

# IMPLEMENTATION OF UNIVERSAL LEARNING DESIGN PRINCIPLES BY MAINSTREAM TEACHER IN INCLUSIVE EDUCATION PROGRAMS

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## ABSTRACT

Sustainable Development Goal 4 (SDG) has stressed the aspect of inclusive education. In Malaysia, the implementation of the Inclusive Education Program has been implemented, which is the placement of students with special educational needs (SEN) together with typical students in the classroom based on the experience of other countries. It is seen as more effective for SEN to obtain effective social interaction in life. To ensure that this inclusive education can be achieved, a universal learning design (UDL) has been developed. UDL is a framework for improving and optimizing teaching and learning for all individuals based on scientific insights into how humans learn. Therefore, the objective of this study is to identify the level of implementation of universal learning design (UDL) of mainstream teachers in the Inclusive Education Program (IEP) in primary schools in Kota Tinggi, Johor. The sample is a total of 82 mainstream teachers who teach the Inclusive Education Program at the primary school level. The census sampling method was used. The questionnaire that was constructed was adapted from the UDL Framework Scale 2023 and *Borang Penskoran Evidens SKPM Gelombang 2* 2016 with Cronbach's Alpha coefficient value  $\alpha = 0.943$  was used to collect data. Statistical Package for Social Sciences (SPSS) Version 29 software was applied to analyze the data obtained. Descriptive analysis found the level of implementation of the 3 principles of UDL in IEP by mainstream teachers at a high level. It can be concluded that teachers always implement UDL in IEP to ensure that SEN can actively engage in learning sessions.

**Keywords:** inclusive education; students with special educational needs; universal design learner

## 1. INTRODUCTION

Universal learning design (UDL) is a framework for improving and optimizing teaching and learning for all individuals based on scientific exploration of how humans learn (UNESCO 2020). UDL focuses on designing learning goals, materials, methods and assessments so that from scratch, any individual can access, build skills and appreciate learning (Balta et al. 2021). The placement of students with special educational needs (SEN) in inclusive classrooms demonstrates academic improvement in a number of areas, including mastery of academic skills and social skills improvement. Placement in inclusive classrooms does not interfere with the academic performance of typical pupils due to the allocation of the amount of time and time of teaching involved, the rate of disruption to the planned activities remains emphasized. Inclusive education and UDL have the

potential to have a positive impact on the learning experience of all pupils. Inclusive education refers to all pupils who are able to access and gain equal opportunities to education and learning while UDL is a framework to improve and optimize teaching and learning for all individuals based on differences in learning strategies.

The implementation of the UDL framework should be applied as an important step towards achieving the objective of inclusive education (Capp 2020). However, the challenges from the implementation of UDL prevent the provision of equitable learning opportunities for all pupils. The level, in this context, is generally considered to be an overall assessment of the degree of willingness and satisfaction of execution (Maio & Haddock 2009). Although teachers' attitudes towards inclusive education and inclusive practices have been the focus of many studies around the world (Page et al. 2022), no previous research has examined the implementation of teachers on inclusive pedagogical frameworks especially in Malaysia. The current study has filled this research gap by examining the level of implementation of school teachers against the UDL framework in Malaysia. The role of school teachers and the way they apply their own teaching strategies to develop inclusive education are important milestones to improve the opportunities and participation of all pupils in mainstream classrooms.

Based on the above background, this study was conducted to identify the level of implementation of the universal learning design (UDL) of mainstream teachers in the Inclusive Education Programme (IEP) in the primary school district of Kota Tinggi, Johor. This study will focus on reviewing the level of implementation of universal learning design (UDL) in the Inclusive Education Programme (IEP) by mainstream teachers through 3 UDL principles which are (1) diverse delivery methods, (2) various ways SEN speaks and (3) diverse SEN involvement.

## **2. LITERATURE REVIEW**

### **2.1. Universal Learning Design Principles**

UDL is a principled educational model for developing an inclusive and accessible learning environment. This is to meet the individual needs of each student. The three principles of UDL are to provide options to attract students to always be motivated and maintain their passion for learning, communicate information and learning content in different ways to meet the diverse needs and preferences of students and offer a variety of ways for students to demonstrate their knowledge and skills through various forms of expression and evaluation (Kennette & Wilson 2019). There are 3 principles in UDL which are (1) various delivery methods, (2) various ways SEN speaks and (3) diverse SEN involvement.

