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August Editorial: Leadership for the Future

"If your actions inspire others to dream more, learn more, do more and become more, you are a leader."
- John Quincy Adams

Jennie Quinn & Penina Kiss

Welcome to the 31st edition of the WTW newsletter. It's a cold and windy day here in Sydney and snowing in parts of New South Wales. Perfect weather for sitting somewhere warm to contemplate the state of our world in August 2024. The topic of leadership is trending strongly and demands our attention. The US presidential nominations, global leadership changes and current wars inciting protest and unrest have made it a topic impossible to ignore.

Like everyone else, we've been keenly watching what has been playing out in this space. It's compelled us to consider the qualities of great leadership that generate innovation for positive change and facilitate hope and aspiration for the future. For young gifted leaders, this idea of hope and aspiration is particularly critical. As educators and parents, too often we see gifted children once brimming with confidence and ambition to change the world deflated, checked out of a system that didn't recognise the need to nurture and inspire this yearning for a better future.

Dystopian narratives may sell but creating a society of high-functioning cynics is certainly not the end goal of gifted education. Great leaders inspire new mindsets for new worlds and the confidence to prepare for what's next. They focus on the positive and challenge others to do the same.

In preparation for this editorial, I asked colleagues and friends about the qualities they rate in exemplary leaders. There was consensus that great leaders build relationships and rapport, the tenet of knowing your students, their strengths, challenges, hopes and aspirations applies strongly to adults in the workplace as well. We all strive to be seen, heard and appreciated for our capacity to add value and merit.

Visionary leaders who see the big picture, and communicate effectively are also valued. Our need to connect to and care about the purpose of our work cannot be underestimated. We admire creative leaders who inspire us to greater heights safe in the knowledge we can trust them to take us on a transformative and ethical journey.

But how does all of this relate to our gifted leaders of the future? Thankfully I had the good fortune to sit down with two accomplished young adults and hear about their perspectives on the future and leadership. Whilst one felt unbridled enthusiasm and hope the other felt resignation and far less optimistic about the future due to environmental and humanitarian mismanagement. Both agreed that great leaders respect their voices and ideas despite the hierarchy, combining high challenge with high support. Because they've been taught to think critically, they value leaders who bring context, connection and purpose to their work. Being trusted was important and they felt that great leaders intrinsically knew when to step in and out whilst nurturing this trust.

Their insights provide clear direction for those lucky enough to lead, nurture and learn from this precious sector of our community.

With all this in mind, we are excited to bring you three wonderful articles from authors addressing leadership, social-emotional learning and the identification and nurturance of giftedness. Toddie Adams discusses the transformational power of teaching leadership skills to gifted students across their educational lifespan. Dr Susen Smith examines the importance of scaffolding social-emotional competencies when providing social-emotional learning to students with twice and multi-exceptionalities and Alaa Eldin Ayoub, Mariam Alghawi, and Ahmed Morsy share with us the Hamdan Giftedness Scale, an assessment tool that is culturally and linguistically tailored to the unique characteristics and experiences of gifted children in Arabic countries.

We hope you enjoy this edition.

Jennie Quinn & Penina Kiss



Fostering Gifted Leadership Across the Grade Levels

Toddie Adams, PhD

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While I believe that all areas of giftedness have equal importance and I strive to advocate for all gifted learners, in fact, any student who needs a voice, I teach leadership skills to all gifted students because leadership can be transformational and enhance skills in other areas of giftedness by supporting critical and creative thinking, problem-solving, effective communication and collaboration, along with analyzing, evaluating, and creating, which are the higher-order thinking skills as designated in Bloom's Taxonomy. Burns (2003) states,

"I have come to see leadership not only as a field of study but as a master discipline that illuminates some of the toughest problems of human needs and social change, and in the process exploits the findings of political science, history, sociology, philosophy, theology, literature, and psychology. I have come to see, too, the contributions that the study of leadership can make to those disciplines." (p. 9)

I share this perspective as a current gifted education teacher, the facilitator of a high school leadership class, a mentor to new gifted educators, and Past President of the Kentucky Association for Gifted Education in the United States. Within these positions, I speak with general education teachers, school administrators, and gifted educators from across the Commonwealth of Kentucky on a consistent basis and periodically with gifted educators across the United States. Many educators confirm that they do not consistently practice differentiated instruction to meet the needs of students identified as gifted in the areas of Specific Academic Aptitude, General Intellectual Ability, Creativity, Leadership, or Visual/Performing Arts. Although differentiated instruction is recognized by teachers, administrators, and educational researchers as an effective teaching strategy for all levels of learners in heterogeneous classrooms, most educators acknowledge that they do not employ differentiated practices due to constraints of time, resources, knowledge, and training (Ziernwald et al., 2022).

