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**| RESEARCH ARTICLE**

## **The Role of Professional Development Programs in Developing Skills of General Education Teachers to Support Students with Disabilities: A Case Study of Jordan**

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**| ABSTRACT**

The core importance of this study can be defined through the illustration of "personal development programs" as a necessary aspect for enhancing the skills of teachers. Increasing the skillsets of teachers has also been defined as a critical element for increasing the learning scope of disabled students. The perception towards this topic has been discussed by utilizing pre-existing studies from authentic sources. A survey has also been conducted in this study to collect necessary information. Participants were selected from Jordan, and responses were collected online. Critical analysis processes such as reliability tests, frequency analyses, descriptive analyses, and "one-sample t-tests" have also been conducted, which can be useful for increasing the importance of this study. The overall findings of this study also imply that the importance of PDP cannot be ignored as it can allow teachers to improve their personal skill sets.

**| KEYWORDS**

"Personal development plan", disabled students, teacher's efficiency

**| ARTICLE INFORMATION**

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### **1. Introduction**

The importance of "professional development programs" or PDP cannot be ignored as it can enhance the skill set of the teachers. The presence of disabled students in Jordan has also made it necessary to integrate PDPs to increase the skillsets among the teachers. According to findings, 11% of the aged 5 in Jordan are disabled students (Reliefweb.int, 2021). Apart from these, around 2.4 million students belonging to the age group of 5 to 14 are known to be disabled. According to reports published by "The Ministry of Social Development and "The Ministry of Education, around 1.9% of the disabled 1.4 million children are enrolled in the primary education system. It further denotes a lack of skilled teachers who have prior experience or knowledge of handling students with disabilities. UNICEF also published a report in 2020 regarding Jordan, where an estimated 112,016 children can be found in the age group of 6 to 15 who are not enrolled in any type of education system.

The core objective of this study lies in the demonstration of the correlation which can be observed between PDP and the enhancement of skill sets among teachers to support the needs of disabled students. In other words, the importance of PDP, which can be useful for modern educational institutions to undertake justified measurements regarding the integration of PDPs, has been discussed in this study. These types of approaches can further elevate the scope for disabled students to become a part of modern society through the path of the education system. It further demonstrates the contribution of this study in the modern era, where enhancing the skill sets of teachers to support disabled students has become necessary. Reasons such as these make this study an important piece of article that can highlight the contribution of PDPs in the development of knowledge and skills among teachers. This can further be justified by highlighting their liability towards maintaining superior quality in the context of educational approaches for disabled children in Jordan.

## 2. Literature review

The responsibilities of a teacher cannot be contained within the boundaries of an educational institute. The need for disabled students is another concerning factor that needs proper attention from modern teachers regardless of their prior knowledge of them. According to Byrd & Alexander (2020), the responsibility of teaching students with special needs is not limited to the teachers who have experience and skills. In other words, teachers without the necessary skills to handle these students are also liable for constructing educational approaches for disabled students. Several studies have also illustrated the need for professional development among teachers that can be helpful for them to overcome teaching barriers (Holmqvist & Lelling, 2021; Chitiyo et al., 2019). Reina et al. (2019) also supported this statement by illustrating the need for professional development among teachers that can be helpful in enhancing self-efficacy levels. In other words, indulging in these types of approaches can be beneficial for teachers to improve their teaching methods.

Professional development can also be identified as an approach that can allow novice instructors to achieve a high success rate through learning the necessary skills. According to Cornelius et al. (2020), professional development can align with the aspects related to rigorous induction. It further highlights the importance of mentoring programs for school teachers, which can enhance their professional capabilities. Rasmitadila et al. (2022) have also illustrated the importance of mentoring programs in elementary schools in a positive manner. Studies have further supported the need for mentoring programs that can help teachers cope with the rising pressure in the teaching profession (Humaira et al., 2021; Shanks et al., 2022). In other words, mentoring programs can help teachers expand their skills in a desired manner. The formation of mentoring programs has also been linked with inclusive teaching methods that can be helpful for students.

