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Systematic Review: Competency Level of Teachers in the Implementation of the Culturally Responsive Pedagogy in the Teaching and Learning of Science

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Abstract
Effective teaching and learning require pedagogical impact which can give benefit especially in science education. The Culturally Responsive Pedagogy is an ability to learn something relating to an individual which has similarities to us while being from another culture. In relation to that, there are a lot of literature researches which look at the competency level of teachers in the implementation of the Culturally Responsive Pedagogy that involves student preparedness, teacher preparedness, receiving of equal opportunities and a student-centred education. Therefore, there is one important part in the Culturally Responsive Pedagogy curriculum which is based on orders and the environment. Science education can help teachers to be more creative and innovative as well as making teaching based on cultural response a tool to improve teacher competency. A scientific research was used to collect evidences from past researches which are related to the culturally responsive pedagogy from articles, theses, journals and proceedings using ERIC, Scopus, Science Direct and SAGE. There are 10 articles identified as having relations to the objective and criteria of the research. Findings show that the competency level of teachers in the implementation of the culturally responsive pedagogy as being the main issue in helping improve the quality of education especially in the process of teaching and learning.
Keywords: Culturally Responsive Pedagogy, Systematic Review, Competency of Teachers

Introduction
In line with the social development and political scene in our country, educators, especially teachers, have to identify how to relate with current issues in the classroom. However, there are educators who have not been able to relate current issues and reports such as minimalised learning in their education training (Darling-Hammond, 2010; Gay, 2010; Ladson-Billings, 2000). According to Ladson-Billings, conducted in 1990 (as cited in Amy J. Samuels, 2018), shows that a teacher has to know how to gain knowledge and appreciation in the culturally responsive pedagogy. The culturally responsive pedagogy is a student-centred approach which involves referring to cultures and identifying the importance of a student's

background as well as all aspects of the student's learning. Marsico, Dazzani, Ristum & Bastos, conducted in 2015 (as cited in Misco, 2018), shows that the culturally responsive pedagogy concept is geared to provide a lens to the emphasis towards culture, history and social contexts where and individual is directly involved in through education. According to Coffey (2008) in the *Culturally Responsive Curriculum and Pedagogy in the Commonwealth of the Northern Mariana Islands* journal by Misco (2018), conceptually, the culturally responsive pedagogy aims to create a relationship between the home and the school while at the same time fulfilling the demands and hopes of the district and state through the background, knowledge and experience of students for the notification and action of the teacher. In todays globalized world, there is a challenge in preparing a teacher to cultural response with multiple cultures that are on the rise in schools. Therefore, according to Brown, 1993 in Childs, 2017, as cited in Fatma Özüdoğru, 2018, shows that it is stated that the practice of the culturally responsive pedagogy receives more attention because the positive or negative responses of a teacher towards the practice affects self-effectiveness and academic achievements for students with different backgrounds.

Looking at the breakdown of the meaning of pedagogical responsive culture can be divided into three, pedagogical, responsive and cultural. According to Ibrahim, Azizah, Saidah, Aziah, Salamah and Rodziah (2005) in the Dictionary of the Fourth Edition of the Council state that the definition of pedagogy is a study of teaching methods and principles, particularly teaching in formal education. While the definition of responsiveness is immediate or easy to provide cooperation or reaction that is helpful to a business. Culture is defined in terms of sociology as a way of life that is learned, adapted and passed down from generation to generation in a particular society (Syed and Ahmad, 2010). According to Trumbull (2005) through Oran (2009) defines culture as a system of values, beliefs, and ways of knowing community community guidelines in their daily lives. In conclusion, this phrase describes a study of how an educator can teach schoolchildren by taking into account and incorporating differences in their students' lifestyles, learning styles, ethnicities, and backgrounds. According to Rizan, Nooreiny and Manisah (2015), teachers' knowledge on the diversity of cultures surpasses awareness, respect and the acknowledgement that each ethnic group has different values or expresses the same value in different ways. According to Victor & Matsephe (2015), their view suggests the possibility of considering reflections and the culturally responsive pedagogy framework (as a jigsaw puzzle or critical pedagogy building block) as a way to overcome the confusion of the theory and epistemic conflict. It might show the value that reflections and the culturally responsive pedagogy can overcome issues relating to culture, political identity and various educational cultures.

