



# Teachers' background diversity on the early intervention service of special education centers in Thailand

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## Abstract

Special Education Centers (SECs) are public educational establishments whose role is to provide early intervention (EI) services to children with special needs. There are currently 77 locations throughout Thailand. A recent study found that SECs encounter teacher transfer problems every year, which affects the efficiency of their EI services. This study explored the reality of EI service and the diversity of teachers' backgrounds on EI service of SECs in Thailand. The result of an in-depth interview form for 18 executives showed that most SECs provide services in several stages, which include general data collection, educational disabilities screening, basic abilities assessment, individualized education plan preparation (IEP/IFSP), provision services with suitable activities, progress assessment, and conducting supervision, monitoring, evaluation, and referral. The most problematic issue of EI service is the diversity of teachers' disciplines. In addition, the result of a questionnaire for 426 teachers showed that teachers had a variety of backgrounds, especially in their graduate majors at bachelor's degree for over 15 majors. Factors of background diversity that affect the implementation of EI service includes: health problems or congenital disease, SECs in current operation, place of service, and responsibilities, which affect each step of the EI service process at a significantly high level of 0.05. However, not all differences in teacher backgrounds will affect EI service delivery.

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## Introduction

Currently, the number of people with disabilities in Thailand is increasing. According to the report of the Department of Empowerment of Persons with Disabilities (2020), it was found that Thailand had 2,058,082 people with disabilities, representing 3.09 percent of the total population. Therefore, it can be considered that people with disabilities are a group of human resources that are important to the country. However, if people with disabilities are given the opportunity to promote and develop their potential in the right way so that they can be self-reliant and live in society like normal people, it will have a positive effect on the development of the country. It also promotes human resources that will help create a good society, happiness and equality of individuals in society. Therefore, helping people with disabilities is considered the duty of everyone in all sectors. In this regard, people with disabilities in countries around the world have the right to receive rehabilitation promotion in all aspects, including medical, educational, occupational and social (Sawangsi, 2013)

There are many forms of education for children with disabilities, and one of them is early intervention (EI).” The principle is that if children with disabilities do not receive rehabilitation treatment at the first discovery of the disability or disorder, it may be difficult to treat and might cause more disabilities (Sirindhorn National Medical Rehabilitation Institute, 2009) taking into account the age, gender, type and level of disability, environmental adjustment according to various needs, readiness and other relevant factors, all parties must play a concrete role (Buranakanon et al., 2009). EI requires a holistic approach at multiple levels in a collaborative manner to manage effective support (Early Intervention Foundation, 2015). In summary, the Office of Special Education Administration (2015) defined that EI services are a system of services provided to people with disabilities or groups at risk from birth or at first found a disability, including adolescence or early adulthood. Both help in prevention in terms of medical, educational and social needs of the individual by relying on the cooperation of stakeholders at all levels so that those receiving services can develop and change in a better way according to the goals. There are people who offer the idea that Personnel involved in EI must be thinkers. They must make decisions and solve problems with a vision and a strategic approach to service delivery among a variety of factors, including family values,

socio-economic bases, networks and resources to support service delivery, and society’s attitude towards children who have special needs. The aim of EI is to provide children with disabilities the earliest possible development and assistance from the earliest stages of their disability so that they can live independently in society as well as prevent disabilities and other problems that may occur (Williams, 1993, quoted in Office of Special Education Administration, 2008).

