

Teachers' Perception towards the Implementation of Inclusive Education in Penang, Malaysia

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ABSTRACT

The objective of this study was to measure teachers' perception towards the implementation of inclusive education in Penang, Malaysia. This study involved 133 mainstream teachers and 37 special education teachers from Penang. Research instrument for this study was adapted from the instrument Contexts, Input, Process and Product, which was introduced by Stufflebeam in 1971. This study involved a questionnaire that contains two sections. Section A is on teachers' demography and Section B concerns with the factors that contribute to the teachers' perception towards the implementation of inclusive education. The results of this study are discussed in terms of frequencies, percentages, independent *t*-test and One-Way ANOVA. The results showed that 32.35% of the respondents have positive perception and 50.59% have moderate perception towards the implementation of inclusive education. On the other hand, this study also revealed that 17.06% of the respondents have negative perception towards the implementation of inclusive education. The findings of this study also highlighted that different types of teachers and their academic qualification do influence or create the difference in term of their perception towards the implementation of inclusive education. In addition, the findings of this study also showed that there is a positive relationship between the types of teachers and their perception towards the implementation of inclusive education.

Keyword: Inclusive education, teachers' perception, special education teachers

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INTRODUCTION

Malaysian has its policy of education for all and this includes children with special needs. In Malaysia, education for the special need children has started since 1920 for the visually impaired children, since

1954 for the hearing impaired children, and since 1969 for children with learning disabilities. In particular, special education has been implemented based on Section I Education Act 1996, which interprets special education as:

- i. Education programme for special need children in special school (visually impaired and hearing impaired).
- ii. Integrated programme where the special need children (visually impaired, hearing impaired, and learning disabilities) study in a separate classroom or building among themselves in a mainstream school compound.
- iii. Inclusive programme where the special need children study together with their normal peers in a mainstream classroom.

STATEMENT OF THE PROBLEM

Inclusive education in special education is a new education system introduced in Malaysia. Therefore, its implementation involves a lot of problems and misunderstanding among school administrators, teachers and parents of special need children and mainstream students. The problems are normally concerning the special education teachers, mainstream education teachers, special need students, mainstream students, support staff, teaching aids, curriculum, as well as teaching and learning processes. Other than that, researchers also looked at the context, input, process and product, which contributed to the implementation of the inclusive education programme.

Problems Regarding Context

Special education in Malaysia is implemented according to the Malaysian Special Education Philosophy, which clearly states that there is a need for integration and inclusion for special need children where applicable; on the other hand, there is a need in maintaining the segregation, wherever applicable. Placement of the special need children in schools relies on the aspect of educable. There is a professional body which is responsible to identify whether a child is educable or trainable, suitable for inclusive or integrated programme or special school. The visually impaired students, for instance, study in mainstream classrooms that are taught by mainstream teachers with assistance from special education teachers. The hearing impaired and learning disabilities students, who can follow the mainstream school system and perform accordingly, are also given opportunity to study together with their normal peers in the mainstream classroom.

Problem Regarding Input

When a school has inclusive education, its staff have to really understand the meaning of inclusive education. In their study, Zalizan and Norani (2000) stated that school organization must understand the objectives and principles of the implementation of inclusive education. In inclusive education, mainstream teachers are those who deal directly with the special need children; therefore they must have a clear understanding of what inclusive education is all about. School's administrators must

also understand the inclusive education well because they are the ones who are in charge of the disabled friendly infrastructure and environment for the inclusive education at their schools. Mohd Siraj (1996) as well as York and Vandercook (1991) stated that inclusive education would only succeed if the special need children were to be totally included in the mainstream classrooms. The teaching and learning processes must focus on the children's strength as well as consider their weaknesses. Individual Education Plan (IEP) should also be planned based on the students' individual needs. Parents of the mainstream students must also understand inclusive education and be willing to accept the fact that their children are learning with children with special needs.

According to Rosenberg and O'Shea (1998), the lack of training and exposure among the mainstream teachers in inclusive education, as well as appropriate special teaching aids, can lead to the failure of the implementation of inclusive education.

Problems Regarding Process

Semmel *et al.* (1991) stated that it is important to have a good collaboration between mainstream teachers, special education teachers and support staff in order to have good quality teaching and learning processes for special need children.

