



Journal of Advanced Research in Social and Behavioural Sciences

Journal homepage:
<https://karyailham.com.my/index.php/jarsbs/index>
ISSN: 2462-1951



Culturally Responsive Teaching Practices among Indigenous Primary School Teachers: A Qualitative Study from Four Zones in Malaysia

Norwaliza Abdul Wahab^{1,*}, Nur Hazira Abu Bakar¹, Siti Rahaimah Ali¹, Muhamad Ikhwan Mat Saad², Mohamad Termizi Borhan², Goh Wei Wei³

¹ Faculty of Human Development, Universiti Pendidikan Sultan Idris (UPSI), Malaysia

² Faculty of Science And Mathematics, University Pendidikan Sultan Idris (UPSI), Malaysia

³ Faculty of Innovation & Technology, Taylor's University, Malaysia

ARTICLE INFO

Article history:

Received 10 July 2025

Received in revised form 5 August 2025

Accepted 29 September 2025

Available online 17 October 2025

Keywords:

Culturally Responsive Teaching; Indigenous Knowledge in Education; Contextualized Education

ABSTRACT

The education of Indigenous (Orang Asli) students remains a complex challenge in Malaysia, particularly in ensuring effective teaching and learning (T&L) practices that are sensitive to students' cultural backgrounds, cognitive abilities, and real-life experiences. This study aims to develop a practical and implementable framework for culturally responsive teaching practices (CRTP) for primary school teachers teaching Orang Asli pupils. A qualitative case study approach was employed, involving semi-structured interviews with ten informants, comprising teachers and school administrators from four schools located in Negeri Sembilan, Perak, Pahang, and Selangor. The data were analyzed using Braun and Clarke's (2006) six-phase thematic analysis approach. The findings produced several key themes that highlight the need for and implementation of culturally responsive teaching in Orang Asli school contexts. These themes include (i) limited availability of teaching modules and materials tailored to Orang Asli students; (ii) implementation of contextual, interactive, and locally adapted T&L practices; (iii) integration of Indigenous knowledge elements such as language, symbols, and cultural narratives into teaching; and (iv) recommendations for building a CRTP framework that is visual, flexible, and supported by school administrators. These themes serve as the foundation for constructing a CRTP framework that offers practical and inclusive guidance for teachers. Overall, this study emphasizes that teachers play a central role in the success of Orang Asli education. The proposed CRTP framework has the potential to support teachers in planning and delivering culturally responsive pedagogy, ultimately enhancing the achievement and engagement of Orang Asli students in the learning process.

* Corresponding author.

E-mail address: norwaliza@fpm.ups.edu.my

<https://doi.org/10.37934/arsbs.40.1.8797>

1. Introduction

Education issues among the Orang Asli community continue to be the focus of discussion in efforts to build an inclusive and fair education system. Past studies have shown that among the factors contributing to the low achievement of Orang Asli students is the incompatibility of teaching approaches with their cultural context.

Many Orang Asli children grow up in communities where learning takes place through everyday life by listening to elders' stories, watching skilled work, and learning directly through practice. These ways of passing down knowledge are deeply rooted in culture but often differ greatly from Malaysia's formal, exam-driven school system. By the time they enter school, some children may already face gaps in literacy and numeracy, making it harder to keep pace in classes organized strictly by age. With many parents having limited formal education themselves, support for schoolwork at home is also limited. In addition, the community's priorities sometimes place more value on practical knowledge than on academic content shaped by the national curriculum.

This ongoing disconnect between home values and school expectations continues to shape major challenges. One visible outcome is the consistently high rate of academic dropout among Orang Asli students. At the same time, teachers who serve these communities often enter the classroom with limited exposure to culturally responsive pedagogy, making it difficult to bridge gaps in learning and engagement. These intertwined issues form the basis for a deeper examination in the following sections.

1.1 Academic dropout of Orang Asli students

According to Sarah Khumairah Muchlis & Mohd Mahzan Awang [1], a study from the Malaysian Education Blueprint (2013–2025) found that many Orang Asli students are still lacking in literacy and numeracy. An Orang Asli Education Transformation Program was established in 2013 with the goal of changing the quality of national education by prioritizing quality of education of Orang Asli students towards a better future. Several past studies have also shown that there is an issue of educational dropout among Orang Asli and it is a problem that has never disappeared in the context of education in Malaysia. Among them is the nature of those who do not want to develop themselves by considering education not important for their lives in the depths of the forest. Another related factor is that Orang Asli students find it difficult to understand the standard curriculum, and it is found that the syllabus in schools does not match their intellectual understanding [2].