Purpose and Objectives of Research
There are many issues that can be discussed in relation to the culturally responsive pedagogy. The purpose of this research is to review several past researches on the competency level of teachers in the implementation of the culturally responsive pedagogy in helping improve the quality of education during teaching and learning.

Research Questions
There are two research questions regarding the culturally responsive pedagogy, which are, 1) What are the advantages of the culturally responsive pedagogy that can help teachers and

the educational system? 2) Is teachers' preparedness towards the implementation of the culturally responsive pedagogy helping in improving educational quality in teaching and learning?

Methodology
Throughout the systematic research of these articles, two steps were used which were the PRISMA Protocol and the Mc Dermott Model (2014).

Prisma Protocol
There are four steps that need to be carried out in the PRISMA protocol which are identification, screening, eligibility and inclusion.

Identification
SCOPUS, ERIC and Google Scholar were used for the identification process. Three key words were used, which are: *Culturally responsive pedagogy, systematic review and teacher competence*. It also makes up the inclusive and exclusive criteria to obtain data that truly fulfils the research objective. The criteria used were inclusive and exclusive:

    i.   Usage of the symbols "+,-, AND, NOT
    ii.   Limiting the search years from 2010 to 2019
    iii.   Findings from journals, theses, proceedings or reports where the search sources are different
    iv.   Use article references to identify other suitable articles

Screening
There are 4340 articles relating to the culturally responsive pedagogy that were obtained from the first finding. Articles from past researches were filtered based on:

    i)   Importance relating to the culturally responsive pedagogy in education
    ii)   Articles explaining the characteristics, advantages, challenges, preparedness level and competency of teachers in regard to the culturally responsive pedagogy.

Eligibility and Inclusion
Data collecting was done using multiple sources of data. Therefore, articles in theses, seminars, technical reports and journals were obtained. By using a systematic research, only qualitative research articles were suitable to be included and analysed. The research selection process used the PRISMA protocol as shown in Figure 1.
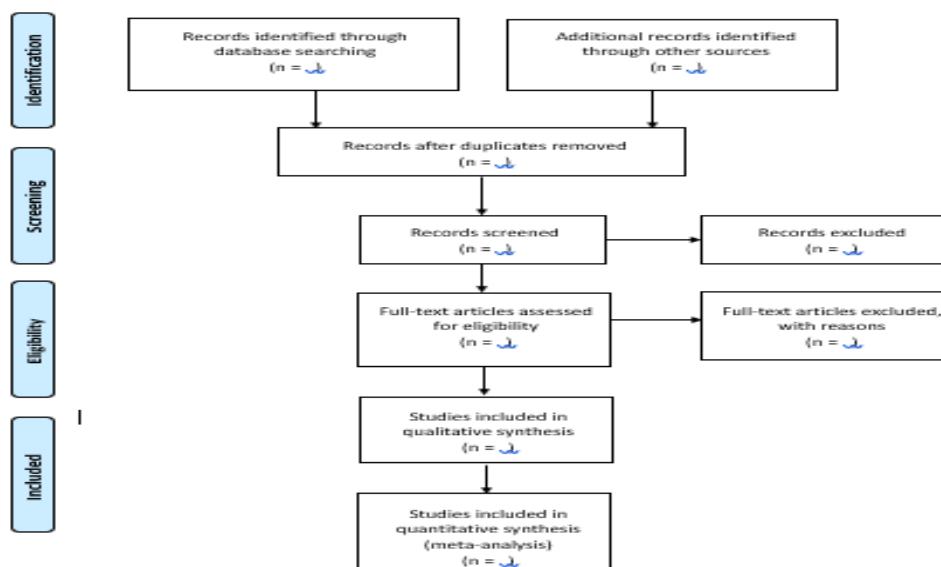
Figure 1: Data collection using the PRISMA Protocol

Mc Dermott

Table 1: Quality of Article Assessment

No	Element	Explanation
1	Objective	Is the research objective clearly stated?
2	Research context	Does the article explain clearly the plan, implementation and development done?
3	Sample	Does the article give a sufficient sample for the research?
4	Methodology	Does the article give an explanation on the research methodology which covers the research framework, data collection and data analysis?
5	Data	Are support materials such as tables, interviews / responses from the observation included? Is the information clearly translated and analysed?
6	Valid research findings	Did the researcher validate the analysis with an expert, response or other mechanisms?

