





NSSEC-24

e-IPH
e-International
Publishing House Ltd.,
United Kingdom

https://sites.google.com/view/nssec-24/home

National Social Sciences & Education Conference 06-07 July 2024

Virtual conference organized by CLM Publishing

Approaches in Training for Non-Option Special Education Teacher at Private Early Intervention Center: The Nominal Group Technique Approach

Siti Shafiqah Rafiquddin¹, Ahmad Zabidi Abdul Razak^{1*}, Madhyazagan Ganesan²

*Corresponding Author

¹ Department of Educational Management, Planning and Policy, University Malaya, Kuala Lumpur, Malaysia ² Department of Educational Psychology and Counselling, University Malaya, Kuala Lumpur, Malaysia

: shafiqahazkiya@gmail.com, zabidi@um.edu.my, madhya@um.edu.my Tel: 03-79675060

Abstract

In the past, studies only focused on approaches to training for teachers in the special education field. Hence, this study develops approaches for training non-option Special Education Teachers (SETs) in private early intervention centers, addressing their lack of specialized qualifications. Seven panel experts participated in this study using the Nominal Group Technique (NGT). The findings using this approach indicate that observation, reflection, and co-teaching are essential for SET at private early intervention centers. This study aims to enhance professional development and improve educational outcomes for children with special needs by tackling the unique challenges these educators face.

Keywords: non-options special education teacher, professional development, private early intervention center, nominal group technique

eISSN: 2398-4287 © 2024. The Authors. Published for AMER and cE-Bs by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer—review under the responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers and cE-Bs (Centre for Environment-Behaviour Studies), College of Built Environment, Universiti Teknologi MARA, Malaysia.

DOI: https://doi.org/10.21834/e-bpj.v9iSI20.6090

1.0 Introduction

The preparation of educators for the unique challenges of teaching in early intervention program settings is a critical undertaking that significantly impacts the quality of educational experiences for young children with diverse needs. Special Education Teachers (SETs) play a vital role in fostering the development and learning of children with disabilities, who require specialized skills, knowledge, and competencies (Gevarter et al., 2022). Notably, SET requires special training to teach their students with various diagnoses and learning issues as well as individual abilities to meet the actual needs of their students (Sidek & Abd. Wahab, 2023). Training geared towards the professional development of teachers is not something new. It is dynamic and has evolved through various perspectives that clearly focus on the changing role of teachers (Stoeger et al., 2021; Weile, Sjaelland, & Nielsen, 2016; Xu & Liu, 2011). However, SETs in early intervention programs do not have special qualifications in special education. The background of SETs at the intervention center is that in addition to having a degree in special education and early childhood education, there are also those with a non-optional degree in this education. Hence, as the demand for well-prepared teachers in special education grows, current practices in teacher training programs for facilitating non-option SET need to be reviewed (Kristen Merrill O'Brien, Nagro, Binkert, Szocik, & Gerry, 2023). Among the issues concerning the training program is that teacher training lacks clear objectives and follow-up actions, does not meet teachers' needs, and lacks local models as guidance (Amin Senin, 2008). This statement is further detailed by Razalli et al. (2020). Thus, addressing these current practices is crucial for enhancing teacher training programs and ensuring inclusive, high-quality education for

eISSN: 2398-4287 © 2024. The Authors. Published for AMER and cE-Bs by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer–review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), and cE-Bs (Centre for Environment-Behaviour Studies), College of Built Environment, Universiti Teknologi MARA, Malaysia.

DOI: https://doi.org/10.21834/e-bpj.v9iSl20.6090

all children. For that, this research aims to determine the best approaches for training SETs who are non-option in private early intervention centers in Malaysia based on expert consensus.