The special education centres (SECs) under the Office of Special Education Administration is a state educational institution that provides non-formal or informal education for people with disabilities from birth or first encounter with disabilities for life and provides education and training to educate caregivers, learners with disabilities, teachers, personnel and communities, including organizing media, technology, facilities, services and other educational assistance. There are currently 77 SECs across the country having a wide scope of work covering the entire country. A variety of activities are organized for providing services to children with disabilities and children with special needs by providing educational services for persons with disabilities from birth or early detection of disabilities in various forms for all 9 personal types of educational disabilities. The Office of Special Education Administration (2017b) identified that all SECs have a role in organizing and promoting education in the form of EI services and preparing people with disabilities to enter the system of child development centres, learning centre for disability, inclusive educational school, disability specific school, and other related agencies, etc. (In addition, the monthly meeting minutes of personnel and group discussions of the Academic Administration Committee (Sukhothai Provincial Special Education Center, 2017a; 2017b) stated about teachers’ problems in the preparation of Individualized Education Program (IEP), Individual Implementation Plan (IIP), Individualized Family Service Plan (IFSP), learning management preparation, student analysis, preparation of learning resources, assessment tools, and production of teaching materials. In the past several years, it has been found that personnel of the Sukhothai SEC have moved in and out frequently, resulting in teaching and learning in different skills. In addition, teachers graduated in various disciplines that did not match the subjects or skills responsible for teaching, resulting in student development that did not meet the behavioural objectives set forth in the IEP (Sukhothai Provincial Special Education Center, 2016).

According to a related study, 77 SECs across Thailand are different and have their own uniqueness both in terms of topography, personnel, background of personnel or locations budget and facilities, including administrative processes. These factors resulted in different SECs having different success in providing educational services and management, and preventing some SECs from achieving their vision, objectives and missions of the organization and also cause some service users and communities to lack confidence in the work of the SEC. Therefore, the development of the quality of the SEC will make education management more efficient and effective by improving the concreteness of the service to be reliable, responsive, giving confidence, knowing and understanding. Consistency will result in the quality of service being more efficient and better than ever (Trachuwanitch, 2018) in order to build faith among the communities who receive the service and related agencies to have more confidence in the operations and services of the SEC. Moreover, Euamornvanich (2017) also found that cultural diversity should not be overlooked, as each individual has a culture that is accumulated from learning in the context of their environment, so learning about the cultural differences of people in an organization is important to ensure smooth work.

From the problem and background mentioned above, as the researcher is one of the teachers of the SEC whose duty is to provide EI services to children with disabilities, it is important and necessary to study the diversity of teachers' backgrounds affecting the EI services of SECs for a database that will lead to the development of a management approach for diversity of personnel and an EI service pattern under the context of diversity of quality teachers of SECs in Thailand, and which can provide services to children with disabilities with more quality and efficiency.

### *Research Objectives*

1. To explore the reality of the EI services of SECs in Thailand.
2. To identify the diversity of teachers' backgrounds on EI services of SECs in Thailand.

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### **Methodology**

This research used a mixed-methods approach of qualitative and quantitative (Creswell, 2014) research methods used: (1) to explore the reality of EI services of SECs in Thailand by studying relevant documents

and using in-depth interviews to interview executives about the patterns of EI services; and (2) to identify the diversity of teachers' backgrounds on the EI services of SECs in Thailand by using a questionnaire to find the diversity of teachers' backgrounds and to study the relationship between teacher diversity affecting the form of EI services of SECs.

### *Population and Key Informants*

The qualitative research uses an in-depth interview form for executives including directors or deputy directors with at least 5 years of work experience in SECs who play an important role in policy making to drive education management and service delivery in special education centers. This in-depth interview is to explore the reality of the EI services of the SECs and the service patterns of each SEC from preparation before service, service process, and successful evaluation of EI services. Sample selection was made by purposively selecting the top three executives or deputy directors from SECs with the highest number of teachers. in 6 regions, 18 places, 1 person each, total 18 people.

The quantitative research uses a questionnaire for teachers examining the diversity of teachers' backgrounds and opinions of EI services at each stage to analyze the relationship between the diversity factors of teachers' backgrounds on implementation of EI services at each stage. The researcher determined the sample size at the organizational level to be all 77 SECs by multi-stage cluster sampling (May, 1997), consisting of Cluster or Area Sampling by dividing the population into 6 geographical regions according to the National Geographical Commission, namely, northern, central, northeastern, eastern, western and southern regions. Then, the researcher specifically selected the representative SECs in each region by selecting from the top three SECs with the highest number of teachers in each region followed by simple sampling, teachers working in each of the 18 SECs in which the researcher determined the size of the sample used in the research from Yamane's prefabricated table (Yamane, 1973), confidence level 99 percent, error level  $\pm 5\%$ , with a sample of 353 people, a total of 371 people. From this research, there were 426 respondents and 18 interviews, totaling 444 people.