The first principle of diverse delivery methods is a principle that emphasizes the importance of delivering information in various formats and mediums to meet the needs of students of diverse backgrounds. This requires the delivery of information in various mediums, combining diverse multimedia, visual and educational resources. By providing a variety of methods of information presentation, the teacher can adjust the diverse style of learning, preferences and capabilities. This can ensure that every pupil can achieve and understand the information taught (Fovet 2020).

The second principle is the various ways SEN speaks. This principle focuses on giving pupils many opportunities to engage in addition to showcasing their understanding of the learning topic. This involves providing various engagement opportunities for students to demonstrate their understanding and abilities using different methods. These various ways of communicating include speaking, writing, sketching or using technology. Teachers empower pupils to demonstrate their understanding and knowledge using a variety of methods that align with their unique talents and capabilities (Cumming & Rose 2021). This method gives pupils the power to control their own learning and promote an inclusive learning experience.

The involvement of diverse SEN is the third principle. This principle emphasizes the importance of fostering student motivation and active participation in learning sessions. This requires experience in the field of diverse education, offering choice and freedom to students as well as being able to build an inclusive classroom environment. By providing a wide range of opportunities for interaction, teachers can connect with pupils' interests and offer meaningful and authentic learning meetings (Hills et al. 2022). Teachers have the power to foster a friendly and supportive classroom atmosphere that encourages students to actively engage and stay motivated.

## **2.2. Inclusion Education**

Inclusive education aims to ensure that every pupil has the same opportunity to engage and benefit from quality education. This is to overcome the barriers found in learning and provide appropriate support to meet the individual needs of students (Fovet 2022). Inclusive education goes beyond access to education alone and focuses on meaningful participation, academic and social engagement and inclusion.

Inclusive education is closely related to the implementation of the UDL principle. UDL promotes flexible, responsive and supportive teaching design and learning environments for all students (Gronseth et al. 2021). By adopting UDL practices, teachers can create inclusive classrooms where students with a wide range of abilities, learning styles and cultural backgrounds can thrive.

Teachers provide their teaching to accommodate the diverse learning needs and abilities of students. They may provide alternative materials, use diverse teaching strategies and offer individual support to ensure all students can engage with the curriculum. Teachers work collaboratively to support pupils of diverse backgrounds (Gronseth et al. 2021). The use of a shared teaching model can be applied where mainstream teachers and special education work together to provide inclusive teaching and support in the same classroom.

Inclusive education promotes the use of assistive technologies and universal design principles to make the material and learning environment accessible to all pupils. This includes using accessible technology, providing captions or transcripts for audio visual materials and ensuring physical space is accessible. Inclusive education fosters a positive and supportive classroom climate where diversity of backgrounds is valued, and pupils feel safe, respected and involved in learning. Teachers who create an environment that values diversity, promotes positive social interaction can eliminate the stigma of bias or prejudice against these pupils (Murphy et al. 2020). Inclusive education acknowledges that pupils have unique learning needs. This indirectly identifies and

addresses individual strengths, challenges, and support needs through individual education plans, accommodation and adaptations.

### **2.3. SEN Achievement in Inclusive Education Program based on Universal Design Principles for Learning**

SEN's achievement in the Inclusive Education Programme, based on the principles of universal learning design (UDL), is a critical aspect in ensuring academic success and students' well-being. The UDL framework, which emphasizes the provision of various ways of representation, action and expression, and engagement, offers opportunities for appropriate and inclusive teaching that supports the learning needs of pupils of diverse backgrounds (Chardin & Novak 2020).

By implementing the UDL principle in the Inclusive Education Programme, some positive outcomes can be observed in the achievement of pupils with special educational needs. Among them are increased access to learning. UDL focuses on providing various ways of representation which is to ensure that pupils have a variety of ways to access information and content. SEN has its own learning style or challenges that require different approaches to access and understand information (Chardin & Novak 2020). Therefore, by offering alternative formats such as multimedia resources and assistive technology, pupils can engage with the curriculum in a meaningful and accessible way to them.

Next, engagement and participation can be enhanced. The UDL principle of various ways of engagement is important in encouraging active participation and motivation among SEN. By offering a wide range of options, combining their interests, and creating a positive and inclusive classroom environment, teachers can engage pupils in meaningful learning experiences (Craig et al. 2022). This increase in engagement leads to higher levels of participation, which positively affects pupil achievement.

Personal learning experiences can be provided when UDL recognizes the importance of individual instruction and provides various ways of action and expression. For SEN, this impact means that as pupils are able to adapt teaching to their specific strengths, interests and learning goals (Gronseth et al. 2021). By offering a flexible approach to demonstrate knowledge and skills, such as through alternative assessments, project-based learning or technology-supported activities, pupils can showcase their abilities and achievements in a way that fits their unique learning profile.

