Moving inclusion forward for students with special educational needs in the Asia-Pacific region

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This paper draws on a comparative study of seven jurisdictions in the Asia-Pacific region to examine current challenges to progressing inclusive education for students with special educational needs (SEN) in mainstream schools. The study used a qualitative approach to collect data from each jurisdiction through a purposive sampling of knowledgeable, university-associated informants. Content analysis was used to identify and quantify specific challenges reported in the data. Subsequently, these items were coded as themes to form a matrix of challenges within and across jurisdictions. Findings revealed that challenges were broadly consistent with recent global trends and shared many commonalities, despite occurring in diverse societal, political and education systems. These challenges are: lack of adequate initial teacher education and ongoing professional development for practicing teachers; lack of resources and support to meet the needs of students with SEN; inconsistent policy guidelines and implementation action plans; restricted stakeholder engagement and collaboration across all levels of education; and limited local inclusion research to inform practice in schools. The findings underscore the need for government and institutional commitment and oversight to bridge the policy-to-practice gap, and an urgent need for local research to identify and disseminate successful approaches for including students with SEN throughout the region.

KEYWORDS

Asia-Pacific, barriers, disability, inclusive education, special educational needs

Introduction

Over the past three decades, United Nations (UN) declarations and conventions have set the agenda for advancing policies and practices around the movement toward inclusion, with inclusive schooling now being regarded as a global norm throughout education systems (Powell et al., 2016). However, an agreed model for inclusion is still contested in educational discourse, and this is affecting the inclusion agenda. The discourse reflects different conceptualizations of inclusion and the driving force behind the ideal. For example, Opertti et al. (2014) adopted a socio-political perspective to document the genealogy of inclusion, highlighting influences that have provided conditions for inclusive education. They identified: (a) the significance that human rights discourses have played, commencing with the UN General Assembly (1948); (b) the emphasis on disability (United Nations Educational, Scientific and Cultural Organization, 1990) and special educational needs (United Nations Educational, Scientific and Cultural Organization, 1994); (c) the promotion of education for all via the targeting of marginalized groups and individuals (United Nations Educational, Scientific and Cultural Organization, 2000); and (d) the transformation of educational systems through policy guidelines (United Nations Educational, Scientific and Cultural Organization, 2005, 2009).

During the same period, Göransson and Nilholm (2014) reviewed the research literature to distill four contrasting definitions of inclusive education that appeared to impact the scope and implementation of reforms and accompanying practices. They proposed that the four definitions have a hierarchical relationship, with each level of definition building on the previous one. Definitions encompass: (a) inclusion defined as the placement of students with disabilities and SEN in mainstream classrooms; (b) inclusion defined as meeting the social and academic needs of students with disabilities and SEN; (c) inclusion defined as meeting the social and academic needs of all students; and (d) inclusion defined as the creation of communities within and across schools and classrooms.

These conceptual and analytical mappings suggest that the move toward inclusive education has been evolutionary rather than revolutionary, reflected by the iterative shifts in inclusion discourses, policies, and practices. Consequently, many education systems globally have found the translation of fundamental concepts and principles into national policy and enactment to be a convoluted and problematic process (Karim and Hue, 2022). This paper reports on the challenges faced across seven jurisdictions throughout the Asia-Pacific region in implementing inclusion in their national contexts and the subsequent recommendations made for improving the quality of education for students with SEN in mainstream schools. The data examined are derived from detailed information provided within case studies for seven jurisdictions in the Springer publication *Inclusion for Students with Special Educational Needs across the Asia Pacific* (Beamish and Yuen, 2022). These case studies relate to five Asian settings (Hong Kong SAR, Macao SAR, Japan, Singapore, and South Korea) and two Anglo-Pacific settings (British Columbia and Australia).