Along with constraints that inhibit the implementation of differentiated instruction in the core subject areas, I find that Kentucky gifted teachers often share the misconception that leadership lessons and activities share those constraints. Instead, lessons and activities to enhance leadership skills can be embedded in existing lessons in the general education classrooms and/or through gifted service delivery options as listed in Kentucky State Regulations. Gifted service options are to be implemented during the school day by either the general education classroom teacher, a gifted educator, or both. Some gifted service options included in the regulation are special counseling services, subject and whole-grade acceleration, collaborative teaching and consultation services, differentiated study experiences, enrichment services, mentorships, self-contained classrooms, pull-out services, and mentorships (704 KAR 3:285).

When communicating with educators in my state and in my country, I hear a common message that classroom teachers must focus on reading and math, not just because of importance of those subject areas, but because of the learning gap exacerbated by the COVID 19 pandemic. Therefore, leadership opportunities are perceived as limited as American classroom teachers are asked to focus on reading and math curricula which require educators to teach to their academic standards and, therefore, may not allow opportunities for activities specifically designed to foster leadership. When I discuss the specific needs of gifted leaders in the classroom with both gifted and general education teachers, I find that many educators focus on opportunities for students to undertake leadership roles during group work or specific tasks in the classroom instead of focusing on characteristics that help grow effective leaders. I hope this article provides a starting point for educators and administrators to recognize leadership opportunities for students throughout the grade levels and that educators and administrators can pursue professional development that meets the needs of differentiated instruction for leadership and the other areas of giftedness.

The definition of Psychosocial Skills according to Kentucky's gifted regulation states:

"Psychosocial or leadership ability" means possessing either potential or demonstrated ability to perform at an exceptionally high level in social skills and interpersonal qualities such as poise, effective oral and written expression, managerial ability, and the ability, or vision, to set goals and organize others to successfully reach those goals (704 KAR 3:285 Section 1. Definitions. (26)).

The National Association for Gifted Children (NAGC) Programming Standards, contain student outcomes for Learning and Development that include Cognitive, Psychosocial, and Affective Growth stating:

Students with gifts and talents demonstrate cognitive growth and psychosocial skills that support their talent development as a result of meaningful and challenging learning activities that address their unique characteristics and needs (NAGC Programming Standard 1.5).

If we apply the definition of psychosocial/leadership ability along with the NAGC student outcomes we have a foundation to build opportunities to foster strengths in leadership through existing lessons and activities in general education classrooms and/or through gifted service delivery options.

As current educational trends support the implementation of groupwork, project-based learning, and producing and presenting

original products, occasions to foster basic leadership skills are available by embedding opportunities to practice them in existing curriculum and instruction. Educators should be aware of opportunities to grow both gifted leaders and potentially gifted leaders as a component of differentiated instruction. When speaking of the Law of Opportunity, John Maxwell (2022) states “only secure leaders give power to others. This means that secure leaders spend their time identifying leaders; building them up; giving them resources, authority, and responsibility; and then turning them loose to achieve.” Educators must be secure leaders in their classrooms to grow student leaders. Educators should foster leadership skills to grow our gifted and potentially gifted leaders to prepare for “turning them loose to achieve” at opportune times.

For generations, American children at the elementary school level have experienced “Show and Tell,” an activity that entails standing in front of their classmates to speak about an object that is special to them. This is often their first educational public speaking experience. The success of using “Show and Tell” as an opportunity for public speaking can be attributed to the event occurring in a safe place where the child is surrounded by peers who are excited to see what is to be shared. Additionally, the presenter can have an emotional attachment to the well-known object which creates excitement and self-confidence for the speaker. Allowing for opportunities in the classroom for students to communicate effectively and be engaged listeners is a responsibility of the educator to foster the foundation of leadership skills. In educational settings across the world, whether students are working individually or in groups, they learn to explain how they solved a math problem, why a hypothesis is correct or incorrect, why colors complement each other, how to share and how to be fair, or when to speak up for themselves or others. Just as Maslow’s Hierarchy of Needs is foundational in effective teaching and learning, a safe school environment is highly conducive to fostering the basic leadership skills that help students succeed emotionally, intellectually, and academically.

