

W&M ScholarWorks

Center for Gifted Education Reports

Center for Gifted Education

2023

Students with Gifts and Talents: A Resource Guide

CTY Ireland, Dublin City University

Center for Gifted Education, William & Mary

Follow this and additional works at: https://scholarworks.wm.edu/cgereports

Part of the Education Commons

Recommended Citation

CTY Ireland, Dublin City University and Center for Gifted Education, William & Mary, "Students with Gifts and Talents: A Resource Guide" (2023). *Center for Gifted Education Reports.* 1. https://scholarworks.wm.edu/cgereports/1

This Report is brought to you for free and open access by the Center for Gifted Education at W&M ScholarWorks. It has been accepted for inclusion in Center for Gifted Education Reports by an authorized administrator of W&M ScholarWorks. For more information, please contact scholarworks@wm.edu.



Students with Gifts and Talents A Resource Guide

Prepared by CTY Ireland, Dublin City University and the Center for Gifted Education, William & Mary

R

6

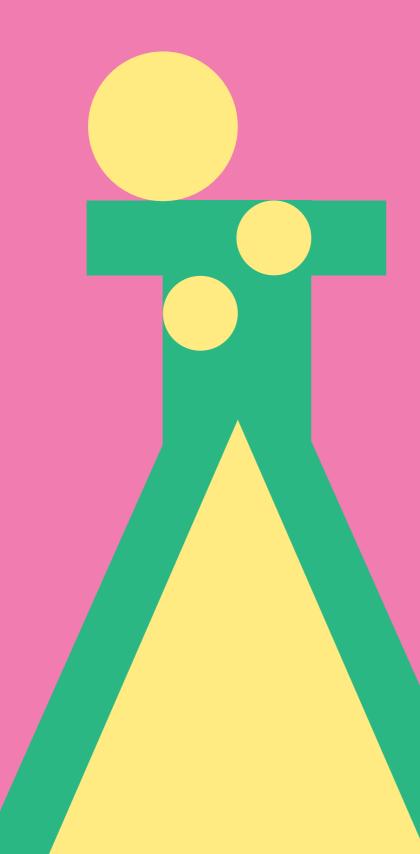
ſ

A

Students with Gifts and Talents A Resource Guide

Centre for Talented Youth, Ireland Dublin City University www.dcu.ie/ctyi

Center for Gifted Educa William & Mary Williamsburg, VA https://cfge.wm.edu



Contents

02	Introduction Colm O'Reilly
08	Gifted Students' Psycho Jennifer Riedl Cross, Tracy L. Cross &
23	Gifted Students in Scho Jennifer Riedl Cross, Tracy L. Cross &
32	Gifted Students' Social and Experiences Jennifer Riedl Cross, Tracy L. Cross &
43	Twice Exceptional Stude
51	Gifted Disadvantaged S Leeanne Hinch
61	Gifted LGBTQ Students Orla Dunne
72	Author Biographies







Colm O'Reilly

ool Colm O'Reilly

Beliefs

Colm O'Reilly

lents

Students

S

Introduction

Different Ways of Learning

CTY Ireland (CTYI) at Dublin City University is a not for profit organisation that works with high ability children aged 6 to 16. CTYI offers fast paced university style courses for academically talented students from all over Ireland and overseas. Since its establishment in 1993 some 50,000 students have participated in classes run by CTYI including over 5,000 students in 2022. The aim is to allow all talented students to reach their potential both academically and socially by providing relevant and interesting courses based on ability and interest rather than age. High ability students can have problems at school as the curriculum is often not challenging enough for them. This can lead to frustration and underachievement.

At CTYI the courses are more geared to their needs and are based on a university curriculum. Staple courses include Medicine, Law & Order, Forensic Science, Imaginative Writing, Exploring Engineering, and App Design, while more specialised courses include Board Game Design, Aeronautical Engineering, Japanese Language & Culture, Nanoscience, Neuroscience, and Model UN.

CTY Ireland has 10 full time staff members and 300 part time staff every year. The full time staff members are divided into academic and administrative staff with most of the academic staff holding doctorates in education relating to high ability students. The part time staff are mostly experts in particular fields including forensic science, computer programming, psychology and many others. These staff are often doctoral students in their particular field so they act as good role models to the students and are also at the cutting edge in relation to research in their particular field.

We have close links with many important organisations in the field of gifted education, including The DCU Institute of Education, The Johns Hopkins Center for Talented Youth, the William & Mary Center of Gifted Education, the European Talent Support Network and the European Council for High Ability (ECHA). Our academic staff regularly attend and present at international conferences, such as those organised by ECHA and the National Association for Gifted Children, as well as publishing research in books, reports, and academic journals.

The Center for Gifted Education (CFGE) at William & Mary and the Centre for Talented Youth Ireland have collaborated on research for 13 years. The CFGE is celebrating its 35th anniversary during the same year that William & Mary turns 330 years old. The CFGE employs 11 staff members, including five Ph.D. holding directors and an additional four doctoral students. Each year the CFGE also hires nearly 100 temporary faculty and counsellors for its programs.

The CFGE's programs include several student programs, including Camp Launch, a two week summer residential STEM program for economically disadvantaged, high-ability students. The CFGE also trains many teachers in a wide range of skills related to working with gifted students. The Advanced Placement Program prepares over 700 teachers each year to teach a wide range of AP courses. The CFGE also offers professional development in the use of the world-renown William & Mary curriculum for gifted students. The curriculum includes materials to assist teachers in language arts, mathematics, sciences, and social studies. The materials are used in all 50 US states and numerous foreign countries. Complementing the curriculum materials is the annual National Curriculum Network Conference hosted by the CFGE. Other events include an online Twice Exceptional Conference, and the Focusing on the Future event for parents and middle-school students.

The CFGE is also quite well known for its research. While all directors conduct research, the primary researchers for the CFGE are Dr. Tracy L. Cross and Dr. Jennifer Riedl Cross. They have partnered with the CTYI team to conduct research for over a decade. With a shared goal of ensuring the well-being of gifted students, the researchers for CFGE and CTYI work well as a team. Large scale studies on gifted students, educators and CTYI parents have been completed. From this research several books, reports and articles, and numerous research presentations at international conferences have been produced.

An unusual outcome of this long term research partnership has been the two Fulbright research opportunities sponsored by CTYI and the Fulbright organisation. These provided day to day collaborations across two six month periods of time when Tracy L. Cross and the second time, Jennifer Riedl Cross as well, lived on the campus of Dublin City University. These opportunities for partnerships in research are quite rare, extremely valuable, and very productive.

Outreach

CTY Ireland currently has four major outreach initiatives: CTYI Young Student programme, CTYI Older Student Programme, Early University Entrance Centre for Academic Achievement. The Young Student Programme caters for primary school children aged 6 to 12 and caters for up to 3,000 students per year. The Older Student programme caters for students aged 13 to 17 and works with up to 2,800 students per year.

Early University entrance is a programme for Transition Year students and has 700 students per year. The Centre for Academic Achievement works with students from socio-economically disadvantaged backgrounds who attend DEIS schools and caters for over 800 students per year.

Method

CTYI offers fast paced weekly or summer courses for students in a university setting. Academically the students are challenged at a pace suited to their ability and socially they get a chance to meet other students like themselves. Students wishing to participate in our programmes must first demonstrate high academic ability.

For our YS and OS programmes, this can be achieved through either our scheduled assessments or by submission of an Educational Psychologist's report. The latter option accommodates and caters for students with various difficulties or disabilities, as about 10% of gifted students are considered twice-exceptional i.e. gifted with a specific learning difficulty or disability.

Class sizes are small (20 students approx.). Instructors are genuinely passionate about their subject and inspire enthusiasm for the subject as well as overall love for learning. As they are often at the cutting-edge in their field, they can act as positive role models for students. Instructors help students nurture their talent and maximise their potential by challenging them at an advanced level and appropriate pace (known as optimal match).



Financial Aid

CTYI has been successful in creating a diverse student population by offering financial support to students coming from disadvantaged backgrounds. We offer financial assistance across all programmes, which has been greatly enhanced by generous parent donations. Approximately 10% of students attending CTYI 2023 Older Student summer programmes were granted financial aid, and similar numbers can be found in the YS programme. CTYI also offers significantly reduced fees to students who attend local DEIS schools linked with the DCU Access Office. The fees for older student programmes are reduced by 80-90%. In 2023, one third of students attending the DCU Summer Scholars programme came from local DEIS schools, and last semester over 12% of EUE students were from DEIS schools.

Research and Teacher Training

CTY Ireland has published two books in the field of gifted education and large scale reports on teachers and parents of gifted children. Six doctoral students have completed theses in gifted education at DCU and this year we have two new doctoral students.

In 2019 CTYI completed an EU Erasmus Plus project developing an online course for training teachers in gifted education. This free resource has been very popular with teachers across Europe.

After the publication of three reports over the last ten years which was the culmination of ten years of research with students, parents and teachers, we are very happy to produce this resource guide that highlights what we believe is best practice in this area.

What's in store

The recent student report that highlighted the academic and social experiences of gifted students¹ emphasised that some Irish high ability students may need help with developing strategies for coping with stressful situations. Others may be concerned that their peers are evaluating them in a negative fashion. While many students have positive peer relationships, some gifted students may be concerned about hurting their peers' feelings when they do better than them in exams. Also gifted students can benefit from fostering positive relationships with peers in mixed ability settings and showing more empathy and concern for other students.

The parent report explored the attitudes of parents whose children attended an out of school programme for gifted students² and highlighted that many parents felt their child were not being appropriately challenged at school and did not receive assignments that were based on their child's ability. Many felt that teachers rarely differentiated content relative to the ability of their child at both primary and secondary level. Most of the parents felt that their child's needs were met in out-of-school programmes like CTYI where the advanced material and more diverse subject choices were helpful for their child.

The teacher's report which was the first to look at teacher attitudes towards gifted education in Ireland³ and showed that while most teachers were generally supportive of education for their high ability students, many felt they didn't have adequate time and support to differentiate their teaching.

A majority also felt they didn't have enough access to expertise to adequately help this cohort of students.

