

Perspectives on the Optimal Investment Diploma Programme: Insights of In-Service Special Education Teachers in Saudi Arabia

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Abstract

Continuous professional development (CPD) is vital for special education teachers, although their perspectives on CPD diplomas in Saudi Arabia remain understudied. This study examined how in-service special education teachers perceive an Optimal Investment Diploma and identified needs, benefits, challenges and areas for improvement. This study employed an exploratory qualitative design. Semi-structured interviews were conducted with twenty-three teachers enrolled in the diploma programme in Bisha, southern Saudi Arabia. Interview transcripts were systematically coded and examined using Braun and Clarke's thematic analysis. Five themes emerged. Collaborative and experiential learning allowed teachers to trade ideas, practise new methods and watch expert colleagues. Diversification of teaching strategies expanded toolkits, integrated evidence-based practices and raised confidence in inclusive instruction. Specialised and ongoing training addressed gaps in behaviour management and assistive technology and sustained professional growth. Accessibility and encouragement highlighted time, funding and scheduling barriers and emphasised administrative and peer support. Practical application and relevance linked course content to classroom problems, helping teachers adapt lessons for learners with disabilities. Participants viewed the diploma as an effective route to stronger inclusive practice and alignment with Vision 2030. The diploma met key professional needs and improved teachers' self-reported competence, yet structural barriers limit full engagement. Flexible delivery, targeted incentives and stronger school-university partnerships are recommended. Longitudinal studies with larger samples should track effects on teaching quality, student outcomes and teacher retention.

Keywords

Inservice Training, Professional Development, Teachers, Special Education,

1. Introduction

Continuous professional development keeps teachers abreast of the ever-expanding body of knowledge, skills, and competencies in their fields (Klatt et al., 2020; Alruqi & Alharbi, 2022). A needs based structured diploma programme supplies in-service special education teachers with targeted training that deepens their mastery of personalised instruction, innovative pedagogical techniques, assistive technologies, and specific disability categories (Elbyaly & Elfeky, 2023a). This diploma programme also introduces special education teachers to evidence-based practices, enabling them to deliver inclusive and differentiated instruction to students with disabilities (Majmaah University, 2025). By connecting teachers with experienced national-level faculty, the programme aims to raise classroom efficiency and improve learner outcomes. Offered as a higher diploma across two evening semesters, it enables educators to study while retaining their full-time positions. In doing so, the initiative advances Vision 2030 by strengthening the national knowledge base, preparing the workforce for future labour-market demands, and promoting lifelong learning (Arabia, 2016). Previous studies have highlighted that an optimal investment in a diploma programme has multiple benefits for instructional outcomes. These benefits include enhanced cultural sensitivity, innovative teaching practices, inclusive education, and better access to special education resources (Elbyaly & Elfeky, 2023b). Existing studies seldom examines these programmes from the teachers' viewpoint, leaving their true effectiveness uncertain and highlighting the need for systematic investigation.

Within Saudi Arabia, the Ministry of Education (MoE) is responsible for meeting the professional development needs of special education teachers. First, it has developed and implemented various policies governing the licensing, training, and professional growth of special needs teachers (Alquraini, 2011). Such policies include the rules and regulations of special education programmes, which outline the rights of children with disabilities and highlight the key rules guiding the provision and certification of special education (Aldabas, 2020). Furthermore, the MoE capitalises on special and general education training programmes and workshops to equip teachers with enhanced skills and expertise (Alyami, 2014). The MoE also invests heavily in curriculum development and the distribution of assistive technologies within schools to support special education teachers in implementing such diploma programmes and advancing their practices using teaching aids and guides (Alyami, 2014). Furthermore, the MoE collaborates with higher education institutions, such as Saudi universities. It engages in partnerships with international organisations, such as the United Nations Educational, Scientific, and Cultural Organization, to help teachers advance their knowledge and skills in special education through customised learning programmes that make them stu-

dent-centric (Alquraini, 2011). These efforts, conjointly, facilitate professional development in special education teachers, ensuring they satisfy evolving educational needs in students with disabilities.

The demand for highly skilled special education teachers in Saudi Arabia is increasing annually, with the government aiming to integrate more students with disabilities into mainstream education. The country prioritises achieving significant strides in special education, which aligns with the goals of Vision 2030. Saudi Arabia aims to become a global leader in special education through strategic initiatives that target teacher competencies and education systems (Gibbs & Bozaid, 2022; Al-Hendawi et al., 2023). Moreover, the country seeks to achieve a comprehensive education system by 2030, allowing the integration of students with disabilities into mainstream classrooms (Allmnakrah & Evers, 2020; Mohammed, 2018). Most importantly, Vision 2030 aims for the nation to adopt a multi-sectoral approach to advance special education, with private stakeholders actively contributing to achieve the national agenda (Al-Hendawi et al., 2023). Although the country is making significant advancements in the education and policy environments, a substantial proportion of in-service teachers remain under-skilled when it comes to offering inclusive education. These challenges primarily emanate from a lack of targeted professional development that equips teachers with skills and strategies to navigate an evolving learning environment (Gibbs & Bozaid, 2022). Decision-makers have developed an optimal investment diploma programme to address this issue and equip in-service teachers with valuable training that enables them to deliver inclusive educational experiences to students.