Continuing with the elementary level, many educators provide opportunities for students to research which requires analyzing and evaluating information to synthesize into an original product. The product may be a research paper, an oral report, a display, or a digital presentation. While developmentally appropriate subject matter and activities for research and products are implemented throughout the elementary grade levels, higher-order thinking skills, time-management, organizational skills, and opportunities for public speaking in a safe environment build experiences for continuing growth of skills required for effective leadership. In addition to providing these opportunities for students, it is one of the many responsibilities of educators to recognize students’ potential strengths to identify students as gifted and grow those gifts into talent. Educators must be aware that what they are witnessing daily in the classroom, along with obvious leadership positions that are assigned to children, are characteristics of leadership and additional opportunities can then be provided to foster growth.

Building upon elementary school experiences, the middle school gifted students with whom I work, are prepared for intellectual and creative challenges to foster growth in their areas of giftedness through leadership activities. As their GT teacher, I explain to them that during our time together, we will focus on higher-order thinking skills to help them think critically and creatively to become habitual problem-solvers. The skills they practice in the GT Enrichment class can then be transferred to their general education classes no matter in which areas of giftedness they are identified. The students have a firm foundation of communication and collaboration which are practiced during discussion times (question of the day), independent or group research projects, debates on current controversial topics, and a variety of activities and products to enrich and accelerate their learning. The skills of analyzing and evaluating are shifted to self-analyzing and self-evaluating to allow students a deeper understanding of themselves and their giftedness.

While differentiation for high ability learners in specific academic areas is not consistently practiced in middle school general education

heterogeneous classrooms (Ziernwald et al., 2022), many middle school teachers employ lessons and activities that incorporate the skills described in the elementary school setting. Along with learning to be engaged listeners, effective communicators, and analyzing, evaluating, and creating, many gifted students explore out of their comfort zone of familiar school settings and begin to venture out in school related extracurricular activities that may include academic teams, sports, and clubs where they have opportunities to employ their leadership skills of time management, organization, and exhibiting initiative to guide others under the supervision and guidance of teachers and coaches. While many middle school students are not at the point where they can be fully turned “loose to achieve,” a goal stated by Maxwell (2022), they have an adequate amount of autonomy to make some decisions and problem-solve under adult supervision.

When gifted leaders reach the high school level, many school districts across the United States offer high-level courses that utilize the strengths I have mentioned. If gifted students enroll in Honors, Advanced Placement, or Dual Credit courses, they must rely on their academic integrity, problem-solving skills, and managerial skills to successfully complete their classes and prepare for universities, the military, or the workforce. Students who are identified in the Visual/Performing Arts and taking advanced classes in their areas of giftedness must be able to analyze and evaluate their work to create their original products. By building upon the foundation of basic leadership skills at the elementary level and then practicing leadership skills throughout the middle school level, high school students continue to grow and be confident in their areas of giftedness along with utilizing practical leadership skills which prepares them for leadership roles at the high school level and beyond.

I am very fortunate to be the facilitator of a high school leadership class in my home district in the Commonwealth of Kentucky. While I collaborate with the Elementary Gifted Coordinator and teach the gifted middle school students, the gifted leaders’ experiences culminate with the leadership class and other high school leadership opportunities. The goal of the leadership class is for students to assume responsibilities of being servant leaders in the classroom, the school, the district, and the state. Gifted leaders are provided with decision-making opportunities as the class is student led. As I facilitate the class, opportunities for students to stumble, fall, and sometimes fail are encountered to allow them to reflect on situations, self-analyze, and self-evaluate to initiate changes for personal growth. Our gifted leaders organize and implement local conferences, mentor younger gifted students throughout the district, volunteer time to help organizations in our community, among many other opportunities. It is the opportune time for “turning them loose to achieve.”

As students move through the elementary, middle, and high school levels or as they learn and grow in whatever educational environment they experience, educators must be aware of the strengths and skills associated with leadership to ensure they are incorporated in lessons and activities. By building foundations for effective leadership and providing opportunities for gifted leaders to practice their transformational skills, educators can help grow gifts into talents which can be applied to any area of giftedness.