All jurisdictions studied have developed economies and social policies to support effective student access to compulsory education (early childhood through to tertiary level) and sufficient staffing and resourcing of learning environments (OECD., 2022). Except for British Columbia where all students are educated in mainstream schools, the six other jurisdictions still have dual education systems that cater for students with SEN in both mainstream and special schools. However, inclusive education reform described in all jurisdictions reflected the recent UN definition stating:

> Inclusion involves a process of systemic reform embodying changes and modifications in content, teaching methods, approaches, structures and strategies in education to overcome barriers with a vision serving to provide all students of the relevant age range with an equitable and participatory learning experience and environment that best corresponds to their requirements and preferences (UN Committee on the Rights of Persons with Disabilities, 2016).

At this point in time, these jurisdictions can be seen to represent various points on a continuum for advancing inclusive education as influenced by varying political priorities, cultural distinctiveness, historical and geographic circumstances, systemic configurations, and pedagogical traditions. This diversity across Asia-Pacific contexts therefore provides a useful sample for examining implementation barriers to, and recommendations for, progressing inclusive education. The selected jurisdictions were chosen due to their unique and contrasting approaches to inclusive education, which offer valuable insights into how different systems address common challenges.

Hong Kong SAR and Macao SAR, as Special Administrative Regions of China, provide perspectives on how inclusive education policies are implemented within unique administrative and cultural contexts influenced by both Western and Chinese educational philosophies. Japan and South Korea, with their highly developed educational systems, offer insights into how countries with rigorous academic standards are advancing inclusive education within their mainstream schools. Singapore represents a city-state with a strong emphasis on educational excellence and innovation, providing a model for rapid implementation of inclusive policies. British Columbia and Australia, as Anglo-Pacific settings, offer a comparative perspective from Western educational systems that have long histories of inclusive education reform.

The findings derived from these jurisdictions should have implications for improving inclusive practice for students with SEN in other Asia-Pacific contexts. Additionally, the findings derived from this region may have translatability to a wide range of contexts globally. Despite contextual differences, comparative research across countries has the potential to inform inclusive education reforms in countries beyond those in which the original research has been undertaken (Sahli Lozano et al., 2021).

Students with SEN are a diverse group of learners, with definitions of the term varying not only over time, but from country to country (Ainscow and Haile-Giorgis, 1998; Ruijs and Peetsma, 2009) and often within countries (Mitchell, 2015). Drawing on OECD reports, Brussino (2020) provided an operational definition of SEN encompassing three main categories: learning disabilities, physical impairments, and mental disorders. This definition does not include the categories of gifted or disadvantage (as related to socio-economic, cultural, and/or linguistic factors). Student groups covered by SEN provisions in all jurisdictions considered in this paper were identified according to Brussino's definition. For specific details of student groups identified as SEN within each jurisdiction, see Hay et al. (under review).[1]

Informing literature

The Salamanca Statement (United Nations Educational, Scientific and Cultural Organization, 1994) initiated the global movement toward inclusive education; and at the turn of the millennium, UNESCO's Principal Regional Office for Asia and the Pacific (PROAP) recognized the need to prioritize education of students with SEN throughout the region. To achieve this outcome, PROAP funded 3 week-long workshops at Bangkok (Thailand), Beijing (China), and Ahmedabad (India), in addition to providing USD $9,000 for participating countries to generate action plans (Mitchell, 2003). Following these workshops, Mitchell synthesized proceedings into reports and then into a chapter titled, *Challenges and Successes in Implementing Inclusive Education*. This publication documented major issues concerning inclusive schooling as "… the

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1 Hay, S., Beamish, W., and Yuen, M. (under review). Policy perspectives from Asia-Pacific region on inclusion of students with special educational needs.

participants noted that barriers had to be identified and strategies developed to overcome them" (Mitchell, 2003, p. 243). The barriers put forward were identified as occurring at three levels: society, education system, and school.

