            |
|---------------------------------|------|------|--------------|--------------|--------------|--------------|
| Teachers' Indigenous knowledge  | 5.77 | 1.12 | <b>0.804</b> |              |              |              |
| Teachers' Cultural Competencies | 5.89 | 1.01 | 0.578        | <b>0.793</b> |              |              |
| Students' Engagement            | 6.01 | 0.93 | 0.521        | 0.472        | <b>0.754</b> |              |
| Learning Outcomes               | 5.91 | 0.98 | 0.418        | 0.511        | 0.583        | <b>0.784</b> |

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**7** *pte.* The square roots of AVEs of the constructs are shown in bold in diagonal. And depict the discriminant validity of the constructs.

**Figure 2**  
*Measurement Model*



**Structural Model Assessment**

The hypothesized relationships were tested applying the structural model in SamrtPLS3. The bootstrapping technique with 500 sub-samples was used (Mansoor, 2021; Sarstedt et al., 2017). In addition, for reporting the impact size and significance of proposed relationships, we reported “β -coefficient, p-value, and t-value.” Besides, “the Coefficient of Determination (R2)” was calculated to confirm the model fitness. The results revealed a 62.9% variance in students’ engagement based on their perception of teachers’ indigenous knowledge and cultural competencies. Students’ perception of teachers’ indigenous knowledge, cultural competencies, and engagement resulted in a 79.2% variance in students’ learning outcomes. These findings show a good fitness of the overall proposed model.

**Direct Hypothesis**

H1 of the current study examined the association of students' perception of teachers' indigenous knowledge with their learning outcomes. Results revealed a positive and significant relationship between students' perception of teachers' indigenous knowledge ( $\beta = .225^{***}, t=4.872$ ) and their learning outcomes. Simultaneously, H2 proposed a positive association between students' perception of teachers' cultural competencies and learning outcomes. Similar to H1, the current study results also supported the H2 revealing a positive and significant relationship between students' perception of teachers' cultural competencies ( $\beta = .212^{***}, t=4.671$ ) and their learning outcomes. The results showed no significant differences for the teachers' indigenous knowledge and cultural competencies in developing student learning outcomes, revealing the importance of both constructs for developing and enhancing students' knowledge. A positive and significant association of teachers' indigenous knowledge ( $\beta = .382^{***}, t=8.348$ ) and teachers' cultural competencies ( $\beta = .303^{***}, t=7.799$ ) with students' engagement was revealed. These results also show that students get more involved and engage in academic and non-academic activities when they perceive their teachers as rich in indigenous knowledge and cultural competencies. Finally, results revealed a significant and positive association between students' engagement ( $\beta = .254^{***}, t=5.153$ ) and learning outcomes. These results further show the importance of students' engagement in enhancing their knowledge and fulfilling their learning goals. Hence, results supported the direct hypotheses of the study, i.e., H1a, b; H2a, b; and H3.

**Mediation Hypothesis**

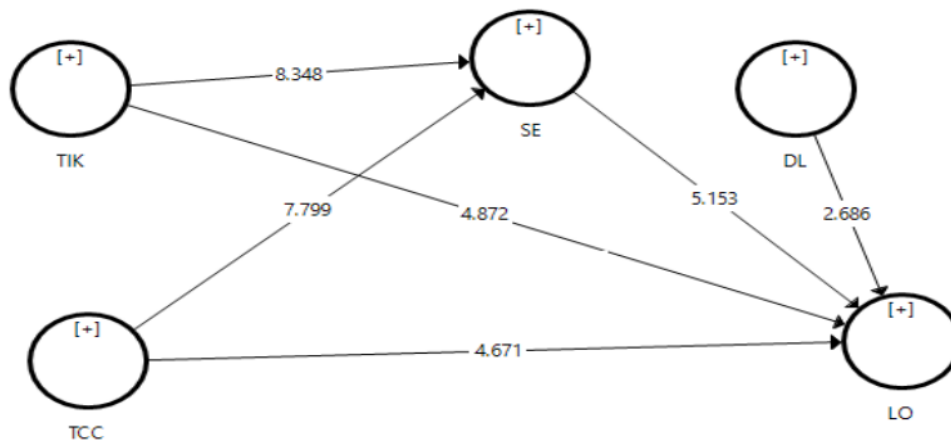
The mediation hypotheses H4 a and b proposed the students' engagement as a mediatory mechanism between the association of teachers' indigenous knowledge and cultural competencies with students' learning outcomes. The results revealed a positive and an indirect relationship of teachers' indigenous knowledge ( $\beta = .263^{***}, t=5.621$ ) and teachers' cultural competencies ( $\beta = .278^{***}, t=11.025$ ) with students' learning outcomes in the presence of students' engagement as a mediator. A detailed summary of direct and indirect associations is given in Table 4.