### *Research Tools*

In qualitative research, the research tool was a semi-structured in-depth interview for executives

about the reality of EI services of SECs in Thailand, consisting of 2 parts: part 1, the form of EI services of SECs in Thailand, which is divided into pre-service preparation, service process, and evaluation of the success after EI services, and part 2, recommendations on EI services.

In quantitative research, the research tool was a questionnaire for teachers on the diversity of teachers' backgrounds and opinions of EI services at each stage to analyse the relationship between the diversity factors of teachers' backgrounds on implementation of EI services at each stage. The questionnaire consisted of 5 parts: general Information of respondents, preparation before the first phase of assistance services, operations in the EI service, assessing the success of EI services, and recommendations for EI services of SECs.

The research tools were evaluated by 5 experts, and the researcher selected questions with an IOC value of .50 or higher (Saiyot, 1996).

### *Data Analysis*

The qualitative data analysis was conducted by analyzing content from interviews with SEC administrators, implementing the method which followed Miles and Huberman (1994) by data reduction and data display. The researcher proceeded to present the data into categories by descriptive methods, drawing conclusions, and verifying the credibility of the data (Trustworthiness) with the method following Lincoln and Guba (1985), including inquiring back to groups of informants on various issues to confirm the information before concluding by describing the content.

The quantitative data analysis was performed by calculating the factors of diversity of teachers' backgrounds affecting the EI delivery patterns of SEC in Thailand and describing the survey data as mean values. Such was then analyzed using economic theory to quantify and trend attitudes towards children with disabilities and services to children with disabilities. The data collected from the sample questionnaire would be analyzed and processed using the SPSS for Windows software package, which in this study used statistics for descriptive analysis. Data analysis by statistics use frequency, percentage, standard deviation, opinion level, and the correlation of the variables using multiple linear regression to find relationships or predict various data.

## **Results**

The results of the study can be concluded in accordance with the research objectives as follows.

### *Qualitative Findings*

#### *The reality of EI services of SECs in Thailand*

Part 1: According to the study of document examination and in-depth interviews with 18 administrators from six regions for the EI services of SECs in Thailand, it was found that most centers were prepared before providing EI services by organizing training for teachers and personnel. The process for EI services is quite similar, but some centers have increased or decreased the procedures to suit the needs of the service users and more in line with the context and limitations of each center. Most SECs have a seven-step service process: (1) general data collection; (2) educational disabilities screening; (3) basic competency assessment; (4) individualized education plan preparation (IEP/IFSP); and (5) providing services with appropriate activities; (6) developmental progress assessment; and (7) supervision, monitoring, evaluation, and referral. After the service, each SEC had teachers assess their own achievements through a self-assessment form. It was also found that many SECs did not have a form for preparation before service provision and assessment of success after service to provide teacher EI services that are as clear as they should be, which is an important step in providing EI services. Therefore, the researcher has defined the form of the EI service of the SEC into 3 main steps: (1) The preparation process, which is training to educate teachers before providing the EI service; (2) The service implementation process, which is the EI service according to the roles and responsibilities of the SEC; and (3) The summary and evaluation process of success, which is the evaluation after the EI service of the SEC.

Part 2: In the interviews with executives of SECs, many directors have an opinion that the diversity of teachers affecting the EI service consists of graduate fields, determination, focus, knowledge and understanding in the context of SECs, expertise and experience which are essential for the development of children with disabilities. It was shown that executive opinions were consistent and different from the quantitative findings of this research. However, some people think that gender and age diversity does not affect the service.

If the teacher or personnel is attentive, eager to learn, then they will do well. In addition, some executives have an opinion that the diversity of teachers has a positive effect because individual expertise will help each other differently. It can help connect the joints or defects in each point.