1.1. Research Objectives

This research examined the perceptions of Saudi Arabia's in-service special education teachers toward the Optimal Investment Diploma, a programme meant to strengthen their professional skills. It investigated the development needs and priorities teachers hoped the diploma would address and assessed whether the programme met those expectations in everyday practice. The study also captured teachers' reflections on how the course influenced their capacity to educate students with disabilities in inclusive classrooms and identified practical obstacles that might hinder smooth adoption across school districts. Finally, it pinpointed components of the diploma and related district efforts that need refinement and outlined objectives to steer future enhancements in inclusive teaching.

1.2. Research Questions

This study set out to determine what in-service special education teachers expect from the Optimal Investment Diploma, how they rate its effectiveness, and how they believe it alters their capacity to teach students with disabilities in inclusive classrooms. Their study also sought to uncover practical barriers that may hinder the programme's objectives and to determine which refinements teachers consider essential within the diploma and across broader district initiatives so as to

strengthen future professional development for inclusive education.

2. Literature Review

This literature review considers the effectiveness of special education professional development programmes, frameworks, and models for designing an optimal investment diploma programme for in-service teachers. It discusses the challenges and barriers to teachers' professional development engagement, and policies and initiatives for improving special education by training teachers in Saudi Arabia.

2.1. The Effectiveness of Professional Development Programmes for Special Education Teachers

The effectiveness of in-service special education teachers relies significantly on the positive interaction among multiple factors, ranging from pre-service learning and personal skills and competencies to the culmination of their teaching experiences (Robinson, 2017). Evidence indicates that sustained support in translating prior experience into daily teaching practice enhances both instructional quality and student achievement (Billingsley & Bettini, 2019; Şenay İlik & Sari, 2017). Targeted professional development has been shown to raise special educators' knowledge, attitudes, and confidence when working with learners who have disabilities (Kurniawati et al., 2017; Yada & Savolainen, 2017). The literature highlights several training priorities: data-informed decision-making, accurate identification of learner needs, clear communication, and focused skill building for teachers of students with disabilities (Byrd & Alexander, 2020; Chitiyo et al., 2019). Collectively, these findings demonstrate that well-designed professional development equips special education teachers to adapt to diverse classroom needs and deliver high-quality learning experiences.

2.2. Frameworks and Models for Designing Effective Professional Development Programmes for In-Service Teachers

Effective professional development blends ongoing training with the introduction of fresh teaching ideas and adjustments to meet changing student needs and shifts in education policy. To succeed, such programmes should rest on principles that define how teachers learn best (Desimone & Pak, 2017). A useful framework is Malcolm Knowles's Adult Learning Theory, or andragogy, which recognises that adults learn most effectively when they direct their own learning, draw on personal experience and tackle real-world problems (Machynska & Boiko, 2020; Knowles et al., 2014). According to Knowles, effective adult learning involves principles, such as active involvement in instructional development, grounding in personal and professional experiences, and a problem-centred orientation (Knowles et al., 2014).

Studies have shown that the most successful initiatives are problem-focused, relevant to teachers' daily contexts and in line with their professional goals (Zepeda et al., 2014; Garet et al., 2001; Desimone & Pak, 2017). However, auton-

omous professional development is rarely effective, and teachers may resist programmes that do not directly address their learning needs (Zepeda et al., 2014; Walter et al., 2023).

Instructional coaching can overcome this hurdle by linking teachers with mentors and peers for ongoing, context-based support (Hammond & Moore 2018; Desimone & Pak, 2017). Studies have demonstrated the effectiveness of this approach in improving the teaching strategies of special and general education teachers (Harris, 2014; Kraft et al., 2018; Czajka & McConnell, 2016).

When the self-directed principles of andragogy are paired with the hands-on guidance of instructional coaching, professional development can be tailored to the real needs of in-service special education teachers, from analysing student data to refining communication strategies (Byrd & Alexander, 2020; Chitiyo et al., 2019; Reddy et al., 2021; Snyder et al., 2015; Richardson et al., 2020).

