

Differentiated Instruction in ESL Classrooms: Insights from ESL Primary School Teachers

(Pengajaran Terbeza dalam Kelas Bahasa Inggeris Sebagai Bahasa Kedua : Pandangan Guru Bahasa Inggeris sebagai Bahasa Kedua di Sekolah Rendah)

NURUL HIDAYAH BINTI UMAR & AZLINA ABDUL AZIZ

ABSTRACT

In today's classroom, teaching diversified skills with a conventional one-size-fits-all approach is unsuitable for the student's development. Students with mixed abilities are unable to learn effectively when teachers implement lessons that treat the class as homogenous. This study therefore aims at examining teachers' perceptions towards the management of differentiated instruction in mixed-ability ESL classes for primary school pupils. It is to seek the in-depth teachers' perception of the familiarity of differentiated instructions, the types of differentiated instruction they used, the challenges they faced. To integrate two data sets and gain more information, the study was carried out with a case study design based on mixed methods. The participants were selected using a purposive sampling procedure involving 30 teachers at 17 Primary Schools in the Labuan Federal Territory. Data were collected employing questionnaires, and Open-ended Interviews; the results were analyzed descriptively with frequency, percentage, mean value, and standard deviation. The findings of this research study revealed that teachers' perceptions have a positive impact on the use of differentiated instruction in ESL classrooms. However, the challenges they faced became barriers for them to implement the Differentiated Instruction in the classrooms. In conclusion, further discussions were held on some research implications and recommendations. This will provide additional value to existing research, contributing to the opening of an opportunity for teachers to enhance their knowledge and consistently use differentiated teaching.

Keywords: Differentiated Instruction, ESL primary teachers' perceptions, mixed ability classrooms

ABSTRAK

Pada hari ini, mengajar kelas yang terdiri daripada pelajar pelbagai kebolehan menggunakan pendekatan konvensional di dalam bilik darjah, iaitu satu saiz yang sesuai untuk semua, tidak lagi bersesuaian untuk perkembangan pelajar. Pelajar yang mempunyai pelbagai kebolehan tidak dapat belajar dengan berkesan apabila guru melaksanakan pengajaran yang menganggap kelas sebagai homogen. Oleh itu, kajian ini bertujuan untuk mengkaji persepsi guru Bahasa Inggeris sebagai Bahasa Kedua di sekolah rendah terhadap pengurusan Pengajaran Terbeza dalam kelas pelbagai kebolehan. Ia adalah untuk mengkaji secara mendalam persepsi guru tentang pengetahuan Pengajaran Terbeza, jenis Pengajaran Terbeza yang mereka gunakan, dan cabaran yang mereka hadapi. Untuk mengintegrasikan dua set data dan mendapatkan lebih banyak maklumat, kajian ini dijalankan menggunakan reka bentuk kajian kes berdasarkan kaedah gabungan. Para peserta yang dipilih menggunakan prosedur persampelan mudah, melibatkan 30 orang guru di 17 buah Sekolah Rendah di Wilayah Persekutuan Labuan. Data dikumpulkan menggunakan soal selidik, dan temubual terbuka; Dapatan kajian dianalisis secara deskriptif dengan kekerapan, peratusan, nilai min, dan sisihan piawai. Hasil kajian penyelidikan ini mendedahkan bahawa guru mempunyai persepsi yang positif terhadap penggunaan Pengajaran Terbeza di bilik darjah. Namun, terdapat beberapa cabaran yang mereka hadapi sepanjang pelaksanaan tersebut. Perbincangan lanjut mengenai beberapa implikasi dan cadangan penyelidikan telah dibuat. Ini akan memberi nilai tambah kepada penyelidikan sedia ada, membuka peluang kepada guru untuk mengenalpasti cara meningkatkan pengetahuan mereka dan mengaplikasi Pengajaran Terbeza secara konsisten.

Kata Kunci: Pengajaran Terbeza, Persepsi guru Bahasa Inggeris sebagai Bahasa Kedua, Kelas Pelbagai Kebolehan

INTRODUCTION

Teaching in a classroom where students' needs differ in economic background, ethnicity, interest, or talent to another, teachers need to be well acquainted with curriculum planning and educational activities. Despite their uniqueness and differences, teachers often see them as resembling each other's abilities. At that point, teachers of languages use the One-Size-Fits-all method in their classrooms. As a result, this common scenario affects the students' performance and diminishes their chances of obtaining knowledge based on their ability. Improving and developing their abilities is made easier by having an equal opportunity to learn in the classroom that they receive. Teachers must be aware of how their students learn and differentiated teaching is designed to achieve this objective. A differentiation approach is quite effective. Addressing the issue of diversity and enhancing students' academic potential. Tomlinson (2001), the pioneer of differentiated learning, believes that it is possible to identify a particular teaching style to achieve maximum student achievement. It also facilitates the attainment of a desired level of competence for students.

Differentiated Instruction is a progressive student's centered approach to teaching and learning. It changes the way students are taught, considering their own needs. Because learners have different areas of development, this topic is important. The two processes the learners have been attempting to adopt are assimilation and accommodation, as described by Piaget (1980) in Huitt and Hummel 2003. Tomlinson, the pioneer of this field, suggests that the aim of the DI is to maximize the success of each student in his or her studies, to be able to meet and assist him or her where he or she is at this stage of the learning process so that he or she can achieve the expected level of competence. Tamiru (2019) came to conclude in his findings that almost all research participants had positive perceptions of DI, but their application was very limited. Ismail and Aziz (2019) assert that teachers struggle to implement and manage the strategy in their classrooms, from the planning part to the practice. Therefore, the purpose of this study is to:

1. examine teachers' perceptions of managing differentiated instruction in primary school mixed-ability ESL classrooms,
2. investigate the strategies for employing DI, and
3. identify types of DI commonly utilized in the classrooms.

THEORIES

CAROL ANN TOMLINSON DIFFERENTIATED INSTRUCTION

At its most basic level, Tomlinson (2017) defines DI as teaching in the classroom so that students have multiple opportunities to absorb information, understand ideas, and express what they are learning. It means to 'shake up' 'what is happening'. The teacher plans and carries out varied approaches to content, process, and product in anticipation of and response to student differences in readiness, interest, and learning needs in a differentiated classroom (Tomlinson 2010). The differentiated teaching model needs teachers to be flexible in how they teach, adjust the content, and communicate information to students rather than expecting them to adapt their curriculum. Classroom teaching is a blend of whole-class, group, and individual instruction. Teachers move students in and out of different placements to let them interact not only with students with the same needs, interests, and learning profiles but also with students with different talents, needs, and abilities to differentiate teaching in mixed-ability classrooms. Proceed with the work in an appropriate order and make it possible based on each person's strengths. The three elements of the curriculum that can be differentiated are content, process, and products (Tomlinson 2001). The teacher will differentiate his or her lessons when he or she reaches out to an individual or small group for a variety of teaching to create the best learning experience possible.