The emerging changes in the social, cultural, economic, and other factors can be linked with the need for improvement in the education sector. A lack of appropriate measurements for improving the education system can be considered an underinsured situation, which can slow down the growth process. According to Fernández-Batanero et al. (2022), exploring the need for professional development among teachers can be considered essential in the current era, which can allow society to cope with emerging changes through educational support. Crispel & Kasperski (2021) have also addressed the need for professional or personal development of teachers, which can be useful for identifying the special needs of their students. Several studies have also highlighted the need for a development plan for teachers which can allow them to fulfil complex roles in the current educational landscape (MacPhail et al., 2019; Bragg et al., 2021). In other words, indulging the PDPs can enable modern teachers to fulfill their roles in an effective manner, which can be considered a desired outcome.

The presence of several development programs for the teachers or academicians can be considered as a feasible approach that can be helpful for increasing skill set or teaching ability. According to Guraya & Chen (2019), indulging in faculty development plans can be beneficial for teachers to improve their ability to perform specific teaching duties. Podolsky et al. (2019) have also agreed with this statement by demonstrating that investing in the teacher's development program has been subject to several debates due to their contribution to developing the ability of teachers to serve their purposes. According to Hanushek et al. (2019), the development of cognitive skills among teachers can be helpful for teachers while performing their duties. Madigan & Kim (2021) have also illustrated that teacher burnout can affect the performance of the students. In other words, the level of skill sets and ability to teach can influence the academic performance of the students.

The importance of special education can also not be overlooked as it can allow students with disabilities to acquire necessary knowledge. According to Maryanti et al. (2021), it is common for disabled children to face both external and internal issues while participating in the education program. Grigorenko et al. (2020) have also illustrated the concept of learning disability, which can cause students to face issues while adapting to educational needs. As opined by Houtrow et al. (2020), students with disabilities need proper attention from society due to their inability to cope with social factors. Asbury et al. (2021) have further highlighted the special educational needs of disabled children and their brittle mental status, which needs proper attention from modern educational institutes. It further demonstrates the need for the construction of appropriate teaching methods that can support these needs in an effective manner.

The quality of the teaching method has often been identified as an important factor that can enhance the outcome of educational programs. According to Brownell et al. (2020), an inclination in the current era can be observed, which demonstrates the need to develop interventions. The establishment of these intervention methods is meant to provide scope and ability to teachers, which can be helpful while teaching disabled children. Didion et al. (2020) have also addressed that it is common for disabled students to acquire lower marks than the estimated averages due to their incapability to acquire necessary knowledge or participate in the assessment process with utmost efficiency. It further highlights the need for intervention or development programs that can enhance the scope for teachers and disabled students to fulfil their goals.

Teaching students with disabilities can be challenging due to their lack of ability to participate in regular learning programs. Smith (2020) has also illustrated a similar concept by depicting that it is common for teachers to face challenges while teaching disabled children, which makes it essential for them to learn new and appropriate teaching methods. Several studies have also highlighted the challenges of teaching disabled students, which can be considered a concerning matter (Lambert & Schuck, 2021; Michielsen & Brockschmidt, 2021). According to Ní Bhroin & King (2020), indulging in a professional development program can enable teachers to adopt changes in their teaching methods. It can further allow them to fulfil the learning needs of disabled children. Hence, it can be stated that the formation of PDPs or any type of development program can be helpful for teachers to fill their professional skill gap. It can further ensure the successful initiation of social and cultural growth where the learning demands of each student are fulfilled regardless of their physical and mental status.

### **2.1 Literature gap**

The overall discussion further illustrates the need for personal development strategies that can be adopted by modern teachers to improve their professional performance rate or teaching ability. However, certain areas have been identified that need further inspection by future researchers. Cornelius et al. (2020) have mentioned the importance of mentoring programs for teachers but not their connection with the development of a knowledge base among children. Fernández-Batanero et al. (2022) have talked about the need to explore the professional development of teachers and not about their link with disabled children. Although Didion et al. (2020) have also discussed interventions for teachers that can be useful for disabled children, they lack the information that can be linked to Jordan's current status. In other words, a lack of Jordan-based studies has provided the scope for this work to get recognized as a major contribution.