2.3. Challenges of and Barriers to Professional Development Engagement Programmes for Special Education Teachers

Professional development encounters several barriers, including human and resource constraints, that hinder its effectiveness. Special education teachers must navigate a rapidly changing teaching environment that encompasses shifting student needs, academic strategies, and resources (Alshahrani & Abu-Alghayth, 2023; Aldabas, 2020; Alnahdi, 2020). Understanding this environment and its limitations is indispensable for developing effective professional development programmes that can help overcome the challenges and barriers to engaging special education teachers (Olson & Roberts, 2020). Time is one of the most pronounced barriers to professional development engagement, with most special education teachers claiming to have overstretched school schedules (Zhang et al., 2020). Special education teachers reported that allocating non-school hours to professional development would weigh on their schedules and increase the risk of burnout.

Professional development requires adequate and coordinated input to address deficiencies in educators. Studies have identified a lack of resources as a key constraint in professional development engagement, with teachers and training programmes lacking adequate finances and meeting spaces (Aldabas, 2020; Alsolami, 2022; Alshahrani & Abu-Alghayth, 2023). In most educational settings, teachers had to forego development initiatives to prioritise other school-based programmes (Henry & Namhla, 2020). Some schools reported that budget shortages prevented them from hiring qualified special-education staff, forcing them to cancel planned training sessions (Alshahrani & Abu-Alghayth, 2023). Other research confirms that teachers often lack financial rewards for attending professional development, with no extra pay or non-monetary benefits provided (Badri et al., 2016; Zhang et al., 2020). In a few cases, less experienced teachers did receive modest salary supplements for training completed outside normal hours, a benefit not extended to veteran staff.

2.4. Policies and Initiatives for Improving Special Education Teacher Training in Saudi Arabia

Saudi Arabia is overhauling its education policies to modernise schools and promote inclusive learning, a goal laid out in Vision 2030. The government has invested heavily in the professional development of pre- and in-service teachers, aligning with Vision 2030 (Vision, 2024). Substantial funding now supports professional development for both pre-service and practising teachers, and public schools receive new tools and materials to help pupils with disabilities succeed in mainstream classrooms (Almaki et al., 2025).

The MoE works with local universities to run ongoing courses for special-education teachers. These programmes keep educators current on instructional methods, assistive technologies and the range of disabilities they encounter (Alshahrani & Abu-Alghayth, 2023).

However, numerous studies have highlighted the absence of robust in-service education and training (INSET) professional development programmes for special education teachers despite their strategic value in achieving Vision 2030 (Melhem, 2020; Abed & Shackelford, 2020). Most structured INSET still takes place during pre-service preparation (Melhem, 2020; Alanazy & Alrusaiyes, 2021).

Challenges of continuous professional development include resource allocation, lack of motivation due to limitations of time and compensation, and a narrow portfolio of professional development courses offered by higher education institutions (Almaki et al., 2025; Badri et al., 2016; Chitiyo et al., 2019). Deliberate efforts by the government to invest in the special-needs education system and increase funding for incentivising teachers are necessary to address these challenges.

Current literature suggests that professional development positively influences student outcomes, self-efficacy, and time management. Knowles' theory of andragogy and the instructional coaching model form the groundwork for effective professional development programmes. Several challenges and barriers to professional development were identified, including time and financial resources. Newer policies and initiatives implemented by the government of Saudi Arabia promise a vibrant educational future.

3. Methodology

3.1. Qualitative Approach Using Semi-Structured Interviews

This study examined how in-service special education teachers in Saudi Arabia view the Optimal Investment Diploma programme. Adopting a qualitative design, the study gathered insights through semi-structured interviews, which combined specific prompts with open-ended questions to capture participants' experiences and perspectives in depth (Ruslin et al., 2022). The lead researcher conducted each interview, recording responses for later transcription and analysis. This approach struck a balance between focused inquiry and the flexibility needed to follow new

lines of discussion, ensuring a rich dataset from which the study's conclusions were drawn.

3.2. Participant Selection Criteria and Sampling

This study used purposive sampling to select participants with direct, relevant experience (Andrade, 2021). A total of 23 in-service special education teachers were recruited, all of whom were enrolled in the Optimal Investment Diploma programme based in Bisha, Saudi Arabia. The researcher reached out to participants personally—through direct conversations and phone calls—after confirming their current teaching roles and active participation in the diploma. Only teachers who were currently practising and enrolled in the programme were included, as their experiences were central to understanding how the diploma influenced real classroom practices. No additional exclusion criteria were applied.

Bisha was chosen intentionally as the study site due to the nature of its school district, which includes a wide network of rural schools that serve diverse student populations and present unique challenges for inclusive education. Many of the participating teachers worked in these rural areas, offering rich, contextually grounded perspectives on the realities of implementing inclusive teaching strategies across different educational settings.