In response to these reports and from our conversations with students, parents and teachers we wanted to put together a helpful guide which would be useful to everyone in various situations.

The format for this book is very simple and we wanted to make it as user-friendly as possible. For too long in the field of gifted education there has been an assumption that high ability students are a homogeneous group. Hopefully this guide will help to dispel this myth once and for all and we can celebrate the different types of gifted students, the different strategies that can help them and we can embrace the heterogeneity of the group.

Each section of the book will cover advice for students, parents, teachers and policy makers. To emphasise the diversity of this group there will be separate sections on twice exceptional students, disadvantaged students and LGBTQ students.

The first chapter will follow on from the recent student report and will help us to better understand the psychology of gifted students. It includes topics such as extraversion and introversion and perfectionism. By understanding these traits better, students can learn to help themselves more in everyday situations and parents and teachers can better understand how they can assist students in these situations.

The second chapter looks at the experiences of gifted students in school and will help students deal with possible boredom at school. It also encourages teachers to differentiate content appropriately so the students will engage in the lesson.

The third chapter deals with gifted students' social beliefs and experiences and will provide help for students who may lack social confidence in certain situations by worrying about what their peers or teachers think of them. It will also advise parents and teachers towards setting realistic expectations for these students and to encourage them to have opportunities to spend time with intellectual peers.

The fourth chapter looks at twice exceptional students. These are high ability students with some form of disability and usually make up about 15-20% of a population of gifted students. As more of these students are being identified earlier we need to understand how to serve them better in classroom and home environments.

The fifth chapter looks at gifted disadvantaged students who are high ability students from socio-economically disadvantaged backgrounds. They can be hard to identify for gifted programmes as teachers often don't nominate them and

- 1 Cross, J. R., Cross, T. L., O'Reilly, C. (2022). Irish gifted students: Self, social, and academic explorations: Summary Report. Report prepared for Centre for Talented Youth - Ireland. https://education.wm.edu/centers/cfge/research/completed/ collaborationireland/2022-irish-student-brief-report_volume_16111.pdf
- 2 Cross, J. R., Cross, T. L., O'Reilly, C., Vaughn, C. T., & Carroll, E. (2019). Gifted education in Ireland: Parents' beliefs and experiences. Report prepared for Centre for Talented Youth - Ireland.
- 3 Cross, J. R., Cross, T. L., O'Reilly, C., & Mammadov, S. (2014). Gifted Education in Ireland: Educators' Beliefs and Practices. Report prepared for Centre for Talented Youth - Ireland.

parents may not have access to the resources needed to allow these students to thrive. This chapter will help these students to empower themselves in their learning and encourage teachers to identify them early and offer them challenging material.

The final chapter looks at gifted LGBTQ students. A high proportion of students who attend CTYI identify as LGBTQ and this group are very under researched in the field. They can also be the victims of bullying and challenging situations at school and this resource will help us to create safe spaces for these students and to establish a culture of acceptance and tolerance.

As well as proving helpful for parents, students and teachers, we really hope this book can have an influence on policy makers. Gifted education is often left out of conversations about students with special needs and many policy makers seem to rely on long since disproved myths that these students will all thrive without any intervention. The model that one size fits all for gifted students is long outdated and hopefully this guide will help people to understand the diversity and heterogeneity in the group.



Gifted Students' Psychology

Jennifer Riedl Cross, Tracy L. Cross – **William & Mary** Colm O'Reilly – **CTY Ireland** We learned quite a bit about what Irish gifted students are like from CTYI students' responses to hundreds of questions on surveys. We didn't observe them and make judgments – we asked them to tell us about themselves. The stereotypical head-in-a-book, not-interested-in-sports-orhaving-fun, super-smart teenager turns out to not reflect most CTYI students. Some students told us they were not that interested in sports, while others said they were great at physical activities. Some students are outgoing and like lots of stimulation (extraverts), while others prefer quiet time, maybe with just one or two friends (introverts). These are all valid ways of being and have some foundation in one's biology. The dimensions of personality are on continua (see Figure 1) and we can all see ourselves at some point between the ends of each dimension.

Personality research⁴ has found that some types thrive in changing environments (those with relatively high scores on the characteristics to the left in Figure 1), whereas others struggle and may need support to be comfortable in their world (those with high scores in introversion and emotional instability or those with high extravert, lacking in discipline and disagreeable scores). Most CTYI students reflected the thriving personality type, but about a third of those we surveyed had combinations of characteristics that might put them at risk.

Figure 1 Personality Dimensions 6

DIMENSION	FROM	то
Open to Experience	Likes novelty, curious, explores	Likes certainty and familiarity, stays put
Conscientiousness	Disciplined, organised, reliable	Disorganised, careless, unconventional
Extraversion	Seeks stimulation, a 'people person,' outgoing	Avoids stimulation, likes to be around a few people, reserved
Agreeableness	Pleasant, helpful, polite	Cold, uncaring, argumentative
Neuroticism	Even-tempered, stable, cheerful	Anxious, worries a lot, moody

4 e.g., Van Leeuwen, K. G., Mervielde, I., Braet, C., & Bosmans, G. (2004). Child personality and parental behavior as moderators of problem behavior: Variable- and person-centered approaches. *Developmental Psychology*, 40(6), 1028–1046. https://doi.org/10.1037/0012-1649.40.6.1028

5 e.g., Sak, U. (2004). A synthesis of research on psychological types of gifted adolescents. Journal of Secondary Gifted Education, 15, 70–79.

6 John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory–versions 4a and 54*. Berkeley: Institute of Personality and Social Research, University of California, Berkeley.

Personality

CTYI students on average were less extraverted than students in the general population. It is common to find a tendency toward introversion among gifted students.⁵ This preference for lower amounts of sensory stimulation in their environment leads them to choose quieter spaces with fewer people around them. There are definitely extraverts among CTYI students, but the number is likely to be fewer than you would find in a regular classroom.

Self-Efficacy

What students believe about their abilities in different areas can matter just as much as what they think about their personalities. While most CTYI students were confident in their abilities across the board, some did not think they could resist peer pressure or meet others' expectations of them. For most students, their lowest confidence levels were related to getting help from others when they needed it. A substantial number of students did not have confidence in their abilities to complete their schoolwork (self-regulation). These beliefs matter, as they are an important component of motivation. It is difficult to stay motivated to do something when you don't believe you can be successful at it.

Perfectionism

Educators, parents, and researchers have expressed concerns about perfectionistic gifted students over the years. These adults worried that striving for perfection in academics or other tasks may be "maladaptive" or harmful to the students. More recent research⁷ suggests that positive striving for perfection is not harmful and is, in fact, associated with success in many cases. What is harmful is a concern that one is being evaluated and may not meet others' expectations for their perfect performance.

Evaluative concerns make students fearful of failing, which can actually get in the way of their success. Positive striving (selforiented perfectionism) was high among CTYI students. This was sometimes combined with evaluative concerns (socially prescribed perfectionism), especially among the female students. We saw this combination most frequently among the students whose personality profile suggested they may be struggling.

It is difficult to challenge these beliefs, when students' products are graded, their test scores determine future opportunities, and parents expect "their best" at all times. In one of our studies, CTYI students reported they were frequently pressured to "always do well" and to "get everything right." That is a lot of pressure and many of them (especially the girls) told us it feels very bad to have that kind of pressure. Evaluation is all around us. Dealing with it in a healthy way depends on how strongly we feel accepted and appreciated, not just for our performances. It can also depend on beliefs about the fixedness of our abilities.

Mindset

One key to a healthy mindset is the recognition that nearly everything can change. If you don't like your appearance, it can be changed through exercise, hair styling, clothing choices, even heel height. We can also change our behaviours, as evidenced by interventions to reduce bullying behaviours, improve study skills, or enhance one's social repertoire. Humans are built to learn, and, with learning, change is possible. It can be hard to recognise this in our daily lives, when we see what "is" all around us. People are this way or that. I am good at one activity, but bad at another.

One problem with this "fixed mindset" is in the interpretation of failure. If I believe I am not good at reciting multiplication tables, for example, it will be no surprise when I fail at that test. Will I try to improve? Not if I think I can't! Recognising that effort has an important role in achievement of any kind is critical. Developing a "growth mindset"⁸ can be a great advantage. CTYI students had scores on a measure of fixed/growth mindset (implicit theory) that suggest they tend to have a more fixed orientation, both about one's intelligence and their personality.

What to do with this information if you are a student?

Personality

- 1 Are you something of an introvert? Try to understand yourself and the depth of your preferences when it comes to being in highly stimulating environments. You don't have to love loud music, chatty settings, or bright lights, just because other people you like prefer that. Find ways to make yourself comfortable if you do find yourself in these settings: bring headphones, wear sunglasses, focus on the person you are talking to. Be as flexible as you can be, but forgive yourself for not being like that extravert you admire.
- 2 Are you more of an extravert? Perhaps you get your energy from being around lots of people and in loud stimulating environments. The majority of people in Western countries do have this preference, so you should have no trouble finding settings that suit you. When paired with an agreeable demeanour, an extravert can be popular among peers and adults. An extravert who is more interested in getting their way than in being agreeable with others is likely to be rejected. Cultivating an interest in what others are like and developing your ability to think about what others might want or need in a situation will go a long way toward building your agreeableness. Recognise that others may feel sapped by the same environment that invigorates you. There is nothing wrong with your preference or theirs. But don't neglect to include your introverted friend who may want to give that loud concert a try, just because you want to protect them. Ask! What do they want?

- 7 Fletcher, K. L., & Neumeister, K. S. (2017). Perfectionism in schools: When achievement is not so perfect. Momentum Press
- 8 Dweck, C. S. (2006). Mindset. Random House.