According to Anthony (1992), the role of special education teachers and the mainstream teachers can be well-defined through the collaborative model. According to him, the main problem for effective collaborative is the failure to provide enough

time for the collaboration. Teachers involve in the inclusive education must have enough exposure to the various teaching strategies, behaviour modification, and collaboration techniques.

Abdul Rahim (1994) mentioned that it is important to have good understanding of inclusive education, the acceptance for inclusive education in the schools and the ability of the teachers to implement the inclusive education. In his study in the state of Kedah, Haniz (1998) found that 66.9% of the mainstream teachers had a negative perception towards inclusive education and this was merely because they lacked the experiences, knowledge, as well as understanding of the needs of education for the special need children.

Problems Regarding Product

Failure in mastering the reading skills, writing skills, and counting skills has been identified as the main reasons for the weaknesses in academic achievement among students. Students' attitude can also influence their academic achievement. According to Salleh (1999), among the problems faced by special education students are low self motivation, not keen in asking questions, short term memory skills, and low self confident.

In inclusive education, special need children have the opportunity to interact and socialized with other mainstream children in a healthy environment. These special need children have been found to show positive social skills when they mingle around with their mainstream peers

in inclusive education setting (Farmer & Farmer, 1996; Henderickson *et al.*, 1996; Hall & McGregor, 2000). Through inclusive education, the special need children will be able to build self skills, positive development in language, cognitive and motor skills.

Problems Pertaining to the Different Perceptions between Mainstream Teachers and Special Need Teachers towards the Implementation of Inclusive Education

Other than trying to see the problem pertaining to context, input, process and product, this study also attempted to find the perception towards inclusive education among special education teachers and mainstream teachers. The perception was towards the issues of placement, the roles of teachers which include special education teachers and mainstream teachers, school head masters or principals, and the benefits from the inclusive education.

OBJECTIVES

The objectives of this study are as follows:

- i. To study the teachers' perception towards the implementation of inclusive education based on the type of teachers (special education teachers and mainstream teacher).
- ii. To study the teachers' perception towards the implementation of inclusive education based on teachers' gender.
- iii. To study the teachers' perception towards the implementation of inclusive education based on teachers' academic qualification.

- iv. To study the teachers' perception towards the implementation of inclusive education based on the length of service.

HYPOTHESES

- i. There is no significant difference in the level of teachers' perception towards the implementation of inclusive education based on the type of teachers (special education teachers and mainstream teachers).
- ii. There is no significant difference in the level of teachers' perception towards the implementation of inclusive education based on teachers' gender.
- iii. There is no significant difference in the level of teachers' perception towards the implementation of inclusive education based on teachers' academic qualifications.
- iv. There is no significant difference in the level of teachers' perception towards the implementation of inclusive education based on their length of service.

METHOD

Participants

This study involved 37 special education teachers and 133 mainstream teachers who had been selected from seven schools in Penang through purposive sampling technique. The researchers used the purposive sampling technique because all the respondents who were involved in this study are teaching in the inclusion programme in their schools.

Instrument

The research instrument for this study was adapted from the instrument Contexts, Input, Process and Product Model (CIPP) which had been used by Stufflebeam (1971). The questionnaire consists of two sections: Section A is on teachers' demography and Section B explores on the factors contributing to the perception of the teachers toward the effectiveness of inclusive education. The questionnaire uses 5-point Likert Scale (refer Table 1). Descriptive analysis (total score, frequencies, and percentage), independent *t*-test and One-way ANOVA were used to analyze the data.

TABLE 1
5 Likert Scale

Statement	Score
Strongly Agree	5
Agree	4
Not Sure	3
Disagree	2
Strongly Disagree	1

In Section B, all the four factors (context, input, process, and product) were included accordingly (refer Table 2).

TABLE 2
Items according to the factor

Factor	Item
Context	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12
Input	13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 24
Process	25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35 and 36
Product	37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47 and 48

As for the teachers' perception, three levels of perception were set for them based on the 48 items in the questionnaire (refer Table 3).