Researcher	Year	Journal Quartile	Criteria						Grade
			Objective	Research context	Sample	Methodology	Data	Validated research findings	

Amy J. Samuels, Gregory L. Samuels and Tammy M. Cook	2017		/	/	/	/	/	/	A
Gloria Boutte, Charlease Kelly-Jackson and George Lee Johnson	2010		/	/	/	/	/	/	A
Ian M. Mette, Lisa Niewnhuizen and David J. Hvidston	2016		/	/	/	/	/	/	A
Judson C. Laughter	2017		/	/	/	/	/	/	A
Julie C. Brown, Elizabeth A. Ring-Whalen, Gillian H. Roehrig and Joshua Ellis	2018		/	/	/	/	/	/	A
Thomas Misco	2018		/	/	/	/	/	/	A
Tia Navalene Barnes and Kathleen McCallops	2019		/	/	/	/	/	/	A
V.M Mayfield and Dorothy Garrison-Wade	2015		/	/	/	/	/	/	A

Articles which achieve desired quality are graded. Each article is graded A, B, C or D. The grading is as follows:

Article grading	Description
A	Six eligible criteria
B	At least five stated criteria are eligible

Velma Johnson, Jan Carpenter, Centae Richards and Kathleen Vincent	2019		/	/	/	/		/	/	A
Yasar Bodur	2016		/	/	/	/		/	/	A
C		Four criteria are eligible								
D		Three criteria are eligible								

The evaluation of quality that was chosen was based on grades of A, B, C and D as what was presented in Table 1.

Table 1: Assessment of Article Quality based on Grades of A, B, C and D.

Coding

After the process of filtering research articles based on the criteria determined, only 10 articles had a relation to the objective of the study and the systematic study. Each article was recorded based on themes. Codes used in this research are based on a combination of letters and numbers. "E" represents elements and "I" represents issues. Numbers (1 and 2) refer to related criteria. The method of presenting the findings is for the use of the researcher to make an analysis on the research data and to find more findings from the systematic research.

Findings

The implementation of the culturally responsive pedagogy is a pressing issue in our world today. There are several reported issues by researches from 2012 to 2019. However, these articles only focus on issues which emphasise on four main criteria which are key elements, issues that can be discussed, year of publication and amount of report from researchers. Research findings were analysed and presented in the form of a matrix table. The data is in the form of analysed narratives based on themes.

Table 2: Empirical Article Summary

Researcher	Year	Involvement	Journal Title/ Quartile	Type of School	Research Design	Element (E)		Issue (I)		Findings
						E1	E2	I1	I2	
Amy J. Samuels, Gregory L. Samuels and	2017	27 people	SRATE Journal	Small public liberal arts school	Multi-tiered	/		/		- A teacher education program to gather responses

Tammy M. Cook											strategically and explicit culture as well as content relating to diversity throughout their course and program
Gloria Boutte, Charlease Kelly-Jackson and George Lee Johnson	2010	-	International Journal of Multicultural Education	Pre-K-12 schools	Review		/		/		- Teachers are encouraged to use the Cultural Relevant Teaching learning method as a way of learning ethical education so that all students can learn effectively following the times.
Ian M. Mette, Lisa Niewnhuizen and David J. Hvidston	2016	120 people	NCPEA International Journal of Educational Leadership Preparation	High school	Case Study	/	/	/	/		- Class teachers agree that group work helps in improving professionalism in the culturally responsive pedagogy. - There are two different views on how

											teachers view their students encourage them to use the culturally responsive pedagogy, specifically how they implement professiona lism.
Judson C. Laughter	2017	-	Urban Educatio n	Middle school science teacher	Survey	/	/	/	/		- Students understand how society is constructed through natural bias by questioning who teaches religion and racism. - Encourage students to know and be proud of their culture.
Julie C. Brown, Elizabeth A. Ring-Whalen, Gillian H. Roehrig and Joshua Ellis	2018	18	Internati onal Journal of Designs for Learning	Beginni ng second ary science teacher s	Action study	/	/	/	/		- Teachers can identify activities that are suitable for each student according to their capability especially with the Fund of