- 3 Do you find yourself worrying a lot? Are you stuck in the blues sometimes? Emotional instability can come from being in a setting that produces worries, but some of us are just more likely to be sensitive and prone to upset. Developing coping strategies can help in these cases. Focusing on how to solve a problem can be better than focusing on the problem itself. Find someone you can trust to talk with. This might be a parent or another relative, a teacher or counsellor at school. It may be a person your age, a classmate, a sibling, or cousin. Be thoughtful about the information you share and be certain the other person genuinely cares about you before exposing too many of your worries. If your worries revolve around being unsuccessful in school, consider
 - a How much do you want to be successful? Is it important enough to you to make sacrifices (e.g., studying instead of being with friends or playing video games)? Is it important enough to people you care about that you are willing to make those sacrifices?
 - b What can you do to ensure you will be successful? For example, what resources are available to help you be successful (a sibling, friend, tutor, or YouTube maybe)?



4 Being open to new experiences suggests a level of comfort with uncertainty. Some people are simply more comfortable with what they know. Being able to predict what will happen next is more important to their well-being than trying new things. Trying new things - travel, new music, a different genre of books - is mind-expanding. Research⁹ has found a link between intelligence and one's openness to new experiences. There are plenty of people who are very intelligent, but prefer to eat the same food, stay in their local area, and not try new things. There is nothing wrong with either of these preferences.

If you find yourself to be more comfortable with what is familiar, maybe try a few new things that do not seem threatening to your sense of self or safety. Be aware that those around you may like new experiences more than you do and acknowledge your preference for sameness. If you are wide open to new experiences, it is helpful to recognise that not everyone feels that way. Think about your values when you are feeling pushed to be open or closed more than you want to be. What is truly important in this situation? How much do you value that friendship? How important is it that you get your way? Sometimes we have to stretch to know what is possible. Good things can come to both those who wait and to those who jump into the fray.

5 Be aware that having personality characteristics at this point in your life does not mean you will always have them. What you are like depends to some degree on your environment. Maybe you feel like an introvert in your regular school, but an extravert at CTYI. Maybe for one teacher or in one subject area, you will be very conscientious, but for another, it is harder to muster discipline. Your environment matters. Be on the lookout for ways you can be the person you want to be. Being comfortable with yourself is most possible when you are in an environment that suits your needs. This doesn't mean the world has to revolve around you. Sometimes you need to give a little to make the fit just right.

It's ok to be an introvert, just like it's ok to be an extravert. Learn what makes you comfortable and try to find environments that suit your preferences.

If you tend to be anxious or worried, find someone you trust to talk with about your concerns. Try putting your concerns into perspective and come up with an action plan to deal with a worrying situation. Be open to new experiences that are consistent with what you value.

Self-Efficacy & Mindset

1 One of the most important components of motivation is your belief that you can do the task. Can I be successful on the football team? Can I make top marks in maths? If we think there is a possibility, we are much more likely to give it a try. Maybe you were good at some other sport, so you have at least a little confidence football will work for you.

Or maybe you passed an early maths class with flying colours, so you believe you can get those top marks. You don't have to have done this before. Someone you trust could encourage you to believe you can do it. Maybe someone your age or in your class has been successful at what you are considering. Seeing them be successful may encourage you to believe you can be, too. Self-efficacy is confidence in your abilities to do something.

2 To build your confidence, take note of your learning. How far have you come in your understanding of a maths concept? Look at where you were when you started and recognise that you are not at that same place. What were the things that helped you learn? A set-aside time for practice? A specific teacher or trainer?

> Learning comes with effort. Recognising how you have changed in the past can help you feel more confident when you are facing a challenge.

Ask for help if you need it.

9 Vuyk, M. A., Kerr, B. A. & Krieshok, T. S. (2016). From overexcitabilities to openness: Informing gifted education with psychological science. *Gifted and Talented International, 31*(1), 59-71. DOI: 10.1080/15332276.2016.1220796

A snack before you started? Find out what helped you be successful, even if you are not yet at your goal. Think of success in increments. A little better, plus a little more, plus a little more, and you are almost there!

- 3 Do you ever find yourself thinking, "I can't do it. I just don't have the ability"? You may be suffering from a fixed mindset. Ability is not something you have or don't have. It is something that develops with practice. If you want to play basketball, it helps if you are taller than everyone else, but there are still skills you can develop that will help you be a good basketball player. In intellectual pursuits, there are skills you can develop to help you achieve any goal.
- 4 Do not be afraid to ask for help. It doesn't make you look foolish or weak. It won't make people think less of you. It helps others and you recognise what you need.

Small changes over time can lead to big improvements in whatever you are trying to achieve.

Perfectionism

Do you sometimes find yourself wondering why you did not take on an activity? Why did you not turn that paper in, even though you knew the topic frontwards and backwards? Why did you not sign up for that academic competition, even though you are a pretty good debater/ scientist/writer, etc.? Now, there can be many reasons we choose not to do something. Maybe we just don't want to. Maybe we don't have enough time. But if you are choosing not to because you are worried about not doing a perfect job on it, you may be setting yourself up for future disappointments. You may be missing out on opportunities because you are worried about not being perfect.

Like those students who told us they frequently feel pressured to get everything right, you may be feeling that others are determined that you should be perfect. You may be experiencing evaluative concerns. What can you do about it? It is tempting to catastrophize an imperfect performance. Is it really the end of the world if you make a 90 instead of 100? If you don't win the competition? Do you really think you are no good if you don't get perfect marks or that you have no future because of it? There is no way that is true. You are a valuable member of your family, your community, our world. You are learning how to contribute as an adult. You don't have to be perfect to make a difference.

2 What if others expect you to be perfect? Are you sure that is what they expect? Maybe you need to ask for clarification. Do they understand the toll their pressure is taking? It is not likely they want you to be suffering. Adults often see your great potential and want you to live up to what is possible for you. If they are unaware that they are putting an undue burden on you, perhaps you can 1) talk with them about your feelings, 2) find another adult to talk with about the situation, or 3) find an alternative task that does not burden you to the same degree.

- 3 What if you know you could do a perfect job, but you don't want to work that hard? This is a valid concern. Research¹⁰ on motivation says the best outcomes happen when a person finds the right balance (for them) in autonomy, competence, and relatedness.
 - a All humans want some amount of autonomy, the ability to make choices for themselves. How much may differ for each of us, but finding the right amount of autonomy is critical. Maybe you don't want to work hard on a task because you feel it was not what you chose – that you are being forced to do it. Can you find another meaningful task to work hard on? Or can you find a reason the task *is* meaningful to you so that you will choose to work hard on it of your own accord?
 - b It is really hard to stay motivated to work on something you don't believe you will be good at. In this case, you know you could do a perfect job, but maybe you don't value the assignment at all. Or it is too simplistic or formulaic for you to give it the effort required to do a perfect job on it. It doesn't help your sense of competence if you are working on something that is below the level you have already mastered. Can you make it more challenging by adding something you do value to the task? Can you ask for an alternative that would offer a real learning opportunity?

c Relationships with others are necessary for our thriving. Is time spent doing a perfect job on the task going to take you away from your friends? Or will you need to be holed up in your room, away from everyone, to complete it? How can you make the assignment one that you can do with people who matter to you, if this is a barrier to your motivation to work hard?

- d Don't forget to question yourself. Is a perfect job really what is required here? Maybe not working too hard is ok. But think about how it fulfils your needs for autonomy, competence, and relatedness before deciding that you won't give it your all.
- 4 Self-talk is important. Be clear with yourself about what success means to you. Do you expect yourself to be perfect? That can be great, so long as it doesn't cause you too much stress. A little stress is ok. Remember, only you can make yourself happy. Others can do things for you, but only you can think about your situation in a positive or negative way. How you think about things will affect how you feel about and learn from them.

If you find yourself unable to take on or complete a task, ask yourself if you are worried you won't do it perfectly. Being worried that others think you shouldn't make a mistake can keep you from doing things that will help you grow and learn. You are the same, loveable you, even when you make a mistake!

Does a task offer you meaningful choices? Do you believe you can do it? Does it allow you to be with people you want to be around? If it doesn't meet all of these conditions, it is reasonable to not be motivated to do it. How can you change that?

10 Deci, E. L. & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.

You can create your own unhappiness or frame your situation in a more positive way. Understand the role you are playing in the lives of the people you think are expecting you to be perfect.

- 5 Monitor your emotional response to the demands you feel. Don't let them get out of control before talking with a trusted adult. Hopefully, this can be your parents or teachers.
- 6 Some people find they only feel they are expected to be perfect in certain environments, like school or the workplace. Working on an unrelated activity can be a pleasant experience. Hobbies or sports (in some cases) don't necessarily require perfection. If you take up sewing or playing the drums or running, imperfection can be acceptable from the start. To have a positive effect, you will want an activity that gives you optimal autonomy, competence, and relatedness.

Think positively! If you find yourself dwelling on negative thoughts, change it up.

What to do with this information if you are a parent?

Personality

1 Are you something of an introvert? If so, you have surely developed some strategies for living in a world that is very hospitable to extraverts. If your child is also an introvert, you probably "get" them. Together you can spend quiet evenings reading or enjoying a show together. A family of introverts can live in peaceful harmony, each choosing the quiet path or small gathering over raucous, large parties. The child growing up with this good fit may find peers with similar preferences. If not, they may develop an interest in exploring the "wild" side, accepting invitations you expect to be disastrous.

In these cases, it is wise to allow exploration, placing their desire to fit in above your fears of sensory overload. It is perfectly natural for them to explore. Acknowledge your own preference for quiet spaces and provide those for your child once they return. Prepare them for a trek to the other side with means of escape, which may mean you will be turning the car around soon after dropping them off. And prepare yourself for the possibility they will love this overstimulating environment so unlike the one your introverted household provided. Our children are not all like us and that is a good thing.

2 Perhaps you are more of an extravert. If your child is also an extravert, it is likely you will enjoy being on the go together, engaging with sights and sounds and loud conversations that would make your introverted neighbours cringe. Help your child understand why their friends might not want the same kind of sensory stimulation your family thrives on. You can also help them to recognise when a slower paced, less stimulating environment may not be a good fit for them. What if you and your child are on the opposite ends of the Extraversion-Introversion continuum? The most important step is to acknowledge this difference, which really does have its roots in biology. Trying to change your child to suit your preference is likely not going to work and may leave the child constantly worried that they are not acceptable as they are. Allow your child to find the spaces they prefer. While you may avoid the crowded shopping mall at all costs, your child may love the excitement and hubbub.

