

Challenges and Competencies of Special Education Teachers in the Implementation of Individual Education Plans in Integration Special Education Program Schools

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Abstract

The implementation of the Individual Education Plan (IPP) is still a major challenge among special education teachers, especially in terms of planning and implementing interventions that meet the needs of students with special needs (MBPK). This study aims to assess the level of knowledge, skills and attitudes of teachers towards the implementation of the PIP as well as the relationship between the three aspects in Special Integration Education Program (PPKI) schools. This survey research is based on the Spencer Competency Model (1993) and the Iceberg Model involving 86 special education teachers in the Kuala Krai district, Kelantan. The data collected through a questionnaire was analyzed using SPSS 29.0 software using descriptive and inferential statistics. The results showed that the level of knowledge (mean = 3.75), skills (mean = 3.87) and attitudes (mean = 4.02) were at a high level. Spearman rho analysis confirmed a significant positive relationship between knowledge, skills and teachers' attitudes. Overall, teachers with high knowledge and skills are more likely to show positive attitudes towards the implementation of RPI. Therefore, continuous professional training needs to be strengthened to improve the effectiveness of RPI implementation and the holistic development of MBPK.

Keywords: Individual Education Plan, Special Education Teacher, Knowledge, Skills, Attitude, Competence, Integration Special Education Program

Introduction

Special education is a form of education that is systematically planned to meet the needs of students with special educational needs (SEN) who have physical, intellectual, emotional, behavioral or learning disabilities. According to the Special Education Division, Ministry of Education Malaysia (2021), this approach aims to ensure that every MBPK gets learning opportunities that suit their individual potential and ability. The uniqueness of these needs demands flexible and adaptive teaching strategies, different from mainstream approaches.

In accordance with the Education (Special Education) Regulations 2013, MBPK is defined as a student certified by a certified professional as having a disability in terms of vision, hearing, speech, physical, learning problems or a combination thereof. Based on this definition, MBPK is placed in various programs such as integration, inclusive and specialized special education that uses curriculum and pedagogy modified according to individual needs.

The Malaysian Ministry of Education also introduced programs such as Special Education Schools, Integrated Special Education Program (PPKI), Inclusive Education Program (PPI), Special Rehabilitation Program and Early Intervention Program to strengthen access to education for MBPK. Based on the latest classification (KPM, 2023), MBPK is divided into six main categories, namely hearing, visual, physical, speech, learning and multiple disabilities.

One of the main components in the implementation of special education is the Individual Education Plan (RPI), which is a planning document tailored to the potential and needs of each student. RPI serves as a guide for teachers to set appropriate learning objectives, teaching strategies and assessment methods, while encouraging collaboration between teachers, parents and support experts (Abdullah et al., 2021). However, Halimah and Azhar's (2022) study found that the implementation of RPI still tends to be formalistic and focused on documentation rather than actual intervention in the classroom.

Accordingly, this study examines the challenges of special education teachers in terms of knowledge, skills and attitudes towards the implementation of RPI. Evaluation of these three aspects is important to determine the level of teacher competence in planning and implementing interventions effectively, further strengthening professional practices and special education policies in Malaysia.

Problem Statement

Although various guidelines and training for the implementation of the Individual Education Plan (IPP) have been prepared, its implementation still faces various constraints in schools. Studies show that some special education teachers lack understanding of the RPI preparation procedure, are weak in setting measurable learning objectives and lack confidence in its effectiveness (Noraini et al., 2023; Halimah & Azhar, 2022). This constraint affects the ability of teachers to implement effective interventions for students with special educational needs (SEN).

Rashid and Wong (2023) also found that teacher competence in terms of knowledge, skills and motivation is still low, influenced by time constraints, limited training and unclear guidelines. This weakness has a direct impact on the success of RPI and the implementation of inclusive education.

Accordingly, this study was conducted to assess the level of knowledge, skills and attitudes of special education teachers towards the implementation of RPI as a basis for improving professional training and a more effective implementation policy.

