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EDITED BY
Israel Kibirige,
University of Limpopo, South Africa

REVIEWED BY
María De Los Dolores Valadez Sierra,
University of Guadalajara, Mexico

*CORRESPONDENCE
Geraldine Townend
✉ g.townend@unsw.edu.au

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What would it take? Enhancing outcomes for high-ability students with disability

Geraldine Townend*, Marie McGregor, Dennis Alonzo and Hoa T. M. Nguyen

School of Education, University of New South Wales, Kensington, NSW, Australia

A troubling misconception exists that high-ability is enough to ensure positive educational, mental health and well-being outcomes for gifted students. Of course, we want all our students to develop their potential in school, so why are so many of our more able children failing in school and enduring the repercussions of reduced well-being? The notion that a student is not highly able if they are receiving poor grades is a common societal misconception, and this is commonly the case for gifted learners with disability, also known as twice-exceptional students. A considerable number of school students globally have intellectual ability in the gifted range, a high number of those are gifted with co-occurring disability, and many remain unidentified. It is, therefore, likely that a significant percentage of our classrooms have students who may be flying under the radar and are likely to be underachieving or unsupported within the school system. The purpose of this article is to highlight the issues around gifted students with disability that may contribute to their underachievement. Also discussed is how educators, counsellors and other key stakeholders can support this unique population of students.

KEYWORDS

gifted, twice-exceptional, disability, intellectual ability, underachievement, classroom practice

Introduction

The purpose of this article is to highlight the issues around gifted students with a disability and how educators, counsellors and other key stakeholders can support them. We define key terms (i.e., intellectual giftedness, twice-exceptionality), focus on the importance of, and obstacles to, identification, and how to support this unique population of students.

> *"Maya was a bright pre-schooler and could complete complex 200-piece puzzles at 4 years old. The first two years of school were very successful, but by Year 3, her parents reported school refusal. Eventually, Maya was diagnosed with dyslexia, and was increasingly unhappy. A psychometric assessment revealed that she was intellectually gifted (psychometric test scores at the 98th and 99th percentiles) in the numerical, visual-spatial, and fluid reasoning domains but below the 30th percentiles in the working memory, verbal, and processing speed domains. Maya was twice-exceptional and responded positively to interventions that focused on her relative strengths alongside her learning support needs."*

Around 10% of students are intellectually gifted (Gagné, 2018)—of these, it is estimated that 7% have a co-occurring disability (Ronksley-Pavia, 2020). These students are often

undetected in our school systems and, therefore, often do not receive adequate support, adjustments, or accommodations, often leading to underachievement (Townend and Brown, 2016). Gifted students with disability present a dual paradox for education systems, both in terms of being gifted and simultaneously having a disability and in terms of the lamentable lack of nurturing of a potential resource on both an individual and a national level (Townend and Brown, 2016). The paradox of two exceptionalities in schools is due primarily to student behavioural issues, lack of community knowledge, and challenges with identification (Foley-Nicpon, 2021). Despite over twenty years of empirical research around twice-exceptional students, the influences on their academic development remain virtually unexplored (Townend and Brown, 2016). We must act now to identify the potential of these students early, respond effectively, and give them the most advantageous start in life.

Widespread misconceptions, generalisations and stereotypes exist within society surrounding the notions of intellectual giftedness and disabilities that affect learning (Russell, 2018; Dell'Anna et al., 2021). A misunderstanding is that many high-ability students, regardless, will achieve good grades and perform consistently well. Another misunderstanding is that interventions for high-ability students, including those with a disability, are considered excessive when resources should be targeted towards other groups to ensure they achieve benchmark standards (Foley-Nicpon et al., 2011). Such oversights and justifications contribute to the lack of identification of and support for gifted students with disabilities. There is confusion around school students where the two constructs of giftedness and disabilities co-occur within one person (Baum and Schader, 2021).

Defining intellectual giftedness and twice-exceptionality

In this article, giftedness will be defined as an aptitude that places one within the top 10 % of age peers (Gagné, 2004, 2013, 2018). This aptitude, or ability, may be observed in the intellectual, creative, social, perceptual and/or physical domains. This paper focuses on those considered gifted in the intellectual domain and encompass those whose ability is within the top 10 % when compared with their age peers (Foley-Nicpon et al., 2011). This high intellectual ability may develop in relation to or coexist with a disability that affects learning (Assouline and Whiteman, 2011; Townend and Pendergast, 2015), emotions and behaviour (Ronksley-Pavia, 2015).