Find a way for them to share experiences like these with a fellow extraverted family member or friend or responsible peers, when they are old enough. Recognise those times when your quiet existence is just too boring for them and be prepared with activities that offer the stimulation they need. Headphones are a great solution for the introvert who wants quiet and the extravert who wants more action. Video games can be a high-energy activity for the extravert who needs to stay at home. Don't let differences in your preferences for an extra- or introverted lifestyle lead to isolation.

Find ways to share spaces in a comfortable way. The extravert's quiet time may be the introvert's exciting time. Intellectual activities like card games can be a great way to spend time together – not too taxing for ether personality type. Understanding and respect for each other, acceptance of your differences, and communication about what is just too much or too little – these are key to supporting your child's psychological development.

- 4 It is not unusual for parents to become concerned about their child's emotional instability. They see their child grow anxious or depressed and feel helpless. In some situations, a professional psychologist is the best answer. In many cases, however, a parent can provide the support their child needs. Knowing your child and how they respond to stressors is helpful. Communication is critical. Talk with your child about events, settings, experiences that make them fearful. Explore the source of that fear. Make sure they know that you love them unconditionally. Even if they fail, they are the same valuable person in your eyes. Be willing to seek help if you aren't making a difference.
- 5 Are you an open-minded person? Do you like novel ideas, seeing new places, trying new things? Or are you more of a traditionalist, preferring the old ways, the familiar, and being able to predict with some certainty what is coming next? Most of us are a bit of both types, with a tilt towards one end of the continuum. The tilt is stronger for some than others. Your child is likely to have learned some of their preference for openness in the family; watching as parents try or reject new things. While there is nothing wrong with either preference, there are advantages to being more open to experience. Creativity has been linked to greater openness.

Get to know your child's preferences for stimulation. Accept they may not have the same preferences you do and help them find comfortable environments. Talk with your child about what they are experiencing in a nonjudgemental way. Take their fears and anxieties seriously. Seek professional help if you think it's needed.

6 On average, the CTYI students we studied had higher scores in Conscientiousness, but not every student will be organised and disciplined about their schoolwork. You may be able to help your child by sharing organisational strategies that have been successful for you. They also may need help in goal setting and recognising the steps required to complete a project. Be aware that motivation may be playing a role in your child's approach to assignments.

One theory of motivation suggests that how much they value the task and whether they expect to be successful determine their level of motivation. Perhaps the work is not getting done because it doesn't seem relevant or interesting. It may also be that they do not believe they can be successful at it.

7 If you see that your child is not fitting well into their school environment, consider how their personality characteristics may be playing a role. Perhaps your introverted child is overwhelmed by a noisy classroom or your extraverted child is bored in a quiet one. Is there enough novelty to keep your open-minded child interested? Consider ways you can advocate for a better fit in their environment.

> Be an advocate for your child. Others may not recognise how the environment is a poor fit for their personality.

Self-Efficacy & Mindset

1 If your child lacks confidence in their abilities, they can improve their sense of efficacy by learning strategies for resisting peer pressure to misbehave, for being more assertive, or for improving their work habits. Practicing these skills can help them develop confidence in their ability to be successful in the future at whatever task they are unsure about. That seems obvious.

What research¹¹ suggests, however, is that just being successful is not enough. In addition to practicing new skills, they need to be made aware of how well they have learned the skills and applied them. Reminding your child that they have improved in their use of strategies like spending more time studying or standing up for themselves will be critical to actually increasing their self-efficacy.

2 A low point in self-efficacy for many CTYI students was in their response to items asking "How well can you get your parent(s)/brothers and sisters/etc. to help you with a problem?". Creating a climate of support among all your family members will go a long way to increasing your child's belief that they can do anything they set out to do,

knowing they can rely on each other when things become difficult. Listen when your child asks for help. They may not be comfortable asking directly. Sometimes a complaint is really a request for your support.

3 Help your child recognise the importance of effort in their success. It is not just their innate ability that helps them achieve in school. They have to be willing to try even after they have failed. Many gifted students avoid challenges they think they don't have the ability to be successful in, without recognising that failure is part of the learning process. Success can come in increments, as a new piece of information is presented in just the right way or as practicing something for the 10th time finally makes sense.

Research¹² has implicated praise as one culprit in making too strong a link between ability and success. Children who were praised for success with reference to their ability - "You are so smart" - were more likely to guit when facing a difficult task than children who were praised for their effort – "I like the way you kept on trying." Fostering a belief that your child's ability is innate - "You are gifted" - can be detrimental to their ultimate success.

Be aware of when they can use your help. They may not be comfortable asking.

Help your child recognise how they have improved over time. Focus on the strategies they have implemented to be successful.

Comment on their actions, rather than their abilities, to help them recognise the choices they are making that lead to success.

Perfectionism

1 Striving for perfection is good. Expecting perfection is not so good. Expecting your child to achieve perfectly can put unnecessary pressure on them. Your expectation takes up brain space (also known as working memory) when they are approaching a task. CTYI students told us they frequently felt pressure to "always do well" or "get everything right." Maybe this pressure comes from their teachers or peers, but it is likely at least some of this pressure is coming from their parents. We do want our children to always do well and hope they will always be right. Does this desire translate into a lack of acceptance if they should sometimes not do well or get things wrong?

You know that you will love your child just as much if they get a mediocre mark in a class as if they get a high one. But do they know that? Fears that they will not be acceptable if they don't meet your expectations can lead to serious problems. Evaluative concerns are associated with eating disorders, anxiety, and depression. These problems are more likely for girls than boys, but can be found in any child. Check your expectations and the way you convey them. Your child needs to know they are loved unconditionally.

11 Bandura A. (1997). Self-Efficacy: The exercise of control. Freeman.

12 Dweck, C. S. (2006). Mindset. Random House.

2 In our study of CTYI parents, the most frequently reported goal they had for their children was to be fulfilled in life; happy, healthy, satisfied, with positive relationships. You can help them achieve this goal. Research¹³ on parenting style has found that the most successful outcomes - the best adjusted children - happen when parents are both demanding and responsive to their child's needs. Being responsive requires you to listen to your child and give in to them when they need you to ("OK, you can take a break from your studying to play."). Being demanding requires that you maintain your expectations ("But after you have played, you will need to spend at least one hour studying.").

It can be a tricky balance. It helps to remember that your child will thrive when they have autonomy (can make choices for themselves), competence (can be successful at what they do), and relatedness (have at least one person who cares warmly for them). By offering them a choice, you support their autonomy. By demanding they learn, you help them build their competence. By attending to what they want and need, you show them you care about them.

What to do with this information if you are a teacher?

Personality, Self-Efficacy, Perfectionism, and Mindset

- 1 Teachers learn early that every child is different. You may recognise the personality differences in Figure 1 among the students in your classes. One thing to note is the higher proportion of gifted students with a tendency toward introversion. In your classroom, these students may go unnoticed as they avoid the hubbub of their more extraverted classmates. Not every introvert will also be gifted, but you may recognise exceptional abilities among your quiet students when you take a closer look.
- 2 All your students have a need for a good fit in the classroom. There should be spaces for students who prefer high levels of stimulation and spaces for those who need less. These may be accommodated by building in technology like headphones for students to hear more sounds or to block the noise around them. Consider your room's lighting and noise level, which can be difficult for the extreme introvert. Is there a way for your activities to incorporate personality differences?
- 3 You can help your students be more conscientious by teaching study skills directly. All students can use a reminder about how to plan for and pace their project work, how to prioritise their assignments, how to manage their time effectively, and so forth. Gifted students may have never learned these strategies as their abilities to learn rapidly made up for weaknesses in their study skills. If you are concerned about a high-ability student not putting forth effort in your class, it may help to evaluate their motivation.

If they do not value the activity or if they don't expect to be successful, they may not be motivated to do the work. How can you make the task something they will value? Increase the level of challenge, make it relevant to the student, make the assignment more complex – these are all ways to increase their valuing of the task.

4 When a student does not believe they will be successful, their motivation to complete a task will be low. You can help increase students' self-efficacy by ensuring they will be successful and they are aware of the progress they have made in previous learning. A task that is too difficult or too easy will not help build their confidence. When students learn very quickly, as many CTYI students do, you may not recognise holes in their learning that could trip them up when moving through the instruction.

You are in danger of losing their interest if a task is too simple for them or if they are required to go through every step of a process they understand implicitly. How can you be sure they understand the foundation of the material? Rather than slow down their progress, you can ask them to let you know their level of comfort with the material. Don't just look for a wrong answer. Check their confidence.

5 Keep in mind that these students may be experiencing discomfort with learning for the first time in your class. They may have had an entire academic career of knowing the answers without having to study or at least not spending much time studying. This history can make it difficult for them to come to you for help. They may be questioning their "ability" when they need to try for the first time. They may not have developed study skills or effective work habits needed for a true challenge. These students need to develop their growth mindset, which you can help them do. They also need your help in building those strong work habits. Show them how they can fulfil challenging goals when they know how to tackle a problem. By linking these strategies to assignments they find challenging, they are more likely to seem meaningful to the student.

6 When you have a student who can certainly achieve the task you set them to, but they shrink away, choosing a simpler task or avoiding the activity altogether, consider the possibility they may be suffering from maladaptive perfectionism. Their fears of being evaluated as imperfect may keep them from taking on the challenge. Concerns about others evaluating their performance will have likely become a habit before they entered your classroom. You can structure assignments so they seem more fun than evaluative.

> Enhance students' motivation with assignments that are appropriately challenging. Foster their confidence by ensuring they see the progress they have made and connect it to the effort they have put forth to learn.

Look for clues that can help you understand your students' personalities. Allow them some freedom in choosing an environment that is comfortable – quiet spaces for some, high energy and stimulation for others. Emphasise the mastery of the content over the evaluation of their performance. When students are told the purpose of the activity is to learn as much as they can, they are often more successful than when told you are watching to see who can do it the best. A classroom full of students with a mastery goal orientation has much less stress than one where the students have an achievement goal orientation. You can reduce the stress for all students when you de-emphasise their performance and focus on what they have learned.