VYGOTSKY'S (1978) ZONE OF PROXIMAL DEVELOPMENT (ZPD)

Another theory for this study, a lens to analyze and interpret the data is provided by comparing Vygotsky's ZPD theory against Carol Ann Tomlinson's explanation for differentiation of teaching. Vygotsky's Zone of Proximal Development provides appropriate support to encourage the acquisition of skills and knowledge for young, less capable learners. Vygotsky's (1978) study of ZPD describes areas where learning occurs when students are supported to learn concepts and skills in the classroom. Vygotsky argued that the greater the ZPD of a student, the greater the learning potential. With the help of ZPD, teachers can identify not only the already developing mental abilities of students but also the functions that are still developing. Positive relationships between students and teachers can create, maintain, and produce an effective interactive ZPD. The teacher's role becomes one of purposeful instruction,

a mediator of activities and substantial experiences allowing the learner to attain his or her zone of proximal development. Therefore, by establishing and maintaining a ZPD in students, teachers can help students express social and cultural concerns at ease, relive previous knowledge and experiences, and transfer newly acquired information into long-term memory, creating a safe and nurturing environment that allows for a positive learning experience and appreciation for learned skills and concepts (Vygotsky 1978). Vygotsky's (1978) ZPD theory can be viewed as the basis for differentiated instruction that ensures that all students achieve the same academic achievement. However, the process of academic success is different for each student.

MIXED ABILITY CLASSROOM

While the curriculum focuses on a non-existent average student who is expected to absorb a decade's worth of knowledge in many subjects during the required study period, real-life children differ greatly. Students are different with diverse personalities, preferences, interests, and abilities. Therefore, we may have an assortment of opposites in a class. The students in mixed-ability or "heterogeneous" classrooms are diverse in language proficiency, skills, learning profiles, and styles. It is contradicted by the 'homogeneous' classroom where students have similar abilities. The difference in language skills between the different levels of linguistic proficiency within a given group is commonly referred to as mixed ability as used in English Language teaching. This could be due to the length of time they've been learning, their various language skills, or their preference for a particular teaching style. A mixed-ability class does not just consist of a range of abilities, a range of learning styles and preferences are also included in it (Bremner 2008).

The ability of pupils varies in terms of their fluency and accuracy, as well as grammar, knowledge, productive skills, and receptiveness as well as the number of words (Sailaja 2018). A school of thought defines a mixed-ability classroom as multilevel or heterogeneous, an area in which one fluent student sits next to the other who can barely write coherent sentences (Al-Shammakhi & Al-Humaidi 2015; Zakarneh et al. 2020) cited in Hazaea and Almekhlafy (2022), demonstrated that differences exist between slow and fast learners in language learning as well as teachers having difficulty dealing with mixed language classes. Mixed-ability classroom is a place where individuals who have different learning styles, preferences, and a wide range of English proficiency attend the same class (Hazaea & Almekhlafy 2022).

DIFFERENTIATED INSTRUCTION

Differentiated teaching is a way of teaching and learning for students of different abilities in the same class. Differentiation in instruction aims to maximize student growth and individual success by meeting them where they are while helping with the learning process. In recent years, researchers have investigated a variety of approaches to DI employed by ESL teachers but there are limited studies on the implementation of DI in mixed-abilities primary school classrooms in the context of local studies, as far as the readings of the researchers are concerned. Tamiru (2019) ferrets English language teachers' perceptions and compares them with their actual classroom practices of DI. The case study employed Grade 11 English language teachers of Bahir Dar TanaHaik General Secondary and Preparatory Schools.

Ismail and Aziz (2019) studied the TS25 schools teachers' perceptions of differentiated learning in diverse ESL classrooms. The results of their study showed the strengths and weaknesses based on the teachers' perceptions. The teachers are fully aware of their diverse academic learners. However, they struggle to implement and manage the strategy in their classrooms, from the planning part to the practice. Marsha and Faizah (2021) suggested in their study factors influencing the implementation of DI in English Language instruction in rural and urban secondary schools of Johor Bahru, that teachers need to consider many factors in the process of implementing DI. Teachers have a high level of self-efficacy as reported in the previous research on the study of self-efficacy and DI among Malaysian school teachers. Hassan and Ajmain (2022) studied the differentiated learning method (DLM) practices in Malaysia and asserted that the concept of differentiation and its implementation is still new in Malaysia. Few schools in Malaysia have started to apply the DLM in classrooms. Abraham, et al., (2022) view the absence of required knowledge and skills on DI as one of the reasons behind the failure to DI in the classrooms. Teachers' lack of competence, large class size, excessive workload, the nature of the curriculum, and low motivation and commitment as factors that affect the successful implementation of DI in the classroom. Papanthymou and Darra (2022) assert that the use of a one-dimensional approach to the quantitative subject matter is a limiting factor in this study. Therefore, this study explores the gap in DI and aims to investigate primary school teachers' perceptions of managing DI in mixed-ability ESL classrooms.

RESEARCH METHODOLOGY AND DESIGN

This study employed a mixed methodology research approach adopting a case study design to investigate 30 teachers’ perceptions of managing DI in primary schools’ mixed-ability ESL classrooms. Quantitative and qualitative data were gathered and examined to enable a varied range and significant data in integrating the study outcome. Both measurable data and interview protocol transcripts were gathered for this purpose. Mixed-method research is described by Creswell and Plano Clark (2017) as investigations that include at least one qualitative and one quantitative strand. The essential steps of qualitative or quantitative research are asking a research question, collecting, and analyzing data, and then interpreting it. The researcher decided to execute a mixed-method and case

study design because it is purposely for the ESL teachers in Labuan Federal Territory.

The design of the study was an exploratory case study. The case of Labuan Federal Territory primary school was taken as a group case and investigated. To explore the teachers’ perceptions and to find out the types of DI they usually employ and the challenges they face implementing DI in the classroom. Structured questionnaires and interview protocol were employed to check further how DI was implemented in primary school ESL mixed-ability classrooms. It was a Convergent parallel mixed-method study through which the researcher tried to grasp data from the research participants. Both quantitative and qualitative data were collected to triangulate findings from different research methods.