The Importance of Research

This study is important because it contributes to the theory, practice and policy aspects of special education in Malaysia. From a theoretical point of view, this study strengthens the

understanding of the Spencer Competency Model (1993) by evaluating the relationship between the knowledge, skills and attitudes of teachers in the implementation of the Individual Education Plan (IEP). From a practical aspect, the findings of the study can help teachers identify their true level of competence and become the basis for the implementation of continuing professional training (CPD) that is more focused to improve the effectiveness of interventions for students with special educational needs (MBPK). While from the basic dimension, the results of the study can be used as a guide by the Special Education Division and schools in strengthening the implementation of the RPI as well as supporting the Zero Reject Policy agenda and the nation's inclusive education goals. Overall, this study contributes to the improvement of teacher professionalism and the strengthening of a higher quality and inclusive special education system.

Objectives of the Study

This study aims to:

- a. Identify the level of teacher knowledge in the implementation of RPI.
- b. Identify the teacher's skill level in preparing and implementing RPI.
- c. Regarding determining the level of teacher's attitude towards the implementation of RPI.

Study Questions

This study was conducted to answer the following questions:

- a. What is the level of teacher knowledge in implementing RPI in the Special Integration Education Program?
- b. What is the teacher's skill level in preparing and implementing RPI?
- c. What is the level of teacher's attitude towards the implementation of RPI?

Literature Review

Individual Education Plan

Previous studies show that the implementation of the Individualized Education Plan (RPI) or Individualized Education Plan (IEP) still faces various challenges, especially in the aspects of knowledge, skills and attitudes of special education teachers. The general findings show that although RPI is recognized as the main instrument in supporting the learning of students with special educational needs (SED), its implementation has not yet reached an optimal level.

Nor Amilia Amerudin and Hasnah Toran (2024) found that special education pre-school teachers are less competent in understanding the concept and procedures of RPI, while the study of Farah Wahidah Md Isa and Hasnah Toran (2024) shows that PPKI teachers need more organized professional guidance to implement RPI effectively. The study of Mohammad Zamri Mohamad Napis and Khairul Farhah Khairuddin (2023) emphasized that the level of teacher collaboration in developing the personality dimension of MBPK is still low, while the study of Nurul Hidayah Ismail and Rosadah Abd. Majid (2020) proved that the implementation of IEPs can improve student achievement and encourage cooperation between teachers, parents and schools. In an international context, Leyi Shao et al. (2022) reported the weakness of IEP implementation in developing countries due to lack of scientific knowledge, evaluation skills and technical support.

This finding is in line with Syar Meeze Mohd Rashid and Mei Ti Wong (2023) who found that special education teachers in Malaysia lack exposure to the use of criteria-based assessment and the collection of student development data. Hristina Fidasieva (2025) also asserted that the success of the IEP depends on the principles of individualization, collaboration, setting realistic goals and flexibility in implementation. Overall, previous studies show that the level of competence of special education teachers is still not consistent, especially in applying knowledge and technical skills to RPI. This situation calls for further research that comprehensively assesses the level of knowledge, skills and attitudes of teachers towards the implementation of RPI so that improvements can be made in terms of professional training, policies and pedagogical practices that are more inclusive and effective.

The Challenge of Teacher Knowledge Levels in Individual Education Plans

The implementation of the Individual Education Plan (IEP) requires special education teachers to have in-depth knowledge of its concepts, structures and procedures. However, the study shows that the level of teacher knowledge is still not satisfactory. Nor Amilia Amerudin and Hasnah Toran (2024) reported that special education preschool teachers lacked understanding of the implementation of RPI due to the lack of specific training, while Shao et al. (2022) in China found that only a small proportion of teachers actually mastered deep understanding despite having received training. On the other hand, Farah Wahidah Md Isa and Hasnah Toran (2024) show that teachers who follow pre- and post-service training have higher knowledge and are able to plan effective interventions, emphasizing the importance of quality training on teacher efficiency. Knowledge also affects professional attitudes; teachers who understand RPI policies and principles are more positive and confident in implementing them (Karaca et al., 2020; Çıkılı & Karaca, 2019).

A systematic review by Syar Meeze Mohd Rashid and Mei Ti Wong (2022) identified three main weaknesses in teacher knowledge, namely data collection, conceptual understanding and understanding of student needs. International studies (Fu et al., 2018; Hott et al., 2021; Almoghyrah, 2021) also confirm that teachers are still weak in using criteria-based assessment to set measurable learning objectives. However, the study of Al-Shammari and Hornby (2019) as well as Goodwin et al. (2022) showed that training and practical exposure can improve the knowledge and competence of teachers in the preparation of RPI systematically. Overall, the lack of theoretical and practical knowledge hinders the effectiveness of RPI implementation as well as inclusive education goals. Therefore, continuous professional development, targeted training and technical support need to be enhanced to ensure that teachers are truly competent in implementing RPI comprehensively and effectively.

