

Recognizing and Unmasking Dysgraphia while Nurturing Giftedness in your 2E Students

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TOPICS

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How do general classroom teachers view twice-exceptional students?

- General classroom teachers' views of twice-exceptional (2e) students may vary based on their personal experiences and exposure to 2e students. However, some common views and challenges that teachers may face in teaching 2e students include:
- Limited understanding: Some teachers may not have a full understanding of what it means to be twice-exceptional and the unique challenges that these students face.
- Frustration: Teachers may become frustrated with 2e students who may appear to be underachieving or not living up to their potential in certain areas despite their giftedness.
- Difficulty identifying: Teachers may struggle to identify 2e students in their classroom, as these students may appear to be average or struggling due to their learning or developmental disabilities.
- Classroom management: Teachers may struggle to manage the classroom environment to meet the needs of both the giftedness and the learning or developmental disabilities of 2e students.
- Resource constraints: Teachers may have limited resources and support to address the needs of 2e students, which can make it difficult to meet the students' unique needs.
- It's important for general classroom teachers to receive training and support to better understand and teach 2e students, as well as access to resources and accommodations to help these students succeed in the classroom.
- Chatgpt generated.

Stereotypes of 2E

Lazy:

Some people may assume that 2e students are just lazy or unmotivated when they struggle with certain tasks or assignments.

Overconfident:

Others may assume that 2e students are overly confident because of their giftedness and may not realize they have a learning disability or disorder.

Inconsistent:

2e students may have uneven performance in different areas or tasks, which can be seen as inconsistent.

Disorganized:

Some people may assume that 2e students are disorganized or lack focus because they have trouble with certain tasks or assignments.

Defiant:

2e students may struggle with authority figures, which can lead to assumptions that they are defiant or oppositional.

Defining Twice-Exceptional

Reis et al (2014)

"Twice-exceptional learners are students who demonstrate the potential for high achievement or creative productivity in one or more domains such as math, science, technology, the social arts, the visual, spatial, or performing arts or other areas of human productivity AND who manifest one or more disabilities as defined by federal or state eligibility criteria."

Assessment and identification of both giftedness and the disability for educational services:


"Twice-exceptional students require differentiated instruction, curricular and instructional accommodations and/or modifications, direct services, specialized instruction, acceleration options, and opportunities for talent development that incorporate the effects of their dual diagnosis".

(Reis et al, 2014, p. 222-223)

Characteristics of Dysgraphia

- Silvermann (2002), in describing the range of visual-spatial learners in “Upside-Down Brilliance”, states “The list ... contains the symptoms of what is known to special educators as *dygraphia*, to occupational therapists as *sensory integration dysfunction*, to optometrists as *visual-motor impairment*, or to psychologists as *developmental coordinator disorder*. In more teacher-friendly language, I call it a writing disability” (2002, p.298-299).
- She presents a ‘*Diagnostic Checklist of Writing Disability*’ that includes:
 - poor and strained posture;
 - awkward pencil holding;
 - irregular pencil pressure;
 - misshapen letters;
 - mixing upper and lower case;
 - not finishing words;
 - irregular spacing;
 - fusing cursive and print.

Signs of Dysgraphia

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- Clumsy movements
 - Awkward way of gripping the pencil
 - Disorganized locker and management of personal space
 - Struggled to learn to write – poor letter formation, different sized letters, fused words and letters, irregular spacing, irregular pressure
 - Handwriting largely illegible – mostly in cursive but print also impacted
 - Excellent oral production that does not translate into written expression
 - Avoids and procrastinates when writing is demanded
 - Takes a long time to write with mental blocks to ideas
 - Submits incomplete assignments
 - Lacks motivation to work on written assignments and tasks

Dysgraphia – multiple forms, types, degrees

“The **Forgotten Disability** in Gifted Children” Mascull (1999)

- Defining dysgraphia in gifted students is complex as they display many characteristics typical of gifted students as demonstrated in the standardized assessments and profiles of abilities and talents
- They do not produce effective written production or do this sporadically and slowly with varying degrees of legibility.
- A racing mind that can't be captured in laborious writing.
- Complicated by perfectionism where the work is redone multiple times
- Feelings of inadequacy and failure to translate their thoughts and ability into high standards set either by the teacher or the student themselves.
- High alertness and intensities of gifted students and their complex thought processes and ideas, the frustration grows.
- May just 'give up' or refuse to write