Interview transcripts were examined using Braun and Clarke's six-phase thematic analysis. First, the researcher immersed in the data by reading and rereading each transcript. Second, meaningful segments were labelled with initial codes that captured key ideas. Third, related codes were clustered to form provisional themes. In the fourth phase, these themes were reviewed against the entire data set to confirm their coherence and relevance. Fifth, each theme was refined, defined and given a clear name that reflected its core insight. Finally, the sixth phase involved weaving together the themes into a narrative account that answers the research questions and highlights the teachers' shared perspectives on the diploma (Andrade, 2021). While the study focused on a single city, Bisha was selected for its active implementation of the diploma programme and its educational diversity, offering a meaningful lens through which to explore teacher experiences; however, generalisations to the broader Saudi educational context should be approached with caution.

3.3. Data Collection

Interview Protocol Development

An interview protocol was developed to collect detailed information about participants' perceptions of an optimal investment diploma programme designed to train special education professionals. Questions were designed to cover key areas on this topic, including the impact of the programme on teaching practices, the relevance of the content to the professional needs of teachers, and the challenges teachers encountered during the initiative. The interview questions were prepared in Arabic and were then translated into English, as de-

picted in **Table 1**.

Table 1. Interview questions.

General Information	Specific Interview Questions
How many students with disabilities are there in your classroom?	What key professional development objectives should a school district prioritise to equip teachers and staff with the knowledge and skills needed for inclusive instructional approaches?
What type of classrooms (inclusive, resource rooms, or integrated classrooms) do you teach?	What specific modifications or updates does an optimal investment diploma programme need to better support inclusive education and meet students' needs?
Which grade do you currently teach?	What is the greatest challenge or barrier a school district may face when fully implementing the objectives of an optimal investment diploma programme?
Which type of disabilities do you have experience with?	After completing an optimal investment diploma programme, what are the most significant changes you have noticed in your ability to support students with disabilities? Please give specific examples.
How many in-service years of experience do you have?	How would you assess the overall effectiveness of an optimal investment diploma programme regarding teaching practices, student outcomes, confidence and competence? Provide examples or evidence.
	Which aspects of an optimal investment diploma programme were most effective in supporting your professional growth as a special education teacher? Give specific examples.
	Why was an optimal investment diploma programme initiated for in-service special education teachers?
	How do professional learning opportunities shape the special education teaching profession?

The investigator started the interview by obtaining informed consent, which provided an introduction to the study, its purpose, expectations from the respondents, and implications of participating in the data collection exercise. The investigator notified the participants about their freedom to engage in or withdraw from the study without any repercussions. The participants were required to consent to participate before the data collection started. This systematic approach informed the respondents about the entire interview process.

3.4. Data Analysis

The data were evaluated using a thematic analysis approach, which involved identifying and interpreting patterns emerging from the qualitative data. This process began with the principal investigator immersing themselves in the data by reading and re-reading interview transcripts to gain a comprehensive understanding of participant responses (Peel, 2020). Initial codes were generated inductively, allowing recurring ideas, topics, and phrases to emerge naturally from the data. These codes were then grouped into broader themes using Braun and Clarke's six-phase framework (Braun & Clarke, 2006, 2022), which in-

cludes familiarisation, coding, theme development, review, naming, and final reporting.

To enhance the rigour and credibility of the analysis, two independent coders—both with graduate-level training in qualitative educational research—coded the transcripts separately. Following independent coding, the coders met to compare and discuss discrepancies, and consensus was reached through deliberation. Inter-coder reliability was assessed using Cohen’s kappa, which yielded a coefficient of 0.81, indicating strong agreement. This multi-coder approach, alongside the use of consensus coding and triangulation of themes, contributed to the study’s overall trustworthiness.

4. Results

This study explored perceptions of in-service teachers about an optimal investment diploma programme for training special education professionals in Saudi Arabia. Qualitative data were collected through semi-structured interviews and were assessed using thematic analysis. In addition to thematic results, data collected from the interviews also provided crucial insights into the participants’ demographic characteristics.

The most common types of disabilities were autism and intellectual disabilities, with eight teachers specialised in providing education to students with these disabilities (Table 2). This was followed by hearing impairment and general disability, with five and two teachers, respectively, specialised in teaching students with these disabilities. Students with attention-deficit/hyperactivity disorder (ADHD), visual impairment, behavioural disorders, and speech impairment had one teacher each dealing with a specific type of disability.

Table 2. Frequency of participant disability specialisation.

Disabilities	Frequency
Autism	8
Intellectual	8
ADHD	1
Hearing Impairment	5
General disability	2
Visual impairment	1
Behavioral disorders	1
Speech	1

Responses indicated that all participants had significant in-service experience, with their experience ranging between five and twenty-five years. Four educators (the highest number) noted that they had been teaching for six years. The majority of teachers recorded having in-service experience between five and ten years.