At the societal level, participants acknowledged that the community, including parents, lacked an understanding of students with SEN and their potential for learning. The issue of parent advocacy was also raised, together with the need for media to play a more prominent role in influencing community attitudes toward this student group. At the system level, participants recognized that legislation was focused on general education and needed to be supplemented by clear policy guidelines on inclusive education. They also acknowledged that inclusive education implementation required targeted funding. Moreover, the pivotal roles played by non-government organizations, educational administrators, and researchers were emphasized. Furthermore, the need for appropriate pre-service and ongoing in-service teacher training was stressed. At school level, participants appreciated that teachers lacked the knowledge, skills, and confidence to educate and include students with SEN in their classrooms, thereby making school-based professional development in inclusive education essential. As principals and other senior teachers make critical decisions regarding school organization and distribution of resources, complementary training for leadership teams was recommended. Importantly, participants also noted that teachers needed to act as appropriate role models of acceptance of students with SEN, in order to shape peer group attitudes and acceptance.

The inventory of major barriers has been expanded, particularly over the past decade as inclusive schooling has progressed throughout the Asia-Pacific. For example, Dua and Dua (2017) listed challenges and barriers across seven categories that have continued to thwart inclusive education efforts in India. The categories and subcategories were: (a) retaining use of the label "special educational needs," (b) attitudinal constraints (social exclusion and discrimination, peer pressure, attitude of regular teachers), (c) school factors (admission criteria, communication problem, building and infrastructure, materials and technology, class size), (d) curriculum, (e) untrained teachers, (f) organization of education system, and (g) resource limitations. This listing, according to Mitchell's (2003) three-level classification system, identifies barriers predominately clustered around the school and classroom.

School-based barriers to inclusive education were also documented by Uttayotha and Scheef (2021). These barriers were: (a) lack of school staffing, (b) a dearth of qualified special educators, (c) the inability of general education teachers to modify curriculum content due to time or lack of knowledge, (d) large class sizes, (e) limited awareness of the effective use of assistive technologies, (f) low levels of government funding, (g) screening and assessment practices, (h) poorly developed individualized education plans, (i) lack of collaboration, both within the school and between the school and other entities, and (j) a general lack of training across all levels of school-based staff.

In contrast to the focus on the challenges identified in the studies noted above, Hosshan et al. (2020) conducted a scoping review of factors facilitating inclusive schooling within the Southeast Asian region. For the purpose of this paper and its focus, findings are only reported in relation to the inputs and processes categories. Critical inputs were identified as: (a) policy, (b) staff professional development and teacher education, (c) resources and finance, (d) leadership, and (e) curriculum. Except for the notable inclusion of policy, the remaining inputs had parallels with respect to the barriers identified above. Effective processes were identified to be: (a) school climate, (b) school practices, (c) classroom practices, (d) collaboration and shared responsibility, (e) support for individuals, and (f) roles of special schools. Taken together, these findings overlap and extend the school-based inventories above.

The informing literature presented above on challenges highlights the intricate interplay between factors at both school and system levels that hinder the effective implementation of inclusive education. While most challenges are pinpointed to occur at the school level, it's crucial not to disregard the systemic responsibilities associated with policy formulation, resource allocation, and teacher professional development. These systemic factors significantly influence the extent to which schools can successfully embrace and enact inclusion, particularly for students with SEN. Therefore, a comprehensive understanding of barriers to inclusion necessitates a holistic examination that encompasses both school-level challenges and systemic dynamics.

The current analysis

In this paper, the analysis of barriers (hereafter referred to as challenges) is drawn from case studies describing developments occurring in seven jurisdictions. Jurisdictions responded to a data-gathering brief that sought information on policies, practices, and challenges related to the inclusion of students with SEN in each context. The brief specifically requested information to address the following question: *What are the current challenges and concerns regarding the implementation of inclusion in schools within your local context?* This paper reports only on information provided by small groups of university-associated participants within each jurisdiction in relation to this question.

Method

Settings and participants

The data-collection brief was intentionally sent to high profile researchers who had networked previously with the first author of this paper. These researchers were based at universities in a mix of Eastern and Western jurisdictions which were characterized not only by substantial cultural and ethnic diversity but also strong economic, technological, and educational development. Consequently, these characteristics served as selection criteria: (a) cultural and ethnic diversity as an influence on inclusive policies and practices; (b) economic and technological development as an influence on resource availability for inclusive education; and (c) education system structure as an influence on the implementation of inclusive education in schools. As indicated previously, the jurisdictions represented in this study were Singapore, Hong Kong SAR, Macao SAR, South Korea, Japan, British Columbia, and Australia. Collectively, these seven jurisdictions exemplified a range of political, cultural, and educational environments, making the

research findings applicable and informative for the Asia-Pacific region and a global audience.