### **3. Methodology**

This study has been based on the usage of survey methods, which can be helpful for collecting necessary information. In other words, a primary quantitative method has been selected in this context where the usage of a survey can be considered appropriate. A sample size of 101 participants has been selected who belonged to Jordan. The participants are teachers by profession who can generate necessary information regarding the selected subject matter. A convenience sampling method has also been selected in this study, which can be useful for selecting necessary survey candidates. As mentioned earlier, the participants of this survey are teachers. The survey was conducted online, where questions were sent, and responses were collected in an effective manner. The usage of SPSS software can also be observed in this study, which has allowed us to conduct a certain analysis process to enhance the research outcome. The hypothesis of the study will be tested using a one-sample t-test.

#### **3.1 Hypothesis**

H1: The "professional development programs (PDP) help general education teachers with a better understanding of the learning needs of students with disabilities.

H2: PDP provided sufficient knowledge and appropriate strategies to general education teachers to deal with disabled students.

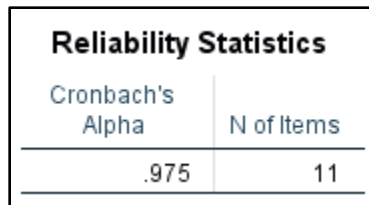
H3: PDP helps teachers in creating an engaging and inclusive classroom for students with disabilities by providing them with the necessary tools and resources.

H4: PDP increases the confidence of teachers to deal with students with disabilities.

H5: PDP has a positive impact on teachers' skills to get the best outcome from students with disabilities.

### **4. Findings**

#### **4.1 Reliability**



<b>Reliability Statistics</b>	
<b>Cronbach's Alpha</b>	<b>N of Items</b>
.975	11

**Figure 4.1: Reliability analysis**

(Source: SPSS)

The importance of Reliability analysis cannot be overlooked as it can portray the effectiveness and necessity of the collected data. As per the analysis process, the value of Cronbach's Alpha is 0.975. Suryanto *et al.* (2023) have also depicted that a value higher than 0.6 in this category can be considered reliable. Hence, this study can be addressed as reliable as the value of Cronbach's Alpha is higher than 0.6.

## 4.2 Demographic

### Age

Group	Percentage
18 to 30	28.7%
31 to 50	21.8%
51 to 60	39.6%
Above 60 years	9.9%

**Table 4.2.1: Age**  
(Source: SPSS)

Teachers belonging to different age groups have been selected for this survey. Teachers from the age group of 18 to 30 is 28.7%, 31 to 50 is 21.8%, 51 to 60 is 39.6%, and teachers above 60 years are 9.9%.

### Gender

Group	Percentage
Male	64.4%
Female	35.6%

**Table 4.2.2: Gender**  
(Source: SPSS)

Teachers from both male and female groups were included in this survey, with the male population around 64.4%. The percentage of the female population was 35.6%. It further demonstrated the inclusion of both gender groups, which can be helpful for collecting the perception of those groups.

### Experience

Group	Percentage
1 to 3 years	28.7%
4 to 6 years	21.8%
7 to 10 years	39.6%
More than 10 years	9.9%

**Table 4.2.3: Experience**  
(Source: SPSS)

Teachers with different experience levels were also included in this study. Teachers with 1 to 3 years of experience were 28.7%, whereas teachers with 4 to 7 years of experience were 21.8%. Teachers with 7 to 10 years of experience were 39.6%, and teachers with more than 10 years of experience were 9.9%.

**4.3 Frequency**

Statements	SD	D	N	A	SA
The professional development programs are properly organized and quite easy to follow	2	4	0	24.8	69.3
The contents of these programs are practical and appropriate to my teaching practice	2	4	0	9.9	84.2
The programs help with a better understanding of the needs of students with disabilities	2	4	0	59.4	34.7
The programs provide effective strategies to support students with disabilities in a general education classroom	2	4	0	19.8	74.3
The programs provide sufficient knowledge of various disabilities and their impact on learning	2	4	0	59.4	34.7
Teachers can learn various strategies that make it easy to accommodate the needs of students with disabilities	2	4	0	24.8	69.3
The programs provide the necessary tools and resources to create an engaging environment for students with disabilities	2	4	0	49.5	44.6
The programs increase the teacher's confidence in their ability to teach students with disability	2	4	0	34.7	59.4
Teachers can develop a positive and inclusive attitude towards students with disabilities with the help of the program	2	4	0	9.9	84.2
The strategies learned can easily be applied by teachers regularly to deal with students with disabilities	2	4	0	24.8	69.3
Overall, professional development programs have a positive impact on teacher's skills to get the best outcome from students with disabilities	2	4	0	9.9	84.2