Thematic analysis showed five primary themes in the data, as shown in **Figure 1**. Each theme has five subthemes, as shown in **Table 3**.

Table 3. Themes and sub-themes emerging from data analysis.

Theme	Sub-Theme	Quote
Collaborative and Experiential Learning Opportunities	Peer-to-Peer Learning and Sharing of Ideas	‘Collaborative learning sessions help us share ideas and learn from our peers’.
	Hands-On Workshops and Simulations	‘Actively participating in learning activities is key for me to improve my skills’.
	Observing Experienced Teachers in Action	‘Learning from teachers who have mastered certain techniques is so insightful’.
Diversification of Teaching Strategies and Skills	Expanding the Toolkit for Supporting Diverse Student Needs	‘Learning about different instructional approaches has expanded my toolkit for supporting students with disabilities’.
	Exposure to Evidence-Based Approaches	‘Incorporating universal design for learning principles has transformed my inclusive practices’.
	Enhancing Inclusive Instructional Practices	‘The training has significantly improved my ability to successfully include students with disabilities’.
Specialised and Ongoing Training	In-Depth Courses on Specific Special Education Topics	‘The deep dive into co-teaching models has transformed my collaborative practice’.
	Continuous Learning and Periodic Training Programmes	‘The periodic training sessions ensure I’m constantly enhancing my teaching skills’.
	Opportunities for Skill-Focused Professional Development	‘Developing expertise in assistive technology has been a game-changer for me’.
Accessibility and Encouragement	Active Outreach and Support for Participation	‘Having a designated staff member who can assist with registration and logistics makes a big difference’.
	Learning Alongside Experienced Mentors and Colleagues	‘Learning alongside my more experienced peers is extremely beneficial’.
	Addressing Barriers to Professional Development Engagement	‘Reducing financial and time burdens is crucial for increasing participation rates’.
Practical Application and Relevance	Linking Theory to Classroom Practice	‘Seeing the direct impact of what I’ve learned on my students’ outcomes is extremely motivating’.
	Developing Contextualised Skills and Strategies	‘Learning techniques directly applicable to my students’ unique needs has been invaluable’.
	Addressing Authentic Challenges in the Inclusive Classroom	‘Gaining practical strategies for effective co-teaching and collaboration has transformed my inclusive practices’.

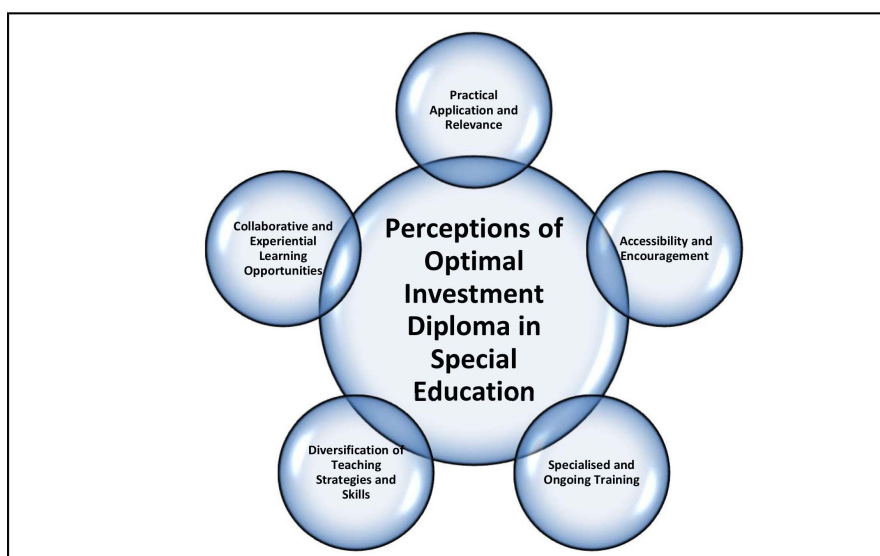


Figure 1. Five themes of perceptions of the optimal investment diploma in special education.

Theme 1: Collaborative and Experiential Learning Opportunities

This theme described various skills and learning opportunities that in-service teachers needed the most and that an optimal investment diploma programme could deliver. As such, it answered the research question, ‘What are the perceived needs of in-service special education teachers from an optimal investment diploma programme?’ Participants highlighted the importance of collaborative and experiential learning opportunities and found that hands-on and interactive lessons were memorable and effective for classroom replication. Specifically, the participants noted that they benefited from the transfer of practical skills, instructional strategies, and key experiential lessons through peer-to-peer learning and continuous sharing of ideas. Participant 7 stated, ‘Collaborative learning sessions help us share ideas and learn from our peers’. Participants noted that these opportunities allowed them to brainstorm potential solutions to classroom issues, ultimately leading to innovative solutions.