The term twice-exceptional refers to gifted students with one or more disabilities that affect learning (Foley-Nicpon, 2021), also referred to as gifted students with disability. Common co-occurring disabilities outlined in the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2022) (DSM-5-TR, 5th ed.) include Autism, attention deficit hyperactivity disorder (ADHD), and specific learning disorders (SLDs) with impairment in reading (SLD I), writing (SLD[W]), or mathematics (SLD[M]). Each of these conditions can impact a student's ability to integrate socially into a classroom, concentrate, regulate one's behaviour achieve and complete assessments which can lead to underachievement (Armstrong, 2012). Despite the goal of worldwide education legislation to aid each student in achieving their educational potential, and although there have been isolated measures globally to attend to these students, research indicates disproportionate levels of underachievement for many reasons, including social, emotional, socio-economic, and co-existing disabilities. Varying studies have suggested underachievement in gifted students, due to many reasons, ranges between 9 and 24% in German studies (Stoeger et al., 2008; Schick and Phillipson, 2009), to 39% in Australia (Abu-Hamour and Ali-Hmouz, 2013), to 49% in a U.S. study (Reis et al., 2005).

Both gifted and twice-exceptional students are two related groups who are often described as at risk of educational alienation and disengagement (Amend, 2018; Baum and Schader, 2021). Such experiences may make them vulnerable to bullying and social isolation (Ribeiro Piske et al., 2022), adversely impacting social and emotional development (Foley-Nicpon, 2021). Indeed, twice-exceptional learners are possibly the most misunderstood and overlooked learners globally (Foley-Nicpon et al., 2013). Ronksley-Pavia (2020) argues that 7% of those identified as gifted may be considered twice-exceptional and although exact figures are unknown for several reasons (e.g., lack of reporting requirements, little empirical research), it is expected that the needs of millions of students globally may remain unidentified in the schooling system. They remain one of the most globally underserved student populations (Foley-Nicpon et al., 2011; Baum and Schader, 2021).

The twice-exceptional population is diverse and heterogeneous. It is, therefore, important that each diagnosis (or exceptionality) is examined (Foley-Nicpon et al., 2011). For instance, there are vast differences between disabilities (i.e., ADHD vs. dyslexia vs. Autism, etc.); thus, it is impossible to generalise twice-exceptionality, but rather to consider the different presentations to inform teaching practice (Foley-Nicpon et al., 2011). Consequently, there is no "one-size-fits-all" pedagogy that encompasses all twice-exceptional students. The apparently disparate needs of twice-exceptional students cannot be segregated, which means that high-ability and special learning needs must be simultaneously addressed for successful learning (Baum and Schader, 2021).

The primary obstacles with twice-exceptional presentations are caused by cognitive masking (whereby the strength masks the challenge and vice versa), the lack of professional and community knowledge about this phenomenon, and hence the lack of identification (Townend and Brown, 2016). These obstacles impact the type of services that twice-exceptional students receive and may prevent them from receiving the support they require (Amend, 2018). For instance, those identified with disabilities only may not develop their full potential in education, whereas those identified as gifted may not receive support for their disability (Atmaca and Baloğlu, 2022). This misalignment between student needs has several undesirable consequences. First, it may lead to underachievement in which "twice-exceptional students operate at less than 50% of their capacity, causing frustration" (Cross, 2013, p. 82) leading to increased psychosocial and behavioural issues. Second, it may have possible repercussions in terms of the potential loss to society (i.e., exacerbating current and future skill shortages; Ceci et al., 2009), and third, it may result in impaired self-concept which aligns more with the self-concept of students with disability than with any other student population (Townend and Brown, 2016; Foley-Nicpon, 2021).