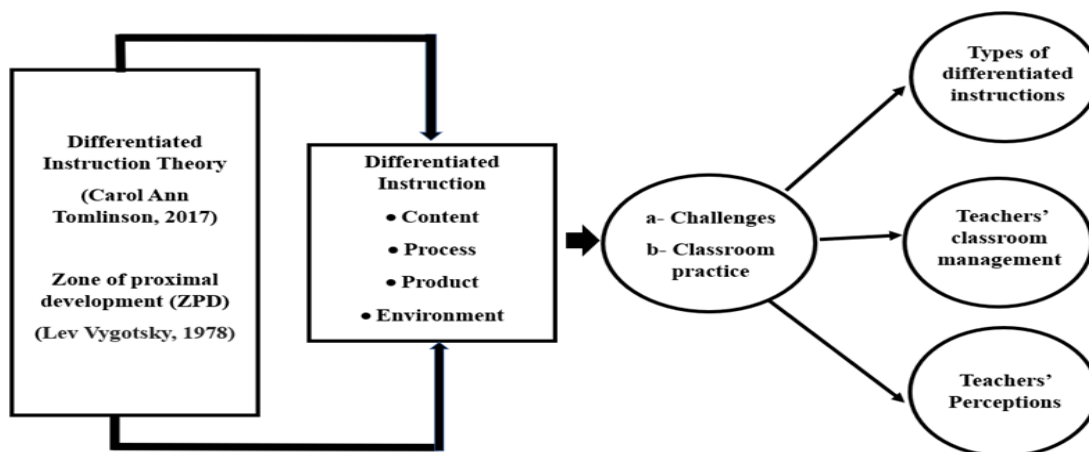


Figure 1. Conceptual Framework adapted from Hall (2004)

CONCEPTUAL FRAMEWORK

This study is adapted from the study by Hall (2004). Based on the conceptual framework above, there are two related theories: DI Theory by Tomlinson (2017) and Zone of proximal development Theory by Vygotsky (1978). Beginning with the first theory, the researcher examines the idea of differentiated Instruction in the ESL classroom. According to Tomlinson (2017), to differentiate instruction is to recognize students’ varying background knowledge, readiness, language, preferences in learning, and interests, and to react responsively. Thus, understanding the key concept of DI is essential as explained in the learning cycle and factors used in planning and implementation of DI. Components and features identified such as curriculum,

student, content, process, and product that are planned accordingly assure the effectiveness of DI in the education environment.

From the first theory, it relates to the second theory, the Zone Proximal of development. According to Vygotsky (1978), the zone of proximal development refers to the difference between what a learner can do without assistance and what he or she can do with guidance and encouragement from a skilled partner. Based on the first and second theories, the researcher proceeds to develop instruments that involve teachers’ perceptions in managing DI. This research explores the design principles and procedures and the methods for implementing and reviewing DI in primary ESL classrooms. As for the implementation of DI, Tomlinson (2001) added that it refers to how authors,

teachers, or students provide sources for language input that are manipulated and used to maximise the potential of use while enhancing our intended output.

RESEARCH PARTICIPANTS/ SAMPLE

This study uses the purposive sampling technique. As the number of participants was manageable, the researcher found a purposive sampling technique more convenient. By choosing purposive sampling, the researcher can concentrate on participants' particular characteristics (Saunders & Thornhill 2009). The researcher shall specify the criterion of inclusion to select participants through a purposive sampling procedure. The criteria are based on a set of characteristics that are ESL teachers who are teaching in primary schools. Furthermore, choosing a purposive sample method where the researcher can do so could improve the accuracy and reliability of the study. Besides, the flexibility of purposive sampling enables researchers to save money and time while collecting and gathering data.

There are 17 primary schools allocated around Labuan Federal School, 2 National type schools (Chinese), 2 Cluster schools of Excellent, and 13 National schools were chosen as the study sampling. Therefore, 30 ESL primary school teachers from the 17 primary schools were selected as the study samplings. Before initiating the research, a consent letter was given to all samplings. Everyone involved in the study was very conscious of their involvement. The researcher decided to use pseudonyms for the purposes of this study, to protect the identity and private lives of primary school ESL teachers.

RESEARCH INSTRUMENT

STRUCTURED QUESTIONNAIRES

A set of structured questionnaires in the form of Google Forms was given to the samplings as a tool for collecting quantitative data. It was conducted to ascertain ESL primary school teachers' perceptions about differentiated Instruction, what they commonly use, and how they have used it in classroom settings. The samplings completed the structured questionnaires anonymously without providing any written explanation, and responses were automatically recorded in a Google form and easily accessible. The questionnaires shall ask questions about the type of pupils they have available in their classrooms to explore learning preferences, as well as whether they believe that by teaching them and assessing all students alike, they give each other equal opportunities for learning. Other than that, it also includes questions related to the mechanisms the

teachers employed to know students' readiness, interest, and learning profiles; teaching strategies and evaluation techniques utilized in the classrooms with students who have multifaceted preferences and similar other questions were forwarded intended to get the insight of teachers' perceptions and classroom practices of DI without necessarily mentioning DI philosophy. The instrument was multi-faceted and written on the Likert scale. It is adapted from five categories of questions that have been identified: demography, teachers' awareness toward differentiation approach, lesson planning and materials building, teachers' perceptions of DI classroom practices, and teachers' competency. A total of 27 items were included in that instrument, including 6 questions asking for demographic information of teachers. A list of twenty-one items is written on the Likert scale, which offers different options: Strongly disagree, disagree, agree, and strongly agree.

OPEN-ENDED INTERVIEW PROTOCOL

One of the qualitative methods of gathering data is through open-ended interviews. It entails two people delving deeply into a particular problem. Voice chat was used to conduct six pre-selected, semi-structured, retrospective personal interviews with open-ended questions. The responses to the questions were recorded. Most of the questions were knowledge, sensory, and opinion based. Despite Telegram's limited security features, users felt safe using it, according to Abu-Salma et al., (2020)'s evaluation. End-to-end encryption for chat messages should be the norm, and using cookies will make it easier for users to adapt their privacy settings (Vaziripour et al. 2018). An in-depth response to the researchers regarding the difficulties the sample faces implementing DI and their classroom practices is what an open-ended interview is meant to yield.