The respondents also felt that professional development programmes allowed them to take advantage of hands-on learning through workshops and simulations. They reported that these sessions were interactive and effective in instilling crucial skills among attending students with disabilities. Participant 14 stated, ‘The practical, hands-on workshops are where I learn the most’, thus highlighting the effectiveness of the programme. Furthermore, simulations allowed teachers to practice their newly acquired skills, creating opportunities for adjustment and improvement following peer and mentor input.

Professional development programmes also provided opportunities for teachers to observe their peers attending students in classrooms. Although all participants were in-service teachers, their practical experiences varied widely, ranging from early-career teachers to veterans. Teachers with a theoretical knowledge of

various inclusion strategies had the opportunity to apply those in real-world scenarios. 'Seeing effective inclusion strategies modelled in real-time is extremely helpful,' participant 13 stated. Similarly, early career teachers used these opportunities to adjust their practices while seeking advice from their veteran counterparts. Participant 6 especially appreciated the opportunity to advance their classroom practices, noting, 'Observing master teachers in their classrooms is invaluable for my own practice'. Ultimately, the professional development programme proved immensely helpful for collaboration among peers and exchanging knowledge via experiential learning opportunities.

Theme 2: Diversification of Teaching Strategies and Skills

This theme explored the perceptions of in-service special education teachers regarding an optimal investment diploma programme, explicitly highlighting what they understood to be its most significant benefits and drawbacks. This answered the research question, "What are the perceptions of special education teachers about the effectiveness of the implemented in-service professional development programme, such as this optimal investment programme?" In addition to creating opportunities for collaboration, the professional development programme was instrumental in enabling teachers to acquire new instructional strategies and advance their existing strategies. First, the participants agreed that the programme helped them expand their "skill toolkits" while supporting diverse student needs. Participant 9 said, "I feel much more equipped to differentiate my lessons and accommodate diverse learners", indicating the programme's ability to impact student learning directly. Most participants felt that the training enabled them to access a broader range of instructional skills, which helped them tailor their lesson plans to meet the diverse needs of students. Importantly, the training programme allowed teachers to become acquainted with evidence-based strategies, such as the universal design for learning. The participants were pleased to realise they could access scientifically proven strategies for different student groups. Participant 4 stated, "Learning about research-backed instructional methods has improved my effectiveness". Notably, some teachers felt that scientific research was an underexplored source of instructional strategies they could not incorporate into their practice. They further acknowledged the crucial role of a professional development programme in enhancing their understanding and application of inclusive instructional practices. The teachers acknowledged that they experienced numerous problems while trying to incorporate inclusivity into their classrooms, with some losing confidence in their ability. However, the programme was instrumental in building teachers' understanding of inclusivity and providing guidance on achieving it in classrooms. Participant 7 observed, "I'm much more confident in my inclusive teaching strategies since participating in this programme". Thus, the teachers felt that incorporating inclusivity skills gained from the programme would have a noticeable effect on the performance of students with disabilities in classrooms.

Theme 3: Specialised and Ongoing Training

This theme addressed teachers' understanding of the key improvements, if any, in their instruction to and interactions with students with disabilities that they could attribute to an optimal investment diploma programme. As such, this theme answered the research question, 'What are the perceived differences that an optimal investment diploma programme has made to special education teachers' ability while teaching students with disabilities in an inclusive classroom setting?' The participants felt that the professional development programme emphasised disseminating much-needed skills and strategies to complement specific knowledge gaps in their practice. The participants agreed that the course approached teacher training from an in-depth perspective, ensuring they had a thorough understanding of special education topics. Participant 11 reported, 'Exploring evidence-based behaviour management techniques in-depth was incredibly valuable'. Equally, they noted that the continuous professional development programme ensured that the participants stayed up-to-date with the rapidly changing educational environment. Consequently, they felt that the programme improved their readiness to deal with any emerging student needs within classrooms, with Participant 8 stating, "...the periodic training sessions ensure I am constantly enhancing my teaching skills". Additionally, the programme created opportunities for skill-focused professional development. The teachers noted that the programme offered numerous learning opportunities that suited professionals with different skillsets, with each educator having one or more areas of focal skills that required professional development. "Developing expertise in assistive technology has been a game changer for me", said Participant 10. Therefore, the participating teachers widely appreciated how the professional development programme emphasised the need for specialised and continuous training.