Identification of twice-exceptionality

> *"Billy loved to write and his year teacher encouraged him and believed he was gifted. Billy was an 'A' grade student throughout primary school but was now, in Year 9, and failing. Although,*

> *he joined the school writing club, other teachers, who knew about his low grade-average and truancy recommended that he should not attend so that he could focus on homework completion. His reports consistently reported erratic focus, a need to stay on task and show more discipline. His year teacher saw a discriminating sense of humour and flashes of a creative and agile mind. Billy was a paradox. He was diagnosed with Autism and had clinical levels of anxiety. The learning support teacher believed he was twice-exceptional but was at a loss regarding how to support anything but his Autism" …I know he is smart, but I do not know how smart. Our focus feels so unbalanced, but I do not know how to help him"!"*

As the vignette indicates, there are complexities around the identification of twice-exceptional students. A possible reason this population remains overlooked may be a lack of awareness by families and the school community, and inadequate teacher education in twice-exceptionality (Foley-Nicpon, 2021). Although it is widely accepted that teachers can influence the outcomes of their students, most initial teacher education programs do not mandate training in gifted education, let alone training in twice-exceptionality. In-service professional learning courses are scarce, which can mean that many teachers, through no fault of their own, may remain uninformed of the unique needs of this population of students, which may impede their ability to identify, understand and respond appropriately (Baum and Schader, 2021). It is possible that teachers, without training, have difficulty reconciling the fact that giftedness can co-occur with disabilities (Foley-Nicpon, 2021). The idea that students may excel in one area (e.g., science) but have great challenges in others (e.g., reading) may confuse some. Instead, teachers may believe twice-exceptional students will succeed independently due to their high-ability and subsequently ignore the reality that they can also have a disability (Rowan and Townend, 2016).

Moreover, the presentation of twice-exceptionality is complex, which may make the identification of these students also complex (Foley-Nicpon et al., 2011). For instance, cognitive masking is associated with twice-exceptionality and occurs when the cognitive strength (the giftedness) masks the disability and vice versa (Reis et al., 2014; Baum and Schader, 2021). For instance, one's gift may mask one's disability so that the disabilities remain unobserved. Alternatively, one's disability may mask one's gift so that the high-ability goes unnoticed, or giftedness and disabilities mask each other in such a way that the student is perceived to be developing typically (Foley-Nicpon and Assouline, 2020). Cognitive masking can also be seen with inconsistent performance on subtests of cognitive ability (Assouline and Whiteman, 2011; Atmaca and Baloğlu, 2022). For instance, when a single score is used to represent intelligence [i.e., full-scale intelligence quotient (FSIQ)] but is composed of widely discrepant scores (i.e., 98th percentile in verbal comprehension but 45th percentile in working memory), cognitive masking may occur if the disparate cognitive results are not evident in their school performance and they may appear to be "average" level students but the high-ability and disability are opposing each other (Townend and Brown, 2016). Indeed, Atmaca and Baloğlu (2022) found that twice-exceptional students perform lower than exclusively gifted individuals in measures of full-scale intelligence quotient, working memory, and processing speed. Thus, reliance on a single intelligence quotient (IQ) test to identify twice-exceptional students would be misleading as the singular number is moderated by the range of results (Atmaca and Baloğlu, 2022).

The identification process

To mitigate these misunderstandings about the abilities and needs of twice-exceptional students, it is recommended that a multifaceted, ongoing, and flexible identification process is used (Mullet and Rinn, 2015; Gubbins et al., 2021; Flynn and Shelton, 2022). This process should be comprehensive enough to identify both abilities and the presence or absence of disability in a gifted student (Amend, 2018). For instance, when assessing a gifted student for a disability, tools must be selected that will uncover the disability in a way that the student cannot use their high-ability to compensate for (i.e., the gifted ability should not mask the disability). On the other hand, when assessing a student with a disability for giftedness, the opposite considerations emerge and instruments must be selected that allow the gifts to be uncovered (e.g., a student with a learning disorder in writing should not be assessed on a written task). To evaluate a student with no prior diagnoses, the identification process should be wide-ranging and employ multiple tools, both subjective (i.e., classroom observations, behavioural observations, and interviews) and objective (i.e., psychometric assessments, cognitive ability assessments). Lastly, the presence and relative impact of observed behaviours on one's functioning should be considered by a suitably qualified professional before a diagnosis is offered (Amend, 2018).