DATA ANALYSIS

The researcher uses Google Form, WhatsApp, and Telegram applications to distribute the survey questionnaires to the samplings and they are given 2 weeks to answer all the surveys. Then, three sessions of open-ended interviews are arranged for six samplings. For daily communication, digital community platforms have become essential. People are using digital communities for various purposes, such as chatting with friends and family or connecting to colleagues at work. The interviews are using the Telegram application as a platform since it is convenient, time consuming, and easily accessible. All the participants agreed to be involved in this study voluntarily. Consent letter was received from the Labuan Federal Territory State

Education Department as well as from the participants themselves. The data needed in this study were collected through the research instruments in the following manner:

THEMATIC ANALYSIS

One of the most important types of analysis used for qualitative data is thematic analysis. The researcher preferred thematic analysis when decoding audio or video transcripts. To find out the context and contents of the speaker’s message, a researcher must be particularly careful with what to look at. In addition, it is possible to simplify the data by employing this analysis. All the questions were categorized into those related to teachers’ perceptions and managing DI in the classrooms. The data were later analyzed and interpreted thematically. The researcher then indicated details from the responses given by the interviewees and arranged them according to the theme. Themes or patterns are described as the final products of data analysis in the thematic analysis according to Braun and Clark (cited by Vaismoradi & Snelgrove 2021) approach.

SPSS

The numerical data collected in the study are analyzed with SPSS, a software package for statistical analysis. To find common patterns and themes, qualitative data have been gathered from the interviews. To identify similarities or differences, each interview question and survey are analyzed individually to compare them. SPSS can manage vast amounts of information and can conduct all the analyses covered in the text and much more. Therefore, for the accuracy of the data transmitted, a double check was carried out. Data from the questionnaires were analysed in detail by means of a Descriptive Statistical Analysis procedure, which described the percentages, frequencies, mean value, and standard deviation of these data. The researcher then analysed the overall mean value and standard deviation. All the data obtained from the structured questionnaire items were presented in the form of tables.

DEMOGRAPHIC DATA AND FINDINGS

PARTICIPANTS’ DEMOGRAPHIC PROFILE

This section outlines the number and frequency of participants’ gender, level of education, work experience, type of school, and grade currently teaching for this study.

Table 1: Demographics profile of participants in the survey

Factor	Categories	Frequency	Percentage
Gender	Male	9	30
	Female	21	70
English-option	Yes	30	100
	No	0	0
Educational Qualification	Diploma	1	3.3
	Bachelor’s degree	27	90
	Master’s degree	2	6.7
	PHD	0	0
Teaching Experience	Less than 3 years	6	20
	3 - 5 years	4	13.3
	6 - 10 years	8	26.7
	11- 20 years	6	20
	20 years and above	6	20
School Type	National School (SK)	23	76.7
	National Type of School (SJKC)	3	10
	Cluster of Excellence (SKK)	3	10
Grade currently teaching	Level 1 (Year 1, Year 2, Year 3)	12	40
	Level 2 (Year 4, Year 5, Year 6)	15	50
	Both	3	10

As for the open-ended interview, 6 participants were involved in this study. The respondents'

biography descriptions in Table 2 were based on the insights from the interviews.

Table 2: Demographics of participants in the open-ended interview

Respondent	Gender	Current certification level	Teaching experience	Type of school currently teaching	Grades currently teaching
R1	Female	Bachelor's Degree	more than 15 years	Sekolah Kebangsaan	Level 2
R2	Female	Bachelor's Degree	more than 15 years	Sekolah Kebangsaan	Level 2
R3	Female	Master's Degree	more than 15 years	Sekolah Kebangsaan	Level 1 and Level 2
R4	Male	Bachelor's Degree	Less than 3 years	Sekolah Kebangsaan	Level 2
R5	Female	Bachelor's Degree	more than 15 years	Sekolah Jenis Kebangsaan	Level 1
R6	Male	Bachelor's Degree	Less than 3 years	Sekolah Kluster Kecemerlangan	Level 2

R-respondent

THEMATIC ANALYSIS

One of the most important types of analysis used for qualitative data is thematic analysis. The following subsections look in-depth at the thematic analysis for each of the research questions. The researcher preferred thematic analysis when decoding audio or video transcripts. To find out the context and contents of the speaker's message, a researcher must be particularly careful with what to look at. In addition, it is possible to simplify the data by employing this analysis. All the questions were categorized into those related to teachers' perceptions, managing DI in the classroom, and the value of implementing DI. All the data were later analyzed and interpreted thematically. It involved the process of understanding the data; making themes; extracting data review; reviewing all the themes again; defining all the themes; making the report. The researcher then indicated details from the responses given by the interviewee and arranged them according to the theme.

RQ: What types of DI do English language teachers employ in the classrooms?

The research question was further divided into four themes. This research questions insight into the teachers' awareness of differentiated approaches and the familiarisation with DI in teaching and implementing them in their classrooms teaching and learning. Other than that, this research question also seeks the teachers' perceptions of DI lesson planning and materials building, the factors

that will be considered in planning differentiated learning, and the challenges faced implementing DI in the classrooms.

DESCRIPTIVE ANALYSIS

Based on the results of the questionnaires frequency, percentage, means, Standard Deviation are shown in Table 3 until Table 4. Item Q1 until Q4 in Table 3 assembled responses on the respondents' awareness towards differentiated instructions in ESL classrooms, which purposely to answer the Research Question. Based on the findings, the respondents showed high awareness towards DI. The highest mean item is Q3, with the mean score of 3.50 and standard deviation of 0.509. The lowest mean item is Q4, with the mean score of 3.30 and standard deviation value of 0.466. The findings show that overall mean value and standard deviation for teachers' awareness of DI in their ESL classrooms are 3.39 and 0.489, respectively. Based on the results, it can be concluded that majority of the respondents agreed that they have high level of awareness that differentiation is widely known as a teaching method to cater the needs of diverse abilities in a classroom (100%), and the diversity among the students in their language abilities (100%), because the respondents are familiar with DI (100%), as well as the importance of DI in designing content for classroom activities (100%). The findings are parallel with the responses collected during the interview. It was identified that all of respondents were familiar with DI.

An interviewee, R1 said “...*Yes. It's because my pupils have different interests, needs, weaknesses, and strengths.*” The next interviewee, R5 said, “*Yes, I do. I implement DI in my teaching and learning, especially in my year 4 class since I have mixed abilities groups in my class.*”

Three of the interviewees mentioned that their schools are involved in the Remedial Instructional Programme and they implemented DI especially in their year four classes. For example, R2 said “*Yes, I do implement it in my classroom, especially in my year four classes.*”

In a similar vein, R3 also agreed with the familiarization of DI in her teaching. She said “*Yes, I do. I implement a Differentiated Learning approach to cater a mixed abilities group in my classes.*” Besides, another interviewee, R4 was also aware of the DI as he responded, “*Our school is one of the schools under the Remedial Instructional Programme. It is something we usually apply in class. Yes. I'm familiar with it.*”

Based on the interview, it is obvious that DI is not a new approach for the respondents, and it gives advantages to execute their differentiated lessons. It showed that the respondents' adequacy awareness of DI is high.