Participants in this study ($n = 26$) were informants who collaboratively co-authored the seven case studies considered in this paper. They were either based at or affiliated with a university located in each jurisdiction. Those based in universities held doctoral-level qualifications, while affiliated participants were at least masters-level qualified. The majority of university-based participants were actively engaged in both teaching and researching within the area of inclusive education policy and/or practice, with many demonstrating additional interests in special needs education. Notably, the vast majority of lead case-study authors had established national and international research profiles concerning inclusive education. As a collective, these participants formed an expert group, who were approached in recognition of their capacity to offer informed perspectives and commentary on the implementation of inclusive education within their specific jurisdictions. They were regarded, therefore, as knowledgeable, outside informants (Chen et al., 1993) who could provide meaningful insights enabling a macro-comparative overview and synthesis of the challenges related to implementing inclusive education across seven Asia-Pacific jurisdictions. These expert participants therefore comprised a purposive sample (Cohen et al., 2018).

Data gathering procedure and analysis

Data gathering involved collating responses to a brief covering seven key areas, one of which specifically focused on implementation challenges relating to including students with SEN. This brief drew on content from briefs previously used for other Springer books published within the Center for the Advancement of Inclusive and Special Education (CAISE) series. Additionally, the brief was informed by numerous overlapping literature reviews related to (a) inclusive education policy and practice, and (b) students with special educational needs (SEN). The brief from which this paper is drawn has been attached as an Appendix.

Textual data on challenges for each jurisdiction were analyzed using content analysis, a systematic qualitative method commonly adopted within the social sciences (Creswell and Poth, 2018). This method was considered appropriate because it takes into account context when sorting textual data according to relational categories to identify similarities, differences, and patterns within the text (Schreier, 2012). The first two authors of this paper followed a seven-step procedure adapted from Elo and Kyngäs (2008) and Schreier (2012) to identify and quantify specific challenges within and across jurisdictions. Reliability of the analysis was obtained through a structured process of double-coding and consensus (see Steps 4 and 5).

1. Data familiarization: all collected textual data were read multiple times by the authors to become thoroughly familiar with the content and context.
2. Initial coding: the authors independently coded the data, identifying initial themes and patterns related to the challenges in implementing inclusive education.

3. Development of a Coding Framework: Through discussion, a coding framework was developed based on the initial codes. This framework included major categories that emerged from the data.
4. Double-coding: both authors then applied the agreed-upon coding framework to the entire dataset, coding the text independently to ensure consistency and reliability.
5. Consensus meetings: two meetings were held to compare the coded data, discuss discrepancies, and reach a consensus on the coding categories. Any disagreements were resolved through discussion.
6. Interpretation and aggregation: coding was refined through interpretation and aggregation into challenge categories identified in the literature.
7. Cross-jurisdictional comparison: finally, the identified challenges were quantified and compared across the different jurisdictions to highlight similarities, differences, and unique occurrences.

Limitations of method

The reporting of challenges from the seven jurisdictions varied, with most presenting information in a discrete section, whereas others threaded similar information throughout their reports. In the latter case, the specific challenges had to be carefully separated from the surrounding text and interpreted by the first two authors. Given the potential impact of this reporting difference on the trustworthiness of the data, the authors discussed in detail the extracted challenges to arrive at a consensus on the meaning of each extract according to theme. Nevertheless, these circumstances may have inadvertently introduced some bias into the data analysis procedure. Moreover, variability occurred in the amount of detail relating to challenges in the reports. Furthermore, the reports were informed by what the small group of university-associated participants perceived as important challenges in their specific jurisdiction. As a consequence, reported perceptions may have been restricted by participants' beliefs, experiences, and commitment to inclusive education policy and practice for students with SEN. Taken together, these three aspects (trustworthiness of identification, amount of detail, and participant perceptions) may be viewed as limitations of method which potentially have influenced the subsequent findings discussed below.