**Table 4.3.1: Frequency analysis**  
(Source: SPSS)

Several statements regarding the selected topic have been used in this survey, which have acquired significant responses from the participants. 69.3% of people strongly agreed that development programs are easy to follow. It further means PDPs can be considered simple, which can be helpful for teachers. The simple nature of these programs can be helpful for faculties to adopt necessary measurements without facing any type of issues. Hence, it can be useful for teachers to adopt useful tactics that can allow them to become a part of PDPs, which are organized and simple in nature. The perception towards the practical and appropriate development programs has also been inspected through a statement which has acquired 84.2% strong agreement. It also means that PDPs can be considered appropriate for the teachers and denote practical scopes for them to integrate into the teaching phase.

The practical nature of PDPs, which can enable them to implement necessary approaches while teaching disabled children in the classroom, has been acknowledged by the survey participants. The goal of the development programs is to enable teachers to understand the issues of disabled students. The statement regarding this has acquired 59.4% agreement and 34.7% strong agreement. In other words, it can be stated that 59.4% of teachers or participants of this survey have agreed that PDPs can be helpful for teachers to gather a brief knowledge regarding the issues of students with disabilities. Apart from this, 34.7% of teachers have also shown their strong agreement with this concept, which denotes PDPs to be important approaches for increasing the

efficiency of teachers. Gathering necessary information regarding the issues of disabled children can be helpful for teachers to adopt crucial approaches during teaching in class.

The core aspects of these programs also lie in the development of a supportive system for disabled students. The statement related to this has received a 74.3% starting agreement. It also means that the integration of PDPs can be helpful for teachers, which further allows them to create a supportive culture for students with disabilities. Hence, it can enable disabled students to participate in the learning process without facing any types of issues. The importance of development programs also lies in the development of a knowledge base that can allow teachers to undertake justified measurements for overcoming teaching issues among disabled students. The statement regarding this has received 69.3% strong agreement. According to this response rate, it can be addressed that PDPs can also be considered useful while increasing the knowledge base of teachers regarding disability types. These types of knowledge can allow teachers to generate feasible approaches that can enable students to learn without difficulties.

The correlation between development programs and engagement level has also received 49.5% agreement and 44.6% strong agreement during the survey. In other words, PDPs can be useful for teachers and allow them to create an engaging environment for the students. This type of environment can allow students with disabilities to become engaged in the learning program, which has also been acknowledged by the survey participants. The confidence level of teachers can also increase due to development programs, which have acquired 59.4% strong agreement from the respondents. It further means that participating in the PDPs can be considered helpful for teachers to increase their confidence levels. Increasing confidence levels can be beneficial in overcoming potential barriers while teaching students with different types of disability. Hence, the importance of PDPs cannot be ignored, and they can be considered a crucial aspect of teaching disabled people.

A strong relation between the formation of adequate strategies and development programs has also been selected through the survey. The statement regarding this has acquired 69.3% strong agreement. In other words, the majority of the participants have agreed that PDPs can be useful for developing effective strategies that can help them teach students with disabilities in an effective manner. The positive impact of development programs on teachers' skills has also been inspected in the survey, which has acquired 84.2% strong agreement. It also denotes that PDPs can be considered as a useful approach that can enhance the skills of teachers. The participants have also agreed to this concept by responding to this statement in an appropriate manner.