As mentioned, it is important that identification tools are not used in isolation but instead a broad range of tools are used concurrently to identify twice-exceptional students. Possible tools include psychometric assessments. (e.g., Wechsler Intelligence Scale for Children—Fifth Edition (Wechsler, 2014) and the Stanford-Binet Intelligence Scales (Roid and Pomplun, 2012)) which should be carefully and critically interpreted. For instance, educators, parents, and school counsellors would gain more from interpreting each index score to understand patterns of relative strengths and weaknesses in a student as opposed to using an FSIQ (Assouline and Whiteman, 2011). Achievement tests (i.e., Woodcock-Johnson Tests of Achievement-Fourth Edition (Schrank and Wendling, 2018), South Australian Spelling Test (Westwood, 2005), Progressive Assessment Tests (ACER, 2024)) may be valuable and provide insight into possible ability-achievement discrepancies (Amend, 2018). Diagnostic tests relevant to disabilities outlined in the DSM-5-TR (American Psychiatric Association, 2022) should be used by a suitably qualified professional to support diagnosis of potential disabilities (e.g., Conners 3 (Conners et al., 2011); Autism Diagnostic Observation Schedule [Second Edition] (Lord et al., 2012), Wechsler Individual Achievement Test [Third Edition] (Wechsler, 2009)). Lastly, valuable data may be gleaned from behavioural observations and interviews with parents, teachers, and students. Consequently, sound identification can support the most fitting intervention and strategies to best support individuals.

Discussion—strategies and solutions for supporting twice-exceptional students

To support twice-exceptional students, a multi-layered approach that includes policy, identification, curriculum, professional development, psychosocial support, and collaboration with key stakeholders is recommended. Table 1 outlines some strategies that may be used to support twice-exceptional students in school.

TABLE 1 Strategies to support twice-exceptional students in school.

Strategy	Application in educational contexts
Identification	Early universal screening of all students (e.g., Peters, 2022). Provide professional development for educators, school psychologists and counsellors (e.g., Foley-Nicpon and Assouline, 2020).
Teacher professional development	Comprehensive pre-service and in-service professional development to support staff and ensure wider understanding and more accurate screening of possible students (Navarro et al., 2016).
Curriculum	Opportunities for curriculum extension (e.g., Betts et al., 2016) Provide student choice (e.g., Schick and Phillipson, 2009) Create multiple ways to respond to new content (Vantassel-Baska and Brown, 2021) Accommodate for the giftedness alongside providing adjustments and remediation support for the disability (e.g., Josephson et al., 2018)
Psychosocial	Support anxiety (e.g., Trail, 2011) Promote self-advocacy (e.g., Olszewski-Kubilius, 2022) Teach stress management techniques (e.g., Hughes, 2021) Counselling support, collaboration between classroom teachers (e.g., Foley-Nicpon, 2021)
School policies and practice	Provide appropriate adjustments, including extra time to complete tasks including gifted and learning support (e.g., Walsh and Jolly, 2018) Explicitly teach organisational skills to support school success (e.g., Gubbins et al., 2021)
Collaboration and communication with key stakeholders	Encourage collaboration between general classroom teachers, gifted support staff, learning support staff, allied health professionals, including school psychologists and counsellors, and parents or careers (e.g., Rowan and Townend, 2016)

Strategies that can be applied in educational contexts to support twice-exceptional students.

Professional learning and identification

Resistance to gifted education stems from cultural aversion around perceptions of elitism (Gross, 1999). Preservice and early career teachers have been noted as considering gifted education elitist (Rowan and Townend, 2016) and, in general, oppose supporting it, including gifted students with disability (Baum and Schader, 2021). Another perception is that students with high-ability, regardless of disability, will find success on their own, ensures that educational interventions are either inappropriate or non-existent, when they should be powerful drivers of progress (Townend and Brown, 2016). Hence, professional development that addresses misconceptions and promotes positive practices is imperative.