Findings and discussion

Findings, together with discussion, are presented in relation to the research question, *What are the current challenges and concerns regarding the implementation of inclusion in schools within your local context?* Our analysis delineated five categories of challenges reported by university informants across multiple jurisdictions, with no unique challenges being identified outside these five categories. Table 1 shows challenges in each category across jurisdictions. In the ensuing synthesis, categories of challenges are introduced in descending frequency of occurrence, serving as a rough gauge of their relative prevalence across the

seven jurisdictions in our Asia-Pacific sample. Consequently, the reporting sequence is as follows: inadequate teacher education and training; limited local research to inform practice in schools; policy formulation and implementation issues; under-resourcing of mainstream schools; and restricted stakeholder engagement. For each category, reported manifestations of challenges within a jurisdiction are detailed, common trends across jurisdictions identified, and connections to relevant literature established. In addition, a summative commentary is provided.

Inadequate teacher education and training

The most pervasive obstacle to inclusive education cited by university informants across all jurisdictions was the lack of adequate initial teacher education (ITE) and ongoing professional training for practicing teachers. This finding is not surprising as only graduates from ITE programs in New Zealand are equipped with the values, knowledge, and competencies for implementing inclusive education in the classroom (Morton et al., 2021). ITE practice in New Zealand, therefore, are in accordance with recent policy advice from the UNESCO Office, Bangkok and Regional Bureau for Education in Asia and the Pacific to governments, which pointed to the need for inclusive education to be embedded in pre- and in-service teacher education and "tackle the sensitive issue of well-established teacher education institutions teaching out-of-date approaches and with little experience in inclusive education" (Kaplan and Lewis, 2019, p. 5).

In contrast, ITE in many other jurisdictions were reported to feature stand-alone units on inclusive practice and/or offer dedicated studies in special needs education. Moreover, informants from several jurisdictions stressed the need for deeper teacher training, particularly in the areas of curriculum differentiation and behavioral support. The 2021 OECD report not only underscored the need to strengthen teachers' ability to modify the curriculum for students with SEN but also acknowledged the negative impact on teacher wellbeing associated with the requirement to continually adjust the curriculum for this student group. Traditional teaching approaches in many jurisdictions have typically not demanded such adaptability in content and methods, with teachers primarily providing instruction to an entire class in a relatively formal manner (see for example, Kim, 2018).

Additionally, many jurisdictions were reported to offer postgraduate programs in special education rather than inclusive education. This approach continues in "exacerbating specialisms" (Hunt, 2020, p. 40) at the expense of promoting collaborative practice, problem-solving and knowledge sharing among teachers. Interestingly, the need for leadership training as recommended by Mitchell (2003) and Hunt (2020) was not mentioned in any reporting. These insights suggest that is time for governments, education systems, and tertiary institutions to take collective responsibility and work together to ensure that all teachers and school leaders are equipped to support all learners.

Limited local research to inform inclusive practice in schools

Overall, our analysis revealed limited local inclusion research in five of the seven jurisdictions, with British Columbia and Hong Kong being the exceptions. In the other jurisdictions, some potential areas of investigation were suggested to address the existing gap between research and practice. Case studies from Australia, Japan, Singapore, and South Korea emphasized the pressing requirement to pinpoint specific obstacles to the inclusion of students with SEN in their respective school contexts. In Singapore and South Korea, the need for local research to enhance the understanding of local conditions that best facilitate inclusion was proposed. Further, various strategies were suggested to advance the inclusion research agenda in several jurisdictions. Enhancing collaborations between schools and local universities were proposed for Australia and Macao, while the broader use of participatory action research involving stakeholders was advocated for Singapore. Additionally, school-based action research with the direct engagement of students was strongly advanced in the case of Japan.