**Table 4**  
 Hypothesis Testing Results

|                 | Hypotheses    | Std. Beta | t-Value | p-values | Supported |
|-----------------|---------------|-----------|---------|----------|-----------|
| H <sub>1a</sub> | TIK → LO      | 0.225     | 4.872   | 0.001    | Yes       |
| H <sub>1b</sub> | TCC → LO      | 0.212     | 4.671   | 0.002    | Yes       |
| H <sub>2a</sub> | TIK → SE      | 0.382     | 8.348   | 0.000    | Yes       |
| H <sub>2b</sub> | TCC → SE      | 0.303     | 7.799   | 0.000    | Yes       |
| H <sub>3</sub>  | SE → LO       | 0.254     | 5.153   | 0.000    | Yes       |
| H <sub>4a</sub> | TIK → SE → LO | 0.263     | 5.621   | 0.000    | Yes       |
| H <sub>4b</sub> | TCC → E → LO  | 0.278     | 6.025   | 0.000    | Yes       |

Note. TIK = Teachers' Indigenous knowledge; TCC = Teachers' Cultural Competencies; SE = Students' Engagement; LO = Learning Outcomes.

**Figure 3**  
*Structural Model*



## Discussion and Conclusion

### Findings of the Study

The results revealed a positive association between students' perception of teachers' indigenous knowledge and learning outcomes. This further shows the importance of teachers' indigenous knowledge, which students consider engaging during lectures based on the fact that if the teacher is well aware of the social, economic, traditional, and technological aspects of the local community about which they want to teach, then students will actively participate in that learning process and achieve their desired outcomes. The results align with the findings of (Naz & Rashid, 2021; Robert & Owan, 2019), who demonstrated the importance of students' perception of teachers' effectiveness in enhancing their performance. This further shows that students' perceptions regarding teachers' abilities and knowledge are important to consider while studying their learning outcomes. The results also revealed the positive association of students' perception of teachers' cultural competencies in enhancing their learning outcomes (Kumari et al., 2020). These results are in line with the previous studies that depicted the importance of intercultural competencies of the teachers to help students belonging to different cultures to learn various subjects more effectively (Hordijk et al., 2019; Wilson et al., 2017). Because literature studies are closely linked with the cultural values of a particular society (Clark & Wylie, 2021; Yamamori, 2019), when teachers with the required knowledge of that society and local area teach literature to their students by giving examples of cultural histories and characteristics, they are more influential in enhancing students learning outcomes.

Moreover, study results show that students' perceptions of teachers' indigenous knowledge enhance their classroom engagement. These findings can be related to the previous studies that suggested the significance of teachers' behaviors and student-teacher relationships in determining and enhancing students' level of engagement in classrooms (Dahleez et al., 2021; Roorda et al., 2017). Suppose the students are satisfied with the teachers and consider that the teachers possess

the required indigenous knowledge of the literature they are going to teach. In that case, they take more interest and engage in the activities initiated by the teachers to enhance the learning level of the students (Raes et al., 2020). Likewise, student perceptions of teachers' cultural competencies were positively related to their engagement while learning Balinese literature. These findings can be associated with the previous studies that suggested the significance of teachers' cultural competencies as a predictor of their quality teaching that results in students' desired achievement (Burgess & Evans, 2017). Simultaneously, it can be stated that the teachers who are well aware of the Balinese culture can better guide their students about Balinese literature. The students reported the same based on their experiences with the teachers who were native speakers and had complete knowledge of Balinese culture and could efficiently and effectively utilize that in their teaching practices to engage students in learning sessions effectively.

In addition, student engagement was positively related to their learning outcomes. This has been previously reported while studying the impact of students' engagement on their achievement and enhanced performance (Alqahtani et al., 2021; Mädamürk et al., 2020; Tsay et al., 2020). This further reflects that the students who engage themselves in the studies, participate in the classes, ask questions from the teachers, and communicate with the students regarding distinct aspects of the subject they are being taught are in a better position to learn and achieve their learning outcomes. Finally, the results showed that students' engagement bridges their perception of teachers' indigenous knowledge and cultural competencies and the learning outcomes. The previous research also supports the mediatory role of students' engagement between teachers' behaviors and competencies and students' performance (Dahleez et al., 2021; Roorda et al., 2017; Wasike, 2017). Hence, when the students positively perceive that their teachers have the required indigenous knowledge of the subject, they are teaching and possess variable cultural competencies. They enjoy and participate in class activities rigorously and communicate with their teachers more intensely. These all-positive engaging activities within and outside the classroom help students enhance their learning outcomes. The study findings can also encourage students to participate in class activities and communicate with their teachers and fellows to learn from their experiences and knowledge. The results are also very valuable for the teachers that their knowledge and competencies can, directly and indirectly, enhance the students' learning outcomes via their engagement.