7 You can keep students motivated by supporting their autonomy (allowing them to find their preferred path to learning; freedom to choose among meaningful activities), building their competence (with appropriately challenging assignments), and fostering their relatedness (with a warm, accepting classroom where students and teacher respect and care for one another).

> Focus on what students are learning – what material they are mastering – instead of on grades.

What to do with this information if you are an administrator or policy maker?

Personality, Self-Efficacy, and Perfectionism

- 1 Allow for individual differences in policy. Accommodations are necessary for students who are not typical, either in cognitive ability or psychological profile. Sometimes the accommodations will need to be additional physical spaces.
- 2 Ensure those who work with gifted students have the training they need to recognise these students, provide appropriate instruction, and support their psychological needs. This includes teachers, counsellors, and administrators.
- 3 Prioritise learning over performance. Minimise the need to achieve and maximise the need to master material. Encourage problem-based learning that will be relevant to the students and can address varied ability levels.
- 4 Ensure all students have access to a trained, welcoming counsellor.
- 5 Provide workshops to teachers and students on the topic of perfectionism.

Allow for accommodations for students with different psychological needs.

Provide training for teachers in working with gifted students.

Ensure there are well-trained counsellors available to all students.

Gifted Students in School

Jennifer Riedl Cross, Tracy L. Cross – William & Mary Colm O'Reilly – CTY Ireland





An appropriate education for gifted students should offer abstract and complex content and tasks; with opportunities to go in-depth and explore broadly; while allowing them to move through advanced material at a comfortable, rapid pace. The typical curriculum requires modification to suit their needs. When asked "How often are you given an assignment that is more challenging or more complex than the assignments other students in class are doing?", 70% of CTYI secondary students in our study reported they rarely or never did.

It differed by subject area, but many of these students reported rarely or never being able to go as in-depth on a topic as they would like. About half of the students claimed to be frequently bored by a lesson because they already knew the material. Nearly 75% of CTYI parents reported their child rarely or never received lessons targeting their ability level. Clearly, every Irish gifted student is not receiving an appropriate education.

In contrast to the parent and student reports, 85% of Irish teachers surveyed reported they do differentiate instruction for their gifted students. A closer look at their descriptions of what they do in the classroom indicated this was not actually the case. Only 3% of teachers were providing curricular modifications and eliminating assignments when their gifted students already knew the material on a regular basis.

The teachers most likely to modify the curriculum and provide challenge and choice were those who had the greatest confidence in their ability to implement varied instructional strategies. This suggests teacher training in instructional strategies, including how to differentiate instruction for their gifted students, may be effective in boosting the rate of gifted students receiving an appropriate education.

Most CTYI parents we surveyed believed their children were happy in school, even if the parents, themselves, were not satisfied with the education their child was receiving. Among the students we interviewed, most said they liked school "a bit." They proceeded to describe many experiences of boredom and frustration with their classmates and teachers. Pressed to recommend changes, students suggested ability grouping and hiring more (and more qualified) teachers.

Differentiating instruction is challenging to do well. It requires more planning, materials, and training than traditional instruction, which targets the average learner. Teachers told us they did not have time or access to specialists who could advise them on how to differentiate their lessons. Many teachers believed gifted students did not get enough attention as more resources were devoted to students who need to catch up to the average level. Educators at all levels, from teachers to school leaders, expressed support for gifted education, but opposed the acceleration practice of grade skipping. Parents had similar attitudes.

What to do with this information if you are a student?

- 1 Being bored is not fun. It is actually a stressful experience for many people. There are strategies you can use to deal with the boredom if your teacher will allow it. Bring a book to read, practice your creative writing, draw, let your imagination roam, practice meditation. Creativity can flourish in boring environments if it can be expressed. Talk with your teacher about acceptable options for when you already know the material.
- 2 Hopefully, you can avoid being bored in school. You should be learning, after all. Let the teacher know you are not learning by asking for something to do. You probably don't want busywork that is not meaningful. How could you extend the lesson of the day in an interesting direction? Could you search the internet for related topics? Do a report on a subject you want to know more about?

Try not to wander too far from the lesson. Create a game from the class content. Write a story about the lesson. Apply the lesson to something else you know that doesn't seem related. Can you make unexpected connections? Share what you are thinking with your teacher. If they are not supportive of your explorations, let them know that you need to be learning and would appreciate a lesson that is appropriate to your ability.

- 3 How can you advocate for yourself without coming across as arrogant? The teacher may have worked very hard to create the lesson and your criticism might feel personal to them. Try thinking of how you can extend the lesson to make it interesting for you. Maybe the teacher will appreciate your ideas and will try to incorporate them into a future lesson. It is always a good idea to be positive in how you voice your complaint.
- Sometimes it can be hard to put your feelings into words. Try to come up with solutions that will work for everyone. Being frustrated with disinterested peers, for example - how can you express that without making someone angry? If other students are making it difficult for you to learn, ask for a quiet location to do your work.

5 According to the Gifted Children's Bill of Rights¹⁴, you have the right to learn something new every day. Are you? Keep a record of when you are learning something new and when you already know what is being taught. Data is always helpful in attempting to bring about change.

6 Your parent or guardian can advocate for you with the school, but they need you to tell them what is going on. Try to be clear about what is wrong and let them know how you feel about it. This can be a challenge for someone who doesn't usually talk about emotions, but it is important for you to understand your negative feelings and what is causing them.

Try to find creative ways to deal with boredom when you already know what's being taught.

Be positive in your interactions with peers and teachers. Think of solutions you can offer if you are not learning something new in a class.

vou are experiencing

- 1 If your child complains about boredom, it may be tempting to tell them they just need to accept this fate. After all, that might have been what you experienced in school. The reality is that does not need to be the case. Boredom is stressful and usually unnecessary. No students should have to be bored in school every day. Researchers¹⁵ found waiting was often experienced by gifted children during their school day. The students dealt with it by reading ahead or reading a book they had brought (if the teacher allowed it), doodling, daydreaming, watching their classmates, or watching the clock. In a school focused on serving the students, waiting should be kept to a minimum.
- 2 Recognise that you don't experience school with your child. You can only know what they are experiencing from what they share with you. If they are frustrated or upset about school, it is important for vou to listen to them and try to understand the source of their frustration. Is it the other students? Is it the teacher? Is it the work? Be openminded in taking complaints to the teacher. There could be circumstances affecting your child's experience about which your child is unaware.

16 N. Colangelo, J. L. VanTassel-Baska, A. Shoplik, & S. Assouline (Eds.). (2015). A nation empowered: Evidence trumps excuses holding back America's brightest students. Belin Blank Center for Talent Development. http://www. accelerationinstitute.org/nation_empowered/

14 https://dev.nagc.org/resources-publications/resources-parents/gifted-childrens-bill-rights

- Practice your prosocial skills by trying to 3 encourage the teacher to offer differentiated assignments rather than demanding them. Offer ideas for how a lesson could be made more engaging and appropriate for your child, but keep in mind the teacher has years of training and may have years of experience in the classroom. Respect them as the professionals they are as you ask them to support your child's needs. They may be unaware that your child is struggling with the pace or content of lessons as they have focused on students struggling on the opposite end of the ability continuum.
- Let's talk about acceleration. What if your child has mastered all the content that will be covered in their current grade? Should they be required to sit in the class, not learning anything new, day after day? Differentiating instruction every lesson, every day, would be great, but perhaps auite taxing on the teacher who must create the individualised lessons and provide independent instruction. It is possible a move to the next grade at the start of the school year would eliminate the need for that effort.

Your child would receive appropriately challenging lessons on new material. Despite frequent opposition, research¹⁶ has found grade skipping is not harmful and is very effective, when carried out according to guidelines. Armed with this information, you may be able to advocate for your child to be accelerated with your school leaders.

¹⁵ Peine, M., & Coleman, L. (2010). The phenomenon of waiting in class. Journal for the Education of the Gifted, 34, 220-244.

5 What if your child is far beyond classmates in one or two subjects, but not the full curriculum? There are more than 20 effective ways for students to be accelerated - moving to the next grade for only a single subject, by compressing the curriculum so students go through it more rapidly, for example – and grade skipping is only one.

You can help your teachers help your child by supporting their requests to learn more about these practices. They will need time and resources to become effective at accelerating instruction. Advocate for them to receive professional development and the time needed for implementation with school officials. You will be helping all highly able students in the process.

6 Have realistic expectations for what the school can achieve for your child. While they should not be bored it is important to understand that the teacher will have lots of different levels of ability in the class and sometimes they can't focus on the gifted student for every minute of the day.

Put yourself in your child's shoes if they complain about boredom. Learn as much as you can about what is actually happening for them on a school day. Advocate for their needs to be met when they need your support.

Be respectful of the teacher's expertise, but voice your support to all who will listen about the need for teacher training in differentiation and working with gifted children.

Learn about acceleration options. One of the many types of acceleration may be the most appropriate educational option for your child.

What to do with this information if you are a teacher?

- 1 It is no easy job being a good teacher. From content expert to accountant to entertainer to warden and everything between, a teacher is expected to know it all. One bored student may mean you are doing most everything right! If you want to know more about possible solutions to appropriately serving gifted students in your class, however, read on.
- 2 Students may be bored because they are not interested in the topic. That can be a problem for students of any ability level. You likely learned many strategies in your training for engaging students. Many of those will apply equally across all students. Making the material relevant to them is a number one way to get their interest. How can it be about them? Or about something they are interested in - football for some, music for others, popular culture or classical literature.

One difference you may find in what interests your aifted students is the complex nature of what interests them. Simplicity may appeal to most students, but may not interest the gifted students at all. How can you add complexity to the material to catch their attention?