This academic dropout is also related to the content and implementation of language and education policies where the exclusion of Indigenous perspectives and qualifications is problematic. Research findings also show that standardized language and education policies that favour mainstream educational outcomes create problems for Indigenous minorities to succeed in school. Therefore, there is a need for teachers to seriously evaluate the implementation of top-down approaches and policies that can have adverse effects on Indigenous well-being and development that are contrary to the targeted outcomes of formal education [3].

1.2 Teachers lack skills in teaching Orang Asli students

According to Sumathi Renganathan [4] study, schools that house indigenous children must be mindful of mainstream educational practices and approaches that may not be appropriate and suitable for indigenous children. For example, teachers must be aware that indigenous children are making the transition from an oral culture to a literate culture when they enter school. To succeed in

school, indigenous children not only need to learn to read and write but they must also do so in a language that is not their mother tongue. According to Azizul Sulaiman *et al*; [5], teachers play an important role and make a contribution in increasing the level of confidence and motivation of students which will affect their academic performance. The role of a teacher can be translated into different contexts. The role played by teachers will be able to actively shape student participation and a sense of safety among students in a classroom.

Through the results of the study by Nurul Aini [6] it is shown that the educational dropout of Orang Asli students is caused by an uncondusive learning environment, teachers do not understand the Orang Asli social culture and do not have the ability to address the learning difficulties faced by Orang Asli students. This educational dropout can also be seen from the reduction in the number of Orang Asli students entering secondary school.

Despite various national efforts and interventions aimed at improving educational outcomes among Orang Asli students, there remains a lack of empirically grounded and contextually relevant frameworks to guide teachers in delivering culturally responsive instruction. Most existing professional development programs adopt a generic, top-down approach that neglects Indigenous perspectives, values, and epistemologies. This indicates a clear research gap, particularly in the absence of structured, practice-oriented models that integrate Indigenous knowledge with responsive pedagogical strategies.

The significance of this study lies in its attempt to develop a culturally responsive teaching (CRT) framework rooted in the lived realities and cultural assets of the Orang Asli community. This framework offers a structured guide for teachers to design learning experiences that are both pedagogically sound and culturally meaningful. It also contributes to the theoretical discourse on Indigenous education by contextualizing CRT within the Malaysian primary school system, specifically among Orang Asli pupils. Therefore, this study aims to construct a culturally responsive teaching practice framework based on Indigenous knowledge that can be used by Orang Asli primary school teachers, particularly within the context of forest-based experiential learning.

2. Methodology

2.1 Research Design

This study employed a qualitative case study design to explore how culturally responsive teaching (CRT) was enacted by teachers in Orang Asli school contexts. This research design allows for an in-depth exploration of participants' pedagogical beliefs, practices, and the socio-cultural dynamics influencing them [7]. This design was chosen to examine pedagogical reasoning, classroom adaptations, and institutional influences on CRT through multiple lenses.

2.2 Participants and Sampling

Twelve individuals were purposively selected from four Orang Asli school zones across Peninsular Malaysia, which are Perak, Pahang, Selangor, and Negeri Sembilan, consisting of eight teachers and four school administrators with at least three years of experience. Participants were chosen based on their roles in implementing or supporting CRT practices in rural Indigenous schooling.

2.3 Data Collection

Primary data were collected via semi-structured interviews conducted face-to-face in Bahasa Melayu. Each session lasted between 45 and 90 minutes and followed a thematic guide informed by

CRT frameworks. The guide included open-ended prompts about instructional strategies, challenges, cultural integration, and institutional support. Interviews were audio-recorded, transcribed verbatim, and supplemented with observational field notes to document setting and non-verbal cues.

To maintain data integrity, all transcripts were reviewed for accuracy. A bilingual researcher then translated selected excerpts into English for publication purposes, ensuring semantic and cultural fidelity through back-translation and peer review. Participants granted written informed consent, and all were assured of confidentiality and the right to withdraw at any stage.