### Theoretical Contribution

Research reports that indigenous students' engagement and interest in the literature studies have been decreasing over the years (Peralta et al., 2016; Tucker et al., 2018; Wintersparv, 2021). In contrast, the current study is a valuable addition to the theory in suggesting the significance of student perceptions of their teachers' indigenous knowledge and cultural competencies in engaging them in the literature studies and enhancing their learning outcomes. The current study advances the theory in multiple ways. First, it has empirically examined the impact of teachers' indigenous knowledge and cultural competencies on students' engagement and learning outcomes, which has not been previously examined in the literature studies.

Second, instead of relying on assumed teachers' indigenous knowledge and cultural competencies, the current study considered the students' perceptions regarding both constructs to check their engagement and learning outcomes. This further shows that teachers' indigenous knowledge and cultural competencies impact students learning outcomes. It also shows the importance of students' perception that when they positively perceive their teachers to be competent and knowledgeable, they engage more in the classroom activities. Third, the current

study was conducted among the students of literature studies for which the indigenous knowledge and cultural competencies are an integral part of the teachers' personality so that they can influentially relate the literature with the characteristics of the local communities to enhance the students' cognitive, social, and interpersonal skills.

Fourth, the study's theoretical framework was established on the constructivism theory, which suggests that the presence of knowledge, positive experiences and learning opportunities help individuals enhance their learning. In the current study, students' perceptions of their teachers' indigenous knowledge and cultural competencies are considered learning opportunities and positive experiences that enhance their learning outcomes. Fifth, the current study has extended the theory of constructivism, suggesting the mediatory mechanism of students' engagement in the classrooms to help them achieve their learning outcomes.

Finally, the current study followed a time-lagged research design in which the data was collected at two separate times to examine the students' learning outcomes. This helped the researchers overcome the common method bias and extracted more generalized results with better causality.

### **Practical Contribution**

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In addition to the numerous theoretical advances, the current study also has practical contributions to literature studies. For instance, based on the positive results regarding students' perception of the teachers' cultural competencies and indigenous knowledge for enhancing the learning outcomes, attention should be paid to enhancing teachers' indigenous knowledge and cultural competencies. For that, competent authorities at higher education institutions can conduct training and workshops so that teachers can be provided with many opportunities to enhance their indigenous knowledge. Also, the competent authorities must arrange cross-cultural events and seminars for teachers to broaden their scope of cultural competencies to guide their students in a better way. Hence, they should pay attention to engaging their students in multiple class activities. For that, along with the class academic activities, they should organize non-academic activities, for instance, trips to cultural heritage places, where students can relate their learning process to the actual scenarios that can help them learn in a better way. In some cases where cultural heritage is not physically accessible to visit, a visual form of digital media should be considered to improve teachers' indigenous knowledge and cultural competencies and enhance students' engagement in the classroom.

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### **Limitations and Future Research Directions**

Like all attempts, this research also has limitations, bringing valuable insights for policymakers and scholars if addressed in the future. First, the current study considered two important constructs that measure the students' learning outcomes based on their perceptions of teachers' indigenous knowledge and cultural competencies. In contrast, future studies can consider the teachers' point of view regarding the triggering factors that impact their literature students' learning outcomes. Second, the current study followed a time-lagged quantitative research design to check literature students' engagement in Time 1 and their learning outcome in Time 2. In the future, a mixed-method approach can be applied in which, during the first phase, qualitative data can be collected based on the interviews of the teachers and the students or focus group discussions

among stakeholders to explore the factors that impact the students learning outcomes. In the second phase, the impact of those factors can be validated by quantitative analysis. Finally, the current study did not include any variable's contingent effect enhancing or decreasing the relationship strength between the students' perceptions and their outcomes. Hence in the future, the moderating role of the constructs like level of study, students' interest, and teachers' experience can be considered to check their contingent impact between students' perceptions, engagement, and learning outcomes. Future studies may also adopt a holistic approach to include all stakeholders like administration, teachers, parents, and students to explore the phenomenon under investigation in a single study to bring forth crucial policy insights to this area.

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