### Quantitative Findings

#### *The diversity of teachers' backgrounds on EI services of SECs in Thailand*

According to the study of the diversity of teachers' backgrounds on the EI services of SECs in Thailand, it was found that out of 426 respondents, 329 were female, representing 77.23 percent, and 97 males, representing 22.77 percent. In addition, the researcher also studied diversity in terms of age, nationality, race, religion, hometown, marital status, disability, health problems or congenital diseases, communication language, education level, and majors that graduated with a bachelor's degree. By analyzing the data, it was found that all 426 questionnaires were the most different and varied in majors that graduated with bachelor's degrees of over 15 majors. It was found that 114 graduated from special education fields the most, representing 26.76 percent, followed by physical therapy, 79 people, representing 18.54 percent, other branches of 53 people, representing 12.44 percent, respectively.

The results of the analysis of teachers' opinions toward preparation before providing EI found that most of the teachers received training to create knowledge and

complete preparation. Moreover, most of the teachers viewed that they were given assignments related to EI service clearly from the SEC. The results of the analysis of opinions on the operation of the EI service were overall with an average of 4.46, a standard deviation of 0.49, in the highest level. They were highest in the formulation of individualized education plan preparation (IEP/IFSP), followed by services with appropriate activities and developmental progress assessments, respectively. The results of the analysis of opinions on the evaluation of the success of EI services in the implementation of EI services were overall with a mean of 4.50, a standard deviation of 0.53, in the highest level. In terms of aspects, all 7 aspects were at the highest level. It was the highest in basic competency assessment with an average of 4.57, followed by services with appropriate activities ( $\bar{x} = 4.54$ ,  $SD = 0.59$ ), individualized education plan preparation (IEP/IFSP) ( $\bar{x} = 4.53$ ,  $SD = 0.60$ ), general data collection of children with disabilities ( $\bar{x} = 4.51$ ,  $SD = 0.59$ ), developmental progress assessment ( $\bar{x} = 4.49$ ,  $SD = 0.60$ ), educational disabilities screening ( $\bar{x} = 4.47$ ,  $SD = 0.70$ ), and supervision, monitoring, evaluation and referral. ( $\bar{x} = 4.42$ ,  $SD = 0.66$ ), respectively. The statistical values are shown in [Table 1](#)

Based on the analysis of opinion data on the operational level of EI services, the researchers determined the correlation of the following factors from teachers' background challenge factors to EI processes in each aspect of the statistic. Analysis of enter multiple linear regression data are shown in [Table 2](#).

**Table 1** Mean and standard deviation of opinions on actual action level and success assessment in EI process

Item	Early Intervention Process	Actual Action Level		Success Assessment	
		$\bar{x}$	$SD$	$\bar{x}$	$SD$
1	Collecting general information	4.46	0.56	4.51	0.59
2	Educational disabilities screening	4.38	0.81	4.47	0.70
3	Basic competency assessment	4.37	0.54	4.57	0.57
4	Individualized education plan preparation (IEP/IFSP),	4.57	0.53	4.53	0.60
5	Providing services with appropriate activities	4.51	0.54	4.54	0.59
6	Developmental progress assessment	4.50	0.55	4.49	0.60
7	Supervision, monitoring, evaluation, and referral	4.40	0.63	4.42	0.66
Mean total		4.46	0.49	4.50	0.53