Theme 4: Accessibility and Encouragement

This theme shed light on the challenges and barriers that in-service special education teachers experienced as they attempted to implement the objectives of the professional development programme. This theme answered the research question, "What are the potential barriers to implementing the objectives of an optimal investment diploma programme?" Teachers felt that there was a need to maintain a camaraderie environment to enhance the effectiveness of the programme, as challenges to collaboration (such as inaccessibility) threaten their ability to interact with each other. Thus, respondents argued for maintaining an environment that encouraged them to motivate each other and actively reach out to their peers. Participant 3 stated, "It's important to actively encourage and support special education teachers to participate in professional development activities". Furthermore, the participating teachers advocated for an environment enabling both experienced and new professionals to collaborate and share skills and expertise. Participant 15 stated, "Collaborating with colleagues who have mastered certain techniques is helpful for my growth". Consequently, the participants encouraged programme organisers to ensure that professional development programmes considered existing barriers to engagement and worked around them. They recom-

mended measures, such as working around school schedules, availing oneself of on-site training, and alleviating fiscal and time barriers to participation. Participant 5 mentioned, “Offering flexible scheduling and virtual options makes professional development much more accessible”. Teachers were cognizant of the barriers to engaging in a professional development programme and advocated for measures to alleviate these challenges.

Theme 5: Practical Application and Relevance

This theme captured teachers’ suggestions for improving an optimal investment diploma programme, ensuring that they highlighted specific objectives to mark completion of these improvements. This theme addressed the research question, “What changes are potentially needed in an optimum investment diploma programme or within the school district’s professional development initiatives regarding inclusive classroom settings, and what are the key objectives for implementing these changes?” The participants observed that the programme embodied effective adult learning by linking theoretical and practical comprehension to situations relevant to classrooms. The participants noted that they could easily implement the knowledge from the programme in classrooms and significantly change their instructional strategies. Participant 8 stated, “I appreciate how the workshops explicitly show us how to implement the strategies in our classrooms”. Participants also felt that the programme helped show how teachers could approach contextualised problems within classrooms and develop amicable solutions. The statement by participant 15, “Exploring solutions to the authentic problems I encounter in my inclusive classroom has been incredibly helpful”, embodies these sentiments, showing that the programme is impactful in problem-solving. Most importantly, the participants agreed that they had tailored the programme to resolve authentic issues stemming from inclusive classrooms. Teachers felt that they were more equipped to understand and address the needs of students with disabilities than their general education counterparts. Participant 12 noted, “I feel much more prepared to address the diverse learning needs of all my students after participating in this programme”. Ultimately, these findings indicate overwhelmingly positive responses from and perceptions of teachers about an optimal investment diploma programme designed to train special education professionals in Saudi Arabia.

5. Discussion

This study explored perceptions of in-service teachers about an optimal investment diploma programme designed to train special education professionals in Saudi Arabia. Overall, teachers had positive views of the programme, aligning with the literature that supports advancements in the Saudi MoE (Alshahrani & Abu-Alghayth, 2023). The participants reported improved inclusivity in general education classrooms, countering the common scepticism that teachers attending children with special needs were unprepared.

This study identified the strengths and limitations of an optimal investment

diploma programme, noting that teachers benefited from new instructional strategies, collaboration opportunities, and enhanced confidence (Kennedy et al., 2017; Alexander, 2020; Horan & Merrigan, 2019; Kennedy et al., 2017; Kurniawati et al., 2017). The five themes that emerged from participants' experiences—collaborative and experiential learning, diversification of teaching strategies, specialised and ongoing training, accessibility and encouragement, and practical application—align closely with key principles of Adult Learning Theory (Knowles et al., 2014). Teachers consistently valued problem-centred learning, the relevance of content to their classrooms, and the autonomy to adapt strategies to their own students—hallmarks of andragogical approaches (Machynska & Boiko, 2020). These findings affirm that in-service teachers learn most effectively when they are actively involved, draw from prior experience, and engage with immediately applicable skills. Furthermore, the emphasis on mentorship, peer modelling, and hands-on workshops reflects the foundational practices of instructional coaching, which combines real-time guidance with reflective dialogue to support teacher growth (Desimone & Pak, 2017; Kraft et al., 2018). By integrating these elements, the diploma programme succeeded in moving beyond passive training toward sustained, practical professional learning. This coherence between theory and lived experience underscores the programme's strength in addressing the real-world challenges of inclusive education. As one participant noted, "seeing the direct impact of what I've learned on my students' outcomes is extremely motivating," exemplifying how adult learning and coaching frameworks resonate in practice. It also documented barriers to professional development engagement, emphasising the need for interdisciplinary solutions involving educators and decision-makers (Badri et al., 2016, Olson & Roberts, 2020; Zhang et al. 2019).