2.0 Literature Review

The act of completing learning tasks or activities to improve knowledge and acquire new abilities is referred to as training (Borosh, Newson, Mason, Richards, & Collins Crosley, 2023; Joyce & Showers, 2002). A theoretical explanation and justification of the skill should be combined with experiential training methods like coaching, modeling, and active skill demonstration, as well as practice applying the skill in a real-world or simulated setting with performance evaluation (Borosh, Newson, Mason, Richards, & Collins Crosley, 2023; Dunst et al., 2010; Parsons et al., 2012). Given the predominance of SET at school, it is imperative that they receive adequate training in order to implement high-fidelity, evidence-based practices for special education needs students.

However, SETs serve not only in schools; some teach in private early intervention centers. Special educational teachers in private early intervention center are composed of those in options and non-options where the educational background covers early childhood education, counseling, and psychology (Anisah et al., 2021).

2.1 The Importance of Tailored In-Service Training and Mentorship for Special Education Teachers

Strimel, Nagro, Pamela Hudson Baker, and Thoma (2023) stated that non-option SETs face difficulties in the practice of good teaching and learning practices, including mastering the level of knowledge and skills to implement in special education classes. According to Abdullah (2020) ,teachers are less trained on the latest techniques in educating students with special education needs. Hence, to improve their understanding of the most recent special education initiatives, rules, and procedures, SET must participate in in-service training. In particular, Individualized Education Plans (IEPs), efficient learning techniques, social and communication skills, classroom management, controlling the behavior of students with special needs, and the special education curriculum are among the areas in which training is necessary (Ithnain & Saidin, 2021)

Knowledge is impacted by in-service training, as intervention professionals can pick up and become proficient in cutting-edge student-appropriate pedagogies (Takala et al., 2023). Accordingly, enhancements made possible by carefully thought-out professional development programs and the assistance of seasoned mentors will surely serve as catalysts for revolutionary shifts in the field of education (Shuib, 2020).

Therefore, a study by Ramli et al. (2023) discovered that training as guidance to non-option SET must be tailored to meet the needs of teachers (Knight, 2018). The study also highlighted the role of guides and their guidance methods in achieving and enhancing adult learning principles based on their personal experience collaborating with teachers.

According to research by Gary et al. (2021), at a special education school for people with physical disabilities, training was provided based on the needs of the teachers. Determining how teacher preparation can support the development of IEPs for children with physical disabilities in the Japanese national curriculum was the study's primary goal or foundation. The study's conclusions clarified why the teacher preparation program concentrated mostly on how each student's IEP was created. Consequently, based on IEPs, teacher collaboration and matching kids with comparable traits were improved, as was the teaching and learning process. Notably, teachers who participated in this training were able to comprehend the unique circumstances of every student and develop customized lesson plans.

In Europe, this session serves as a program to mentor new teachers without prior teaching experience. In this case, it is a mentorship session for non-option teachers (Lee et al., 2020). In China, supervising colleagues is a collaborative process between inexperienced instructors and senior teachers with expertise; the inexperienced teachers observe the senior teachers' approaches as they first discuss them. Additionally, they receive formal training and sound direction (Lee et al., 2020). Then, they will reflect on what happened during the session.

2.2 Reflective Strategies And Components For Training Non-Option Teachers in Special Education

Together with the senior SET, SET will put the suggestions from the reflections into practice during these dialogues and debates. Adult learners seek opportunities and set goals for ongoing progress by reflecting on professional practices. They also consider coaching conversations to enhance their coaching methods and approaches (van der Linden et al., 2023). The facilitator's coaching techniques are a component of Knight's Impact Cycle, a school-based instructional coaching method. The facilitator's coaching techniques are a component of Knight's Impact Cycle, a school-based instructional coaching method. This method consists of three basic parts: identify, learn, and improve.

According to Knight (2018), three key aspects need to be highlighted in the identify component: current reality, goals, and teaching strategies. For the first meeting session, the senior SET will engage in dialogue with the SET to obtain a clear picture of the current reality, identify goals, choose teaching and learning strategies to meet the goals, monitor progress, and solve problems until the goals are met.