Research Studies

**Reis (2023)
Project Twice
Exceptional with
Autism Spectrum
Disorder (2E-ASD)
USDOE Javits Grant.
How to Identify and
Teach 2E-ASD
students**

- Study 1: Online Survey of 147 Disability Providers
- Study 2: Service Provider Interviews
- Study 3: Interviews of 40 students with 2E/ASD
- Study 4: Interviews with Teachers and Counselors
- <https://giftedasd.project.uconn.edu>

Research Studies and Findings (Reis, 2023) Successful 2E University Students - Factors

- Study 1: Online Survey of 147 Disability Providers
- Study 2: Service Provider Interviews – what factors facilitate academic success in university that must be provided in high school?
 - Self-determination and self-advocacy; campus advocacy; clubs and social activities; executive functioning – skills; positive social relationships
- Study 3: Interviews of 40 students with 2E/ASD – 18% diverse culturally; 43% transferred from community colleges
 - half identified in school; majority received enrichment and talent development; 90% participated in at least 1 school activity or camp; 73% taken Honors or AP.
- Study 4: Interviews with Teachers and Counselors
 - Most had never reflected on 2E students, stating all students are different and have different needs and learning styles. Few had any idea on best practices for 2E

Two Gifted Education Experts who are 2E


Scott Barry Kaufman

- <https://scottbarrykaufman.com/bio/>
- View the 2019 NeuroLeadership Summit talk

Temple Grandin

- <https://www.templegrandin.com/templehome.html>

Strengths- Based Learning

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- ❖ Infusing student strengths, abilities, talents and interests;
 - ❖ Aligning curriculum with their strengths;
 - ❖ Promoting self-esteem and confidence in abilities;
 - ❖ Engaging students with active learning;
 - ❖ Compensation strategies for growth;
 - ❖ Developing skills through strengths;
 - ❖ Focus on individual development and needs;
 - ❖ Talent development opportunities;
 - ❖ **teacher as facilitator moving towards student potential for creative productivity**

Reis, s; Baum, S. (2020) Using Strength-Based Pedagogy to Engage and Challenge Twice-Exceptional Student Development. University of Connecticut. Professional Learning Series. <https://gifted.uconn.edu/>



John is a gifted 8th grader who has been diagnosed with dyslexia. He excels in math and science but struggles with writing. John's writing is often disorganized and difficult to read, and he has difficulty expressing his ideas clearly. He is frustrated because he knows he is capable of more but feels held back by his dyslexia.

Alex is a 6th-grade student who has been diagnosed with both ADHD and a processing disorder. He struggles with writing, especially with organizing his thoughts and staying on task. He often gets stuck on the first sentence or paragraph of an assignment and becomes easily frustrated.

Sarah is a 10th-grade student who has been identified as gifted and talented in language arts but also has ADHD. She has difficulty staying focused during writing assignments and often misses important details. Despite her talent for writing, her work is often disorganized and lacks coherence.

Emily is a 7th-grade student who has been identified as gifted and talented in multiple areas but also has a specific learning disability in writing. She has difficulty with spelling, grammar, and sentence structure, which can make her writing difficult to understand. Emily is frustrated because she knows she has good ideas but struggles to express them clearly in writing.

Factors in achievement and success of students challenged by dysgraphia - case study

- A teacher who volunteered to tutor in handwriting practice and performance while infusing his love of literature and reading – overcoming the weakness by focus on strengths.
- Teachers who became mentors who understood challenges and assisted to develop skills and strategies for coping with them but focused on his interests and talents. They offered ways to produce in areas of passion about in a range of creative formats.
- Facilitating ways to compact the regular curriculum and work individually at an advanced pace and accelerated content in areas of his interest
- Supporting taking on leadership roles and creating a club for his musical talent
- Enrichment opportunities beyond the regular curriculum for art and music
- Recognizing interest in theatre and ability as an actor and giving him major roles in school productions.
- Boost to self-esteem in winning the art prizes and local exhibition
- Parents who were fully supportive, understood the challenges and provided opportunities and constantly sought the best educational and personal opportunities.