Table 3. Teachers' awareness towards Differentiation approach

No	Items	N	f %	SD (0%)	D (0%)	A (66.7%)	SA (33.3%)	Mean	Std. D
Q1	I am familiar with Differentiated Instruction.	30	f %	0 (0%)	0 (0%)	20 (66.7%)	10 (33.3%)	3.33	0.479
Q2	I am aware of the diversity among the students in their language abilities.	30	f %	0 (0%)	0 (0%)	17 (56.7%)	13 (43.3%)	3.43	0.504
Q3	Differentiation is widely known as a teaching method to cater the needs of diverse abilities in a classroom.	30	f %	0 (0%)	0 (0%)	15 (50%)	15 (50%)	3.50	0.509
Q4	I am aware of the importance of Differentiated Instruction in designing content for classroom activities.	30	f %	0 (0%)	0 (0%)	21 (70%)	9 (30%)	3.30	0.466
Overall								3.39	.489

SD-Strongly disagree D- Disagree A-Agree SA- Strongly Agree

The next four items in the structured questionnaires were sought to understand the strategies implemented by the respondents. Therefore, items Q5-Q8 in Table 3 were aimed to analysed types of DI that the respondents utilised in the classrooms. The highest mean items are Q6 and Q7, with the mean score of 3.20 mean score and standard deviation of 0.484. The lowest mean item is Q8, with the mean score of 2.70 and standard deviation value of 0.535. The findings show that overall mean value and standard deviation for teachers' perceptions on Differentiated Instructions lesson planning and materials building are 3.05 and 0.47. Based on the findings, majority of the respondents differentiated lessons by product (96.7%) and differentiated lessons by process (93.4%). The respondents also differentiated lessons by content (96.7%) and differentiated lessons by learning environment (66.6%). However, for items Q5 until Q8, some respondents disagreed that they differentiated the lessons by contents and product (3.3%), differentiate lessons by process (6.6%), and differentiate the lessons by learning environment (33.3%).

The findings from the questionnaire are parallel with the responses obtained in the interview protocol. Most of

the interviewers consider lesson contents and the process of carrying out the teaching and learning activities in planning and preparing teaching and learning materials. For example, an interviewee, R1 explained, “*students in my classes have different interests, needs, and strengths. They need support and encouragement to succeed.*”

The next interviewee, R2 asserted, “*There are three things that I would consider before I use differentiated instruction in my classroom. First the three main instructional elements: the content, the process, and the product. There are also three students' characteristics that teachers should consider before designing instructions, which are readiness, interests, and learning profile.*” Meanwhile, R3 had a similar view. She said, “*I will consider the level of ability, content of the lesson and duration and period of the lesson for steering and settling teaching and learning activities.*”

Another interviewer, R5, stated in her perceptions of Differentiated strategies this way.

“*I'll consider the objectives of a lesson by providing options for the content they study from the subject to the approach. The next thing that I will consider is my resources.*”

As for R6, she took time, worksheets, and pupils' groups into consideration in planning and preparing teaching materials. She said, "...time because the Low-ability students need extra time to finish their work. I must

prepare different worksheets for them too. I will gather the low students in the same group. It was easy for me to guide them or the advanced pupils to teach them."

Table 4. Types of Differentiated Instruction implemented in the classrooms

No	Items	N	f	SD	D	A	SA	Mean	Std. D
Q5	I usually differentiate my lessons by content.	30	f %	0 (0%)	1 (3.3%)	25 (83.4%)	4 (13.3%)	3.10	0.403
Q6	I usually differentiate my lessons by process.	30	f %	0 (0%)	2 (6.6%)	23 (76.7%)	5 (16.7%)	3.20	0.484
Q7	I usually differentiate my lessons by product.	30	f %	0 (0%)	1 (3.3%)	22 (73.4%)	7 (23.3%)	3.20	0.484
Q8	I usually differentiate my lessons by learning environment.	30	f %	0 (0%)	10 (33.3%)	19 (63.4%)	1 (3.3%)	2.70	0.535
Overall								3.05	0.47

SD-Strongly Disagree D- Disagree A-Agree SA- Strongly Agree

Table 5 shows the values analysis of teachers' perceptions on DI lesson planning and materials building. Items Q9- Q16 were aimed to analyse teachers' perceptions on self-competency about DI approach. The highest mean item is Q12, with the mean score of 3.83 and standard deviation of 0.379. The lowest mean item is Q13, with the mean score of 3.00 and standard deviation value of 0.371. The findings show that overall mean value and standard deviation for teachers' perceptions on DI lesson planning and materials building are 3.36 and 0.452. It can be concluded that all respondents (100%) agreed there are additional resources available to assist teachers with differentiating instruction in a diverse class, and the learning activities in the class are varied (100%) as the lesson was designed to engage the pupils as members of a learning community (100%). Majority of the respondents (93.3%) agreed that lesson planning and materials building for differentiated Instructions is challenging because planning lesson that includes differentiated instruction requires additional time to develop, plan, and execute (96.7%). The respondents faced numerous challenges when attempting to differentiate instruction in class (93.3%) and vary the activity sheets (96.6%) as the respondents planned differentiated learning strategies based on the students' preferred learning style (93.4%). On the other hand, some respondents (6.7%) disagreed that planning a differentiated learning lesson is challenging and faced numerous challenges when attempting to differentiate instruction in class (6.7%). Besides, some of the respondents also

disagreed that differentiated learning strategies based on the students' preferred learning style (6.6%). Other than that, a minority of the respondents disagreed that planning lessons that includes differentiated instruction requires additional time to develop, plan, and execute (3.3%) and varied the activity sheets (3.3%).

These findings are parallel with the findings from the interview protocol. There were several factors that they considered in planning their lessons. Others also consider their students' diverse language abilities in planning their lessons and preparing the materials for differentiated learning. It is essential for them to plan and carry out a diverse learning environment which caters to all their students' learning styles. An interviewee, R1 gave her perception towards Differentiated Instruction as, "... the process of tailoring the lesson to meet each student's interests, needs, and strengths. So, teaching this way gives students choice and flexibility in how they learn and helps teachers personalize learning." Another interviewee, R4 stated that, "I will consider the level of ability, the content of the lesson, duration, and period of the lesson for steering or settling activities. Is it enough to give them the learning experience that they deserve?"

Another interviewee, R5 stated in his perceptions this way:

"I will consider the level of students, in terms of their proficiency. The higher proficiency, the average proficiency, and the lower proficiency."

An interviewee, R6, who teaches in National Type Chinese School expressed her opinion as, "... the factors that I will consider are *time because the low-ability students need extra time to finish their work.*" She also agreed that dividing the students into groups assists better in the steering or settling learning activities. "... *grouping.* I will gather the low-level students in the same group. It was easy for me to guide them or the advanced students to assist them."