2.4 Data Analysis

Interview data were analyzed using Braun and Clarke's (2006) six-phase thematic analysis approach: (1) familiarization with data, (2) initial coding, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. Coding was inductive but guided by CRT constructs. ATLAS.ti 23 was employed to assist with data management and retrieval.

Transcripts were coded line-by-line, with similar codes grouped into categories and then refined into themes. Themes were validated through constant comparison across participants and sites. Peer debriefing with qualitative experts and intercoder checks strengthened analytical rigor. Member checking was conducted with a subset of participants to verify the resonance of emerging interpretations.

2.5 Trustworthiness & Ethics

Credibility was enhanced through triangulation across sites and informants, member checking of preliminary findings, and maintenance of audit trails. This study received ethical approval from the University Pendidikan Sultan Idris Institutional Ethics Committee. Participant anonymity and confidentiality were rigorously upheld.

2.6 Link to Findings and Discussion

Thematic analysis resulted in the identification of four major themes, each reflecting recurring and significant dimensions of CRT practice: (i) the lack of culturally relevant teaching modules and materials, (ii) contextual and adaptive pedagogical strategies, (iii) integration of Indigenous knowledge, and (iv) proposed framework and institutional support. These findings are elaborated in the next section, supported by direct quotes from participants to illustrate key patterns and deepen understanding.

3. Results

3.1 Theme 1: Constraints in Culturally Responsive Teaching (CRT) Modules and Materials

3.1.1 Lack of specific teaching modules for Orang Asli pupils

One of the primary issues faced by teachers is the absence of teaching modules specifically designed for Orang Asli pupils. As a result, teachers are often compelled to independently adapt their teaching materials based on personal experience. According to the teachers, most modules provided by the Ministry of Education (KPM) or the District Education Office (PPD) do not holistically consider the cultural background, socioeconomic status, or literacy levels of Orang Asli students. This lack of appropriate teaching resources not only burdens the teachers but may also demotivate students,

especially when the content is overly general and disconnected from their daily lives. One teacher expressed concern regarding this situation:

“There really isn’t any module that truly suits Orang Asli pupils. The modules we receive are all designed as if we’re teaching urban children. I have to create my own materials based on my understanding of them.” (Teacher E)

Another teacher pointed out that the existing teaching materials cater solely to mainstream needs and fail to capture the attention of Orang Asli students when used in class:

“I once tried using the literacy module provided by the PPD, but my students didn’t understand it at all. The vocabulary used had no relevance to their lives. Only when I replaced it with pictures of forests and their villages did they become interested.” (Teacher C)

This constraint is further acknowledged by a school administrator, who noted the lack of systematic efforts to develop culturally responsive teaching (CRT) modules for the Orang Asli community:

“There is no serious planning from the school or PPD to produce dedicated modules for Orang Asli pupils. Only creative teachers take the initiative to adapt materials appropriately, but not all teachers are able to do this.” (Administrator B)

The lack of such modules hampers systematic efforts to strengthen culturally responsive teaching in Orang Asli schools. Previous studies have also shown that the lack of culturally relevant teaching aids remains a significant barrier to CRT practices in minority contexts [8]. Therefore, the development of specialised modules that align with the local context and cultural realities of Orang Asli pupils is a critical need that must be addressed by the Ministry.

3.1.2 Dependence on teachers’ individual initiative

The lack of culturally responsive teaching (CRT) modules and instructional materials has forced teachers to rely heavily on their own initiative to produce suitable resources. Many teachers admitted that they have to spend additional time outside of teaching hours to create their own materials that are relevant to their students. While this reflects the high level of dedication among teachers, it also places pressure on them due to the lack of systemic support from higher authorities. One teacher articulated this clearly:

“Sometimes I have to draw my own teaching aids, print pictures of animals or village scenes myself. The textbook materials are just not engaging for them.” (Teacher B)

Another teacher added that their efforts often go unrecognized despite clear evidence that such personalized approaches have improved student outcomes:

“I make short videos in their language, showing how to solve problems. But all of this is my own initiative there’s no budget or specific training support.” (Teacher F)

A school administrator acknowledged that budget constraints and policy limitations have made it difficult for schools to provide additional support materials to teachers:

“We rely on dedicated teachers who understand the cultural context. But officially, there’s no special allocation for culturally relevant teaching materials.” (Administrator A)

These findings align with those of Yew *et al.*, [9], who emphasize the importance of institutional support systems to enable teachers to effectively implement culturally responsive pedagogy. Without formal support, such teacher initiatives are limited in both reach and impact.