TABLE 3
Level of Teachers' Perception

Score	Level of Teachers' Perception
48 – 111	Negative Perception
112 – 176	Moderate Perception
177 – 240	Positive Perception

Pilot Study

Prior to the actual study, a pilot study involving the use of a questionnaire containing 48 items was carried out to get the internal validity of the items in the questionnaire. The respondents for the pilot study were 30 teachers and all of them were not included in the actual study. Cronbach Alpha was used to find the internal consistency of the instrument and the results showed that the internal consistency obtained was 0.9760. The internal consistency for the context factor was 0.9208, and this was 0.9245 for input, 0.9302 for process, and 0.9565 for product.

FINDINGS AND DISCUSSION

Teachers' Perception towards Inclusive Education

Teachers' perception towards inclusive education was analyzed according their total scores in the questionnaire. The researchers had set three levels of teachers' perception, namely, negative perception (score 48 – 111), moderate perception (score 112 – 176), and positive perception

(score 177 – 240). The findings of this study showed that 29 respondents (17.06%) had a negative perception, 86 respondents (50.59%) had moderate perception, whereas 55 respondents (32.35%) had a positive perception towards inclusive education (refer to Table 4).

TABLE 4
Teachers' Perception Level

Perception Level	Score	Frequency	%
Negative Perception	48 – 111	29	17.06
Moderate Perception	112 – 176	86	50.59
Positive Perception	177 – 240	55	32.35
Total		170	100.00

The results in Table 4 shows that half of the respondents had an average level of perception and one third had positive perception towards the implementation of inclusive education. This shows that most of the teachers (special education teachers and mainstream teachers) had either moderate or positive perception towards inclusive education. This finding contradicts with the result from a study by Haniz (1998) who found that nearly two third (66.9%) of the mainstream teachers had a negative perception towards inclusive education and this is merely because those teachers lacked the experiences, knowledge, as well as understanding of the need of education for the special need children. The explanation for these contradicting findings is the exposure, training as well as courses that were provided to the teachers (special

education teachers and mainstream teachers) during their pre-service training course and in-service training. Moreover, the current scenario shows that parents of the special need children are aware of the importance of the inclusive programme.

Comparing Special Education Teachers' Perception towards Inclusive Education with Mainstream Teachers and Mainstream Teachers' Perception

Comparing the special education teachers' perception towards inclusive education with those of the mainstream teachers and mainstream teachers' perception, the results of this study revealed that four respondents (10.81%) had negative level of perception, 19 respondents (51.35%) had moderate level of perception, and 14 respondents (37.84 %) had positive level of perception towards the implementation of inclusive education (refer Table 5).

Based on the findings presented in Table 5, there is not much difference in the perceptions of the special education teachers and the mainstream teachers towards the implementation of the inclusive education. Table 5 also shows that 51.35% of the special education teachers and 50.37% of the mainstream teachers have moderate perception towards inclusive education. Surprisingly, this study discovered that 10.81% of the special education teachers had a negative perception towards the implementation of the inclusive education programme compared to 18.80% of the mainstream teachers. As for the category of positive perception, the result showed that 37.84% of the special education teachers

TABLE 5
Teachers' Perception towards Implementation of Inclusive Education based on the Type of Teachers
(Special Education Teachers and Mainstream Teachers)

Perception Level	Score	Frequency		Percentage	
		Special Education Teachers	Mainstream Teachers	Special Education Teachers	Mainstream Teachers
Negative Perception	48 – 111	4	25	10.81	18.80
Moderate Perception	112 – 176	19	67	51.35	50.37
Positive Perception	177 – 240	14	41	37.84	30.83
Total		37	133	100.00	100.00

had positive perception towards inclusive education as compared to 30.83% of the mainstream teachers. It is also surprising to find that special education teachers who have been trained in special education also have either negative or moderate perception towards inclusive education, which is rather similar to the level of perception of the mainstream teachers who are not trained in special education.

Perception Level Based on Teachers' Gender

Table 6 shows the different levels of teachers' perception towards the implementation of inclusive education based on their gender. The findings of this study showed that 23.68% of the male teachers had negative perception towards the implementation of inclusive education as compared to the female teachers (11.70%). The results also showed that 50% of the male teachers and 51.05% of the female teachers had a moderate perception towards the implementation inclusive education. Meanwhile, 26.32% of

the male teachers and 37.24% of the female teachers had a positive perception towards the implementation inclusive program (refer to Table 6). Overall, the results showed that female teachers had better perceptions towards the implementation of inclusive education compared to their male counterparts.