											Knowledge where students have a teaching and learning culture as well as socialising.
											- The challenge for teachers to implement the culturally responsive pedagogy is that the curriculum has to be relevant with the students' Funds of Knowledge because it needs to be explained clearly to help students understand what they learn.
Thomas Misco	2018	26 people	International Journal of Multicultural Education	Middle and high schools	Case study	/	/			/	- The rational of the culturally responsive pedagogy in the curriculum and pedagogy.

										- The role of teachers in lower secondary and upper secondary in teaching and learning. - Curriculum challenges of the culturally responsive pedagogy that are identified especially in the upper secondary level and the promises of the management to unify knowledge and the method of knowing.
Tia Navalene Barnes and Kathleen McCallops	2019	18 people	Journal of Multicultural Education	Private school	Action school	/	/	/	/	- The importance of standardizing the SEL skills presented in this RULER approach across settings for students and adults implementing RULER.

V.M Mayfield and Dorothy Garrison-Wade	2015	27 people	Journal of Instructional Pedagogies	Middle school	Multi-case study	/		/	/	- The culturally responsive pedagogy has been observed from 5 out of 6 concepts which are leadership, environment, learning, pedagogy, involvement of parents, trust and competency through improving professionalism.
Velma Johnson, Jan Carpenter, Centae Richards and Kathleen Vincent	2019	12 people	Journal of Multicultural Education	-	Mixed methods	/	/			- The response of respondents changes when the culturally responsive pedagogy can affect and change the future of teaching and learning. - A collaborative learning environment also has an important role in the culturally responsive pedagogy.

| Yasar Bodur | 2016 | 53 people | Georgia Educational Researcher | University | Case study | / | | | / | |

A clearer explanation is as follows:

Element

There are two elements that are related to the culturally responsive pedagogy which take into account the findings obtained. The elements are seen from environmental and instructional elements. Table 3 shows the elements in more detail.

Element	Number of Articles	Percentage (%)
Environment	9	90%
Instructional	7	70%
Teacher competency	6	60%
Teacher preparedness	8	80%

The findings show that the key elements in the culturally responsive pedagogy are related to the environment and instructions in teaching and learning implemented is schools by teachers and students. A number of 9 articles (90%) are related to the environment where it is related to the culture of learning, involvement of parents, physical space and materials as well as encouraging classroom management (positive behaviour and management procedures). Meanwhile, 7 articles (70%) are on instructional where it is activity management in the teaching and learning of the culturally responsive pedagogy which are group work (flexible and classroom layout), teacher as a facilitator, student as a facilitator, interaction, student comprehension and evaluation. The number of total articles that have a relation with the culturally responsive pedagogy elements are as much as 10 articles (100%). Meanwhile, articles on issues regarding the competency of teachers amounts to 6 articles (60%) and those regarding to teacher preparedness amounts to 8 articles (80%) based on what has been reported.

Issue

Based on the decisions from the analysis, there are 4 issues obtained based on the 2 elements explained in the article selection specification relating to the culturally responsive pedagogy which are the environment, instructional, teacher competency and teacher preparedness.

Environment

The environment element concerns the development of a Respect and Rapport environment, parents and community involvement, management of physical space and materials as well as encouragement in the classroom management system. According to Tia Navalene and Kathlen McCallops (2019), found that school climate and classroom climate, the implementation of RULER is successful when it involves the community, parents and staff who want to learn about SEL intervention. The involvement of parents and the community not only gives an impact on the learning culture, but in order to achieve what we want, everyone

must know about other cultures and their own. Other than that, according to Velma Jan, Centae, Kathleen 2019, stated in terms of environment, collaborative learning is also stressed on as stated in the research of. The involvement of parents is also considered as a monitor other than the teacher indirectly. For the environment of learning, it can be seen from the varying ways of communicating, especially the use of multiple languages with people in school or from outside of school.