Most of the interviewees pointed out the difficult situations faced by them when they were asked. The main obstacles that impede their implementation are time, classroom size, and workload Differentiated Instruction strategies. The amount of time needed to plan and prepare for these activities was very high, according to the teachers. In addition to preparation, teachers have spoken of this Time spent in school, sometimes they're forced to spend more time at home too. This indicates that for them to successfully work at differentiation, they must do an enormous amount of work. Besides the preparation time, the respondents also found that a 30-minute class period wasn't sufficient to allow students to do their activities properly. The interviewees mentioned the challenges that they faced. For example, R3, asserted "...some of the challenges are *time constraints, behaviour management, class management, and the involvement of parents.*"

"There are several challenges I met by implementing differentiated instruction in my classroom such as *I must work extra hard to plan and prepare the lesson.*"

Another interviewee, R2 mentioned that, "Yes, I admit that there are several challenges that I have faced during the implementation of differentiated learning in my class. The first challenge that I would like to mention is the *classroom management itself.* The second challenge that I have faced is the time constraint. The third challenge is *I feel burdened with the differentiated learning strategies* because I have three classes."

"One of the challenges I may face when implementing these differentiated instructions in the classroom is probably *the number of pupils in the classroom and the amount of time.*"

The response received from interviewee R5 was, "... *lack of professional development, especially in technology, and lack of funding for creating the best environment.* So, those are *some challenges that I faced while implementing this differentiated teaching.*"

"There are several challenges that I faced. *I need extra energy in the classroom.* The next challenge is *preparing worksheets.* I need to prepare different worksheets. It is of course *time-consuming as well.*"

Table 5. Teachers' perceptions on differentiated instruction lesson planning and materials building

No	Items	N		SD	D	A	SA	Mean	Std. D
Q9	Planning a differentiated learning lesson is challenging.	30	f %	0 (0%)	2 (6.6%)	5 (16.7%)	23 (76.7%)	3.70	0.596
Q10	I face numerous challenges when attempting to differentiate instruction in my class.	30	f %	0 (0%)	2 (6.6%)	22 (73.3%)	6 (20%)	3.13	0.507
Q11	Planning lesson that includes differentiated instruction requires additional time to develop, plan, and execute.	30	f %	0 (0%)	1 (3.3%)	6 (20%)	23 (76.7%)	3.73	0.521
Q12	There are additional resources available to assist teachers with differentiating instruction in a diverse class.	30	f %	0 (0%)	0 (0%)	5 (16.7%)	25 (83.3%)	3.83	0.379
Q13	I plan my differentiated learning strategies based on my students' preferred learning style.	30	f %	0 (0%)	2 (6.6%)	26 (86.7%)	2 (6.7%)	3.00	0.371
Q14	The learning activities in my class are varied.\	30	f %	0 (0%)	0 (0%)	24 (80%)	6 (20%)	3.20	0.407
Q15	I vary the activity sheets.	30	f %	0 (0%)	1 (3.3%)	23 (76.6%)	6 (20%)	3.17	0.461
Q16	The lesson was designed to engage my pupils as members of a learning community.	30	f %	0 (0%)	0 (0%)	25 (83.3%)	5 (16.7%)	3.17	0.379
Overall								3.36	0.452

SD-Strongly Disagree D- Disagree A-Agree SA- Strongly Agree

Table 6 shows the analysis on teachers' perceptions of self-competency about DI approach. The highest mean item for teachers' perceptions on self-competency about DI approach is item Q18, with a mean value 3.37 and standard deviation of 0.490. The lowest mean score is item Q21, with a mean value of 1.40 and standard deviation of 0.498 because all the respondents (100%) disagreed of feeling unprepared for providing DI. Based on the respondents' responses on items Q17, Q18, and Q19, all respondents (100%) agreed of responsible for teaching all students at their level of readiness because the respondents believed differentiated instruction is necessary to meet the needs of the students, and the respondents' teaching practices match the needs of the students. The responses for items Q20, a majority of the respondents (96.7%) agreed that differentiated learning in the ESL classroom is manageable, but a minority of the respondents (1.1%) disagreed. The findings show that overall mean value and standard deviation for teachers' perceptions on DI lesson

planning and materials building are 2.82 and 0.391, respectively. All the respondents fully agreed that they are ready to provide DI to their students in ESL classrooms.

The findings from the interview protocol are aligned with the findings from the survey. R1 interviewee said, "Yes. We *design pathways for students to learn*. we can decrease the gaps between the weak, intermediate, and advanced pupils." Another interviewee, R2 said "In my opinion. *Differentiated instructions let students show what they know in different ways*. So, it allows all students to keep pace with learning objectives." As for the other interviewee, R3, she mentioned "Choosing different instructions to help students understand tasks in each stage of the lesson. It is important to balance outcomes from 3 different ability groups and choose materials to cater to 3 different ability groups. R4 stated that, "In my opinion, if we teach mixed-ability classrooms, we need to do it. If not, the low pupils will be left behind."

Table 6. Teachers' Perceptions of Self-Competency about Differentiated Instruction Approach.

No	Items	N	SD	D	A	SA	Mean	Std. D	
Q17	I am responsible for teaching all students at their level of readiness.	30	f %	0 (0%)	0 (0%)	22 (73.3%)	8 (26.7%)	3.27	0.450
Q18	I believe differentiated instruction is necessary to meet the needs of my students.	30	f %	0 (0%)	0 (0%)	19 (80%)	11 (20%)	3.37	0.490
Q19	My teaching practices match the needs of the students.	30	f %	0 (0%)	0 (0%)	28 (93.3%)	2 (6.7%)	3.07	0.254
Q20	Differentiated learning in the ESL classroom is manageable.	30	f %	0 (0%)	1 (3.3%)	28 (93.4%)	1 (3.3%)	3.00	0.263
Q21	I feel unprepared for providing differentiated instruction.	30	f %	18 (60%)	12 (40%)	0 (0%)	0 (0%)	1.40	0.498
Overall							2.82	0.391	

SD-Strongly Disagree D- Disagree A-Agree SA- Strongly Agree

DISCUSSION

The findings of this study were intended to thoroughly seek the primary ESL teachers' perceptions of managing DI in mixed ability classrooms. It is focused on the primary ESL teachers' awareness towards DI, teachers' perceptions of DI lesson planning and materials building, and teachers' perceptions of self-competency of DI approach. The insight

from the study could offer a fresh perspective towards teachers' perceptions and effective implementation of DI in the classrooms, especially to the educators and the policy makers. The implementation of DI with diverse learners in heterogeneous classrooms allows the teachers to nurture 21st century skills in the learning as well as providing constructive and equal opportunity learning experiences to the students. It is in line with the Ministry of Education Blueprint 2013-2025- Forward.