Teachers' Perception towards Inclusive Education According to the Type of Teachers

The results of the independent *t*-test show that there is a significant difference between the perception towards the implementation of the inclusive education between special education teachers and mainstream teachers ($t=0.465$, $df=168$, $p=0.014$, two-tailed) (refer to Table 7). In specific, special education teachers were found to have positive perception towards inclusive education compared to the mainstream teachers. The reason underpinning this result is the exposure that the special education teachers received during their pre-service training and in-service training.

TABLE 6
Teachers' Perception Level According to Teachers' Gender

Perception Level	Score	Frequency		Percentage	
		Male Teachers	Female Teachers	Male Teachers	Female Teachers
Negative Perception	48 – 111	18	11	23.68	11.70
Moderate Perception	112 – 176	38	48	50.00	51.06
Positive Perception	177 – 240	20	35	26.32	37.24
Total		76	94	100.00	100.00

TABLE 7
Independent Samples *t*-Test Based on the Type of Teachers

Category of Teachers	N	Mean	SD	T	df	Significant (2-tailed)
Special education teachers	37	161.13	18.85			
Mainstream teachers	133	141.23	14.76	0.465	168	0.014

p<0.05

TABLE 8
Independent Samples *t*-test based on Gender

Teachers' Gender	N	Mean	SD	<i>t</i>	df	Significant (2-tailed)
Male teachers	76	140.59	15.73			
Female teachers	94	151.14	15.86	0.745	168	0.458

p<0.05

H01: There is no significant difference in the level of teachers' perception towards the implementation of Inclusive Education based on the type of teachers

(refer to Table 8). This finding also shows that there is no difference in the level of perception towards the implementation of inclusive education between the male and female teachers (special education teachers and mainstream teachers).

Another result from the independent *t*-test also shows that there is no significant difference between the perception towards the implementation of inclusive education among special education teachers and mainstream teachers based on their gender (*t*=0.745, *df*=168, *p*=0.458, two-tailed)

H02: There is no significant difference in the level of teachers' perception towards the implementation of Inclusive Education based on gender

Ho3: There is no significant difference in the level of teachers' perception towards the implementation of Inclusive Education based on academic qualification

In order to test this particular hypothesis, the researchers used the One-Way Analysis

of Variance (refer to Table 9). The results showed that there is a significant difference in the perception level of the teachers based on their academic qualifications ($F = 5121$, $df = 3/169$, $p = 0023$), and therefore, H_03 has to be rejected. In order to determine the pair of academic qualification that has significant difference, the researchers used the Tukey HSD tests (refer to Table 10).

TABLE 9
ANOVA for the Teachers' Perception Level Based on Their Academic Qualification

Variables	Sum of Square	df	Mean Square	F	Sig. 2-tailed
Between Groups	6186.519	5	1237.304	5.402	0.023
Within Groups	58179.327	254	229.052		
Total	64365.846	259			

$p < 0.05$

TABLE 10
Tukey's Results According to the Teacher's Perception Level Based on Their Academic Qualification

Academic Qualification	Basic teaching certificate	Diploma in Education	Degree	M.A/PhD
Mean	192.20	180.93	179.95	169.82

Academic Qualification (I)	Academic Qualification (J)	Mean Difference (I - J)	Standard Error	Sig.
Basic teaching certificate	Diploma in Education	11.27	8.99	0.193
	Degree in Education	12.25	8.12	0.293
	M.A/PhD	22.38	8.65	0.023*
Diploma in Education	Basic teaching certificate	-11.27	8.99	0.193
	Degree in Education	0.98	5.26	0.116
	M.A/PhD	11.11	6.05	0.065
Degree in Education	Basic teaching certificate	-12.25	8.12	0.293
	Diploma in Education	- 0.98	5.26	0.116
	M.A/PhD	10.13	4.66	0.094
M.A/PhD	Basic teaching certificate	-22.38	8.65	0.023*
	Diploma in Education	-11.11	6.05	0.065
	Degree in Education	-10.13	4.66	0.094

$p < 0.05$

Table 11
ANOVA for Perception Level Based on Period of Service

Variables	Sum of Square	df	Mean Square	f	Sig. 2-Tailed
Between Groups	5861.768	4	1465.442	2.545	0.021*
Within Groups	95010.021	165	575.818		
Total	100871.788	169			