Instructional
The instructional element is related to group work, interaction, student understanding and the various assessment strategies. In terms of group work, there are two types of strategies which are flexible groups and the design of the classroom. It is related to the roles of a teacher in explaining each procedure, ensuring ease of discussion, creating diversity in students and promote students' interest in group and individual work. The arrangement of the class is found to be suitable for language activities such as group work, station activities and performances so that students can move around to discuss with their friends or sit with them to finish a given task as the finding suggested (Radha, Noorizah, Kemboja & Shahirah, 2017).Besides that, with technology, it provides a borderless platform for teachers and students. Students also have a role in group work with the teacher as a facilitator which is to explain tasks to students, facilitate groups effectively, identify the needs of students and facilitate understanding through collaborative, individual and paired work. In Tia Navalene and Kathleen McCallops' (2019) research, shown that the focus of the group leader is to ensure that their friends expand their experience on the RULER exercise.

Teacher Competency
Teacher competency is an important issue to be looked at, especially to build a teacher's professional attitude. A teacher monitors assessment on gaps and invalid data in terms of race. During the meeting with parents, they will discuss on the influence of racism in schools and their involvement in a professional manner. Meanwhile, in meetings with the school staff, competency on culture can be integrated through discussions. Teachers have to improve their self-efficacy that is to improve their teaching so that they may reflect on themselves. As in the research of Tia Navalene and Kathleen McCallops (2019), as in the findings shown that, participants of the research feel that the SEL program gave them the language and strategy to improve themselves the know-how to use the SEL style to become an efficient teacher. According to Jamilah and Niranjala (2011), teachers that teach in a lecture with students from multiple cultural backgrounds have to open and accept any interaction with students regardless of their cultural background and their origin. This includes the acceptance that an international student might have different language styles and varying capabilities in the English language as compared to local students.

Teacher Preparedness
Teacher preparedness is given importance by institutions, especially schools and universities. Issues regarding teacher preparedness is more focused on new teachers. Teachers have to understand the culturally responsive pedagogy where they need to know how to identify student achievement with their learning culture. Zamri and Razah (2011), in the context of teaching and learning, asking questions is able to encourage teacher and student interaction effectively. It becomes easy for a teacher to identify the relations of culture with students through this method, therefore, teachers have to spend time to know the background of

students well, such as their home, language, siblings and parents. Misnaton, Hamidah and Marinah (2016), teachers as agents have to identify and be ready to accept trust from their students, take opportunities to know students, believe that they know and can tell differences, build relations and develop trust in students.

Discussion

The findings show two elements and two issues in the culturally responsive pedagogy can be implemented in improving the competency level of teachers especially in terms of implementation in teaching and learning in schools. The findings are closely related to basic training for teachers. To improve the competency level of teachers, teachers must have knowledge on the culturally responsive pedagogy especially on the environment and instructional elements which are very important. For environment, teachers have to know about the learning culture where it requires teachers to interact with the outside community or the parents of students. Teachers who practice pedagogy in multicultural classrooms should see teaching as " an art rather than a science" so that teachers will be more creative and adaptable to students of different cultures (Noriati et.al, 2009). Other than that, teachers must know how to manage physical space and materials that can enhance the interest of students. In the management of the classroom, teachers can be monitors of their own behaviour, ensuring student behaviour is always positive and manage the classroom efficiently. For the element of instructional, it is more focused on group strategies that are flexible and the design of the classroom where it focuses on teachers' interaction in class, individuals, student with student and monitoring interactions. On students' understanding, teachers can use communication and tasks in the classroom. Many assessment strategies can be used by teachers such as formative and summative as well as individualised tasks.