The Challenge of Teacher Skill Levels in Individual Education Plans

The skills of special education teachers are the main pillar of the effectiveness of the implementation of the Individual Education Plan (IEP). However, various studies show that the level of teachers' skills is still not satisfactory, especially in setting SMART goals, evaluating student progress and establishing collaboration with stakeholders. Farah Wahidah Md Isa and Hasnah Toran (2024) reported that rarely followed IEP training caused teachers to lack exposure to the latest techniques. On the other hand, structured training based on SMART principles as in the study of Salih Rakap et al. (2024) proved to improve the goal writing skills and practical competence of teachers.

This finding is also supported by a digital study by Russo-Campisi (2020) and Dietz (2021) which shows that web-based training is able to strengthen teacher competence. A systematic study by Syar Meeze Mohd Rashid and Mei Ti Wong (2022) identified three main weaknesses in teacher skills, namely the preparation of reports, collaboration, and evaluation. Teachers often fail to document student progress accurately (Hott et al., 2021) and face difficulties collaborating with parents (Shao et al., 2022). In addition, weaknesses in building assessment tools and evaluating student development objectively also affect the effectiveness of interventions (Akcin, 2022; Kozikoğlu & Albayrak, 2022). In conclusion, the lack of technical and reflective skills is still the main challenge in the implementation of RPI. Therefore, continuous professional training that focuses on practical and collaborative skills needs to be strengthened to ensure that teachers are more competent in implementing RPI systematically and inclusively.

The Challenge of Teacher Attitude Levels in Individual Education Plans

The attitude of special education teachers plays an important role in determining the effectiveness of the implementation of the Individual Education Plan (IEP). Teachers who have a positive perception of RPI are more committed to planning and implementing interventions that meet the needs of students with special needs (Syar Meeze & Wong, 2022).

However, time constraints, workload and non-continuous training often weaken teacher motivation, making RPI just an administrative document without significant impact. A study in Turkey by Kozikoğlu (2022) also shows that although teachers recognize the importance of Individualized Education Program (IEP), resource constraints, technical skills and large class sizes affect implementation. This finding proves that a positive attitude needs to be supported by continuous professional training, contextual guidance and collaboration with stakeholders. Overall, the successful implementation of RPI depends on the balance between the teacher's professional attitude, pedagogical competence and comprehensive education system support.

Theoretical Framework of the Study

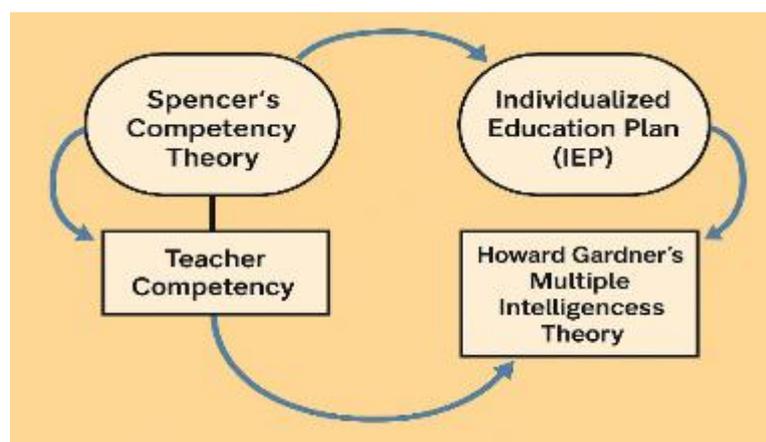


Figure 1 : The Theoretical Framework of the Study adapted from Nor Fauziyana's Study (2023)

This study is based on two main theories, namely Spencer's Competency Theory (1993) and Gardner's Multiple Intelligence Theory (1983), to explain the relationship between teacher

competence and the effectiveness of the implementation of the Individual Education Plan (IPP). Spencer's Competency Theory emphasizes the five main dimensions of knowledge, skills, self-concept, personal attributes and motivation that determine the professional performance of a teacher. In the context of this study, the theory explains the level of ability of teachers in planning, implementing and evaluating special education interventions effectively. Meanwhile, Gardner's Theory of Multiple Intelligences focuses on the diversity of potential and learning styles of students. Its application in RPI allows teachers to adjust teaching strategies based on individual student strengths, making interventions more holistic and inclusive. The combination of these two theories forms a solid conceptual basis for evaluating the competence of special education teachers and ensuring that the implementation of RPI is truly centered on the unique potential and needs of students with special needs.