3.2 Theme 2: Contextual and Adaptive Teaching

3.2.1 Adapting content to students' life contexts

Teachers in Orang Asli schools generally recognize the need to adapt teaching content to suit the lived experiences of their students. Many reported that the national curriculum materials often do not align with the everyday realities of Orang Asli children. Therefore, teachers strive to contextualize abstract topics in the syllabus by relating them to the students' immediate environment, such as village life, forests, local practices, language, and symbols that are familiar to them. One teacher shared their contextual approach:

"I teach science using local examples, like the guava tree outside the classroom when explaining photosynthesis. That way, students can actually see the connection." (Teacher A)

Another teacher explained how learning becomes more meaningful when connected to students' prior knowledge:

"I notice that my students understand better when I use stories about things they do, like fishing or helping their families in the forest. When we use their experiences, they really pay attention." (Teacher G)

This contextual approach aligns with current conceptions of culturally responsive pedagogy as essential for affirming student identity through culturally meaningful instruction (He & Abdullah, 2025) [10]. Empirical evidence from Malaysian Indigenous contexts supports that assessments or instructional materials incorporating students' native language and cultural context significantly enhance understanding and engagement in learning [11].

3.2.2 Flexible strategies based on student learning preferences

In addition to adapting content, teachers also demonstrated flexibility in instructional strategies tailored to the learning tendencies of their students. These include the use of visual and kinaesthetic strategies to address literacy challenges, incorporating students' mother tongue in explanations, and employing play-based learning approaches aligned with Orang Asli learning styles. This flexibility allows teachers to engage students more effectively and promote classroom participation. One teacher shared:

"My students like movement-based activities, so I teach math through games. For example, I use rubber seeds to teach addition and subtraction. They enjoy learning this way." (Teacher D)

Another teacher emphasized using methods that align with how their students learn best:

"I use a lot of pictures and videos because they understand better visually. If I use long texts, they get bored quickly." (Teacher H)

This instructional flexibility reflects the asset-based dimension of culturally responsive pedagogy, which emphasizes recognizing and building upon students' unique learning strengths to improve engagement and outcomes [12]. Teachers in this study exhibited similar adaptive approaches, even in the absence of formal training or resources.

3.3 Theme 3: Integration of Indigenous Knowledge

3.3.1 Empowering cultural identity through responsive curriculum

In the context of Orang Asli education, integrating cultural elements and indigenous knowledge into teaching content serves as a foundation for empowering students' cultural identity. Teachers who applied this approach found that it not only improved student comprehension but also instilled pride in their heritage. One teacher shared:

"I teach about the forest, because that's where they feel at home. I link it to science what they know about trees, traditional medicines... they become more active, because it's their world." (Teacher G)

This approach echoes Abdul Rahman *et al.* [13] found that storytelling based on folk tales can significantly improve early literacy skills and cultural affirmation among marginalized students. Culturally rooted teaching bridges school learning with students' lived realities. Teachers also noted the long-term benefits in building students' self-esteem and cultural identity:

"Sometimes they're shy to speak in dialect, or to talk about their village. But when we use it in lessons, they enjoy it... they become the 'owners' of knowledge." (Teacher E)

Recent studies suggest that embedding indigenous epistemology into instructional planning significantly enhances learner engagement and comprehension [14]. Indigenous knowledge should therefore not be treated merely as supplementary material but as a core component of CRT.