In the context of education, there are a variety of strategies, methods, techniques, and pedagogies that are relevant to practice within a diverse group of students. These include collaborative and cooperative methods, directive, mediative, generative, contextual, metacognitive, external context (external study), future studies, findings, projects, reading materials, computer-based learning, and more (Noriati et al., 2009; Syed & Ahmad, 2010). Teachers should be sensitive and focused on the selection of resources for R&D activities to ensure that every student of all ethnicities can learn in a fun environment. Teachers should have the opportunity to diversify their R&D resources through the diverse cultures and ethnicities of their students. Therefore, when planning activities, a teacher should choose materials and learning resources that highlight the importance of ethnic relations regardless of race and ethnic differences. Teachers can choose the most appropriate source for fostering ethnic unity through the use of appropriate sources such as stories, songs, clips, videos, and photos. Ethnic relations will be present when students are seated in a circle surrounded by friends of various ethnic groups. This is because students will interact and communicate with each other. From conversations and speeches, strong ethnic relations can be nurtured as they learn the culture and customs of other ethnic groups, and in turn accept, respect, and tolerate them.

Level of competency and teacher preparedness are issues that are emphasised in the culturally responsive pedagogy whereby teachers face challenges in implementing the

teaching and learning methods. Thomas Misco (2018), the challenges faced by teachers, especially by secondary school teachers, is where the respondents replied that the main focus of the teaching is rarely applied. Most teachers still fail to activate general knowledge regarding this method of teaching. The competency level and teacher preparedness are also seen from the implementation of student understanding. The role of the teacher is very important so the teachers can learn from the livelihood of the students. Teachers can also increase their alertness especially in implementing culture for a positive teaching experience.

Conclusion

In conclusion, culturally responsive pedagogy is an approach that involves the use of cultural features, experiences, references, and cultural perspectives in an effort to teach students more effectively and effectively. During the teaching and learning process, students will be aware of and appreciate their own and others' cultural heritage, provided with a variety of resources and information in the school. In fact, what the teacher teaches should link the experience at home and at school as it reflects the true sociocultural situation. Therefore, a broad and varied teaching and guidance strategy associated with individual differences needs to be applied when a teacher intends to teach based on culturally relevant pedagogy. each culture has its own characteristics that teachers need to recognize in helping teachers provide learning resources, helping students determine how they learn, improving their academic performance, and ultimately their academic success. A teacher who deeply understands pedagogy of cultural relevance, will be able to understand why a student in his class behaves outside of society's norms and will not criticize it if his behaviour is extraordinary compared to that of other students.

References

Amy, J. S., Gregory, L. S., & Tammy, M. C. (2017). Examining Perceptions of Culturally Responsive Pedagogy in Teacher Preparations and Teacher Leadership Candidates. University of Montavallo: SRATE Journal. Retrieved from
https://files.eric.ed.gov/fulltext/EJ1152453.pdf

Chezare A. W. (2018). *Empathy, Teacher Dispositions, and Preparation for Culturally Responsive Pedagogy*. Journal of Teacher Education 2018, Vol.69 (2) 169-183. SAGE JOURNAL. Retrieved from https://doi.org/10.1177%2F0022487117712487

Gloria, B., Charlease, K. J., George, L. J. (2010). Culturally Relevant Teaching in Science Classrooms: Addressing Academic Achievement, Cultural Competence and Critical Consciousness. University Of South Carolina : International Journal of Multicultural Education.

Ian, M. M., Nieuwenhuizen, L., & David, J. H. (2016). Teacher's Perceptions of Culturally Responsive Pedagogy and the Impact on Leadership Preparation : Lessons for Future Reform Efforts. NCPEA International Journal of Educational Leadership Preparation, Vol.11, No. 1-May, 2016. Retrieved from
https://files.eric.ed.gov/fulltext/EJ1103652.pdf

Judson, C. L., & Amelia, D. A. (2017). Culturally Relevant Science Teaching in Middle School. Urban Education. Retrieved from http://uex.sagepub.com