- 3 An assignment may not appeal to your high ability students if there is no way for them to branch out, to make choices and to be creative in how they complete the task. Perhaps they can choose the format for the end product – write a poem or a story about a mathematical theorem or create a rap song describing a historic event. Perhaps they can research a tangential subject or go more deeply into a topic you are covering. Allowing for choice-making will go a long way toward satisfying a frustrated student.
- 4 Appropriately targeting lessons to a student's ability may need to start with some kind of pre-assessment. What do they already know about a topic? This may be helpful for you in identifying students with similar prior knowledge. A study¹⁷ of hundreds of mathematics classrooms across the US found most of them had students whose achievement levels fell within a wide range. Ability grouping may be the only way to meet their needs.

17 Pedersen, B., Makel, M. C., Rambo-Hernandez, K. E., Peters, S. J., & Plucker, J. (2023). Most Mathematics Classrooms Contain Wide-Ranging Achievement Levels. Gifted Child Quarterly, 0(0). https://doi.org/10.1177/00169862231166074

- 5 We found a relationship between teachers' confidence in their ability to use varied instructional strategies and their use of curricular modification or provision of challenge and choice. Getting back to the basics by refreshing your familiarity with different instructional strategies may increase your comfort level with making modifications to your curriculum or figuring out ways to provide students with extra challenge or choices.
- 6 When differentiating for gifted students try to make sure the differentiation is appropriate. If it is just a repetition of the previous task, the child won't feel they have been challenged.
- 7 Learn what you can about the many options for acceleration¹⁸. Some of these are bound to work for you and your students. Do not dismiss grade skipping as an option when a student is far above the level of classmates. There is guidance on how to be successful in this form of acceleration.
- 8 Ask for professional development in working with gifted students. Training in understanding gifted students, strategies for differentiation, curriculum development, and more will be useful for you and your colleagues.

Be open to your students' requests for different or more challenging assignments.

Learn about training in differentiation

and working with gifted students

acceleration options and consider which of these might be in the best interest of the student.

What to do with this information if you are an administrator or policy maker?

- 1 Teachers require support for understanding and knowing how to work with their high ability/gifted students. You can help by providing high quality early teacher training and professional development for in-service teachers in gifted education practice.
- 2 Ensure teachers are aware of subjector domain-specific giftedness. It is a myth that all gifted students excel in every subject.
- 3 There is a wealth of research supporting the effectiveness of acceleration options, yet many school officials are opposed to practices such as grade-skipping. Learn about the resources available¹⁹ to guide educators through successful acceleration of students for whom it is the best option.
- 4 Gifted students often need assignments that are different from those their classmates can benefit from. They may be motivated by more complex and challenging assignments and content. Teachers may be able to meet their needs in a heterogeneous classroom if they are well-trained in how to differentiate instruction.

Provide gifted education training, access to specialists, resources, and planning time to teachers.

Formalise your support for gifted students through official channels, such as putting policies in place to ensure an appropriate education.

18 N. Colangelo, J. L. VanTassel-Baska, A. Shoplik, & S. Assouline (Eds.). (2015). A nation empowered: Evidence trumps excuses holding back America's brightest students. Belin Blank Center for Talent Development. http://www. accelerationinstitute.org/nation_empowered/

19 N. Colangelo, J. L. VanTassel-Baska, A. Shoplik, & S. Assouline (Eds.). (2015). A nation empowered: Evidence trumps excuses holding back America's brightest students. Belin Blank Center for Talent Development. http://www. accelerationinstitute.org/nation_empowered/

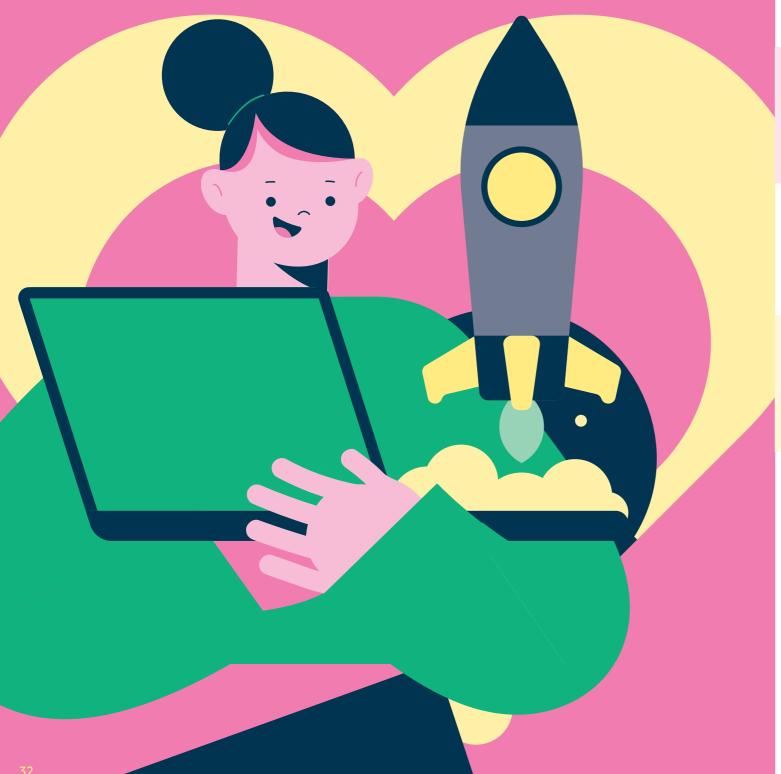
Professional development, along with adequate time and materials, are needed for teachers to effectively provide an appropriate education to all their students, including those with exceptional academic abilities. Access to specialists in gifted education will reduce the amount of time for teachers to become proficient.

- 5 Ensure every school has a policy for working with gifted students, along with a mechanism for updating policies to keep up with current research in gifted education.
- 6 Move away from a one-size-fits-all policy for gifted students. Try to understand the large differences among members of this group and make policies according to the particular needs of these students, which may not all be the same.

exibility to mak for their gifted students

Gifted Students' Social Beliefs and Experiences

Jennifer Riedl Cross, Tracy L. Cross – William & Mary Colm O'Reilly – CTY Ireland



A majority of CTYI students in our studies have confidence in their ability to make and keep friends and the experience of being rejected by peers is infrequent. Even if it does not happen often, the cost of rejection is high and especially the girls reported strong negative feelings from the experience. This would be true for any student experiencing peer rejection, but students with exceptional academic abilities are unique in the challenge their differences pose to social relationships.

In the 1980's, Larry Coleman proposed that giftedness is a stigmatising condition. Because gifted students don't want their abilities to get in the way of social interactions, he said, they will take steps to manage information they share with others. Research has confirmed that gifted students would rather go so far as to lie at times than to be exposed as having stronger intellectual abilities than their peers.

CTYI students in our research were highly likely to take steps to hide their abilities, including lying about how easy a test was for them when their peers had a hard time with it. They reported often trying to hide their differentness, conforming to their classmates' behavior, or avoiding acting as if they actually liked learning (which they did).

CTYI students tended to agree that they are more serious about learning than their peers and that they prefer to work independently. Their academic abilities are often visible to their peers. Being pointed out as the best student by the teacher can make them cringe, however, as it may be setting them up as a target for bullying by frustrated peers who aren't as successful.

The gifted students may go beyond cringing, however, and choose to stop achieving to avoid this threatening visibility. Underachieving may make them more socially comfortable, but concealing their abilities may lead to being overlooked and missing potentially enjoyable opportunities to develop their talents.

Why is it threatening for one's exceptional abilities to be exposed to peers? A peer's jealousy or feelings of inferiority can make it difficult to be friends. CTYI students told us they were afraid to share their academic success with others who found the task difficult in some cases because they did not want to be seen as bragging or out of a fear they would hurt the other person's feelings.

Social experiences with adults can also be difficult for these intellectually able students. CTYI students were well aware of their parents' and teachers' expectations for them to excel. In general, these expectations did not make them feel particularly bad. Pressure to "always do well academically" or to "get everything right" did make them feel bad, however. Keeping up with the workload was sometimes seen as a burden, even when they were able to do the work. Pressure from peers to always excel was also stress-inducing for some CTYI students.

Peers sometimes expressed satisfaction when CTYI students made a mistake, leading to concerns about others' evaluations of their performance, even if it was just answering a question in class. It felt safer to stay quiet rather than try, when the cost of rejection is so harsh. Such experiences can make the classroom feel like a hostile environment and some students expressed disappointment that they could not feel free to learn naturally, without the expectation they would always be successful.

Over time, the social experience of gifted students changes, with the middle school years (6th class – 2nd year or so) being pivotal (see Figure 2). While some primary students experience peer rejection due to their intellectual and academic abilities, it is only in these middle years that the weight of their situation becomes apparent. The mixed messages from parents and teachers to do their best and from peers to be like them require careful navigation. Combined with the high expectations for the quality and quantity of their schoolwork, it may just be easier to "tune out" and stop performing. The high school gifted students we interviewed had learned to deal with these difficulties, but they were selected to participate in our study because they were still participating in a gifted program. The ones who chose to go underground, to underachieve so they would be accepted and could avoid the pressure to excel – they were not in a gifted program by their high school years.

Figure 2 Coping with the Social Experience of Giftedness Over Time²⁰



What to do with this information if you are a student?

- You may be one of the many CTYI students who feels quite comfortable in your relationships with peers. Perhaps you have found common ground with them outside of school in activities that don't involve a comparison of your intellectual abilities. Or maybe they are happy for you with your academic success and are not jealous. Perhaps most of your friends have similar intellectual abilities, as at CTYI, and those friendships are fulfilling. Friendly academic competition can be rewarding, so long as the stakes are not too high.
- 2 What if you are one of the students with low confidence in your social abilities? There are things you can do to improve your situation. For example, there are certain steps we all go through as we enter a social setting. Do you take the time to size up what is happening as you enter? What do you think was going on just before you arrived? You can practice making sense of a social situation by observing others or paying attention to social scenes on TV or in the movies. Is a new person walking in welcomed? If so, how did they behave? If not, how did they behave? You can learn a lot by watching others.