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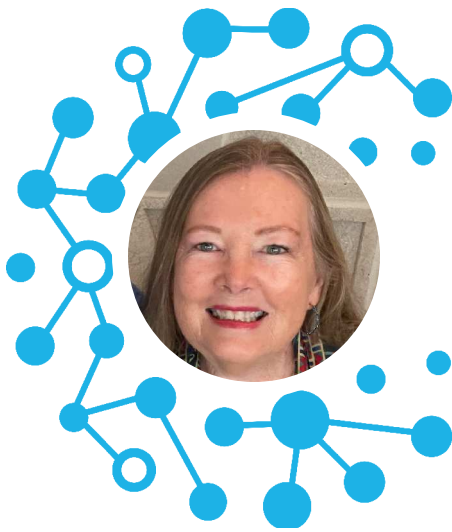
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Dynamically scaffolding the social and emotional learning strengths and challenges of students with twice-exceptionalities

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When gifted students' advanced capabilities co-exist with other neurological exceptionalities or disabilities, twice- or multi-exceptionalities ensue. While the social and emotional competences and needs of students with twice-exceptionalities (2e) are widely researched, there is less empirical research on their actual Social and Emotional Learning (SEL) processes. Their SEL includes scaffolding the development of students' social and emotional competences within sensitive, inclusive, and risk-free learning environments. Social and Emotional Competence (SEC) includes the relationships between intrapersonal and interpersonal agency factors that are crucial for 2e students' well-being. This summary provides an overview of the strengths and challenges of students with twice-exceptionalities and their SEC and SEL needs to support their academic, social, and emotional well-being; specifically of students who are intellectually or creatively Gifted who may also have Learning Disabilities (GLD), high functioning autism spectrum disorder (GASD), or Attention Deficit Hyperactivity Disorder (GADHD). In addition, SEL strategies for 2e based on positive psychology, gifted education research, the combined principles of the CASEL Framework, social-constructivism and the Model of Dynamic Differentiation (MoDD) will be provided. This summary concludes with some implications for practice.

The development of SEC results in positive well-being

Gifted students are as socially and emotionally stable as their same-age peers, but the gifted may face difficulties not experienced by their counterparts. These difficulties may be due to their advanced intellectual or creative capacities, asynchronous development different to typical peers, the manifestation of psychosocial characteristics, or the disparity between their SEL needs and provisions, which reinforces the need to support their Social and Emotional competences (SEC) with Social and Emotional Learning (SEL). Furthermore, some gifted populations are more at risk of additional psychosocial difficulties, such as 2e students. While these co-existing exceptionalities may exacerbate identification, behavioural outcomes, confuse the etiology of 2e, and complicate possible support, the overlap between the exceptionalities in one student can be viewed as dynamic SEC strengths to be nurtured, rather than comorbid difficulties to be treated.

The developmentally and ecologically founded *Collaborative for Social, Academic, and Emotional Learning* (CASEL 2015) framework reiterates five core social and emotional competences, that are: *self-awareness; self-management; relationship skills; social awareness; and responsible decision-making* (CASEL, 2015). Self-awareness, self-management, and responsible decision-making are intrapersonal (i.e., internal) competences, while social awareness and relationship skills are

interpersonal (i.e., external) competences. Developing SEC includes understanding the relationships between intrapersonal and interpersonal agency factors that are crucial for 2e students' well-being as it influences their achievement, social relationships, and health factors.

Academic achievement and positive intrapersonal and interpersonal well-being result from the development of SEC, but psychosocial difficulties may ensue if students' SEC is not developed through SEL within sensitive, inclusive, risk-free, and student-relevant learning ecologies. SEL includes scaffolding students' development of their SEC so self-regulation evolves. SEL can improve student capacity to manage depression and stress, increase student achievement, and improve interrelationship skills and attitudinal factors. However, most SEL programmes are not designed for gifted students' unique needs, nor for 2e students, but for students generally, so SEL provisions specifically for 2e's atypical needs are essential.

Scaffolding 2e Social & Emotional Learning (SEL)

A 2e student may be gifted, but underachieving and not yet talented, though still have the potential to develop their talent if supported. Hence, the aim is to support 2e students' SEC development and growth of intrapersonal and interpersonal agency through SEL to promote well-being that results in talent development. Also, 2e students exhibit positive attributes that may include intrapersonal strengths, positive emotions and experiences, and meaningful interrelationships. Dynamically targeting these strengths, rather than focussing on weaknesses is the focus here. In the development of intrapersonal (i.e., self-awareness, self-management) and interpersonal (i.e., relationship skills) competences, well-being should be nurtured to manifest outcomes, such as self-motivation, school enjoyment, achievement, and other resulting competences.