Second, regarding the current reality issue, the senior SET observed the session and noted that not all students could perform the task. Hence, initial assessments will be conducted and senior SET will be coached on how to draft the IEP according to the initial assessment and suitable for cognitive development of the student.

The third component is improvement. According to Knight (2018), the steps are to confirm direction, review progress, plan improvements/enhancements, and plan the next actions. The SET will provide their IEP and activities conducted with students with special needs. Correspondingly, in the reflection session, the senior SET will ask questions to the SET, and if the SET can answer the

facilitator's questions well, it indicates that the SET understands the student's needs and that the session goes smoothly. This is attributable to the issues and problems in the session, which can be effectively resolved through reflection and two-way dialogue. Next, for the learning component, the SET and senior SET discuss the teaching conducted in the second meeting session. The SET will present the IEP that has been prepared and all the exercises done with their students.

Hence, to train this non-option teacher approaches to training need to be considered. For that, this study will review the element of training to be provided to non-optional teachers who are in private early intervention centers based on consensus experts.

3.0 Research Aims

The purpose of this research is to provide specific recommendations for improving non-option SET training at private early intervention centers. In particular, there are two primary goals for this study:

- To assess expert opinions and suggestions in order to produce solutions based on expert consensus.
- To determine the best approaches for training according to professional experts' consensus and viewpoints.

4.0 Methodology

The Nominal Group Technique (NGT) method is the primary research methodology used in this work. Seven specialists in educational management and special education participated in the study. The panel experts consist of 2 from educational management background which has doctor of philosophy degree, 3 from special education background and 2 non- option senior teacher from private early intervention center. All of this panel expert are chosen becase they have experience in this field more than 5 years and practicing in this field and have knowledge on this field (Creswell & Creswell, 2017). Researchers conduct NGT sessions online using Google Meet since it is still not practical to convene experts in person at one time. Note that the session lasted for two hours. Experts convened to generate ideas and solutions based on expert opinion, and the NGT approach was used during a brainstorming session to generate ideas and solutions. Using the NGT approach, the researcher performed a specific computation at the end of the session to produce results that addressed the study's objectives.

4.1 Sampling

The researcher employed seven specialists in the field of educational management and special education in this investigation. This amount does not need to be utilized in large quantities to guarantee that the sample is specialized. The NGT can be implemented with either a single cohort or a large group (Lomax & McLeman, 1984; Dobbie et al., 2004; Mustapha et al., 2022). In addition, to enable efficient communication, it can also be split up into smaller groups based on the particular requirements of the research. According to Horton (1980), the sample is between seven to ten people, while the opinion of Harvey and Holmes (2012) stated that the number between six to twelve is sufficient to implement the NGT procedure.

4.2 Step of NGT

NGT is a methodological procedure for determining the consensus among a group of people with regard to a presented issue. It was first conceptualized as a "participation technique for social planning circumstances" (Delbecq, Van De Ven, & Gustafson, 1975) with "social planning situations." This includes exploratory research, public engagement, the use of interdisciplinary specialists, and the examination of proposals. Since then, it has been utilized in various group situations, including social science empirical research. O'Neil and Jackson (1983), Lomax and McLeman (1984), and MacPhail (2001) are just a few of the researchers who have used it in education; however, it seems to be utilized more frequently in health research.