Research Methodology

This study uses a descriptive quantitative survey design to assess the level of knowledge, skills and attitudes of special education teachers towards the implementation of the Individual Education Plan (IPP) in primary and secondary schools of the Integrated Special Education Program (PPKI) in Kuala Krai, Kelantan. The study population consisted of 109 special education teachers, with 86 sample people determined through Krejcie and Morgan's table (1970) using stratified sampling according to school type. The main instrument is a structured questionnaire adapted from the study of Nor Fauziyana Mosbiran (2023) and Syar Meeze and Mei Ti Wong (2022), covering three main constructs namely knowledge, skills and attitudes. Face and content validity were checked by four experts, while reliability was tested through a pilot study (n=30) with an overall Cronbach's Alpha value of $\alpha = 0.805$, indicating high internal consistency. Data was collected using a face-to-face questionnaire and analyzed through descriptive statistics (mean, standard deviation, percentage) and inferential statistics (Spearman correlation and difference test) to identify the relationship between variables and confirm the research hypothesis. In this study, the researcher used SPSS 29.0 software to analyze the data collected.

Study Findings

Level of Teacher Knowledge in Individual Education Plans

Table 1: Mean Score and Standard Deviation of Each Item in the Variable Level of teacher knowledge in implementing RPI in the school of the Special Integration Program.

No.	Item Question	Mean	SD	Interpretation
1	I understand the basic concepts of the Education Plan Individual (RPI).	4.15	.712	High
2	I know how to identify special needs students for the preparation of RPI	4.02	.703	High
3	I am knowledgeable in planning a good RPI	3.80	.779	High
4	I do not have enough knowledge in setting RPI objectives	2.71	1.061	Medium Low

5	I know how to evaluate the effectiveness of RPI that has been implemented	3.78	.621	High
6	I have knowledge in determining the MBPK category	3.92	.755	High
7	I have access to sufficient reference materials and learning resources to effectively prepare RPI	3.78	.758	High
8	I am knowledgeable in implementing RPI effectively	3.72	.714	High
9	I know the existence of SMART in RPI	3.62	.770	Medium High
10	I know the importance of intervention in RPI and above MBPK.	4.00	.797	High
	Teacher's Level of Knowledge of RPI Overall	3.75	0.77	High

Descriptive analysis shows that the level of special education teachers' knowledge of the implementation of Individual Education Plans (IEPs) is at a high level (mean = 3.75, SP = 0.77). A total of 70% of the items were at a high level, reflecting a strong understanding of the concepts, procedures and importance of the RPI intervention. However, items related to objective setting and the application of SMART principles showed moderate weakness, indicating the need for additional training. Overall, the teachers showed a good mastery of conceptual and practical knowledge, but an increase in focused professional training is still needed to strengthen the skills of setting goals and systematically evaluating the effectiveness of interventions.

Teacher Skill Levels in Individual Education Plans

Table 2

Mean Score and Standard Deviation of Each Item in the Teacher Skill Level Variable in implementing RPI at the Integrated Special Education Program school

No.	Item Question	Mean	SD.	Interpretation
11	I am skilled in planning RPI according to MBPK's intellectual function.	3.85	.623	High
12	I am able to organize learning activities which is suitable according to the needs and ability level students	3.85	.760	High
13	I have the skills to collaborate with parents, special education specialists, and the school in compiling RPI	3.85	.699	High
14	I understand how to record and assess student progress based on the RPI.	3.93	.647	High
15	I am skilled in identifying the individual needs of students based on diagnostic assessment	3.87	.665	High
16	I am skilled in planning RPI according to MBPK's ability level	3.95	.631	High
17	I am skilled in planning RPI according to the readiness level of MBPK	3.86	.726	High
18	I am skilled in conducting RPI meetings	3.84	.701	High