**4.4 Descriptive**

	<b>Statistics</b>					
	N		Mean	Median	Mode	Std. Deviation
	Valid	Missing				
The professional development programs are properly organized and quite easy to follow	101	0	4.55	5.00	5	.854
The contents of these programs are practical and appropriate to my teaching practice	101	0	4.70	5.00	5	.831
The programs help with a better understanding of the needs of students with disabilities	101	0	4.21	4.00	4	.804
The programs provide effective strategies to support students with disabilities in a general education classroom	101	0	4.60	5.00	5	.849
The programs provide sufficient knowledge of various disabilities and their impact on learning	101	0	4.21	4.00	4	.804
Teachers can learn various strategies that make it easy to accommodate the needs of students with disabilities	101	0	4.55	5.00	5	.854
The programs provide the necessary tools and resources to create an engaging environment for students with disabilities	101	0	4.31	4.00	4	.834
The programs increase the teacher's confidence in their ability to teach students with disability	101	0	4.46	5.00	5	.855
Teachers can develop a positive and inclusive attitude towards students with disabilities with the help of the program	101	0	4.70	5.00	5	.831
The strategies learned can easily be applied by teachers regularly to deal with students with disabilities	101	0	4.55	5.00	5	.854
Overall, professional development programs have a positive impact on teacher's skills to get the best outcome from students with disabilities	101	0	4.70	5.00	5	.831

**Figure 4.4: Descriptive analysis**  
(Source: SPSS)

A descriptive analysis has been conducted in this study to identify the mean value of the responses. Specific options were also provided to the participants, which included "strongly disagree", "disagree", neutral, agree and "strongly agree". Each participant has selected these options as per their own understanding. The options which have been chosen the majority of the time have been identified through the mean value of the descriptive analysis process. The first statement was related to the simplified nature of PDPs. As per the analysis process, a mean value of 4.55 can be observed in this context, which denotes that the majority of the survey candidates have selected options 4 and 5. It further means that participants have agreed that PDPs are easy to follow and organized in a proper manner. A standard deviation or SD of 0.854 have also been anchored in this analysis, which denotes that overall findings are clustered with the mean value.

The appropriate nature of the PDPs has also been inspected through surveys where statements regarding this have acquired a mean value of 4.70. The mean value of 4.70 can be interpreted as the selection of option 4 and option 5 by the participants the majority of the time. The value of 0.70 also signifies that participants have selected option 5 the majority of the time rather than option 4. This value also denotes that survey participants have agreed on the appropriate nature of the PDPs, which can also be defined as a practical approach. An SD value of 0.831 can also be observed in this context, which denotes an ignorable amount of deviation from the mean value in the entire dataset. The value of N represents both valid and invalid responses, where 101 responses have been identified as valid and 0 as missing. It further means all participants have reposed during this survey.

The importance of understanding the needs of disabled children has also been focused during this survey. The importance of PDPs has been inspected in the context of this need. A mean value of 4.21 was acquired during the descriptive analysis, which is defined as the mean value of the entire response. The mean value of 4.21 also signifies that respondents have selected option 4 and option 5. Apart from this, it can further be stated that option 4 has been selected by the survey participants a higher number of times than option 5. Hence, respondents agreed that PDPs can be helpful in highlighting the needs of disabled students, which can be helpful for teachers during the coursework. The value of SD in this context is 0.804, which can be considered negligible. The remaining mean values can also be interpreted in a similar manner, which can be considered as the participants' responses.

**4.5 One-Sample**

One-Sample Test						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
The programs help with a better understanding of the needs of students with disabilities	2.599	100	.011	.208	.05	.37
The programs provide effective strategies to support students with disabilities in a general education classroom	7.145	100	.000	.604	.44	.77
The programs increase the teacher's confidence in their ability to teach students with disability	5.355	100	.000	.455	.29	.62
Teachers can develop a positive and inclusive attitude towards students with disabilities with the help of the program	8.499	100	.000	.703	.54	.87
The programs provide the necessary tools and resources to create an engaging environment for students with disabilities	3.700	100	.000	.307	.14	.47
Overall, professional development programs have a positive impact on teacher's skills to get the best outcome from students with disabilities	8.499	100	.000	.703	.54	.87

**Figure 4.5: One-sample T-test**

(Source: SPSS)