Increased self-efficacy and confidence. The implementation of UDL principles fosters a supportive and inclusive learning environment, which contributes to the development of self-efficacy and pupil confidence. When SEN experience success and progress in their learning, they gain confidence in their abilities and become more motivated to continue their academic journey (Lowrey et al. 2019). These positive self-perceptions can have a profound impact on their overall achievement and long-term educational outcomes.

Collaboration and peer interaction can be applied. UDL promotes social learning and collaboration among students. By designing learning activities that promote peer interaction, cooperative learning and inclusive classroom practices, SEN can benefit from the expertise and support of their

peers (Lowrey et al. 2019). Collaborative learning experiences facilitate knowledge sharing, problem solving, and social skills development, leading to increased academic achievement and a sense of belonging in inclusive classroom communities.

### 3. METHODOLOGY

This research is a quantitative study and uses a survey method aimed at reviewing the level of implementation of the universal learning design (UDL) of mainstream teachers in the Inclusive Education Programme (IEP). This study involved all mainstream teachers who taught SEN in the IEP at primary school level in Kota Tinggi, Johor and using *census sampling* as a sample selection of studies. The district was chosen because the level of IEP implementation in schools has reached 100%. A total of 82 mainstream teachers teaching the primary school-level Inclusive Education Programme in Kota Tinggi were selected as a sample of the study.

The instrument for this research is a set of questionnaires that include three sections. The first part of Part A is the demographic characteristics of the respondents including gender, age, educational status and teaching experience. The second part is Part B which contains 18 items of principle implementation that have been adapted from the *UDL Framework Scale* by Hongyu et. al (2023). This Part B has been devoted to 3 sub-questions representing 3 UDL principles which are the first principle : diverse delivery method (6 items), second principle : various ways SEN speaks (4 items) and third principle : diverse SEN involvement (8 items). The third part is Part C: SEN Achievement Level in IEP (8 items) adapted from the SKPMg2 Evidence Scoring Form (KPM 2019).

The likert scale used is type five scale and the scale description is from a scale of 1 which means strongly disagree to a scale of 5 strongly agree. Table 1 describes the likert scales used in this study. So the factor in the selection of the instrument of this study is based on the review of the literature of past studies as well as the appropriateness in answering the question of this study. The higher the score *in this UDL Framework Scale, will indicate the positive level of implementation of the teacher in the UDL principle*. The instrument also recorded a *Cronbach Alpha* value above 0.7. This translated version recorded a *Cronbach Alpha* value of 0.943 after conducting a pilot study involving 30 mainstream primary school teachers in Kota Tinggi. Content validity is implemented by involving two experts with experience in the field of *Technical and Vocational Education and Trainin (TVET) SEN* and the field of special education. All study items in Parts B and C were measured based on a five-point likert scale. Respondents are required to choose answers for each item in Sections B and C using the five-point likert scale introduced by Nor Aizal & Nora (2012) as in Table 1.

Table 1: Five-Point Likert Scale used in Questionnaire

Value	Explanation stage
1	Strongly Disagree
2	Disagree
3	Sometimes
4	Agree

5	Strongly Agree
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*Source* : Nor Aizal & Nora 2012

Application for permission to conduct research was made through the eRas 2.0 website operated by the Information Management Division and the Education Policy Planning and Research Division, Ministry of Education Malaysia (MOE) before this research was carried out. Next, the application for permission to conduct the study is also made through the Johor State Education Department (JPN) upon approval from eRas. After obtaining the permission of the Johor NRD, data began to be collected from the study participants. Information on the number of mainstream teachers teaching IEP in Kota Tinggi is obtained from the Kota Tinggi District Education Office (PPD). Questionnaires are provided in the form of Google Forms which are distributed to study participants through *Whatsapp* and *Telegram* applications with the assistance of PPD Kota Tinggi.

The *Statistical Package for Social Sciences* (SPSS) Version 29 software is used to analyze the data. Descriptive analysis is used to obtain the mean score, percentage, standard deviation of all variables. Next, this analysis also describes the background and demographic characteristics of the study sample such as gender, age, school type of educational standards and mainstream teacher teaching experience. The demographic factors in this study will be analyzed by descriptive methods using frequency and percentage distributions. To determine the level of implementation of the UDL principles and the achievement of SEN in IEP shown by the respondents, the mean level interpretation has been divided into 4 categories, namely low, medium low, medium high and high as shown in Table 2.