**Table 2** The relationship between the diversity factors of teachers’ backgrounds on implementation of EI services.

No	The diversity factors of teachers’ backgrounds	General data collection		Educational disabilities screening		Basic competency assessment		Developing of IEP/IFSP		Providing services with appropriate activities		Developmental progress assessment		Supervision, monitoring, evaluation, and referral	
		Exp(b)	Sig.	Exp(b)	Sig.	Exp(b)	Sig.	Exp(b)	Sig.	Exp(b)	Sig.	Exp(b)	Sig.	Exp(b)	Sig.
1	Gender	-.058	.379	.009	.924	.042	.493	.044	.486	-.009	.891	-.004	.948	-.032	.661
2	Age	.090	.161	.033	.711	.012	.838	.051	.408	-.009	.886	.030	.631	.031	.658
3	Religion	.029	.564	-.070	.332	-.014	.776	.029	.551	-.045	.356	-.016	.750	-.056	.325
4	Domicile	-.007	.736	-.068	.020*	-.030	.119	-.002	.922	-.002	.939	-.016	.440	.006	.796
5	Marital status	-.036	.281	-.008	.862	.014	.666	.004	.903	-.008	.795	.003	.934	.045	.225
6	Physical disability	-.158	.272	.133	.514	.068	.617	-.213	.123	-.184	.179	-.092	.515	-.111	.485
7	Health problems or congenital disease	-.158	.050	-.208	.069	-.164	.031*	-.133	.084	-.195	.012*	-.201	.012*	-.232	.010*
8	Language used in daily communication	-.012	.857	.067	.471	-.061	.332	-.027	.672	-.049	.435	-.012	.854	-.031	.670
9	Working language	-.028	.819	-.111	.514	.081	.474	-.027	.812	.005	.964	.053	.655	.087	.512
10	Highest level of education	-.021	.785	.060	.587	-.039	.598	-.027	.716	-.036	.634	.022	.770	.032	.708
11	Majors in Bachelor’s degree	5.883E-5	.991	-.007	.339	.002	.675	.000	.977	-.001	.892	.001	.866	.000	.933
12	Special education qualification	-.003	.958	-.042	.649	-.066	.287	-.019	.765	-.073	.248	-.041	.528	-.092	.209
13	SECs currently operating	-.006	.770	.111	.000*	.047	.010*	-.006	.728	.029	.111	.022	.240	.009	.665
14	Government position	-.067	.279	-.163	.064	-.060	.309	-.062	.301	-.063	.287	-.041	.505	-.114	.100
15	Place of service	.140	.020*	.005	.957	.143	.012*	.064	.260	.078	.170	.091	.123	.091	.169
16	Experience working with disabled children	.085	.187	.051	.576	.005	.935	.026	.668	.013	.834	.019	.769	-.024	.739
17	Experience in a SEC	.061	.355	.086	.354	.075	.225	.062	.326	.092	.144	.059	.360	.089	.221
18	Responsibilities	-.068	.071	-.157	.004*	-.112	.002*	-.047	.197	-.083	.022*	-.092	.014*	-.145	.001*
19	Monthly income	-.016	.749	-.031	.665	.037	.434	.024	.619	.047	.335	.035	.484	.023	.682
Constant		4.770		4.945		4.406		4.864		5.096		4.717		5.041	
R		0.304		0.343		0.328		0.237		0.310		0.277		0.316	
R <sup>2</sup>		0.092		0.118		0.108		0.056		0.096		0.077		0.100	
F		2.171		2.847		2.583		1.276		2.276		1.780		2.374	
Sig. ANOVA (p-value)		0.003		0.000		0.000		0.195		0.002		0.023		0.001	
SE <sub>est</sub>		±5.48		±7.77		±5.49		±5.26		±5.24		±5.40		±6.09	

Note: \* means Sig. less than .05

From the analysis of the result of the data obtained from the questionnaire, it was found that the background diversity of teachers was different and diverse in all aspects of SECs, including health problems or congenital diseases. These affect all aspects of EI services by affecting basic competency assessment, service provision with appropriate activities, developmental progress assessment, and supervision, monitoring, evaluation and referral statistically significant at the 0.05 level. In addition, the difference between each SEC also affected the early stage of assistance services in terms of educational disabilities screening and basic competency assessment at a statistically significant level of 0.05. The property aspect also affects EI services. This resulted in the general data collection of children with disabilities and the basic competency assessment at a statistical significance of 0.05. In addition, differences in responsibilities in SECs also affect the EI by affecting the educational disabilities screening, basic competency assessment, and educational disability. Providing services with appropriate activities, developmental progress assessment, and supervision, monitoring, evaluation and referral were at a statistical significance at the 0.05 level, and also affecting the general data collection of children with disabilities, there was a statistical significance at the 0.1 level.