A one-sample t-test has been conducted to demonstrate the acceptance of the hypothesis. As per the analysis process, the value of "T" in each category has been identified as more than 2. The "t" values of each category are 2.599, 7.145, 5.355, 8.499, 3.700 and 8.499 respectively. Apart from this, the value of "sig 2 tailed" is also lower than 0.05, which denotes a high significance rate. The calculated values in this category are 0.011 and 0.000 for the remaining categories. Hence, it can be addressed that the selected hypotheses have been proven to be true due to their high significance rate. In other words, the selected hypotheses, such as H1, H2, H3, H4 and H5, can be considered true, which denotes the connection between PDPs and teachers' skill sets.

## **5. Discussion**

The importance of PDP among teachers cannot be ignored as it can allow them to cope with the rising need for teaching students with disabilities. Reina et al. (2019) have also illustrated a similar concept by stating that professional development can allow teachers to increase their performance rate. The practical and appropriate nature of the PDPs can be considered necessary for teachers to improve their professional skill sets. These types of approaches can further enhance the scope for modern teachers to teach disabled children at a high efficiency rate. The PDPs are also known for being simple in nature, and their organized aspects also allow teachers to integrate these into their professional development phase. Apart From these, PDPs can also be defined as a source of knowledge where teachers can gather brief information regarding the issues of disabled students, which can further enhance the outcome of learning activities.

It is common for teachers to perform several complex roles and perform critical activities during their professional life. Several studies have also illustrated the complex duties of teachers, which can be crucial for teachers (MacPhail et al., 2019; Bragg et al., 2021). The necessity of PDPs can also be highlighted through their importance in developing strategies for dealing with students with different disabilities. In other words, PDPs can be beneficial for teachers in developing crucial approaches or fruitful strategies that can allow them to teach disabled students in an appropriate manner. In other words, teachers can also undertake justified strategies for overcoming challenges which can occur while teaching disabled students. The correlation between the formulation of engaging classrooms and the integration of PDPs can be considered a necessary aspect in the current era. Implementing necessary strategies can be useful for teachers to generate a sense of engagement among disabled students.

The positive impact of PDPs on the performance rate of teachers cannot be ignored. Ní Bhroin & King (2020) have also illustrated that development programs enable teachers to ensure changes in their professional approaches. It further addresses the need for teachers to integrate PDPs. Teachers can formulate strategies based on PDPs to improve teaching methods for disabled children. Hence, it can be addressed that the positive impact of PDPs can be observed through enhancing the skills of the teachers. The prince of robust correlation between PDPs and teachers' efficiency also depicts its importance in the current era.

## **6. Conclusion**

The overall content of this study also denotes that PDPs can be considered a necessary source or aspect that requires proper attention from modern teachers. Integrating PDPs in the professional field of teaching can be addressed as a feasible approach that can allow teachers to overcome challenges while teaching disabled students. The overall findings also support that implementation of PDPs can be beneficial for teachers because they can enhance their skill sets for teaching students with disabilities. A lack of useful approaches in this context can cause teachers to face issues while teaching disabled students. Hence, focusing on the integration of PDPs can be considered useful in the current era where teachers from Jordan can improve their proficiency in professional life.

The data collection approach of this study denotes the usage of primary quantitative methods where a survey has been conducted. Hence, it can be assumed that this study has been built upon the data collected through surveys, which have been useful for demonstrating the relation between identified variables. The number of participants was 101, which was useful for providing crucial information. However, selecting a larger population could have been useful for identifying the perception of a larger population group. Formulation of this study on the basis of responses gathered from 101 participants can be addressed as the limitation of this study, which can be improved in future.

The future scope of this study lies in the selection of a larger population group. The selection of higher numbers can be considered useful for increasing the credibility of the overall findings. Apart from that, the use of interview methods can also be useful for gathering the teachers' personal experiences and collecting necessary feedback from them. Integration of secondary sources can also be useful for highlighting key findings, which can be timesaving in nature. Integrating the perception of pre-existing authors in this matter can be helpful in increasing the credibility and effectiveness of the overall findings. Hence, this can be addressed as a future scope of this study.