The primary school ESL teachers as the respondents in this study are aware of DI is a teaching strategy that they endorse while teaching diverse students in a homogenous classroom. The diversity among the students in their language abilities is important for the teachers in designing content for classroom activities. The findings also showed that a majority of the respondents (96.7%) considered differentiating their lessons in these three elements of the curriculum the most: Content, Process, and Product. While 20 of the respondents (66.6%) usually differentiate their lessons by the learning environment. These findings align with the research findings by Mohd Ikhwan and Azlina (2019). Even though the implementation of DI promotes inclusivity in the classrooms, the teachers' perceptions of DI, lesson planning and materials building are meticulous. They faced many challenges in planning, preparing materials and executing DI in the classrooms. In addition, time consuming and the classroom size were factors that affect the efficacy of implementing DI in mixed ability classrooms. Consequently, the primary school ESL teachers found that they need additional support to improve their DI approach in teaching.

The findings based on the structured questionnaires and during the interview protocol sessions, all the respondents agreed that planning a differentiated learning lesson is challenging when they are asked for their thoughts about it. They faced numerous challenges when attempting to DI. For example, planning lessons that include DI requires additional time for them to plan, develop materials, and execute what they had planned in the classrooms. They also mentioned the large classroom size, students' behaviours, classroom management, and extra workload as other grave barriers for them to implement differentiated instruction effectively. It is time consuming since they have to prepare different types of materials for each class that they teach. The workload they had, and lack of funds retarded them from producing differentiated materials for their students. The class size influenced the steering and settling teaching and learning activities in the classrooms. Lavania and Nor, (2021) carried out a qualitative study at five rural schools and five urban schools had come out with different findings. Six main factors namely curriculum, instruction, knowledge of DI, school, time, and workload that to be considered in implementing DI.

The respondents also pointed out that it was time-consuming and lack of fundings preparing the DI materials. This finding is correlated with Pazhayannur (2022) in her study revealed that the large class sizes, overloaded work schedule, lack of preparation time, and inadequate professional training were the most prominent challenges faced by the teachers. Abu Hassan and Ajmain (2022), explained in the findings of their study that the differentiated learning method lesson planning is challenging and time

consuming as well. The teachers are lacking in terms of financial resources in providing the materials for students. These challenges had created a barrier for the teachers to implement differentiated instruction effectively. Although there are materials provided for the Remedial Instructional Programme by the Ministry of Education of Malaysia, they are limited to be implemented in Year Four classes. Teachers need to work their brains and prepare materials to cater their diverse proficiency students in the classrooms.

The findings on teachers' perceptions of self-competency in implementing DI approach showed that most of the teachers have a unison view of high self-efficacy, and DI in the classrooms is manageable for them. Notwithstanding, they need continuous support in practising DI. Tomlinson et al. (2003) stated that training and support for teachers has proved to be a key to the successful implementation of DI by teachers.

IMPLICATIONS

Based on the findings, most teachers have positive perceptions towards DI. Nevertheless, this study shows that there is much to be done when it comes to practicing these strategies in the classroom. Many teachers, who have a good theoretical knowledge of DI, have expressed their views. The improvement of their application skills requires more focused professional training. The findings revealed that the teachers do not consider themselves sufficiently knowledgeable for planning and implementing various DI strategies in their classrooms. Therefore, it is necessary for teachers and school management to ensure consistent professional development for DI. The desire to differentiate instruction in a classroom can be enhanced by the right kind of professional development. Another point is to note that, in many cases, professional development opportunities have had a substantial impact on creating positive attitudes and enabling teachers to gain confidence in their implementation. The implementation is based on the learning gaps that exist within the organization's teaching staff.

The other significant aspect is the implementation of a different learning approach in the classrooms. It is a challenging methodology to apply consistently, which needs adequate planning. Time consuming, large class sizes, workload, and limited available materials were some of the problems faced by the ESL teachers. Therefore, teachers and school administration can take a leap by creating school community support that can be a starting point to DI friendly environments in schools. The execution may require additional resources to deal with different groups of people. The teachers can take alternatives of using available resources and planning lessons

collaboratively. They can self-taught themselves by exploring digital materials that Web 2.0 tools offered which they could adopt and adapt into their teaching activities. Other than that, they can attempt to address the issues related to time management and large classes in managing DI which gives students more individual attention with collaboration, understand, and reflect on changes in teaching practice through professional development.

CONCLUSION

In conclusion, this mixed-methodology research which adopted a case study, is an attempt to study the insights of the ESL primary school teachers' perceptions of managing DI in the classrooms. This study was conducted to fill the gap of teachers' perceptions of DI in Malaysian ESL primary. The study focuses on their perceptions of DI based on their teachings in the classrooms. The participants in this study shared their views and experiences implementing DI in the classrooms. Their perceptions of DI were analysed based on four segments: (1) Teacher's awareness towards differentiated instructions, (2) Types of DI implement in the classrooms, (3) Teachers' perceptions on DI lesson planning and materials building, (4) Teachers' perceptions of self-competency about DI approach.

The findings show that the ESL primary teachers who involved in the study have high awareness of DI. They are familiar with it and have experiences implementing DI in the classrooms and implemented three elements of DI the most, content, process, and product. They also showed positive attitudes towards the implementation of DI lesson planning and materials building. The findings revealed that they considered several essential factors in planning their lessons such as students' diverse language abilities, readiness, learning profiles, and the classroom size. It is crucial for them to plan and carry out a flexible diverse learning environment which cater the heterogenous classrooms. Despite this, the teachers encountered numerous challenges in preparing materials for the DI teaching and learning. It is time consuming to prepare different types of materials for each class that they teach. The workload they have, and lack of fund retarded them from producing differentiated materials for their students. The class sizes also influenced the steering and settling teaching and learning activities in the classrooms. The next findings from the study showed that the ESL primary school teachers have high perceptions of self-efficacy. Despite the finding, they admitted that there are rooms for improvements and develop their differentiated instructions teaching approach. They also need further assistance in building suitable teaching and learning materials for their students.

It is hope that content creator, material developer and

policy maker, and school administration will ponder the importance of workshop and continuum support to the ESL primary school teachers. Teachers also can explore more options for building differentiated instructions teaching and learning materials that will engage students in the learning. They can find other alternatives such as attending online teacher sharing session or self-taught themselves by exploring online resources and Web 2.0 tools that can be adopt and adapt into their teaching. This study suggests that a larger scale of samplings for the future study to provide more insight into teachers' perceptions of differentiated instructions. It is suggested that the school administrators and policy makers should look into the issues, reexamine, and prioritise teachers' work to minimise their workload. It is important for teachers to have sufficient support, training and differentiated instruction teaching and learning materials that are suitable and can be obtained easily.