3.3.2 Indigenous knowledge as a foundation for contextual teaching

Using indigenous knowledge in teaching strategies not only improves learning delivery but also builds a bridge of understanding between teachers and students. Many teachers noted that linking academic concepts to Orang Asli students' real-life experiences enhances their engagement:

"I once used a story about how they catch fish... when teaching water pressure in physics, they immediately understood because they've done it before it's not foreign to them." (Teacher B)

This highlights the need for pedagogies that are contextually relevant to students' backgrounds. Abdullah and Alias [15] emphasized that culturally embedded strategies rooted in local knowledge foster meaningful engagement and knowledge construction among learners from rural and indigenous backgrounds. Crucially, such integration allows teachers to appreciate diverse meaning-making processes that may not align with mainstream educational expectations. One teacher explained:

"Sometimes when we teach directly from the textbook, it doesn't register. But when I ask what they already know first, then build from there, that's when they start to think and engage." (Teacher F)

This aligns with recent research by Souto Otero [16], which reconceptualizes the formal validation of informal learning, highlighting how often such validation occurs covertly and implicitly even in systems where it goes unrecognized. The study suggests that while informal knowledge is indeed included in formal education, the process is usually selective and unacknowledged, underscoring the importance of deliberate pedagogical strategies to surface and integrate diverse learner knowledge.

3.4 Framework Necessity for Culturally Responsive Teaching: Teacher Proposals and Institutional Supports

3.4.1 Systematic need for Culturally Responsive Teaching (CRT) teacher training

A significant number of teachers stated that the lack of dedicated training in CRT remains a major barrier to effective implementation. While there are individual and informal efforts, there is no systematic training initiative from the Ministry:

"We've never received a course that really focuses on teaching Orang Asli pupils. Most of it we do on our own searching for materials, discussing with peers. Even then, it's not enough." (Teacher C)

The lack of systemic training results in significant variation in practice, where some teachers avoid incorporating local culture due to uncertainty or lack of pedagogical confidence. This not only undermines learning engagement but reproduces the marginalization of indigenous identities within mainstream schooling. The absence of formal support structures leaves teachers unsure about experimenting with new teaching approaches. Administrators also expressed concern about the gap in teacher understanding of Orang Asli culture, which affects delivery effectiveness:

"We need specific modules to help teachers. Not all of them have experience, so they need guidance on how to teach in ways that reflect students' cultural contexts." (Administrator B)

As noted by Razali et al. [17], sustained professional development rooted in culturally responsive leadership and professional learning community (PLC) practices is essential for empowering teachers in small, rural schools. However, such support structures remain limited in Malaysian contexts especially in indigenous zones. Without systematic capacity-building, educators are often left navigating complex cultural landscapes unaided, risking misrepresentation and stereotype reinforcement among Indigenous students.

Salleh and Hatta's [18] study also reinforces this argument when it finds that school principals in Malaysia emphasize the importance of structured teacher professional development such as periodic in-service sessions, collaborative planning, and instructional coaching as key to improving teaching performance and quality. Without ongoing and embedded CRT training in the school system, teachers will lack a solid foundation to consistently apply culturally responsive pedagogy in classroom practice.

This underscores that teacher initiative alone is insufficient without systemic support. For instance, Abdullah [19] conducted a systematic review on mathematics education strategies for Orang Asli learners in sustainability, finding that culturally relevant instructional practices, when embedded in policy, substantially improve learning outcomes. The review stresses the importance of institutional frameworks that support pedagogy rooted in community language, values, and ecological knowledge.

In short, this study underscores the pressing need to move from fragmented, individualized efforts to a systemic, culturally responsive training ecosystem that empowers teachers to engage authentically and effectively with Orang Asli learners. Without such systemic transformation, policy aspirations for educational inclusion and equity will remain aspirational rather than actionable. The findings also clearly suggest that a culturally grounded teacher training framework must be developed and integrated into existing professional development systems.

3.4.2: Policy alignment and administrative support

Institutional support through clear policies and administrative structures is essential to ensure effective CRT implementation. While some grassroots efforts exist, the lack of alignment from higher levels is a key obstacle. A teacher noted:

"We're just doing this individually. There's no clear directive from the District or State Education Offices. Sometimes we don't even know if what we're doing is correct or just trial and error." (Teacher A)

This underscores that teacher initiative alone is insufficient, what's needed is an overarching, coherent policy framework from the Ministry of Education. As argued by Chua & Low [20], Malaysia's implementation of inclusive education policies such as those embedded in the Education Blueprint requires not only rhetorical commitment but also operational alignment across all levels of school governance. Without this, culturally responsive teaching (CRT) remains fragmented, unpredictable, and heavily dependent on individual educators.