The adoption of one or more of these strategies has the potential to narrow the local research-to-practice gap within jurisdictions. Although research into inclusive schooling includes case studies employing collaborative action research approaches to enhance inclusive practices in schools around the globe (e.g., Ainscow et al., 2004; Deppeler, 2013; Moliner et al., 2021), no mention of limited local research hindering inclusive practice can be located in the literature. Rather, emphasis has been placed on conducting local collaborative research to establish practices for inclusion that have contextual relevance (see Forlin, 2013; Messiou, 2017). Importantly, Hummel (2018) has highlighted how inclusive practices should be constructed through research being undertaken at local sites with local stakeholders. She contends that such an approach allows for the incorporation of socio-cultural, political, and institutional dimensions crucial for the effective implementation of inclusive education within specific contexts. Consequently, the adoption of locally derived research by schools should lead to the enactment of sustainable, contextually sensitive practices compared to drawing upon more generalized recommendations from other regional or national contexts.

Policy formulation and implementation issues

Challenges relating to policy formulation and implementation were reported with respect to four jurisdictions and concerned (a) system-level policies, (b) a school-level policy; and (c) an existing policy discrepancy. In relation to system-level policy formulation, inconsistent government policies were identified as a significant obstacle to inclusive education reforms in Australia, due to each state and territory (rather than the federal government) being responsible for educational administration and service delivery. Based on these circumstances, Anderson and Boyle (2019) have pressed for "a nationally accepted understanding of inclusive education, and the development of an Australian Framework

TABLE 1 Overview of challenges by categories across jurisdictions.

Jurisdictions	Inadequate teacher education & training	Limited local research to inform practice	Policy formulation and implementation issues	Under-resourcing of mainstream schools	Restricted stakeholder engagement
Australia	✓	✓	✓	✓	
British Columbia	✓			✓	
Hong Kong SAR China	✓				
Japan	✓	✓			✓
Macao SAR China	✓	✓	✓	✓	✓
Singapore	✓	✓	✓		
South Korea	✓	✓	✓		✓

Data are based on information provided in case-study chapters.

for Action" (p. 806). In contrast, concern about national-level policies being formulated for implementation without sufficient attention to practical action plans for infrastructure reform were expressed in regard to South Korea. Moreover, in this country, the ongoing national 5-year plan to enhance segregated education in special schools and classes was recognized as being at odds with the philosophy of inclusive education. In terms of school-level policy, the need for a whole-school approach to be officially endorsed by the Macao government was called for. Internationally, this comprehensive approach is increasingly acknowledged as a way to build inclusive schools and classrooms through systematically changing school culture, programs, and pedagogy (see Chan and Yuen, 2015; Kenny et al., 2023). Lastly, an existing policy discrepancy was highlighted between the UN's rights-based approach to inclusive education and the advancement of inclusive schooling in Singapore. The discrepancy is associated with incorporation of the inclusive schooling agenda within the government's broader socio-cultural aspiration to foster an inclusive society. These insights remind us that the interpretation of policies is not an easy matter as it requires an understanding of historical, cultural, and contextual influences as well as national priorities (Lim et al., 2019).

Under-resourcing of mainstream schools

The challenge of adequately resourcing schools was highlighted in the case of three jurisdictions. This issue seems to have reached a critical point in British Columbia where diminishing government funding has led to a reduction in classroom teachers and specialist teachers, increased numbers of students with SEN, and rising student waiting lists at schools. By comparison, concerns were raised about the inequitable distribution of resources among schools in Macao, whereas lack of systemic support for teachers was seen as a resourcing issue in Australia. The lack of funding and personnel issues aligns with findings from the 2021 OECD report, suggesting that teachers worldwide are urging their governments to acknowledge the importance of prioritizing expenditure for students with SEN. As highlighted in the literature for almost a decade (e.g., Ebersold and Meijer, 2016; Dua and Dua, 2017; Hosshan et al., 2020; Uttayotha and Scheef, 2021), school

resourcing is a fundamental issue for the successful implementation of inclusive education.