20 Cross, J. R., Vaughn, C. T., Mammadov, S., Cross, T. L., Kim, M., O'Reilly, C., Spielhagen, F., Pereira Da Costa, M., & Hymer, B. (2019). A cross-cultural study of the social experience of giftedness. *Roeper Review*, 41(4), 224-242. 10.1080/02783193.2019.1661052

- 3 One way to boost your chances of connecting with others is to participate in numerous activities. The goal is not to be the best, but to enjoy yourself and learn something new. Physical activities are good for you and you may not outperform others like you can in schoolwork, paving the way for potential friendships.
- 4 Consider exploring the many online activities that allow people with the same interests to come together. Never join in one of these without your parents' explicit knowledge, as you never know what dangers might exist. In the right setting, though, an online group may be an excellent way of meeting others who share your interests.
- 5 Other options may be arts workshops or community theatre. You might also look for opportunities to volunteer for an organisation you care about. There are likely to be others who care about the same things you do.

we discover talent

- 6 While it may be tempting to hide your abilities or underachieve so you can avoid making others jealous or hurting their feelings, there can be negative consequences. A better approach can be to learn some strategies for when you care about the person you can outperform. Know this: we ALL have to learn how to make and keep friends. It may seem natural and something you shouldn't have to work at, but that is incorrect. We learn from models in our family, in school, in church, on TV, how to act in a friendly way. And then we have to practice it. Sometimes it feels strange to do these things the first time, but you'll see. Soon it will be second nature and you won't even think about how to do it.
- a Helping strategies can be very effective. Can you use what you know to help others get the scores they want? Tutoring is one way, but maybe there is a trick you know for remembering a list or doing a calculation. Sharing your abilities shows the other person you care.
- b Make them feel better about themselves by complimenting them, pointing out their strengths, or encouraging them. These efforts must be sincere, though. A madeup compliment can alienate them even more.
- c Being nice to them shows you care. Doing favours, helping others, being friendly, makes you likeable. Again, it may feel weird at first, as if you are acting. You will soon find that being prosocial (kind, nice, helpful) makes you feel good about yourself and makes others feel good about you. And if they don't respond positively, don't worry about it. Just keep on practicing being nice. It is worth it.



Adult expectations

- Your parents and teachers are most likely thrilled to have a student with abilities like yours. They have seen your potential and know what the future holds for someone so bright. Great things lie ahead, if you only buckle down and work to achieve what is possible! No wonder you sometimes feel pressured to always excel. You probably want them to be happy, so have always tried hard. Perhaps you and the adults in your life have found a good fit. They push just the right amount and you work to the level of their expectations or beyond.
- 2 What if, however, you feel there is an unrealistic pressure on you to achieve? The adults in your life want you to always excel, to always put in the work, and to always get it right. If you've had a history of performing at the top of your game, it is easy to see why they might expect that is the way you like it and the rewards for you are enough to keep you going. If you find that you are under too much pressure, however, how can you let up without disappointing those who want the best for you? Is letting up what you should do?

Remember that making friends is a learned activity. Watch others who do it well and practice positive, friendly behaviours.

> Communicate with your parents when you feel you are under too much pressure. Keep in mind that hard work leads to expertise, but there should be a balance between your efforts to develop your skills, maintain healthy social relationships, and choose for yourself what you want to pursue.

The key here is communication. Are you interpreting their expectations correctly? Maybe they don't really expect you to be perfect, but you've always done that, so now they just think that is what's going to happen. They may not mean to apply pressure when they get excited at the prospect of you attending their alma mater (maybe 10 years from now), but that may not be exactly what you want. How can you keep an open line of communication about what you are feeling and what you want? Are they being responsive to your needs? It may be hard if you don't tell them what you need. Be an advocate for yourself.

Learn strategies that help others know you care about them – helping, encouraging, complimenting – and practice those strategies

What to do with this information if you are a parent?

- 1 It is extremely common to hear parents of gifted students say they are concerned their child has no friends. Sometimes parents are concerned, but the child is not. The lessons about introversion and extraversion bear repeating. Not everyone wants the same thing when it comes to relationships with others. One caring, trusted person may be enough to satisfy your child's need for belonging. The extraverted child, on the other hand, may want many friends. You should be looking for signs of their dissatisfaction with relationships before becoming concerned.
- 2 Some parents can relate to their child's dilemma of having to choose whether to achieve to their potential or don't achieve so they can have friends who are less capable. Perhaps you have had this experience yourself and can advise your child on what you learned. Many parents, however, have not (or have forgotten) and are surprised that the social scene in their child's school is so difficult. It seems like everyone should want the students to fulfil their potential.

Instead, the preference for keeping the students achieving at an average level is apparent among the students and sometimes even, research²¹ shows, the teachers. It helps if you recognise the mixed messages your child receives to do their best or to remain average. It can be hard to reach for the stars when you are tethered to friends on the ground.

3 Your child can benefit from being in settings like CTYI, where students of similar intellectual ability can find each other. In fact, some time like this is critical for those students who simply do not have intellectual peers in their home school. 4 The vast majority of CTYI students spend the school year surrounded by peers with less academic ability. To assume none of them can be a friend is short-sighted. This is a population where some students will likely have similar interests in music, hobbies, sports, or student government. Even if they are not as serious about learning as your child, they may be able to find common ground.

Teaching your child some of the strategies shared in the section for students, will help them develop social skills they may not have had time for in their early years. Some gifted students spend so much time developing the talent that is their passion, they missed time their peers were spending developing their social skills. You may need to be direct in teaching them to recognise body language or cues that a social interaction is going well or should end. Role plays can be effective.

> Recognise the dilemma of mixed messages about achievement your child receives from you and from classmates. Teach them strategies for maintaining relationships with classmates who may not be able to achieve at their level.

Teach social skills directly, by drawing attention to others' behaviours and practicing friendly actions.

21 Cramond, B., & Martin, C. E. (1987). Inservice and preservice teachers' attitudes toward the academically brilliant. Gifted Child Quarterly, 31, 15-19. doi:10.1177/001698628703100103 Comment on what you observe in social interactions happening on TV, at the ball game, the mall, or picking them up from school. "Did you notice how Tom asked if he could join the game when he first arrived?" "I saw that Susan seemed very confident when she was talking with the coach. What do you think made her look confident?" Model friendly behaviour so they can learn from you.

5 Be open in communication with your child about your expectations for their achievement. "Open" in this sense means you listen as well as talk. Do you expect your child to always excel? What if they don't? Will it affect your relationship? A responsive parent is willing to acquiesce to their child when that is what they need. You can be demanding, but be responsive, too, so as not to overwhelm.

> Ensure they have some time with intellectual peers.

What to do with this information if you are a teacher?

Teachers may not be aware how their behaviour affects students' relationships. One study²² found that students reported liking a peer less when the teacher made derogatory comments (e.g., "I've just about had enough, Billy"), but liked the peer more when the teacher gave feedback in a positive tone (e.g., "Looks like Billy's paying attention. Good!"). In another study²³, classrooms where the teacher made comments that referred to the academic hierarchy (e.a., "I point out students who do well academically as a model for the other students") had fewer friendships at the end of the school year than at the beginning.

Teacher behaviours can have an effect on the relationships among their students. CTYI students described underachieving to avoid being held up as an example to the class. You can help to foster positive relationships among your students by being positive toward all of them and de-emphasising comparisons of their performance.

- 2 Recognise that some of your most capable students may have chosen to hide their abilities or underachieve for social reasons. You can help them achieve to their potential through the structure of your assignments. Properly structured problem-based learning activities create interdependence among students, requiring all students to do their best work to be successful. Emphasising learning goals over grades or performance goals can also reduce students' comparisons with one another.
- 3 Be aware that your gifted students may internalise your expectations to the point of distress. Stay in communication with them about workloads, timelines, and priorities.
- 4 Teachers of students in the middle school years should recognise the crucial decision being made at this age. Look for ways you can ease their fears about peer rejection for being visible (mastery learning goals for all; inconspicuous differentiated assignments, etc.) and help them enjoy challenging work.

5 Many CTYI students said they prefer to work independently than with classmates. This may be because they would not be able to work at their preferred pace or fear social loafing. One study²⁴ found an association between how much gifted students felt supported by peers and their willingness to work in a group. A positive climate in your classroom may make the gifted students more interested in working with peers. Problem-based learning assignments are one way to foster positive interdependence and reduce students' concerns about being in competition with peers.

> Reduce competition with peers by de-emphasizing grades for your assignments, focusing instead on the learning you want your students to master.

Be aware of your role in students' relationships. Be positive toward all students and do not draw attention to your gifted students' superior performances.

22 White, K., Kistner, J. (1992). The Influence of teacher feedback on young children's peer preferences and perceptions. Developmental Psychology, (1992), 28, No. 5, 933-940.

23 Mikami, A. Y., Griggs, M. S., Reuland, M. M., & Gregory, A. (2012). Teacher practices as predictors of children's classroom social preference. *Journal of School Psychology*, 50, 95-111.

24 French, L. R., Walker, C. L., & Shore, B. M. (2011). Do gifted students really prefer to work alone? *Roeper Review*, 33(3), 145-159. http://dx.doi.org/10.1080/02783193.2011.580497

Maintain a positive classroom climate where students support each other and negative comments or bullying behaviours are not allowed.

What to do with this information if you are an administrator or policy maker?

- 1 Ensure policies are in place that cater for social development of gifted students rather than focusing only on academics.
- 2 Teachers and school leaders may not be aware of the stigma associated with giftedness and its consequences. Providing training for educators on the stigma of giftedness can help educators be prepared for students' stigmarelated behaviours.

Ensure all students feel valued as they receive an education appropriate for their abilities. Avoid focusing on the hierarchy of achievement, emphasising learning over performance.

Recognise the need for attention to students' social development. Academic achievement should not be the only focus of administrators and teachers.

- 3 Underachievement is a loss for schools as well as the individual who is not working up to their potential. Students choosing not to achieve specifically because of social pressures need support. Teachers can learn to recognise this situation and take action, as described above. Professional development on gifted education should include a component on underachievement.
- 4 Highly visible programs or activities for gifted students may make them a target for derision or rejection by peers. Environments that are welcoming of diversity of all kinds, including neurodiversity, will reduce the impact of high performance on peer relationships.

Provide training on the stigma of giftedness and possible negative outcomes, such as underachievement.