The findings of this study suggest that an optimal investment in a diploma programme equips teachers to offer better and more advanced support to students with disabilities, resulting in improved learning outcomes (Kennedy et al., 2017; Byrd & Alexander, 2020). Although outcomes of the programme show promise, its scalability remains uncertain owing to the limited sample size used in this study. While the study offers valuable insights into the professional development experiences of in-service special education teachers, several limitations must be acknowledged. First, data were collected solely through self-reported interviews, which may be subject to recall bias or selective interpretation of experiences. Participants may have unintentionally overstated the programme's benefits or understated challenges due to social desirability—wishing to present themselves, their schools, or the diploma programme in a more positive light. While every effort was made to create a safe and non-judgmental interview environment, such effects are an inherent risk in qualitative, self-report-based designs. Furthermore, the absence of classroom observations means that the findings reflect perceived rather than observed changes in instructional practice. This limits the ability to triangulate claims with behavioural evidence or student outcomes. Nonetheless, the narratives shared by teachers offer authentic and meaningful windows into their lived

experiences, and their voices remain critical for shaping inclusive education policy and practice in Saudi Arabia. This single-city sample (Bisha) may limit contextual breadth; while the Optimal Investment Diploma is delivered under nationally standardized Ministry of Education guidelines, transferability to other regions should be interpreted cautiously. Future research would benefit from integrating classroom observations and student feedback to gain a more comprehensive understanding of the programme's real-world impact.

Future research should evaluate the programme's impact on student outcomes, teacher retention, and job satisfaction, and investigate students' perceptions about training teachers through the programme. These areas of study will enhance the overall understanding of the effectiveness of the programme.

The study recommends that teachers engage in continuous professional development so their instructional strategies and understanding of student needs remain current. School and district administrators should supply funding, schedule dedicated time, and arrange peer-learning opportunities to strengthen inclusive practice in Saudi classrooms. Regional educational vice principals need to establish policies that make professional development standard practice, mobilise local resources, and explore alternative training routes to build teacher capacity. At the national level, the Ministry of Education should deepen partnerships with universities to design and implement coherent professional development policies and secure the financial and institutional support required for their success.

Future research should expand the scope of this study by including a larger and more diverse sample of in-service special education teachers from different regions of Saudi Arabia to develop a more comprehensive understanding of perceptions about an optimal investment diploma programme. Longitudinal studies should also be conducted to examine the long-term impact of such programmes on teachers' instructional practices, student learning outcomes, and the overall inclusiveness of the educational environment, assessing the sustainability and effectiveness of these programmes over time. Exploring the perspectives of other stakeholders, such as school administrators, policymakers, and teacher educators, would offer a more holistic understanding of the programme's strengths, challenges, and areas for improvement. Investigating specific factors that contribute to the successful implementation of the programme and comparing the experiences of participating and non-participating teachers could help identify the key elements that make the programme effective. Additionally, research should examine the potential barriers and challenges that may hinder the widespread adoption and sustainability of the programme and develop strategies to address these obstacles. Finally, aligning an optimal investment diploma programme with broader educational policies and initiatives in Saudi Arabia, such as Vision 2030, will ensure successful integration of the programme and confirm its relevance to the country's overarching goals for special education.

6. Conclusions

This study aimed to understand the perceptions of in-service teachers regarding

an optimal investment diploma programme designed to train professionals to work with students with special needs in Saudi Arabia. The analysis underscored several findings relevant to the research questions. First, it established that the perceived needs of in-service special education teachers for an optimal investment diploma programme centred around better access to specialised training, the provision of ongoing professional and peer support, and the demonstration of practical strategies to advance inclusive education. This finding is especially significant for teachers, administrators, and officials in the MoE, as they have the resources to capitalise on these programmes and advance the skills and competencies of special education teachers. Second, special education teachers' perception of the effectiveness of an optimal investment diploma programme was positive, especially in creating collaborative spaces, advancing instructional strategies, and expanding their notion of inclusivity. Equally, this finding is significant for policymakers who can successfully incorporate these sentiments into policies to encourage and boost professional development among teachers. In addition, this study established that an optimal investment diploma programme significantly enhanced the ability of special education teachers to meet the needs of students with disabilities in inclusive classroom settings. This finding is significant for teachers who can work towards developing their skills after understanding the importance of these programmes. However, several barriers to implementing the objectives of an optimal investment diploma programme were noted, including time constraints, a lack of financial resources, a deficiency in motivation, and inadequate school support. This finding is significant for all educational stakeholders willing to work collaboratively to alleviate these challenges. Several changes to schools and development programmes, including more tailored content, continued mentorship and support, heightened collaboration, and more emphasis on practical applications, are needed to facilitate student learning outcomes and improve the readiness of teachers to coordinate inclusive classrooms effectively. This finding is significant for policymakers and programme developers who can use this information to adjust professional development programmes to address the needs mentioned above.

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Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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