NGT is a highly structured process with four distinct phases: (1) Independent generation of ideas in response to a stimulus question. (2) Sharing (and listing) these ideas in round-robin mode without discussion. (3) Clarification of each idea and grouping of similar ideas. (4) Individual voting to prioritize ideas. To encourage honest results and engagement, voting should be anonymous and follow the guidelines outlined above. Finally, NGT provides a permanent record of the group's process and outcomes by writing down all suggestions and approved changes on flipchart pages. Displaying these papers is an excellent method to inform people who missed all or part of a meeting. It also allows groups to pick off right where they left off at the previous meeting (Fox, 1989; Mustapha et al., 2022). Converting experts for Nominal Group Technique (NGT) sessions in person is impractical due to diverse schedules, geographical locations, and high costs. Virtual meetings offer flexibility, higher participation, and safety, especially post-pandemic, making them a more feasible and efficient alternative for achieving study objectives (Mustapha et al., 2022)

5.0 Findings

The findings from the analysis indicate that all construct concentrations within the training model achieve an optimal range, with over 70% expert consensus, confirming the model's robustness and applicability. This strong consensus is supported by studies such as Deslandes, Mendes, Pires, and Campos (2010) and Mustapha et al. (2022). The modified NGT has proven to be an efficient alternative to the Delphi method, significantly reducing the time required to reach a consensus without compromising the quality of expert judgments. Notably, this efficiency is crucial in the context of training non-option SETs, where timely and effective training interventions are essential.

The data highlight three primary training approaches with high consensus among experts: coaching with senior SETs in creating lesson plans, observing classroom management by senior SETs, and reflecting on lesson plans together. These approaches received perfect or near-perfect consensus, underscoring their critical significance. Hence, coaching in lesson planning equips novice teachers with effective teaching strategies, while observation provides practical insights into classroom management. At the same time, reflecting on lesson plans fosters continuous improvement and professional growth. Additionally, the approach of senior SETs observing novice teachers in the classroom and co-teaching methods further supports novice teachers' development through constructive feedback and hands-on learning.

These insights have led to the development of a prototype model for training non-option SETs, emphasizing mentorship and collaboration with experienced SETs. The model includes structured coaching sessions, classroom observations, collaborative teaching practices, and reflective practices. This structured framework addresses the immediate training needs of non-option SETs and provides a sustainable approach to their ongoing professional development. Ultimately, integrating these elements ensures that novice teachers are well-equipped to meet the diverse needs of their students, enhancing the quality of special education.

Table 1. Finding from consensus expert											
Items / Elements	Voter	Total item	Percentage	Rank	Voter						
	1	2	3	4	5	6	7	score		Priority	Consensus
Coaching with senior Special Education	3	3	3	3	3	3	3	21	100	1	Suitable
Teacher (SET) in creating lesson plans											
SET observe senior SET handling	3	3	3	3	3	3	3	21	100	1	Suitable
classroom											
Senior SET observe SET handling	3	3	2	3	3	3	3	20	95.24	2	Suitable
classroom											
Co-teaching with senior SET	3	2	3	3	3	3	2	19	90.48	3	Suitable
Reflection of lesson plan together with	3	3	3	3	3	3	3	21	100	1	Suitable

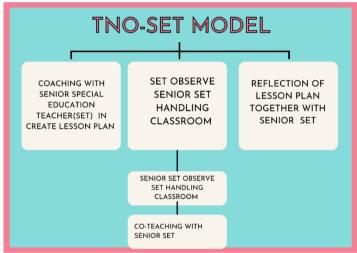


Fig. 1: TNO-SET MODEL (Training Non-Option Special Education Teacher Model)
(Source: Author)

6.0 Discussion, Recommendation & Conclusion

The widespread consensus on the significant benefits of mentorship-based training approaches for non-option SETs within private early intervention centers is firmly grounded in established theories of professional development and adult learning. Collaborating with senior SETs to develop lesson plans, observe teaching practices firsthand, and engage in joint reflections aligns with Vygotsky's (1978) social constructivist theory, emphasizing the importance of social interaction in learning. Furthermore, Bandura's (1986) social learning theory supports these findings, highlighting that learning occurs through observation, imitation, and modeling. Thus, by embedding these mentorship and observational elements into the training model, the study reinforces the theoretical underpinnings that effective teacher development requires practical, hands-on experiences guided by seasoned educators.