Julie C. B., Elizabeth A. R., Gillian H. R., & Joshua, E. (2018). Advance Culturally Responsive Science Education in Secondary Classrooms Through an Induction Course. International Journal of Designs for Learnin. Retrieved from

http://doi.org/10.1443/ijdl.v9i1.23297

Rabahi, M., Yusof, H., & Awang, M. (2016). Leading learning among the indigenous orang asli students: Setting the scene. Malaysia Journal of Society and Space 12, Issue 12 (120-134), ISSN 2180-2491. Retrieved from http://journalarticle.ukm.my/11407/1/16247-45542-1-PB.pdf

Rashid, N. B. A., Boon, P. Y., Ismail, J., Zuraidah, A., Majid, L. T. H., & Paul, R. M. (2009). *Modul Pengajian Profesional EDU3106 Budaya Dalam Pembelajaran.* Kuala Lumpur: Kementerian Pelajaran Malaysia.

Oran, G. (2009). *Culturally Relevant Pedagogy.* Retrieved from http://www.education.com/reference/article/culturally-relevant-pedagogy

Radha, M. K., Nambiar, N. M. N., Ismail, K., & Adam, S. (2017). New Learning Spaces and Transformations in Teacher Pedagogy and Student Learning Behavior in the Language Learning Classroom. 3L: The Southeast Asian Journal of English Language Studies – Vol 23(4); 29-40. Retrieved from http://journalarticle.ukm.my/12853/1/21548-65550-1-PB.pdf

Mustapa, S. I. B. S. & Maskon, A. S. B. (2010). *Budaya dan Pembelajaran.* Selangor Darul Ehsan: Penerbitan Multimedia Sdn. Bhd.

Maasum, T. N. R. T. M., Maarof, N., & Ali, M. M. (2015). Addressing Learner Diversity by Culturally Responsive Pedagogy. International Conference on Social Sciences & Humanities (ICOSH-UKM2012), Special Issue 1 (2015) 138-150, ISSN:1823-884x. Retrieved from http://ejournal.ukm.my/ebangi/article/view/11002/3546

Misco, T. (2018). Culturally Responsive Curriculum and Pedagogy in the Commonwealth of the Northern Mariana Islands. International Journal Multicultural Education, Vol.20, No.2, p81-100. Retrieved from https://files.eric.ed.gov/fulltext/EJ1184979.pdf

Tia, N. B., & Kathleen, M. (2019). Perceptions of culturally responsive pedagogy in teaching SEL: Journal of Multicultural Education, Vol.13 Issue:1, pp. 70-81, http://doi.org/10.1108/JME-07-2017-0044

Mayfield, V. M., & Dorothy, G. (2015). Culturally responsive practice as whole school reform. Journal of Instructional Pedagogies, Vol. 16. Retrieved from http://www.aabri.com/copyright_html

Victor, J., Pitsoe, & Matsaphe, M. L. (2015). Re-Engineering Teaching Practice Through Reflexive Practice and Culturally Relevant Pedagogy Framework. Journal of Social Sciences and Humanities, Vol.10, No. 1(2015) 154-169, ISSN: 1823-884x, http://journalarticle.ukm.my/9333/1/154-169_Pitsoe_Re-engineering_Teaching_Practice.pdf

Johnson, V., Carpenter, J., Richards, C., & Vincent, K. B. (2019). Culturally responsive practices for teacher candidates: a neighbourhood treasure hunt: Journal of Multicultural Education, Vol.13 Issue: 1, pp. 19-32, https://doi.org/10.1108/JME-07-2017-0042

Bodur, Y. (2016). Is Cultural Responsiveness Part of Effective Teaching?:Preservice Teacher Perspectives. Georgia Educational Researcher, Vol.13, Iss.1 (2016) Art.5, http://digitalcommons.georgiasouthern.edu/gerjournal

Mahamod, Z., & Lim, N. R. (2011). Kepelbagaian kaedah penyoalan lisan dalam pengajaran guru Bahasa Melayu: Kaedah pemerhatian. Jurnal Pendidikan Bahasa Melayu 5(1): 51-65. Fakulti Pendidikan, Universiti Kebangsaan Malaysia.