REFERENCES

- Abu-Salma, R. 2020. Designing User-Centered Privacy-Enhancing Technologies (Doctoral *dissertation*, UCL (University College London).
- Al-Shammakhi, F. & Al-Humaidi, S. 2015. Challenges Facing EFL Teachers in Mixed Ability Classes and Strategies Used to Overcome Them. *World Journal of English Language* 5(3). <https://doi.org/10.5430/wjel.v5n3p33>
- Bremner, S. 2008. Some thoughts on teaching a mixed ability class. *Scottish Languages Review* 18(1): 1-10.
- Creswell, J. W. & Plano Clark, V. L. 2011. *Designing and Conducting Mixed Methods Research*. (2nd ed.) Thousand Oaks, CA: Sage.
- Hassan, F. N. A. & Ajmain, M. T. 2022. The Differentiated Learning Method (DLM) practices in Malaysia. *Innovative Teaching and Learning Journal* 6(2): 9-15.
- Hazaea, A. N. & Almekhlafy, S. S. A. 2022. Timed reading activity for developing EFL students' reading skills in mixed-ability classes. *Learning and Teaching in Higher Education: Gulf Perspectives* 18(1): 49-61.
- Huitt, W. & Hummel, J. 2003. Piaget's theory of cognitive development. *Educational Psychology Interactive* 3(2): 1-5.
- Ismail, M. I. H. & Aziz, A. A. 2019. TS25 schoolteachers' perceptions of differentiated learning in diverse ESL classrooms. *Journal of Education and Social Sciences* 13(1): 95-107.
- Lavanaia, M., & Nor, F. M. 2021. Factors influencing the implementation of differentiated instruction in English language instruction in rural and urban secondary schools of Johor Bahru. *Creative Education* 12(6): 1235-1246.

- Maddalena, S. 2002. Using high level students as teaching assistants in a mixed ability classroom. *TESL-EJ* 6(1): 1-11.
- Ministry of Education Blueprint 2013-2025- Forward (2013), A22-A36.
- Papantymou, A. & Darra, M. 2022. Perceptions of primary school teachers regarding the implementation of differentiated instruction to students with learning difficulties. *World Journal of Education* 12(5): 19-39.
- Pazhayannur, A. 2022. Teacher Perceptions and Attitude of Differentiated Instruction.
- Ramli, R. & Nurahimah, M. Y. 2020. Self-Efficacy and Differentiated Instruction: A Study Among Malaysian School Teachers. *Universal Journal of Educational Research* 8(4): 1252-1260.
- Silalahi, R. M. 2019. Understanding Vygotsky's zone of proximal development for learning. *Polyglot: Jurnal Ilmiah* 15(2): 169-186.
- Tamiru, Z. 2019. English Language Teachers' Perceptions and Actual Classroom Practices of Differentiated Instruction. *The Ethiopian Journal of Social Sciences and Language Studies (EJSSLS)* 6(1): 77-95.
- Tomlinson, C. A. 1999. *The Differentiated Classroom: Responding to the Needs of All Learners*. Alexandria, VA: Assoc. for Supervision and Curriculum Development.
- Tomlinson, C. A. 2000. Differentiation of Instruction in the Elementary Grades, ERIC Digest. ERIC Clearinghouse on Elementary and Early Childhood Education ED443572
- Tomlinson, C. A. 2001. *How to Differentiate Instruction in Mixed-ability Classrooms*. Alexandria, VA: Assoc. for Supervision and Curriculum Development.
- Tomlinson, C. A. 2004. Differentiation in diverse settings: A consultant's experience in diverse settings. *The School Administrator* 7(61): 28-35.
- Tomlinson, C. A. 2005. Quality curriculum and instruction for highly able students. *Theory into Practice* 44(2): 160-166.
- Tomlinson, C. A. 2017. *How to Differentiate Instruction in Academically Diverse Classroom*. 3rd ed, Alexandria, VA: Assoc. for Supervision and Curriculum Development.
- Tomlinson, C. A., Brighton, C., Hertberg, H., Callahan, C. M., Moon, T. R., Brimijoin, K., Conover, L. A. & Reynolds, T. 2003. Differentiating Instruction in Response to Student Readiness, Interest, and Learning Profile in Academically Diverse Classrooms: A Review of Literature. *Journal for the Education of the Gifted* 27(2/3): 119-145.
- Tomlinson, C. A. & McTighe, J. 2006. *Integrating Differentiated Instruction & Understanding by Design: Connecting Content and Kids*. Alexandria, VA: Assoc. for Supervision and Curriculum Development.
- Tomlinson, C. A. & Imbeau, M. B. 2010. *Leading and Managing a Differentiated Classroom*. Alexandria, VA: Assoc. for Supervision and Curriculum Development.
- Tomlinson, C. A. & Imbeau, M. B. 2012. Common sticking points about Differentiation. *School Administrator* 69(5): 19-22
- Vaziripour, E., Wu, J.; Farahbakhsh, R., Seamons, K., O'Neill, M. & Zappala, D. A survey of the privacy preferences and practices of Iranian users of Telegram. In *Proceedings of the USEC Workshop*, San Diego, CA, USA, 18 February 2018.
- Vaismoradi, M. & Snelgrove, S. 2019. *Theme in qualitative content analysis and thematic analysis*.
- Vygotsky, L.S. 1978. *Mind in Society*. Cambridge, MA: Harvard University Press.
- Zakarneh, B., Al-Ramahi, N. & Mahmoud, M. 2020. Challenges of Teaching English Language Classes of Slow and Fast Learners in the United Arab Emirates Universities. *International Journal of Higher Education* 9(1): 256-269.
- Zelalem, A., Melesse, S. & Seifu, A. 2022. Teacher educators' self-efficacy and perceived practices of differentiated instruction in Ethiopian primary teacher education programs: Teacher education colleges in amhara regional state in focus. *Cogent Education* 9(1), 2018909.

Nurul Hidayah Umar
Faculty of Education,
Universiti Kebangsaan Malaysia
43600, Bangi, Selangor, Malaysia.
p118227@siswa.ukm.edu.my

Azlina Abdul Aziz, PhD.
Faculty of Education,
Universiti Kebangsaan Malaysia
43600, Bangi, Selangor, Malaysia.

* Corresponding Author email: azlina1@ukm.edu.my