Given that the first stage in the identification of twice-exceptional students usually involves a referral from a classroom teacher (Amend, 2018), it is imperative that teachers receive appropriate pre-service training and professional development (Rowan and Townend, 2016). This can change teacher perceptions of twice-exceptionality, directly impacting teachers' classroom practices (Siegle et al., 2014). These changes may enable teachers to observe behaviours in the classroom and identify early signs of twice-exceptionality (see Table 2 for a list of common characteristics associated with twice-exceptionality). On these grounds, some have called for professional learning in this area to be mandatory (Sharma and Nuttal, 2016) and ongoing (Aspfors and Bondas, 2013).

In order to support identification, it is important that teachers are familiar with common characteristics associated with giftedness and/or common disabilities to inform their classroom judgments. A list of common characteristics is shown in Table 2. Further characteristics may include delayed reading skills, difficulty organising ideas, compromised numeracy skills, and a large discrepancy between verbal and written communication (Amend, 2018). Twice-exceptional students might appear uncooperative and more easily frustrated with a focus on their limitations and poor self-concept (Townend and Brown, 2016). Whilst educators are waiting for further exploration, imputing a diagnosis in school can enable educators to implement appropriate supportive strategies (e.g., Cooc, 2019). However, thorough and complete identification with the appropriate professionals is ideal (Foley-Nicpon and Assouline, 2020).

TABLE 2 Characteristics that twice-exceptional students may present.

Diagnosis	Some possible presentations of characteristics
Intellectual giftedness (e.g., Peters, 2022)	Highly curious Strong verbal skills Abstract thinking Strong sense of social justice
Attention deficit and Hyperactivity Disorder (ADHD) (e.g., Hughes, 2021)	Inattentive/Impulsive Compromised self-regulation Poor working memory and immediate recall
Autism (e.g., Foley-Nicpon, 2021)	Impaired organisation and planning Cognitive inflexibility Hyper-sensitive to stimuli such as noise
Specific Learning Disorder (Reading) (e.g., Amend, 2018)	Avoidance behaviours when asked to read Difficulties recalling the sequence of a story Compromised spelling

Some common characteristics that may present in educational contexts for twice-exceptional students that may support identification.

Curriculum design and implementation

From the expansive curriculum of Hollingworth's (1926) early work that encouraged students to discover connections around societal progress and through to acceleration (Terman and Oden, 1947) to the autodidactic learning that promoted (Vantassel-Baska, 1995), the curriculum has developed. Current curriculum models are based on research around accelerative and enrichment approaches that include differentiation so that each student is met at their point

of readiness to learn. Research stresses the importance of a positive, strength-based approach, with remediation and adjustments for disability, to support the development of a positive self-concept, ultimately contributing to a successful life beyond the educational arena (Josephson et al., 2018). This means that, first and foremost, students should be provided with strength-based opportunities in their area of strength (e.g., mathematics) whilst receiving scaffolding in their areas of relative challenge (e.g., writing; Bianco et al., 2009; Armstrong, 2012). This recommendation stands in contrast to common practice, which prioritises the disability. For example, in many countries, schools have directed efforts to identify student disabilities to meet the requirements for disability services and funding (Bohanon et al., 2016). However, deficit-thinking frameworks that privilege the challenges (or challenging behaviours) over the strengths can prevent talent development in twice-exceptional students and potentially damage an already fragile self-concept, leading to anxiety and low self-worth (Townend and Brown, 2016).

Inclusion of students with diverse learning needs means that teachers must adjust or differentiate learning so that all students can fully participate in the classroom. There have been two broad approaches to curriculum design: one, 'design down' approaches where all K-12 curricula are constructed to encourage readiness for college (e.g., International Baccalaureate (IB) program), and two, 'bottom up' approaches in which enriched and broader views of the curriculum are considered as students progress through school [e.g., The Integrated Curriculum Model (Vantassel-Baska and Brown, 2021)]. Both approaches claim to allow for the development of creativity, critical and creative problem-solving, and motivation.

However, in line with others (Vantassel-Baska and Brown, 2021), the authors recommend the Betts Autonomous Learner Model (BALM; Betts, 2003; Betts et al., 2016). The BALM was developed to meet the emotional and social needs of gifted students, in addition to their diverse cognitive needs (Pinto and Clare, 2017). It offers a process-based scope and sequence alongside an independent study program that apply to all curricular domains and all years of students (Betts et al., 2016). Opportunities to work independently in areas of passion and strength are recommended alongside experiencing optimal challenges to enhance engagement (Rogers, 2007). This approach aims to facilitate autonomous forms of motivation that are necessary to develop talent (Baum and Schader, 2021).