Moreover, He & Abdullah [10] highlight from global contexts that inclusive education policies must be systematically translated into clear, school-level guidelines and supported by leadership, curricular resources, and professional development if CRT is to be sustained beyond token gestures. An administrator emphasized:

"I try to support my teachers by letting them use their own materials, but without an official policy, there's only so much we can do." (Administrator A)

Such coordination would enable teachers to access structured training, culturally relevant resources, and logistical support toward genuinely responsive teaching practices for Orang Asli students.

4. Conclusions

This study investigated the implementation of culturally responsive teaching (CRT) among teachers working with Indigenous (Orang Asli) students in Malaysian primary schools. Thematic analysis of qualitative interviews revealed four core themes which are lack of culturally relevant teaching materials, contextual and adaptive teaching strategies, integration of Indigenous knowledge in pedagogy, and framework necessity for culturally responsive teaching, teacher proposals and institutional supports.

Findings show that while teachers are committed to meeting students' cultural and educational needs, they face considerable limitations due to the absence of official resources and national guidelines. Teachers' adaptive strategies, grounded in students' lived realities and local knowledge, reflect the potential of contextualized pedagogy to enhance engagement and identity affirmation.

The study calls for the development of a culturally responsive teaching model tailored for Orang Asli students. This includes professional development opportunities, leadership support, and policy recognition of Indigenous cultural identity. These findings contribute to the growing discourse on inclusive education and provide actionable insights for teacher training, curriculum reform, and equitable educational policy in Malaysia and beyond. These findings contribute not only to the theoretical understanding of CRT in Indigenous education but also to its practical implementation in multilingual, multicultural societies like Malaysia. They underscore the urgent need for systemic reforms that embed cultural responsiveness into national educational frameworks, thereby advancing equity for marginalized learners across diverse schooling contexts.

Acknowledgement

This research was conducted under the Fundamental Research Grant Scheme (FRGS / 1/2023 / SS10 / UPSI / 02/1) funded by the Ministry of Education Malaysia.