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**The Role of Professional Development Programs in Developing Skills of General Education Teachers to Support Students with Disabilities: A Case Study of Jordan**

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**Appendix: Articles in Literature Review**

No	Journal Name	Publisher	ISSN	The Committee's Decision
1	Investigating special education teachers' knowledge and skills: Preparing general teacher preparation for professional development	Journal of Pedagogical Research	2602-3717	
2	Teachers' collaborative professional development for inclusive education	Routledge, Taylor & Francis	(Print) (Online)	
3	Teachers' Professional Development Needs Regarding Inclusive Education in Ghana	ERIC	EISSN-1710-2146	
4	Incluye-T: a professional development program to increase the self-efficacy of physical educators towards inclusion	Routledge, Taylor & Francis	1740-8989 (Print) 1742-5786 (Online) J	
5	Examining the Impact of Professional Development and Coaching on Mentoring of Novice Special Educators	Routledge, Taylor & Francis	0162-6620 (Print) 2158-6098 (Online)	
6	Teachers' Perceptions of the Role of Universities in Mentoring Programs for Inclusive Elementary Schools: A Case Study in Indonesia	Asian Online Journal Publishing Group	(E) 2410-9991 / (P) 2518-0169	
7	Teacher Perceptions of University Mentoring Programs Planning for Inclusive Elementary Schools: A Case Study in Indonesia	INTERNATIONAL JOURNAL of SPECIAL EDUCATION	p: 0827-3383 e: 1917-7844	
8	A comparative study of mentoring for new teachers	Taylor & Francis Group	NA	
9	Digital competences for teacher professional development. Systematic review	Taylor & Francis	NA	
10	The impact of teacher training in special education on the implementation of inclusion in mainstream classrooms	Routledge, Taylor & Francis Group	1360-3116 (Print) 1464-5173 (Online)	
11	The professional development of higher education-based teacher educators: needs and realities	Taylor & Francis Online	NA	
12	Successful design and delivery of online professional development for teachers: A systematic review of the literature	Elsevier	NA	
13	The impact and effectiveness of faculty development program in fostering the faculty's knowledge, skills, and professional competence: A systematic review and meta-analysis	Elsevier	NA	
14	Does teaching experience increase teacher effectiveness? A review of US research	emerald.com	2056-9548	
15	THE VALUE OF SMARTER TEACHERS: INTERNATIONAL EVIDENCE ON TEACHER COGNITIVE SKILLS AND STUDENT PERFORMANCE	jhr.uwpress.org (The Journal of Human Resources)	NA	
16	Does Teacher Burnout Affect Students? A Systematic Review of its Association with Academic Achievement and Student-Reported Outcomes	Elsevier	NA	
17	Science Education for Students with Special Needs in Indonesia: From Definition, Systematic Review, Education System, to Curriculum	semantic scholar.org	p- ISSN 2775-9857 e- ISSN 2775-8400	

18	Understanding, educating, and supporting children with specific learning disabilities: 50 years of science and practice.	National Library of Medicine	NA	
19	Children with disabilities in the United States and the COVID-19 pandemic	IOS Press	NA	
20	How is COVID-19 Affecting the Mental Health of Children with Special Educational Needs and Disabilities and Their Families?	Springer	NA	
21	Improving Teaching Quality for Students With Disabilities: Establishing a Warrant for Teacher Education Practice	Sagepub	NA	
22	Teacher Professional Development and Student Reading Achievement: A Meta-Analytic Review of the Effects	Routledge, Taylor & Francis	1934-5747 (Print) 1934-5739 (Online)	
23	Challenges and Opportunities for Teaching Students with Disabilities During the COVID-19 Pandemic	ojed.org	2474-2546 Print/2474-2554 Online	
24	"The Wall Now Between Us": Teaching Math to Students with Disabilities During the COVID Spring of 2020	Springer	NA	
25	Barriers to sexuality education for children and young people with disabilities in the WHO European region: a scoping review	Taylor & Francis Online	NA	
26	Teacher education for inclusive education: a framework for developing collaboration for the inclusion of students with support plans	Taylor & Francis Online	NA	