The strong expert agreement on practices such as coaching, classroom observation, and co-teaching highlights the critical role of senior SETs in professional development. With agreement rates reaching 95.24% and 90.48%, respectively, these findings challenge the traditional, one-size-fits-all professional development programs that often lack personalization and practical application. The data support Schön's (1983) reflective practice theory, which posited that reflection on action is crucial for professional growth. Hence, engaging in joint reflections with senior SETs allows novice teachers to critically analyze their teaching methods and outcomes, fostering

senior SET

a culture of continuous improvement. This approach addresses the immediate training needs and ensures the sustainability of professional development, adapting to the evolving educational landscape.

In the broader context of special education, the findings contribute to ongoing discussions about effective teacher training models. The mentorship-based approach supports the notion that targeted, context-specific training is essential for meeting the diverse needs of students with Special Educational Needs (SEN). This model, with its strong emphasis on mentorship and collaborative practices, provides a robust framework that can be adapted and applied in various educational settings. Therefore, future studies should explore comparative analyses between this model and other professional development frameworks, such as the Fuzzy Delphi method, to identify unique strengths and areas for improvement. Additionally, integrating qualitative research methods like interviews and focus group discussions can offer deeper insights into training elements and experiences, facilitating the identification of implementation challenges and the design of adaptable training programs.

Exploring the integration of technology to enhance training accessibility is also recommended. Digital platforms can provide additional resources, facilitate remote mentorship, and create interactive learning environments, further supporting the professional development of non-option SETs. Moreover, investigating the combined effects of peer mentoring alongside senior SET mentorship could lead to comprehensive professional development programs that leverage multiple layers of support and expertise. This multifaceted approach could enhance the efficacy of training programs, ensuring that novice teachers receive well-rounded support tailored to their specific needs and challenges.

While this study provides valuable insights into the effectiveness of mentorship-based training approaches for non-option Special Education Teachers (SETs) within private early intervention centers, it is important to acknowledge several limitations. The reliance on expert consensus gathered through the Nominal Group Technique, although robust, may not fully capture the diverse perspectives of all stakeholders, potentially overlooking valuable insights from a broader population of practitioners and trainees. Additionally, the focus on private early intervention centers may limit the generalizability of the findings to other educational settings, such as public schools or different regions with varying resources and regulatory environments.

In conclusion, this study advocates for the adoption of mentorship-based approaches led by senior SETs in training non-option SETs within private early intervention centers. These approaches, validated by expert consensus, prioritize mentorship, observation, and collaborative reflection as pivotal strategies for enhancing teaching efficacy and promoting continuous professional growth in the specialized field of special education. Furthermore, the comprehensive approach advocated here aligns with existing theories of professional development and addresses practical issues in current training programs, offering a viable solution to improve instructional practices. Such initiatives foster effective teaching and ensure the ongoing development and adaptation of training methodologies to meet evolving educational needs, ultimately benefiting educators and students in special education settings. Therefore, expanding the discussion on implications suggests that incorporating these findings into broader educational policies and practices can lead to more effective and sustainable professional development frameworks, enhancing the overall quality of special education.

Paper Contribution to Related Field of Study

Special education and rehabilitation center

References

Bibigul, D., Marina, K., Alpysbayeva, M., & Nietbaeva, G. (2022). Training a special teacher: Opinions and experience of teachers in the conditions of inclusive education. Cypriot Journal of Educational Sciences, 17(3), 920–929. https://doi.org/10.18844/cjes.v17i3.6985

Borosh, A. M., Newson, A., Mason, R. A., Richards, C. D., & Collins Crosley, H. (2023). Special Education Teacher-Delivered Training for Paraeducators: A Systematic and Quality Review. Teacher Education and Special Education, 46(3), 223–242. https://doi.org/10.1177/08884064231160575

Creswell, J. W. & Creswell, J. D. 2017. Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.