The Model of Dynamic Differentiation (MoDD) provides a pedagogic approach to educational provisions that transits from the 'developing' child generally to the student's academic, intrapersonal, and interpersonal development in differentiated educational contexts specifically. The MoDD highlights the dynamicity of bidirectional human and contextual interrelationships between varying teaching and learning processes involving assessment of student strengths, enrichment based on interests, scaffolding individual needs, and self-regulating learning within and across all the educational contexts from the student educating themselves, to the classroom, school, community, family, global and virtual contexts. The focus here is on *scaffolding* support processes in varying learning environments to help

2e students SEL, e.g., scaffolding strength development and achievement can enhance 2e students' self-efficacy and their self-concept.

SEC complexities of Gifted students with Learning Disabilities (GLD) and SEL

GLD combines giftedness and learning difficulties. Learning disabilities or difficulties are exhibited in many forms, such as dyslexia, dyscalculia, dyspraxia, and the like. These learning difficulties may impact intrapersonal and interpersonal agency factors, resulting in challenges, such as academic disengagement, disciplinary outcomes for adverse behavioural reactions, and poor social functioning. GLD may be highly cognitively advanced enabling their awareness of their social difficulties, but lack the social skills to relate interpersonally, resulting in social isolation or poor self-concept.

GLD intrapersonal agency factors likely include lower self-concept, poor self-esteem, and depression. GLD students may find the discrepancy between their exceptionalities difficult to cope with, contributing to contradictory thinking about their potential, which can decrease their self-concept and increase their anxiety. They may perceive themselves as being different to their peers, struggle with social-emotional problems, and have difficulty relating to their peers so they self-isolate. Focussing on remediation alone is likely to emphasise challenges and difficulties, lowering self-esteem, reducing motivation, and increasing stressors or depression, while strength-based gifted education strategies and programmes increase participants' self-concept. Hence, provisions need to encompass strength-based SEL of these SEC alongside academic learning.

When GLD typical growth is evident, developmental instruction is required, while their specific strength may need scaffolding to develop further. In turn, areas of challenge should be remediated with research-based interventions, such as using technologies to replace handwriting and to support grammar and syntax development, to enable giftedness to become unmasked, to decrease disengagement, and to increase achievement.

Teaching 2e self-advocacy through role-playing and modeling is empowering and can increase their competences, such as self-awareness and management skills. A social-constructivist interpersonal approach would utilize a mentor or grouping to support the development of SEC for GLD students. Interpersonal dynamics in small group contexts with like-minded peers allow students the opportunity to share their perspectives and experiences regarding how they are feeling, and to focus on interests and strengths for group assignments.

In relation to interpersonal agency that may enhance positive peer relationships, open-ended tasks can provide opportunities for risk-taking during small group creative learning tasks. Teachers can model creative learning processes and teach creative thinking, and redirect student creativity, over-enthusiasm, or distracting responses into individual or small-group real world problem-solving tasks. Access to gifted education programmes or other specialized provisions matched with their strengths and interests helps build self-regulation skills and promote innovative outcomes.

SEC complexities of Gifted students with high functioning Autism (GASD) and SEL

Students with high functioning autism can also have mild to profound intellectual or creative giftedness or talent (GASD). Characteristics of ASD are social interaction and communication difficulties, obsessive interests, and repetitive behaviours, while single-mindedness, resilience, visual thinking, and problem solving are advantageous characteristics of students with GASD. However, the amalgamation of these characteristics presents differently to those with ASD alone or giftedness alone, e.g., GASD students may show some awareness of social differences, struggle with routines, and present with stereotypical behaviours, contributing to the unique cognitive dissidence and resulting non-social behaviours that

GASD students present. For example, while they may have extremely deep content knowledge, they may lack the social awareness or interrelationship skills to work productively with peers in group contexts. GASD students may manifest more depression, inattention, and difficulty with social skill development than their gifted peers.

A SEL strategy could tap into the students' interests and expertise by completing interest inventories, the results of which become the foundation for interest-based projects or assignments with choice. Educators can scaffold their transition between tasks and broaden their range of interests by relating the GASD's particular passion with other content knowledge or interdisciplinary issues and questions.