Table 2: Mean Level Interpretation

Min Range	Level Interpretation
1.00 – 2.00	Low
2.01 – 3.00	Medium Low
3.01 – 4.00	Medium High
4.01 – 5.00	High

*Source* : Sapie et. al 2017

#### 4. FINDINGS

The findings of the study were obtained from 82 mainstream teachers who teach inclusive education programs (IEP) in primary schools in Kota Tinggi.

Table 3: Respondent Demographic Distribution

Teacher Demographic Details		Frequency	Percent (%)
Gender	Men	22	26.8
	Female	60	73.2
Age	20 – 30 years	21	25.6
	31 – 40 years old	19	23.2

	41 – 50 years old	21	25.6
	51 – 60 years old	21	25.6
Teaching Experience	1 – 5 years	19	23.2
	6 – 10 years	10	12.2
	11 – 15 years old	12	14.6
	16 – 20 years old	41	50.0
	21 years and above	0	0
Education Standards	Diploma	0	0
	Bachelor	79	96.3
	Master's Degree	3	3.7
	Doctor of Philosophy	0	0

According to table 3, most of the survey respondents were female teachers who had shown a greater number when compared to male teachers. In terms of age, there are 3 age groups that predominate from 20 – 30 years, 41 – 50 years and 51 – 60 years old, which is 25.6% (21 people) respectively. As for the teaching experience demographics, half of the total respondents have taught for more than 16 years which is 41 people (50%). Next, respondents had 96.3% who held a bachelor's degree and only 3.7% had a master's degree.

#### 4.1. Implementation Stage 3 Principles of Learning Design

To review surveys of mainstream teachers (n=82) according to each UDL principle more clearly, researchers will display them in the form of tables and descriptions. Table 4 shows the findings of each principle involving all respondents.

Table 4: Findings 3 UDL Principles

	Respondent, n	Mean, <i>M</i>	Standard Deviation, <i>SD</i>
Principle 1	82	4.348	0.482
Principle 2	82	4.177	0.561
Principle 3	82	4.122	0.478
Total	82	4.209	0.456

Table 4 shows that the first principle of multiple delivery methods recorded the highest mean score ( $M=4.348$ ,  $SD=0.482$ ,  $n=82$ ). While the third principle of diverse SEN involvement recorded the lowest mean score ( $M=4.122$ ,  $SD = 0.478$ ,  $n=82$ ). The second principle is that various ways SEN speaks recorded the middle mean score  $M=4.177$ ,  $SD = 0.561$ ,  $n=82$ ). Based on the overall mean score recorded, there is not much difference in mean score between these three UDL principles and the average mean score is at a high level.

Table 5: Findings of Principles 1 UDL (Multiple delivery methods)

Bill.	Items	Scale	<i>SD</i>
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		1 SD	2 D	3 S	4 A	5 SA	Mean, <i>M</i>	
1	P1 : I provide a variety of teaching aids for students to master the concept of the lesson.			10 (12.2%)	40 (48.4%)	32 (39%)	4.268	0.668
2	P2 : I use an easy-to-understand language barrel			2 (2.4%)	33 (40.2%)	47 (57.3%)	4.549	0.548
3	P3 : I use textbooks for every learning and facilitation session.	1 (1.2%)		12 (14.6%)	37 (45.1%)	32 (39%)	4.207	0.781
4	P4 : I identify the existing knowledge of the pupil.			6 (7.3%)	43 (52.4%)	33 (40.2%)	4.329	0.609
5	P5 : I clearly state the content of the lesson that needs to be mastered.			7 (8.5%)	42 (51.2%)	33 (40.2%)	4.317	0.626
6	P6 : I guide students to apply knowledge to diverse questions			3 (3.7%)	42 (51.2%)	37 (45.1%)	4.415	0.565

Table 5 shows the descriptive statistics i.e. mean score and standard deviation for each item. The researchers mentioned 5 items to the respondent (n=82) regarding the first principle of UDL which is a diverse delivery method. Based on the data obtained from table 5, respondents gave answers based on a scale of 1 (Strongly Disagree), 2 (Disagree), 3 (Sometimes), 4 (Agree) and 5 (Very Agree). Item P2 recorded the highest mean score ( $M=4.549$ ,  $SD=0.548$ ,  $n=82$ ). The percentage of choosing Very Agree is 57.3% ( $n=47$ ), Agree is 40.2% ( $n=33$ ) and Sometimes Occasionally is 2.4% ( $n=2$ ). The lowest mean score is item P3 ( $M=4.207$ ,  $SD=0.781$ ,  $n=82$ ). The percentage of



choosing Very Agree is 39% (n=32), Agree is 45.1% (n=37), Sometimes it is 14.6% (n=12) and Very Disagree 1.2% (n=1). On average, all mean scores are at a high level based on table 2.