Creativity and Dysgraphia

- Creativity involves both divergent and convergent thinking
- Creativity involves both conception and production; a process and outcome
- Twice-exceptional students may be highly creative but struggle with capturing thoughts through the writing process
- Use text capture and graphic organizers and technologies
- Note taking is a challenge – use voice recordings to print
- Use different tools and apps for different stages of creativity – preparation; incubation; illumination; verification
- Use multiple templates for creative production


Reisman, F.; Severino, L. (2023) Using Creativity to Address Dyslexia, Dysgraphic, and Dyscalculia. Taylor & Francis.



Guidelines for Teachers: Addressing Dysgraphia in the classroom with gifted students. (Eriksson, 2022)

- Observe the way the student holds the pencil and varying pressure on the paper
- Observe the strokes made in writing where there are irregular letter formations, spacing, linked words or missing letters, missed lines
- Observe levels of anxiety when given writing tasks, such as procrastination, incomplete work, broken pencils
- Observe motor skills related to using scissors, glues, paints, materials
- Observe gross motor challenges with balancing, tripping, falling
- Observe struggle with organizing ideas into a structure
- Observe oral skills with fluent self-expression and oral performance
- Observe behavior in the classroom and interaction with peers
- Take steps to prevent bullying

Assessment

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- Refer students for a comprehensive assessment to determine the need for additional tutoring, technology training, services for addressing handwriting and written production and general academic progress
 - Develop an Individual Educational Plan that also integrates their Gifted Educational Plan. Include strengths-based goals on I.E.P. or 504 Plan.
 - Arrange meetings with the supportive team, special education and teachers of the gifted and parents to ensure that everyone understands the needs and expectations and can provide for the range of services and opportunities needed.
 - Monitor progress and examine the quality of the educational plan regularly
 - Examine the need for teacher training in twice-exceptional students as well as dysgraphia
 - As dysgraphia can occur in different degrees and types, and be combined with other learning and behavioral disabilities, teachers need training on the complexity of students who are neurodiverse.

Strategies to compensate, overcome and individualize



Provide a selection of assistive pencil grips and different types and strengths of pencils and pens with lined paper spaced wider or raised lines for guiding script.



Allow the use of assistive technology for writing; graphic organizers, speech to text programs; using recording for note-taking; provide templates and examples; allow for additional time to explore topics in depth and complete tasks; facilitate self-evaluation and the generation of rubrics for this to give students a structure and timeline that is individually relevant.



Provide for enrichment activities that focus on areas of talent, interest and abilities and integrate meaningful written production.



Develop the agency in students to identify critical issues that they are concerned about and take steps to make an impact on the field and communities particularly in relation to ethical problems impacting society and the world at large.



Facilitate the development of independent investigations and passion projects through providing assistance with clarifying and developing meaningful topics and problems; generating resources and sources of information; providing mentors in areas of specialization; monitoring progress through action information; creating opportunities for presenting final productivity to a meaningful audience or outcome.



Assistive Technology – Applications

- Canva – Magic writing – AI text generator - <https://www.canva.com/magic-write/>
- Grammarly - <https://www.grammarly.com>
- Ghotit – <https://www.ghotit.com/ghotit-for-kids>
- Snap Type - <https://snaptypeapp.com/>

General

- Lifelong Learning Center (2023) Apps to help students with Dysgraphia and Writing Difficulties: <http://texaslifelonglearning.com/apps-to-help-students-with-dysgraphia-and-writing-difficulties/>
- Aaeteachers – 16 Writing Apps for Students and Teachers: <https://www.aaeteachers.org/index.php/blog/1642-16-writing-apps-for-students-and-teachers>
- Med Kharbach (2023) Some of the Best Writing Apps for Elementary Students - <https://www.educatorstechnology.com/2018/05/some-of-best-writing-apps-for.html>
- Med Kharbach (2023) Speech to Text Tools - <https://www.educatorstechnology.com/2021/01/voice-type-your-documents-three-great.html>
- Online Dictation; Dictanote; VoiceNote.
- 20 Tools (2023) Elementary School Writing Apps and Websites - <https://www.commonsense.org/education/lists/elementary-school-writing-apps-and-websites>

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