19	I have good communication in conveying information to fellow teachers, parents and administrators.	3.88	.710	High
20	I am skilled in identifying important documents that need to be in the RPI file	3.83	.636	High
Teacher's Skill Level for RPI Overall		3.87	0.68	High

Analysis of Table 2 shows that the skill level of special education teachers towards the implementation of RPI is at a high level (mean = 3.87, SP = 0.68) for all 10 items. This finding proves that teachers have high competence in aspects of planning, evaluation, collaboration and communication. Teachers are able to plan interventions based on the intellectual function and readiness of students, perform diagnostic assessments, and collaborate effectively with parents and experts. However, RPI's documentation and meeting management skills still need improvement.

Levels of Teacher Attitudes in Individual Education Plans

Table 3

Mean Score and Standard Deviation of Each Item in the Variable Level of Teachers' Attitudes in Implementing RPI at Integration Special Education Program schools

No.	Item Question	Mean	SD	Interpretation
21	I am ready to plan the RPI according to the student's current academic achievement level.	4.03	.694	High
22	I am willing to adapt the method teaching to meet the needs of each student in the RPI.	4.00	.686	High
23	I always strive to improve my knowledge and skills in implementing RPI	4.09	.680	High
24	I do not feel burdened with the responsibility of implementing RPI in my class	3.72	1.013	High
25	I am less confident that I can perform RPI well without adequate guidance.	3.31	1.109	Medium
26	I am confident that RPI can help improve individual student achievement.	4.07	.699	High
27	I see the preparation and implementation of RPI as one of my professional responsibilities	4.13	.764	High
28	I am willing to work with parents/guardians in the implementation of RPI	4.23	.714	High
29	I am ready to discuss with colleagues to get support in the implementation of RPI.	4.28	.607	High
30	I believe that support from the party school can increase my motivation to implement RPI better.	4.33	.659	High
Level of teacher's attitude towards RPI Overall		4.02	0.76	High

Based on Table 3, the level of attitude of special education teachers towards the implementation of RPI is at a high level (mean = 4.02, SP = 0.76), showing commitment and strong belief in the importance of RPI in supporting the development of students with special needs. The majority of teachers show seriousness, sense of responsibility and high internal motivation in implementing RPI despite time constraints. Only one item recorded a moderate level, namely the perception of workload. Overall, the findings show that teachers' positive

and proactive attitude is a determining factor in the effectiveness of RPI implementation, in line with the goals of special education that is inclusive, structured and focused on the individual needs of students.

Discussion

Overall, the results of this study show that special education teachers in the Special Integration Education Program (PPKI) have a high level of competence in the implementation of the Individual Education Plan (IPP), covering aspects of knowledge, skills and attitudes. From the aspect of knowledge, teachers understand the concept and purpose of RPI well, but there are still constraints in setting specific and measurable learning objectives, as also found by Farah Wahidah and Hasnah (2024) and Nor Amilia and Hasnah (2024).

This finding shows the need for increased understanding of the application of theory to actual practice, particularly in individual intervention planning. The skill aspect reflects the high efficiency of teachers in preparing, implementing and evaluating RPI systematically, in line with the findings of Rashid and Wong (2022). However, weaknesses in evidence-based documentation and evaluation still need to be strengthened through continuous training (Abdul Rahim, 2024).

In terms of attitude, teachers show seriousness, responsibility and confidence in the importance of RPI in the development of students with special needs, in line with the views of Syar Meeze and Wong (2022). Thoroughly, the effective implementation of RPI requires a balance between theoretical knowledge, technical skills and the teacher's professional attitude. Therefore, continuous efforts through reflection-based professional development, collaborative guidance and comprehensive administrative support must continue to strengthen inclusive and high-impact special education practices.

Conclusion

Overall, this study shows that special education teachers have a high level of knowledge, skills and attitudes towards the implementation of the Individual Education Plan (IPP). This finding proves the effectiveness of the existing special education policy, but still requires improvement in the aspects of documentation and data-based evaluation. The implication demands the strengthening of competency-based professional training as well as the expansion of the RPI digitalization system to improve teacher efficiency and accountability. Further research is recommended involving a wider sample, involving a study of the Special Education Program for Learning Integration, various respondents including parents and students, as well as a qualitative or mixed approach to gain a deeper understanding of the implementation of RPI in Malaysia.

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