Table 6: Findings of Principles 2 UDL (Multiple ways SEN speaks)

Bill.	Items	Scale					Mean, <i>M</i>	<i>SD</i>
		1 SD	2 D	3 S	4 A	5 SA		
1	P7 : I provide a variety of mediums for students to demonstrate their understanding of the concept of the lesson.		1 (1.2%)	10 (12.2%)	49 (59.8%)	22 (26.8%)	4.122	0.655
2	P8 : I wrote the learning objectives that pupils need to master on the whiteboard.		2 (2.4%)	14 (17.1%)	37 (45.1%)	29 35.4%)	4.134	0.781
3	P9 : I provide teaching aids that students use during the learning and facilitation process.		2 (2.4%)	14 (17.1%)	37 (45.1%)	29 35.4%)	4.134	0.781
4	P10 : I showed a demonstration to apply diverse strategies in problem solving.			6 (7.3%)	44 (53.7%)	32 (39.0%)	4.317	0.606

Table 6 shows the descriptive statistics i.e. mean score and standard deviation for each item. The researchers mentioned 4 items to the respondent (n=82) on the second principle of UDL which is the various ways SEN speaks. Based on the data obtained from table 6, respondents gave answers

based on a scale of 1 (Strongly Disagree), 2 (Disagree), 3 (Sometimes), 4 (Agree) and 5 (Very Agree). Item P10 recorded the highest mean score ( $M=4.317$ ,  $SD=0.606$ ,  $n=82$ ). The percentage of choosing Very Agree is 39% ( $n=32$ ), Agree is 53.7% ( $n=44$ ) and Sometimes Sometimes is 7.3% ( $n=6$ ). The lowest mean score is item P7 ( $M=4.122$ ,  $SD=0.655$ ,  $n=82$ ). The percentage of choosing Very Agree is 26.8% ( $n=22$ ), Agree is 59.8% ( $n=49$ ), Sometimes it is 12.2% ( $n=10$ ) and Very Disagree 1.2% ( $n=1$ ). On average, all mean scores are at a high level based on Table 2.

Table 7: Principles 3 UDL Findings (Multiple SEN Involvement)

Bill.	Items	Scale					Mean , $M$	SD
		1 SD	2 D	3 S	4 A	5 SA		
1	P11 : I guide students in self-assessment			10 (7.3%)	49 (53.7%)	32 (39%)	4.158	0.618
2	P12 : I give autonomy to pupils during the learning process.			14 (17.1%)	55 (67.1%)	13 (15.9%)	3.988	0.577
3	P13 : I built a learning-friendly inclusive environment.			7 (8.5%)	49 (59.8%)	26 (31.7%)	4.231	0.594
4	P14 : I ask a question that is geared towards problem solving.		1 (1.2%)	7 (8.5%)	55 (67.1%)	19 (23.2%)	4.122	0.596
5	P15 : I stimulate students to collaborate in learning activities.			8 (9.8%)	46 (56.1%)	28 (34.1%)	4.243	0.619
6	P16 : I apply learning on a master's basis.		1 (1.2%)	12 (14.6%)	57 (69.5%)	12 (14.6%)	3.976	0.587
7	P17 : I have an expectation of time for the objectives to be		1 (1.2%)	9 (11%)	52 (63.4%)	20 (24.4%)	4.109	0.629

achieved for  
each pupil.

8	P18 : I provide diverse support for students to adopt a new concept of learning.	1 (1.2%)	7 (8.5%)	52 (63.4%)	22 (26.8%)	4.146	0.669
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Table 7 shows the descriptive statistics i.e. mean score and standard deviation for each item. The researchers attributed 8 items to the respondents (n=82) regarding the third principle of UDL which is the involvement of various SEN. Based on the data obtained from table 7, respondents gave answers based on a scale of 1 (Strongly Disagree), 2 (Disagree), 3 (Sometimes), 4 (Agree) and 5 (Very Agree). Item P11 recorded the highest mean score ( $M=4.158$ ,  $SD=0.618$ ,  $n=82$ ). The percentage of choosing Very Agree is 39% (n=32), Agree is 53.7% (n=49) and Sometimes Sometimes is 7.3% (n=10). The lowest mean score is item P16 ( $M=3.976$ ,  $SD=0.655$ ,  $n=82$ ). The percentage of choosing Very Agree is 24.4% (n=20), Agree is 63.4% (n=52), Sometimes it is 11% (n=9) and Disagree 1.2% (n=1). On average, all mean scores are at a high level based on table 2 unless items P12 and P16 are at medium-high levels.