Restricted stakeholder engagement

In three jurisdictions, the current level of engagement from stakeholders at the systemic, community, and school levels was reported as posing primary barriers to implementing inclusive education practices. For instance, the need for policymakers and school administrators to share both vision and responsibility for inclusion was urged in South Korea whereas cooperation and collaboration between teaching professionals and associated organizations were encouraged for Japan. On the other hand, the need for all parties involved in the educational process to be accountable for the execution of inclusion was called for in Macao as was a stronger parental say in how inclusion is enacted at the school level. Viewpoints about shared visions, responsibilities, accountability, and cooperation among stakeholders continue to be strongly recommended in the literature (for example, see Johnstone, 2011; Hosshan et al., 2020; Uttayotha and Scheef, 2021; Subban et al., 2023). Yet, Karim and Hue (2022) contend that this expectation is unrealistic considering the differences in socio-economic, cultural, and political factors in action within and across countries.

Summary

The inclusion of students with SEN has remained challenging for many education systems and schools globally (Forlin and Lian, 2008; OECD., 2021; Karim and Hue, 2022). Our analysis of reported data across seven jurisdictions distilled five challenges as having significant implications for effectively including students with SEN in mainstream schools: (1) inadequate teacher education and training; (2) limited local research to inform practice in schools; (3) policy formulation and implementation issues; (4) under-resourcing of mainstream schools; and (5) restricted stakeholder engagement. Overall, these findings provide valuable insight into how barriers to inclusive education are interconnected within different jurisdictions. Moreover, despite the presence of diverse

historical, political, systemic, and socio-cultural factors at play, a similar pattern of challenges was evident across jurisdictions.

Except for the challenge related to limited local research, the four remaining challenges are well-documented, with an abundance of previous studies emphasizing their significance within and across countries. Challenges identified across our seven jurisdictions, therefore, appear to be broadly consistent with global trends. Undoubtedly, inadequate teacher education and training is the most prominent challenge emphasized in the international literature. Moreover, this challenge has long been recognized as fundamental to thwarting inclusive education efforts in the Asia-Pacific region (Mitchell, 2003; Forlin and Lian, 2008; Dua and Dua, 2017; Hosshan et al., 2020; Uttayotha and Scheef, 2021). Yet, inadequate teacher education and training emerged as a universal obstacle to achieving inclusive education for students with SEN in each of our jurisdictions. As such, this finding confirms that the current strong press by UNESCO to improve inclusive teacher education, internationally (Hunt, 2020) and regionally (Kaplan and Lewis, 2019), is both needed and necessary.

Recommendations

Table 2 presents five recommendations aimed at addressing the identified challenges and reducing their impact on inclusive education reform initiatives for students with SEN. These recommendations also offer a strategic guide for developing a viable approach to advancing inclusive education within Asian-Pacific contexts. The aspiration signaled here is that countries might integrate these recommendations into their national policy frameworks and action plans to improve inclusive schooling for this specific group of students.

The five recommendations collectively form a comprehensive strategy for improving inclusive education that is characterized by reform efforts that are vertically and horizontally integrated. Vertically, the strategy calls for action at multiple levels of governance and administration. At the government level, targeted funding for schools supporting students with SEN and the development of robust rights-based policies and action plans to bridge the policy-to-practice gap are essential. The strategy also calls for governments to ensure that initial teacher education programs at universities equip classroom teachers with a broad foundation of evidence-based inclusive practices and approaches. It is equally important that governments establish an independent authority to monitor university programs together with related professional development in-service activities provided by relevant organizations.

Horizontally, the strategy emphasizes the need for broad stakeholder engagement and a greater sharing of responsibility for the enactment of inclusive education at the school level. Local initiatives should involve not only school staff and parents, but also where possible, students with SEN, their peers, and external support service personnel. This collaborative approach extends to the research agenda, where partnerships between researchers and local education staff is recommended to establish a needs-based research agenda. Further, successful approaches for including and educating students with SEN should be widely disseminated across schools, locally and regionally.

TABLE 2 Recommendations to address identified challenges.