As far as interpersonal skills, teachers or counselors could provide social skills programmes to enable the development of group-based skills, to build on their creative social skills, and increase their social competences rather than their knowledge of social rules or etiquette. Engage GASD students in collaborative grouping contexts that enable sharing of unique social experiences and spontaneous scenarios for improvised responses that encourage opportunities for students with GASD to work with like-minded peers with like-interests for friendship-building and scaffolding learning. By creating risk-free interpersonal environments using these strategies, successful SEL intrapersonal outcomes for students with GASD can reduce social anxiety, or enhance interrelationships, and self-esteem.

SEC complexities of Gifted students with Attention Deficit Hyperactivity Disorder (GADHD) and SEL

Co-existing with giftedness, students with GADHD may present as having a neurobehavioural disorder that manifests in rapid speech, persistent non-social behaviours, extreme behavioural reactions, hyperactivity, impulsivity, distractibility, inattention, sensitivity to stimuli, and adverse competence beliefs that impact development. Again, it is important to reinforce GADHD students' strengths and creativity, rather than possible difficulties or challenges.

GADHD students may have executive functioning/learning problems, which means they have learning management difficulties, such as difficulty starting, organising, and completing tasks, hence having difficulty maintaining effort and being motivated. Educators can teach intrinsic motivation to increase self-efficacy and learning enjoyment and decrease achievement anxiety. Psychosocial competences, such as *effort* are pliable, hence, teachers can emphasise and praise individual effort and personal growth with feedback that matches goals. Setting short term goals increases student intrinsic motivation, so teach students to set personal goals to work towards mastery goals, where they learn new expertise that leads to improved SEC outcomes and talent development.

Support for executive functioning development through guidance by a significant other is recommended. Teachers can teach self-regulation competences within well-structured interdisciplinary instruction. Scaffolding and modeling metacognition and providing systematic practice in authentic learning contexts using relevant, engaging, and challenging content can also assist self-regulation skill development.

Pfeiffer and Foley-Nicpon (2018) caution against misdiagnoses, undertreatment, and overtreatment of students with GADHD which may result in grave educational, and social-emotional repercussions. While medications can help self-regulation, inattentive or hyperactive behaviors have also been linked to inappropriate curriculum and pedagogy. This reinforces the need to sensitively address the neuropsychological, social-emotional, and cognitive facets of both the giftedness and the neurodivergence.

Many of the GADHD competences can be enhanced through social skills programmes or evidence-based counseling support. However, any provisions for individual students with GADHD also needs to be based on comprehensive identification and ongoing monitoring that reflects the

dynamicality and complexity of the overlap and similarity of characteristics evident in both exceptionalities. This dynamicality and complexity suggest the need for greater flexibility in using strengths-based identification and provisions for students with GADHD for constructive social-emotional outcomes to ensue. Additionally, outreach enrichment programmes and whole schools for 2e students are gaining favour for supporting the academic and SEC of diversely gifted 2e students.

Some Implications for practice

Provisions should be relevant to 2e strengths to ensure their potential is not overshadowed by their difficulties or challenges, and also address their differences, so these do not mask their high potential. A strength-based approach to provision for 2e can increase cognitive and social-emotional development. Promoting a collaborative multidisciplinary team approach to planning provisions for 2e in supportive school contexts is essential and in-school special education programmes are the most cost-effective interventions to support the psychosocial needs of 2e students. Nonetheless, varying strategies specific to 2e types and needs are required to help transform giftedness into talent.

Both interpersonal and intrapersonal competences can be nurtured following the practical application of the developmental phase of Gagné's (2016) DMGT and the ecologically-based MoDD framework that reinforces scaffolding and self-regulating student SEL holistic needs across varying learning contexts. Emotional well-being can be scaffolded by open communication between teacher and student, modeling empathy towards others, explicitly teaching SEC through SEL, and providing coping strategies to deal with stressors. These can be taught within small group ecological contexts with like-minded peers that nurture interpersonal growth and address specific intrapersonal competences.

Conclusion

Students with twice-exceptionalities are a diverse group of students who have both diverse special abilities and divergent special needs according to their type or combination of exceptionalities. They are often misunderstood, misdiagnosed, or underachieving, and their intrapersonal and interpersonal agency remain largely unsupported. Ill-conceived deficits-based provisions can exacerbate their social-emotional development and difficulties. Replacing language, such as deficit, deficiency, and disability with difference and divergence and using a strength-based approach to provisions begins the journey to successful 2e SEC and SEL outcomes. The dynamicality of 2e's overlapped exceptionalities needs special consideration for both the high ability and the complex challenges. Hence, their unique co-existing characteristics, which are different again to those with a single exceptionality or typical students, and their competences need scaffolding commensurate with both or all their exceptionalities. Based on social-constructivism and the MoDD, specially planned SEL strategies and programmes matched with their specific SEC will go partway to addressing their unique social-emotional needs and promoting well-being and talent development in students with twice-exceptionalities.