## 5. DISCUSSION

The interest in collecting the above data is to support the implementation of universal learning design (UDL) in inclusive pedagogy. Along with the implementation of inclusive education at the globalisation level over the past two decades, the application of appropriate inclusive pedagogical design is significant to reduce the learning gap for all students including pupils with special educational needs (Capp 2020). The use of traditional learning methods that use a flat-beat approach to all pupils has been successfully replaced with a universal learning design (UDL) which is now the optimal choice. This is because UDL managed to reduce barriers in proactive learning by achieving learning objectives, teaching method planning and the use of teaching aids (Meier & Rossi 2020).

In this study, the level of implementation of UDL by mainstream teachers in the Kota Tinggi district primary schools in the Inclusive Education Programme (IEP) was studied using instruments of reliability. The findings show that the level of implementation of UDL by mainstream teachers in IEP is positive. This shows that mainstream teachers support well the implementation of inclusive education. Policies in Malaysia such as the Malaysian Education Development Plan 2013-2025 are a factor for teachers to continue to support inclusive education where the Ministry of Education Malaysia is committed to encourage more SENs in IEP (Special Education Division 2013). The education curriculum in Malaysia promotes education for all and is not hindered to SEN in line with the Persons with Disabilities Act 2008. With increasing priorities through policies in the implementation of inclusive education, UDL is recommended to use it in inclusive education that has pupils of various backgrounds (Price & Slee 2021).

The level of readiness of mainstream teachers towards SEN teaching becomes the probability of a positive outcome factor. The widespread exposure of people with disabilities every day makes teachers aware of the existence of SEN and their learning style. This can also be seen in overseas studies that state that mainstream teachers placed in special education and inclusive education classes have adequate training and exposure in New South Wales (Forlin et. al 2013). Subban and Mahlo (2017) found that the attitude of teachers who have adequate training in the field of inclusive education is more positive than that of teachers who do not have knowledge and training. Knowledgeable UDL teachers have good implementation in teaching and will always implement UDL throughout the course of the profession as a teacher.

Based on the findings of this study, there are several implementation items to take note of. For example, most teachers believe that textbooks are the main requirement for SEN in learning and facilitation sessions. However, the main idea in the first principle is that the method of presenting various formats such as video or digital images to represent the concept of learning is not just a writing textbook. Teachers who are inflexible about how teaching will trigger barriers to access and participation of pupils in the classroom (Evans 2020). For the third principle of diverse SEN involvement is to empower students to make choices or suggest alternative strategies in learning activities. However, the findings suggest full autonomy cannot be granted. Questions leading towards solutions asked in the classroom are seen as difficult to implement where teachers prefer to simple question types even if these items are among the requirements in the UDL. However, the level of implementation of UDL by mainstream teachers in IEP showed positive results.

## **6. CONCLUSION**

Overall, the implementation of UDL in IEP is seen as at a good level. Through the implementation of the identified UDL principles and the efforts made, students and teachers are easy to collaborate in the classroom while the students feel comfortable, safe, and happy. The positive acceptance of SEN in the education system at the same school shows that no discrimination has occurred. This can also increase SEN's self-confidence in socializing with mainstream students. The implementation of the Inclusive Education Programme (IEP) is seen as having a positive impact whether the students are fully inclusive or partial. SEN in IEP can now communicate with prime students without any social stigma. Universal design in learning reduces the hardships SEN experiences in learning by providing a variety of strategies, approaches and methods. The increase in teacher professionalism is seen as significant in helping to hone the creativity of teachers to improve the holistic and authentic development of pupils in schools. Collaboration meetings between parents and teachers as well as local community involvement can also provide appropriate and inclusive school programme planning. Nevertheless, in preparing and implementing the UDL principles, there are major challenges identified. The challenges include preserving and improving the principles of UDL in a school. Among the efforts that can be made include continuous communication and communication with the school community such as discussions through Professional Learning Community. This is to inform that inclusive education programmes that support the UDL principles should continue as it makes the best impact on the active involvement of pupils with special educational needs in schools.

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