Recommendations
Improving teacher preparation and training
(a) That initial teacher education programs commit to producing "work-ready" graduates with the essential attitude, knowledge and competencies for including and teaching students with special needs. This requires training institutions to have teachers and tutors who are themselves suitably experienced in inclusive pedagogy to deliver these courses. The relevant authority in each country should monitor initial teacher education programs for effective inclusive education content (b) That education systems afford a minimum specified amount of ongoing professional development for classroom teachers and specialist teachers to promote their understanding, efficacy, and practice in including and teaching students with SEN. Additionally, teacher registration bodies (or equivalent) in each country should monitor this ongoing professional development for their teaching workforce
Extending the inclusion research agenda
That a partnership be established between researchers and staff in local education systems and schools to establish a needs-based research agenda and enlist broad stakeholder input when undertaking agreed-upon studies. It is also essential that a mechanism be put in place that will enable details of positive approaches found to work well in some schools are disseminated to all other local schools
Redressing the policy gap
That governments develop robust rights-based policies and action plans focused on equity principles that enable students with SEN to achieve their potential in the mainstream. Additionally, governments should then authorize an independent body to monitor the implementation of these policies at the school level, to prevent policy slippage over time
Increasing targeted funding
That governments and education systems prioritize funding to mainstream schools that are supporting students with SEN and monitor the impact on student outcomes and teaching quality
Expanding stakeholder engagement
That education systems support schools in implementing effective processes for enlisting and maintaining the engagement of all stakeholders (teachers, parents, students, peers, and external support service personnel) and encouraging their input into the inclusive education model for students with SEN

In essence, this strategy recognizes the importance of both top-down and bottom-up approaches in promoting inclusive education for this specific group of students. It underscores the need for government and institutional commitment and oversight, while also acknowledging the pivotal role that teacher educators, researchers, and school-level stakeholders play in implementing and refining inclusive practice. This dual and integrated focus ensures that the strategy is both comprehensive and responsive to the specific needs of students with SEN and their situated contexts.

Conclusion

The analysis of challenges and concerns presented in this paper outlines issues that warrant immediate consideration to enact effective inclusive education for students with SEN across the Asia-Pacific region. The most pervasive and universal obstacle identified across all jurisdictions was the deficiency in both initial and continuing teacher education and professional growth. Further substantial roadblocks include policy complexities, a scarcity of

localized research to guide school practices, insufficient funding, and restricted stakeholder participation, in response to these challenges, we have proposed five recommendations which have been organized into an all-encompassing strategy that integrates reforms at diverse levels of governance and administration and promotes collaboration amongst various stakeholders. This strategy calls for greater government commitment and oversight, an explicit focus on enhancing teacher knowledge and practice, the need for broad stakeholder engagement and shared responsibility for inclusive schooling, and productive research partnerships at the local level. We are confident that through the implementation of these initiatives, countries in the Asia-Pacific region can make effective strides toward the realization of sustainable inclusive schooling for this group of students.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Author contributions

WB: Conceptualization, Formal analysis, Methodology, Writing – original draft, Writing – review & editing. SH: Conceptualization, Formal analysis, Methodology, Writing – original draft, Writing – review & editing. MY: Writing – review & editing.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Appendix

Guide for case studies.

Case studies should be written to cover the following seven key areas.

1. Context: Begin by providing basic information about your jurisdiction: population and demographics; mainstream education systems (government and non-government schools); where students with special needs or disabilities traditionally received their education are where they are placed now; any relevant cultural influences that affect education and inclusion.
2. Legislation, policies, and guiding documents related to inclusion.
3. Brief review of any inclusion research undertaken in your country/state.
4. Teacher preparation and ongoing professional development (initial teacher education programs; in-service and further development opportunities).
5. How inclusion is implemented in schools. Mention any relevant structures and arrangements together with the working relationship between regular and special education teachers. Describe any valued practices (whole school and classroom) that have evolved; if possible, provide a case study illustrating good inclusive practice in action.
6. Remaining challenges and concerns regarding inclusion.
7. Conclusion: This final section could provide key recommendations for advancing inclusion in your country/state, and indicate issues still needing research.