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Hamdan Giftedness Scale: The Objective Measurement for Identifying and Nurturing the Gifted

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Hamdan Bin Rashid Al Maktoum Foundation for Medical and Educational Sciences aims to establish a comprehensive system for measuring and identifying gifted students, as well as providing them with the necessary support and care. Despite the UAE's commitment for over twenty years to identify and develop services for gifted students in both public and private schools, there has not been a locally developed scale or test specifically for this purpose (AlGhawi, 2017). Arab countries often use translated intelligence tests to identify gifted children, but these tests face several challenges and limitations in the Arabic environment. One of the most significant issues with translation is the potential for linguistic and cultural biases. When intelligence tests are translated into Arabic, subtle semantic and cultural nuances can impact their validity and fairness. Additionally, the concept of giftedness can vary between cultures (Mandelman et al., 2010). Moreover, translating IQ tests to other languages may overlook sociocultural factors that influence children's performance, such as educational disparities and limited resources (Shuttleworth-Edwards, 2016). Therefore, it is essential to develop assessment tools that are culturally and linguistically tailored to the unique characteristics and experiences of gifted children in the Arabic countries.

Creating a local test that caters to the needs of each country or culture is essential. Ensuring that these tools are appropriate for any culture requires a high validity and reliability of any intelligence test. Hamdan bin Rashid Al Maktoum Foundation for Medical and Educational Sciences has developed a complete assessment kit for identifying a range of student abilities, not just those who are gifted. Hamdan Giftedness Scale (HGS) is intended to be used not only for identifying gifted students, but also for evaluating intellectual abilities across the general student population. The main purpose of this article is to evaluate the reliability and validity of the HGS in assessing intellectual abilities of students in the UAE, using Rasch theory and item response theory. This comprehensive evaluation is meant to validate the use of the HGS for a variety of educational and clinical applications, beyond just the identification of gifted learners.

Rasch Model and HGS

The Rasch model is regarded as a measurement model rather than a statistical model. It has a long-standing history of application in social and behavioral sciences, including educational measurement (Hayat, Putra & Suryadi, 2020). This model provides ability estimates that are independent of both the test's difficulty and the abilities of other test

takers. This can be achieved by placing individual ability and item difficulty on the same scale, as the Rasch model allows us to predict which items are most likely to be answered correctly by any given test taker (Stemler & Naples, 2021). The true strength of the Rasch model lies in its fit statistics, which help determine whether a linear scale has been created that functions uniformly for all test takers, thereby enabling meaningful interpretation of test results. With the Rasch model, test scores have a consistent meaning for all test takers, unlike when using other Classical Test Theory (CTT).

Considering that most gifted tests are multiple-choice, what if we have a test consisting of 20 items, and the student answers the first five questions and the last three questions? Does the student receive a score of 8 out of 20? Are the items answered by the student of the same difficulty level? Are the items answered by the student less difficult than the questions they did not answer? And what happens if the items the student answered are more difficult than the items they did not answer?

It is an accepted principle that an individual's ability remains constant regardless of the test being measured, meaning that an individual's ability should not be affected by the ease or difficulty of the test items. The following figure illustrates a comparison between two individuals on three types of tests.



Figure 1: The person-item map

We observe in the figure that the individuals' abilities remain constant across the three tests, which is logical and natural. However, due to the

differing difficulty parameters in the three tests and the lack of distribution of items to comprehensively measure the trait, this has led to variations in the scores they received on the three tests (Figure 1).

The following figure 2 represents the ideal distribution of test items using Rasch model.



The Rasch analysis was conducted to examine the unidimensionality of the sub-scales using a Rasch dichotomous model in the WINSTEPS computer program. The infit and outfit statistics were applied to verify whether item responses fit the expectations of the unidimensional Rasch model or not. All items are fit and indicate unidimensionality. Moreover, Principal Component Analysis (PCA) on residuals was applied to further ascertain the unidimensionality. The residual variance of the first principal component was $\leq 20\%$, demonstrating unidimensionality (Wu et al., 2019). Also, Rasch person reliability was analyzed for the items which fitted the unidimensional Rasch model. The criteria of Rasch person reliability were 0.62, acceptable reliability (Aaronson et al, 2002; Orji, Mandryk & Vassileva, 2012).