Delbecq, A. L., Van de Ven, A. H. (1971). A group process model for problem identification and program planning. The Journal of Applied Behavioral Science, 7(4), 466-492. https://doi.org/10.1177/002188637100700404

Delbecq, A. L., Van De Ven, A. H., & Gustafson, D. H. (1975). Group techniques for program planning: A guide to nominal group and Delphi processes. Glenview IL: Scott for

Fox, W. M. (1989). The improved nominal group technique (INGT). Journal of Management Development, 8(1), 20-27. https://doi.org/10.1108/eum000000001331

Gary, N. H. (2021). Based on the collaboration of teachers at a special needs school for the physically handicapped Implementation and effectiveness of in-school training programs. Special Education Research, 59(3).

Gevarter, C., Siciliano, M. G., & Stone, E. (2022). Early Interventionists' Knowledge of Evidence-Based Practices for Autism. Focus on Autism and Other Developmental Disabilities, 37(4), 203–214. https://doi.org/10.1177/10883576221099895

Ithnain, I., & Saidin, K. (2021). The effectiveness of professional development model in enhancing teachers' competencies. Malaysian Online Journal of Educational Management, 9(4), 32–52.

Jaafar, N. A., Mohd Nordin, N. A., & Aljunid, S. M. (2021). Outcome of Community-based Rehabilitation and its Associated Factors among Children with Disability in East Coast of Peninsular Malaysia. Jurnal Sains Kesihatan Malaysia, 19(01), 177–185. https://doi.org/10.17576/jskm-2021-1901-19

Liang, Z., Zuo, J., & Lee, D. (2023). An Evaluation of Online Training on Pre-service Special Education Teachers' Case Application of Visual Schedules for Individuals With Intellectual and Developmental Disability in China. Journal of Special Education Technology, 0(0), 1–9. https://doi.org/10.1177/01626434231214792

Ling, O. E., & Toran, H. (2023). The Practices of Special Education Teachers in Improving the Reading Skill of Students with Autism. International Journal of Academic Research in Progressive Education and Development, 12(2). https://doi.org/10.6007/ijarped/v12-

Lomax, P., & McLeman, P. (1984). The uses and abuses of nominal group technique in polytechnic course evaluation. Studies in Higher Education, 9(2), 183-190. https://doi.org/10.1080/03075078412331378834

MacPhail, A. (2001). Nominal group technique: A useful method for working with young people. British Educational Research Journal, 27(2), 161-170. https://doi.org/10.1080/01411920120037117

Razalli, A. R., Hashim, A. T., Mamat, N., & Ariffin, A. (2020). Collaborative Teaching between Special Education Teachers and Mainstream Teachers in Inclusive Education Program. International Journal of Academic Research in Business and Social Sciences, 10(8). https://doi.org/10.6007/ijarbss/v10-i8/7713

Strimel, M., Nagro, S. A., Pamela Hudson Baker, & Thoma, C. A. (2023). The Experiences of Teacher Candidates With Disabilities: A Systematic Literature Review. Teacher Education and Special Education, 46(3), 243–259. https://doi.org/10.1177/08884064231170573

Takala, M., Sutela, K., Ojala, S., & Saarinen, M. (2023). Teaching practice in the training of special education teachers in Finland. European Journal of Special Needs Education, 38(6), 835–849. https://doi.org/10.1080/08856257.2023.2177945

Tan Ai Lee, Zulkufli Mahayudin, Ooi Soo Yuan, Mooi, O. Y., & Ng Lai Teng. (2020). Pengalaman pembimbing instruksional dan guru dalam proses bimbingan instruksional pentaksiran bilik darjah di sebuah sekolah rendah. Jurnal Penyelidikan Dedikasi Jilid 18, 18(2), 2020.

van der Linden, S., Papadopoulos, P. M., Nieveen, N., & McKenney, S. (2023). ReflAct: Formative assessment for teacher reflection in video-coaching settings. Computers and Education, 203(May), 104843. https://doi.org/10.1016/j.compedu.2023.104843