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## Discussion

Results of exploring the reality of the EI services of SECs in Thailand from the study of documents and interviews with 18 executives found that each SEC has different service procedures. The process of providing EI services at all SECs is similar on 7 steps, which are: (1) general data collection, (2) educational disabilities screening, (3) basic competency assessment, (4) Individualized education plan preparation (IEP/IFSP), (5) provision of services with appropriate activities, (6) developmental progress assessment, and (7) supervision, monitoring, evaluation, and referral. This is consistent with the Early Intervention Foundation (2015) stating that EI services require a holistic approach at multiple levels in a collaborative manner to manage effective support. In addition, it is also in accordance with the guidelines for developing the quality of children with disabilities for parents who come to receive services in the SEC of the Office of Special Education Administration (2015), which specifies the process of providing assistance in the early stages where there are 7 steps as well. From in-depth interviews, the SEC

executives found several interesting and relevant research issues. Many SECs have developed the EI service pattern by increasing or decreasing the steps in providing services, each step has the same details and differs depending on the context of each location. Many SECs do not have a clear pattern for preparing teachers and staff for service and evaluating the success of EI services, which are important steps in providing EI services. The researcher therefore defined the form of the EI service of the SEC into 3 main steps: (1) The preparation process, which is training to educate teachers and professionals; (2) The service implementation process, which is the provision of the EI service according to the roles and responsibilities of the SEC; and (3) The summary and evaluation process, which is the evaluation after providing EI services for SECs.

In addition, from interviews with executives of SECs, many directors have opinions that the factors of teacher diversity that affect EI services are graduate fields, determination, Knowledge and understanding in the context of SECs, expertise and experiences which are essential for the development of children with disabilities, including evaluating strengths and areas that should be developed. The assessment in EI becomes crucial to employ the relevant dependent variable, and often several, in order to describe child status and to detect treatment effects. In addition, some administrators are of the opinion that the diversity of teachers has a positive effect because the expertise of each person will help each other differently, also helping connect joints or defects at each point. Corresponding to Tantayaphinan's research (2011), which studied differences within the organization and strategies for managing human resources (Management Tactics for a Diverse Workforce, it was found that the methods that can manage these diversity to have collaboration for the success of the organization must recognize the importance of differences in order to bring out both dominant behaviors and develop them to create human resource management potential so that everyone can work together under the same rules.

The study of the diversity of teachers' backgrounds on the EI services of SECs in Thailand from asking for the opinions of SEC teachers on the level of actual practice in providing EI services that were actually practiced in the SEC found that collecting general information of children with disabilities, individualized education plan preparation (IEP/IFSP), providing services with appropriate activities, and developmental

progress assessment was at the highest level with mean values of 4.57 ( $SD = 0.53$ ), 4.51 ( $SD = 0.54$ ) and 4.50 ( $SD = 0.55$ ), respectively. In opinions on the operation of the EI service overall, the mean was 4.46, and the standard deviation was 0.49, which was in the highest level. Consistent with Suttiwan et al. (2022), who researched and summarized the basic knowledge of auto-ethnography research in the context of education, teachers are important persons who promote educational reform based on auto-ethnographic research as a qualitative research method popularly used abroad of a group of teachers who believe in instructional management that focuses on reflecting on the issues. They learned in a particular class phenomenon from the point of view of the researcher as a practitioner, which depends on the validity with social and cultural contexts. Therefore, it can be regarded as a way of knowledge that encourages teachers to learn and solve problems at their own level by reflecting and describing the stories that occur in their teaching and learning in class in various social and cultural contexts concerning problems, findings, and learner development outcomes.