References

- [1] Sarah Khumairah Muchlis, & Mohd Mahzan Awang. (2020). Sejarah dan Perkembangan Sekolah Rimba Komuniti Orang Asli di Malaysia. 308–315.
- [2] Nordin, Nordina Alia, and Norwaliza Abdul Wahab. 2021. "Kertas Konsep Pembangunan Modul Sekolah Rimba Berasaskan Pengetahuan Peribumi Bagi Mengekalkan Kelestarian Masyarakat Orang Asli". *Asian Pendidikan* 1 (1):10-21. <https://doi.org/10.53797/aspen.v1i1.2.2021>.
- [3] Renganathan, Sumathi. 2021. "Research Concerning the Indigenous Orang Asli and Education: A Review of Problem Representations." *Diaspora, Indigenous, and Minority Education* 16 (3): 200–211. <https://doi.org/10.1080/15595692.2021.2007073>.
- [4] Renganathan, Sumathi. 2016. "Educating the Orang Asli Children: Exploring Indigenous Children's Practices and Experiences in Schools." *The Journal of Educational Research* 109 (3): 275–85. <https://doi.org/10.1080/00220671.2014.945150>.
- [5] Sulaiman, Mohd Azizul, Nor Farhana Mohd Azmi, Arifi Ridzuan, Azwan Shah Aminuddin, and Norhana Aini Saini. "Differences in teacher's perspective on academic engagement among students of Orang Asli and non-Orang Asli students." *Gading Journal for Social Sciences* 23, no. 1 (2020): 13-23.
- [6] Aini, Nurul. 2018. "A Study on the Effect of Multilingual Repertoire on Speaking in Three Universities in Metro City, Lampung – Indonesia." *Pedagogy: Journal of English Language Teaching* 6(2): 121–132. <https://doi.org/10.32332/pedagogy.v6i2.1232>
- [7] Jalil, Che Rohana A. 2023. "The Application of Culturally and Linguistically Responsive Pedagogy in English Speaking Classrooms: A Case Study." *International Journal of English Language Teaching* 11(2): 72–91. <https://doi.org/10.37745/ijelt.13/vol11n27291>
- [8] Ismail, Norazman, and Halimah Awang. 2022. "Culturally Responsive Teaching in Rural Indigenous Schools: A Systematic Review." *International Journal of Education and Pedagogy* 4 (2): 34–49. <https://doi.org/10.37134/ijep.vol4.2.2022>
- [9] Yew, Pei Jia, and Nurfaradilla Mohamad Nasri. 2019. "A Systematic Review: Competence of Teachers in Implementation of Culturally Responsive Pedagogy." *Creative Education* 10 (12): 3118–3130. <https://doi.org/10.4236/ce.2019.1012236>
- [10] He, Jinrui, and Mohd Yusof Abdullah. 2025. "The Role of Culturally Relevant Pedagogy in Enhancing Educational Equity for Minority Students in China." *Uniglobal Journal of Social Sciences and Humanities* 4 (1): 215–230. <https://doi.org/10.53797/ujssh.v4i1.20.2025>
- [11] Shanmugam, S. Kanageswari Suppiah, Arsaythamby Veloo, and Ruzlan Md-Ali. 2021. "Culturally Responsive Assessment: Assessing Mathematics Performance of Indigenous Pupils in Malaysia Using a Trilingual Test." *Diaspora, Indigenous, and Minority Education* 15 (2): 113–136. <https://doi.org/10.1080/15595692.2020.1846515>
- [12] Chao, Wan-Ling, Szu-Yin Chu, Ying-Wen Wang, et al. 2025. "Culturally Responsive Teaching Efficacy of Teachers at Inclusive Preschools in Taiwan." *Early Childhood Education Journal*. <https://doi.org/10.1007/s10643-025-01882-2>
- [13] Abdul Rahman, Mohd Nazri, Aishah Abdul Malek, and Muhammad Asyraf Mansor. 2021. "Culturally Responsive Pedagogy through Folk Tales for Early Childhood Literacy Skills." *Sains Insani* 6 (1): 91–98. <https://doi.org/10.33102/sainsinsani.vol6no1.254>
- [14] Shanmugam, S. K. Suppiah, Arsaythamby Veloo, and Ruzlan Md-Ali. 2021. "Culturally Responsive Assessment: Assessing Mathematics Performance of Indigenous Pupils in Malaysia Using a Trilingual Test." *Diaspora, Indigenous, and Minority Education* 15 (2): 113–136. <https://doi.org/10.1080/15595692.2020.1846515>
- [15] Abdullah, Norulhuda, and Nor Aziah Alias. 2021. "Culturally Responsive Pedagogy in Malaysian Classrooms: Empowering Indigenous Learners through Contextualised Instruction." *International Journal of Instruction* 14(2): 601–616. <https://doi.org/10.29333/iji.2021.14234a>
- [16] Souto-Otero, Manuel. 2021. "Validation of Non-Formal and Informal Learning in Formal Education: Covert and Overt." *European Journal of Education* 56 (3): 365–379. <https://doi.org/10.1111/ejed.12464>
- [17] Razali, Mohd Norlizam Mohd, Aida Hanim A. Hamid, Bity Salwana Alias, and Azlin Norhaini Mansor. 2024. "The Relationship among Culturally Responsive Leadership and Professional Learning Community Practices in Small Schools in Peninsular Malaysia." *Journal of Education and Learning (EduLearn)* 18 (3): 960–966. <https://doi.org/10.11591/edulearn.v18i3.21357>
- [18] Salleh, Johdi Mohamad, and Muhammad Hatta. 2019. "Best Practices for Promoting Teachers' Professional Development in Malaysia." *UMT Education Review* 2 (2): 1–26. <https://doi.org/10.32350/uer.22.01>

- [19] Abdullah, Abdul Halim. 2022. "A Systematic Review of What Malaysia Can Learn to Improve Orang Asli Students' Mathematics Learning from Other Countries." *Sustainability* 14 (20): 13201. <https://doi.org/10.3390/su142013201>
- [20] Chua, Tuan Sek, and Hui Min Low. 2024. "Inclusive Education: Perception, Practice and Implementation Within Malaysia." *Jurnal Pendidikan Bitara UPSI* 17 (Special Issue): 13–30. <https://doi.org/10.37134/bitara.vol17.sp.13.2024>