Another approach suggested to address twice-exceptional students' needs is through a Response to Intervention (RtI) model. The RtI refers to a process that illustrates how students respond to adaptations in instruction in the classroom. Individual students' progress is monitored, and results are used to decide further instruction and intervention (Miciak et al., 2019). This model could be beneficial as it addresses students' strengths and relative challenges.

Regardless of which curriculum model is adopted by a school, embedding authentic and effective differentiation to cater to all students is required, enabling students to build skills, pursue interests, and tap into their creative potential (Baum and Schader, 2021). It is important that the level of challenge in the curriculum is not simplified based on a co-occurring disability (Townend and Brown, 2016). Instead, challenge, complexity, and abstraction, via authentic projects, should be incorporated into the learning activities whilst scaffolding and supporting where necessary for the disability, leading to greater autonomy, improved teacher-student relationships, and enhanced achievement (Rubenstein and Siegle, 2012).

Psychosocial considerations

Psychosocial factors facilitate talent development and should be deliberately cultivated in the classroom (Subotnik, 2015; Dixson et al., 2016; Olszewski-Kubilius et al., 2019). Indeed, individuals who truly contribute to a field and move it forward often report more false starts, failures, and challenges to overcome than experiences of quick success (Olszewski-Kubilius et al., 2019). Some psychosocial skills may be particularly challenging for twice-exceptional students, depending on their disability, including empathy, self-regulation, communication, and emotion regulation (Townend and Brown, 2016). For example, the emotional issues that can present when a student is identified as gifted with a co-occurring disability can be complex in presentation and require a team of teachers, psychologists, and counsellors to work collegially to support twice-exceptional students (Trail, 2011).

Twice-exceptional students may experience much frustration because of their asynchronous development. They often have an external locus of control, meaning that they blame others for their failures (e.g., the teacher and their parents; Baum and Owen, 2004). In this instance, it may be pertinent to target motivational interventions towards explicit teaching of locus of control to enable students to critically reflect upon, evaluate, and identify areas in their lives that they *can* control (e.g., the effort they exert, the choices they make, their own response to situations etc.) and areas that they *cannot* control (e.g., other people, the questions in the exam etc.).

Regarding motivation, twice-exceptional students may experience somewhat low motivation because of their perceived challenges (Wang and Neihart, 2015; Neihart et al., 2021). Consequently, motivational interventions that are targeted towards developing self-awareness, self-direction, and self-governance would benefit. These students should be encouraged to reflect upon their own interests, preferences, and strengths whilst also reflecting on strategies that allow them to work with their challenges to facilitate a sense of self-determination in students. Additionally, educators should provide choice (e.g., of what is learnt, how it is learnt, or how learning is shown) to offer multiple avenues for students to develop and demonstrate mastery. Such flexibility will likely empower twice-exceptional students in their own learning and subsequently increase their self-efficacy as learners (Schick and Phillipson, 2009).

Twice-exceptional students may also struggle in the social domain due to behaviours associated with their disability (e.g., low tolerance and emotional self-regulation often seen in ADHD; limited theory of mind and impaired social skills that can be seen in Autism). Interventions to address these challenges should be evidence-based and may include providing clear, concise, and direct instructions, as well as visuals, scripts, and time warnings for possible changes to classroom routines. Additionally, to support social interactions, participation in social skills programs may facilitate the development of listening skills, turn taking, reciprocity in communication, and initiating, maintaining, and ending conversations (Foley-Nicpon, 2021). For instance, structured conflict resolution programs may be helpful for students in social situations and moderate their levels of impulsivity (Hughes, 2021). Likewise, twice-exceptional students may benefit from interacting with other twice-exceptional students (i.e., like-minded individuals) to recognise that they are not alone and can indeed experience a sense of belonging and understanding regarding the challenges that other children face (Hughes, 2021). It is important that twice-exceptional students who experience challenges with executive function are provided with specific strategies

to develop coping mechanisms and systems that allow them to take on more challenging work (Olszewski-Kubilius, 2022). For instance, a self-determined organisational system may include the use of lists to organise and prioritise daily tasks, visual organisers to organise thinking and brainstorm ideas, chunking of activities (i.e., breaking down a large task into smaller, manageable chunks), goal definition and management, and time management strategies (i.e., Pomodoro techniques, timers etc.).