The analysis of data obtained from the questionnaire found the background diversity of teachers was different and varied in all aspects including health problems or congenital disease, the SEC that operates, the place where they regularly provide services, and the duties and responsibilities in the SEC affecting each step of the EI service process with statistical significance at the 0.05 level. This is in line with the research of Kaewmark (2013), who studied the teacher development model of border patrol police schools in Loei Province to enhance the teaching and learning skills for the critical thinking skills of grade 1 Thai language subjects. It was found that the state of teaching and learning critical thinking skills of border patrol police school teachers had too many responsibilities and project work but lack of training in teaching and learning which emphasizes critical thinking skills. Therefore, he created the guidelines for developing teachers which consisted of a workshop on teaching critical thinking skills in an actual teaching practice, organizing an evaluation measurement workshop, and creating a test for analytical thinking skills. This is also consistent with the research of Trachuanitch (2018), that found that the overall personal characteristics were related to the service quality of the Phetchaburi SEC, but when considering individually, it was found that occupations were related to quality. The service provision of the SEC in Phetchaburi Province was statistically

significant at the 0.01 level, indicating that Personal characteristics, namely, age, have an effect on the service quality.

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## Conclusion and Recommendation

This research found that each SEC has different procedures for providing services, most of which provide services as specified by the Office of Special Education administration. Some SECs have improved their EI service pattern by increasing or decreasing the service procedures to be in line with the needs of service users and the limitations of each SEC. Most SECs have a seven-step service process: (1) general data collection, (2) educational disabilities screening, (3) basic competency assessment, (4) individualized education plan preparation (IEP/IFSP), (5) providing services with appropriate activities, (6) developmental progress assessment, and (7) supervision, monitoring, evaluation, and referral. It was also found that many SECs did not have a form for preparation before service provision and assessment of success after service. Therefore, the researcher has defined the form of the EI service of the SEC into 3 main steps: (1) The preparation process, which is training to educate teachers before providing the EI service; (2) The service implementation process, which is the EI service according to the roles and responsibilities of the SEC; and (3) The summary and evaluation process of success, which is the evaluation after the EI service of the SEC.

In addition, the result of a questionnaires showed that teachers of each SEC had a variety of backgrounds, especially in their majors at bachelor's degree, which showed over 15 majors. The results of the analysis of teachers' opinions toward preparation before providing EI found that most of the teachers received training to create knowledge and complete preparation. Moreover, most of the teachers viewed that they were given assignments related to EI service clearly from executive of the SEC. The results of the analysis of opinions on actual Action level in EI Process were overall with an average of 4.46, a standard deviation of 0.49, in the highest level. The results of the analysis of opinions on the evaluation of the success of EI services in the implementation of EI services were overall with a mean of 4.50, a standard deviation of 0.53, in the highest level. In terms of aspects, all 7 aspects were at the highest level. The research also found that teachers from a variety of backgrounds differ in many areas, especially in their majors graduating with a bachelor's degree.

Additionally, it was discovered that factors of diversity of backgrounds affecting the implementation of EI services of SEC include health problems or congenital disease, SEC currently operating, place of service, and responsibilities in the SEC by affecting the initial assistance service process in each step with statistical significance of 0.05. However, not all differences in teacher backgrounds will affect EI service delivery.

### *Recommendations from the Study*

SECs should provide training on EI services of SECs in Thailand under the context of teacher diversity to administrators, teachers, and related personnel to highlight the importance and necessity of working within the multicultural framework of teachers and EI service providers because this research already showed that cultural diversity affects the process of providing early support services. School administrators involved in EI services of SECs should be aware of the importance of diversity in the organization in order to maximize the benefits of EI service development of SEC.

### *Recommendations for Further Research*

There should be a study on the diversity of people receiving assistance services in the early stages, which are children with special needs and their parents. In addition to physical diversity data, attitudes and opinions of parents should be studied further to be used as a database to further develop the appropriate service model of the SEC. There should be an extension of the development of EI services that take into account the diversity of service users, i.e. diversity of children with special needs, diversity and opinions of parents to make the service more comprehensive and useful.

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### **Conflict of Interest**

The authors declare that there is no conflict of interest.

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