$P < 0.05$

Ho4: There is no significant difference in the level of teachers' perception towards the implementation of Inclusive Education based on their period of service

Based on the Tukey HSD test, with significant difference in the level of $p < 0.05$, the results showed that there is a significant difference in the perception towards the implementation of inclusive education between the respondents with the lowest academic qualification (basic teaching certificate) and those who hold higher academic qualification (masters/PhD). The results also showed that the mean perception of the respondents who hold the basic teaching certificate was 192.20, while the mean of the respondents who holds a masters/PhD qualification was 169.82 (refer to Table 10).

In testing hypothesis 4, the researchers used the one-way ANOVA. The results revealed that there is a significant difference in the teachers' perception towards the implementation of inclusive education based on their length of service ($F=2.545$, $df=4/169$, $p=0.021$). Therefore, researchers

conduct Tukey HSD test (refer to Table 12).

The results from the Tukey HSD test showed that there is a significant difference in the period of service. The results indicated that the teachers who have worked for a shorter period of time (1 – 5 years) had positive perception towards the implementation of inclusive education as compared to those with longer period of service, which is more than 20 years. The possible explanation for this significant finding is the so-called new teachers who have been serving between one to five years possess a basic exposure towards inclusive education during their basic teacher training course. On the other hand, teachers who have been working for more than 20 years most probably do not have any exposure on inclusive education. Therefore, this issue influences their perception towards the implementation of inclusive education.

CONCLUSION

The result of this study shows that half of the teachers involved in this study have a moderate perception towards inclusive education. This number includes the special education teachers and the explanation for that is the possibility that these teachers

TABLE 12
Tukey Test Analysis for the Perception Level Based on the Period of Service

Period of Service	1 - 5 Years	6 - 10 Years	11 - 15 Years	16 - 20 Years	More Than 20 Years
Mean	179.54	171.71	168.00	167.33	165.00

Period of Service (I)	Period of Service (J)	Mean Difference (I - J)	Standard Error	Sig.
1 - 5 Years	6 - 10 Years	7.83	4.65	0.444
	11 - 15 Years	11.54	8.29	0.170
	16 - 20 Years	12.21	14.02	0.108
	More Than 20 Years	14.54	17.11	0.015*
6 - 10 Years	1 - 5 Years	-7.83	4.65	0.444
	11 - 15 Years	3.71	9.00	0.029
	16 - 20 Years	4.38	14.45	0.198
	More Than 20 Years	6.71	17.46	0.195
11 - 15 Years	1 - 5 Years	-11.54	8.29	0.170
	6 - 10 Years	-3.71	9.00	0.029
	16 - 20 Years	0.67	16.00	0.308
	More Than 20 Years	3.00	18.76	0.398
16 - 20 Years	1 - 5 Years	-12.21	14.02	0.108
	6 - 10 Years	-4.38	14.45	0.198
	11 - 15 Years	-0.67	16.00	0.308
	More Than 20 Years	2.33	21.91	0.504
More Than 20 Years	1 - 5 Years	-14.54	17.11	0.015*
	6 - 10 Years	-6.71	17.46	0.195
	11 - 15 Years	-3.00	18.76	0.398
	16 - 20 Years	-2.33	21.91	0.504

P<0.05

have not been given enough information on inclusive program even though they are special education teachers.

Result of this study also shows that 10.81% of special education teachers have a negative perception and 51.35 % have a moderate perception towards the implementation of inclusive program even though they themselves involve directly in the inclusive program. The question arise here is, if they themselves are not confident

in the implementation of the inclusive education, how do they teach in the inclusive program?

On the other hand, this study finds that the special education teachers have better perception towards inclusive education compared to the mainstream teachers. This is due to the exposure that the special education teachers receive during their pre-service training as well as in-service training. When referring to the academic

qualification, the result of this study shows that teachers who hold basic teaching certificate has higher mean of perception towards the implementation of inclusive education compare to the teachers who hold masters/ PhD qualification. In addition, the result of this study also shows that teachers who work a shorter period of time (1 – 5 years) have a higher perception towards the implementation of inclusive education compared to teachers who work for more than 20 years. This is because these teachers are exposed to the inclusive education in their basic teacher training course.

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