Counselling considerations

Twice-exceptional students are considered the most at-risk subpopulation of gifted students and are at risk of educational alienation, disengagement (Townend and Pendergast, 2015), bullying and social isolation (Ribeiro Piske et al., 2022). As such, school counsellors play a vital role in meeting the needs of these students and are integral to understanding, promoting, and developing awareness of the unique needs of twice-exceptional students (Assouline and Whiteman, 2011). For counselling to be most effective, the counsellor must: one, be knowledgeable about the unique needs and challenges facing the student; two, know how to support the development of psychosocial skills and study skills (e.g., time management, organisation, test-taking), three, understand how to facilitate self-awareness and self-acceptance in twice-exceptional students, and four, be informed about possible avenues the twice-exceptional student may follow (e.g., university courses, career planning; Wood and Estrada-Hernández, 2012). However, support must be underpinned by the school or organisation through policy and practice.

School policies and practice

Government policies globally promote engagement and challenge for all students, regardless of background, and such policies filter into school policy to varying degrees (Walsh and Jolly, 2018). Therefore, the success of government policy is determined by the development of school policy. Given the complex and heterogeneous nature of twice-exceptionality, giftedness and disability, schools need a clear policy around the assessment and early identification of students, including practices to support inclusive learning (Rowan and Townend, 2016). Schools tend to rely heavily on traditional forms of identification, including IQ tests and subjective methods, such as teacher nominations. Importantly, teachers need access to data for identifying clusters of gifted characteristics and regarding levels of potential, including inclusive and global screening (Allen, 2017; Peters, 2022).

Some implications and recommendations for the improvement of school policies and practice are as follows: firstly, identification can be enhanced through accessible professional learning and equitable global screening assessments for educators, school psychologists and counsellors; secondly, tiered counselling through the systematisation of counselling needs to support school counsellors in scaffolding the psychosocial needs of twice-exceptional students; third, learning systems need to include tailored intervention programs for successful outcomes (Baum and Schader, 2021). School systems are often developed to support students with disabilities or gifted students but rarely adopt a dual approach in which gifts and disabilities are considered simultaneously. Thus, dual differentiation should be designed and implemented. Finally, there should be collaboration and communication with key stakeholders and, including school staff, allied health professionals and parents or carers, to promote positive teacher-student and school-home relationships (Rowan and Townend, 2016), build trust and create a safe environment for students to test ideas, make mistakes and learn. This encourages a growth mindset to develop academic potential (Mofield and Parker Peters, 2019) and improve social–emotional well-being (Blaas, 2014).

Conclusion

The purpose of this article was to highlight the issues around twice-exceptionality and how key stakeholders can support this unique population of students. The ideas listed above are not exhaustive but instead illustrate some potential considerations for educators. It is important to note that interventions for twice-exceptional students should be guided by research, focusing on their *unique* individual needs. The complexity of identification and intervention for twice-exceptional students requires a complex and sophisticated interdisciplinary approach that involves key stakeholders, especially teachers, parents, school counsellors, and allied health professionals such as psychologists. First, these students need to be *seen* by teachers and specialists who can highlight and identify their unique patterns of relative strengths and challenges, which can then be used to inform practice so that students receive an education that is respectful, authentic, and meaningful to their own individual needs.

Secondly, these students need to be catered for and inclusive education is the process of providing all learners with equitable educational opportunities, which is one of the challenges faced by teachers. Teachers require understanding of twice-exceptionality, in addition to how curriculum, assessment, pedagogy, and interpersonal relationships can be tailored to respond to this student population. The use of comprehensive identification, contextually appropriate curriculum models, and strategies to support strengths and remediate challenges, alongside appropriate and supportive curriculum adjustments, will contribute to an overarching, research-based approach that supports twice-exceptional students to develop their full potential.

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