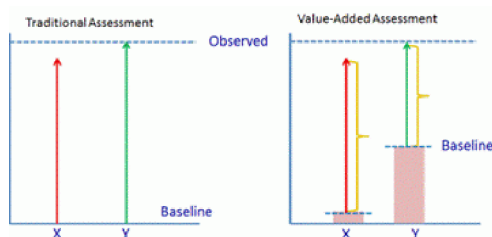
The measurement properties of the HGS scale items were assessed using the separation index and reliability measures. The separation index for persons was found to be 1.27, indicating moderate measurement precision in distinguishing between individuals with varying levels of the measured trait. Additionally, the separation index for items yielded a value of 13.04, suggesting a high level of measurement precision in differentiating between items with different levels of difficulty or severity.

In short, the Rasch model helps achieve an objective and fair measurement of students' abilities, contributing to the improvement of education quality and providing appropriate support for each student based on their individual needs.

Value-added Assessment

Evaluating the value-added of programs provided to gifted students is a complementary aspect of objective measurement, which can only be achieved through instruments that are designed, standardized, and calibrated using the Rasch model. Many studies (Ayoub, 2014; 2015; 2016; 2018) have emphasized the importance of using the value-added approach in evaluating the programs as an alternative to the average test scores, which are commonly used as the most important indicators to express performance growth. Gascon (2006) indicates that the use of value-added depends on the analysis of the results of the tests by different statistical methods that consider the characteristics of the learner, which may affect the degree and growth. The simplest way to calculate the degree of value-added (growth), is to present the baseline achievement of the learner and compare it with the current observed achievement in order to determine his growth over a certain period of time. The current research shows in Figure (1) the difference between traditional measurement and value-added assessment in measuring the growth of student performance.

Figure (3) the difference between traditional measurement and value-added assessment in measuring the growth of student performance



In the traditional measurement, learning outcomes (current performance) are measured without considering the student's prior knowledge and his level. The students in program (Y) may have prior knowledge of the subject of the program and thus they have achieved a learning outcome unlike or opposite to the students who are participating in program (X). While in the evaluation of value-added, the prior knowledge and the level of the students are considered as Figure 1 shows. The students participating in program (Y) have prior knowledge of the subject of the program more than the students participating in program (X). Although the students participating in program (Y) achieved learning outcomes, the added value of program (X) to the student performance is more than the value added of program (Y) to the performance of the students (Ayoub, 2015).

Gifted students are a heterogeneous group. The students who are participating in the enrichment programs come with different and varied previous experiences, skills, and knowledge. So, the Rasch model and value-added analysis can be used to divide them into homogeneous groups in terms of baseline (starting point) and provide them with the proper education that copes with their diversity and introduces care for each cluster considering their ability level.

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Call for Articles

We would like to invite you to write an article for the WorldTalentWeb newsletter. The theme and writing style are open for the author to determine. Articles could take the shape of an interview with a specialist in the field, a report on research or a recent event, a book or resource review etc. The guidelines for the article are listed below.

Please submit your article to the following email: WorldTalentWeb@ha.ae

Guidelines for submitting an article for the WorldTalentWeb newsletter

1. A submitted article should be between 800 to 2000 words, not including references.
2. WorldTalentWeb newsletter caters to the international community and thus, all articles should be written in English.
3. American or British spelling is accepted.
4. All non-native English speakers should make sure to check their articles for language accuracy before submitting them.
5. The article should be in Times New Roman font, size 12 pt.
6. Authors should avoid using footnotes.
7. Authors should adhere to the APA style and/or formatting guidelines provided in the APA Manual, 7th Edition.
8. The article should be submitted with embedded photos, and tables, and figures if relevant.
9. The article should be submitted as an email attachment as a Microsoft Word document.
10. Articles should be word-processed and single-spaced with 1 inch (2.54 cm) at the top, bottom, left, and right of every page as per the APA 7th edition requirements.
11. Authors should strictly observe the copyrights-requirements and cite the work of others correctly.
12. Relevant permission should be obtained if photos of people are used. An email giving permission to use photos publicly is sufficient.
13. Authors should include their full name, title, institutional affiliation, and a high-resolution color photo.
14. If an article was published before elsewhere, then only submit a summary of the original document with acknowledgment.
15. Authors are encouraged to use supportive pictures.
16. The editorial team reserves the right to edit articles accepted for publication.

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