Twice Exceptional Students

Catriona Ledwith – CTY Ireland



Twice exceptional, "2e" or dually exceptional refers to children whose exceptional cognitive ability exists alongside a special need. An operational definition of twice-exceptionality has been proposed as an answer to the lack of consensus on previous definition(s), facilitating unity in future research efforts²⁵. According to the definition by 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 functioning AND who manifest one or more disabilities as defined by federal or state eligibility criteria. These disabilities include specific learning disabilities: speech and language disorders; emotional/behavioural disorders; physical disabilities; Autism Spectrum Disorder (ASD); or other health impairments, such as Attention Deficit/ Hyperactivity Disorder (ADHD)." (p. 222)

Children and young people who are twice exceptional may demonstrate exceptional ability in one or more areas, and significant weakness in others. They can be difficult to identify as the disability often masks their outstanding ability. Children with ASD, for instance, demonstrated slower processing speed, adaptive skills and psychological functioning as understood by teachers and parents, clouding any sense that the child may also be gifted.²⁶

Equally, there may be occasions of brilliance accompanied by apparent laziness, gross disorganisation, difficulties engaging with others, problems with reading, etc. (that would point toward an undiagnosed additional need). In others, only the special need is discernible, masking the exceptional ability. Furthermore, there are students who perform in the average range, never raising a hair. Neither their special need nor exceptional ability are apparent because one disguises the other, and neither is ever identified.

Twice exceptional children require a comprehensive assessment, with an individualised approach to their diagnosis.27 Because of their unique circumstances, their cognitive potential must not be overlooked. Typically, a psychological assessment will incorporate an assessment of cognitive function and parents and teachers are often surprised to find the child was twice exceptional, as the special need was all that was suspected. Retrospectively, those involved with the child will see that the exceptional ability explains quite a lot about them, and this can help teachers to spot other children.

People who are twice exceptional can struggle to believe in themselves (low selfconcept) and may not consider themselves academically able because they feel held back by their special need or needs. Dually exceptional students may find it difficult to acquit themselves well when presenting coursework. They are also prone to frustration if they struggle to focus or simply engage with their studies.

What to do with this information if you are a student?

- 1 Would you describe yourself as intensely curious, and also guite disorganised? Do you feel like your mind is moving apace, but you really struggle to manage yourself? Have you advanced problemsolving skills, but find producing schoolwork a stressful experience? Can you study for long periods of time with ease, or is staying focussed a real challenge? You may be twice exceptional. If you suspect this might be the case, you and your parents might find it useful to speak to your school Year Head and perhaps get some advice from CTYI. If you require an assessment you will need to arrange this with a psychologist, which your school can help you with.
- 2 Do you think of yourself as a perfectionist, but are regularly frustrated by this? Students who are twice exceptional may be perfectionists, but because they fail to live up to their own unreasonably high standards, struggle with low self-esteem and self-concept. While perfectionism that is self-oriented can be a good thing, it can be damaging if you feel like you never perform or produce something to the level that you set out to. Practice setting yourself achievable targets, and don't beat yourself up if something doesn't go your way. Learning is an incremental process, and sometimes three steps forward can only happen after you take two steps back.

- 25 Reis, S. M., Baum, S. M., & Burke, E. (2014). An operational definition of twice-exceptional learners: Implications and applications. Gifted Child Quarterly, 58 (3) 217-230. https://doi.org/10.1177/0016986214534976
- 26 Doobay, A.F., Foley-Nicopon, M., Ali, S.R., & Assouline, S.G. (2014). Cognitive, adaptive, and psychosocial differences between high ability youth with and without Autism Spectrum Disorder. Journal of Autism and Developmental Disorders, 44, 2026-2040.
- 27 Foley-Nicopon, M., Allmon, A., Sieck, B., & Stinson, R.D. (2011). Empirical investigation of twice-exceptionality: Where have we been and where are we going? Gifted Child Quarterly, 55 (1) 3-17.

- 28 Dyslexia Association of Ireland. (2023). What is Dyslexia? Retrieved from Dyslexia Association of Ireland: https:// dyslexia.ie/info-hub/about-dyslexia/what-is-dyslexia
- https://www.cambridgeenglish.org/blog/ten-ways-to-support-learners-with-dyslexia/ 30 ADHD Ireland. (2023). Teacher Tips. Retrieved from https://adhdireland.ie/for-professionals/teacher-tips/

- People with dyslexia experience 3 challenges with reading, writing, spelling and processing difficulties.²⁸ Copying content down from the blackboard can be particularly difficult, and consequently a very frustrating exercise. Dyslexic students should consider alternative methods in these instances. Approaches like mind mapping, use of audio instead of reading (i.e., multi-sensory approaches), using a ruler when reading to help guide you and using a computer to type instead of writing²⁹ can be helpful. It helps if you know where your preferences are so that your teachers can adapt your learning and presentation requirements.
- 4 If you're a student with ADHD (attention deficit hyperactivity disorder) you likely find it hard to stay focussed in school, often daydreaming, forgetful, disorganised and simply finding it difficult to sit still. You probably get into trouble for talking too much and for work that looks careless. At school this can be a stressful experience, as you are not trying to get into trouble, but it's just so difficult to concentrate.

There are several strategies that can help you to overcome the challenges of ADHD.³⁰ The most important is for your teacher to help you with organisation of your time and learning, including helping you to break down tasks. Use of a watch to help manage your time, taking movement breaks to help with selfregulation, removal of distractions to help you focus, routine, having notice of upcoming coursework and tasks, will all assist a student with ADHD to manage.

29 Blue, J. (2023). 10 Ways to support learners with dyslexia: for Pre A1 Starters to B2 First for Schools. Retrieved from

5 People with autism can experience challenges in social communication, differences in sensory processing, and exhibit limited and repetitive behaviours and interests. Autistic people appear on a spectrum, as not all characteristics are the same. Autism affects how a person "thinks, communicates, interacts, and experiences the world around them".³¹ A noisy, busy school environment can be overwhelming for an autistic person, so knowing what the triggers are and using assistive devices and technologies will help to mitigate the impact.

It's important that your teachers understand you and work with you so that your learning and social experience at school is maximised. Students and parents should link in regularly with the school's special needs team for ongoing support, most especially when difficulties start to arise. The team is typically made up of the Principal and Deputy Principal, Special Needs Coordinator, learning support teachers and special needs assistants (SNAs). They are responsible for organising and monitoring learning supports and will liaise with individual teachers as necessary.

It's important that your derstand you and wor rith you so that your learning and soci (perience at school is maximised. Studen arents should link in reaularly with l's special needs team for on support, most especially when difficultion start to arise. The team is typically made up of the Principal and Deputy Principal, pecial Needs Coordinator, learning support achers and special needs assistants (SNAs). They are responsible for organising and monitoring learning supports and will liaise with individual

> Up to 15% of gifted children in Ireland are twice exceptional, and that number has risen over the years as greater awareness of disability amongst parents and educators has come about. It's important not to panic, because there is greater understanding and support available in schools of special needs.

What to do with this information if you are a parent?

- 1 Are you concerned that your child might be twice exceptional? Or are you the parent of a recently diagnosed, twice exceptional student? It is perfectly understandable for you to have worries about the road ahead, both academically and socially. Remember, you are not alone! Up to 15% of gifted children in Ireland are twice exceptional, and that number has risen over the years as greater awareness of disability amongst parents and educators has come about. It's important not to panic, because there is greater understanding and support available in schools of special needs.
 - Though the diagnosis can be surprising at first, it is a good thing because it opens doors to help and support for your child. While schools are very busy places, they also have a wealth of resources and experience, and parents new to a diagnosis will find lots of support and expertise from their child's principal and teachers. It's understandable to have worries as you navigate school and education with this new diagnosis.
- 2 Does your child have exceptionally high expectations of themselves, or do they carry a belief that others expect them to be perfect? Parents play a crucial role in helping their children manage perfectionistic tendencies, and in developing positive attitudes about their efforts to achieve. While self-oriented perfectionism is more benign, perfectionism that is socially prescribed is more damaging, so understanding the root of this pressure is important. (Socially prescribed perfectionism relates to the child's need to fulfil the high expectations they perceive others have of them.

31 Irish Society for Autism. (2021). Autism. Retrieved from https://autism.ie/information/faq/autism/

It occurs when their belief about their own intelligence becomes bound to their self-worth, and so any failure is considered an indication they are not as intelligent as they/others thought³²). Placing the emphasis on the effort (positive striving) and giving the child latitude to navigate their own course with unwavering support whether the outcome be perfect or not, instils a stronger self-concept.

Does your child believe their ability is fixed or is it something they work on to grow? When a child has a fixed mindset, it is hard to keep trying when you feel like you are failing. Children who believe effort is rewarded (growth mindset) cope better in the face of challenge. It can be very difficult for a twice exceptional child, who has the potential but struggles to acquit themselves well in schoolwork. Parents should work closely with teachers to ensure that content is accessible and that tasks are manageable.

> Though the diagnosis can be surprising at first, it is a good thing because it opens doors to help and support for your child. While schools are very busy places, they also have a wealth of resources and experience, and parents new to a diagnosis will find lots of support and expertise.

32 Kamins, M.L., & Dweck, C.S. (1999). Person versus process praise and criticism: Implications for contingent self-worth

4 The challenges of being twice exceptional on an academic level can affect how children feel on a social and emotional level. It is important to focus on your child's strengths, as much of the focus at school will likely be centred on their disability. Celebrate the wins and be there as a guide and support when the challenges arise. Be on the lookout for frustration, self-depreciation, and defeatist attitudes as indicators that they are in trouble, and move quickly to provide emotional support.

For example, if completing a school project is the cause of significant stress, help your child to break it down into manageable tasks, and help them to work through each part. Gradually working through the task list toward completion, will see their self-confidence and selfconcept begin to re-establish.

The challenges of being twice exceptional on an academic level can affect how children feel on a social and emotional level. It is important to focus on your child's strengths, as much of the focus at school will likely be centred on their disability. Celebrate the wins and be there as a guide and support when the challenges arise.

5 Children who struggle with low selfefficacy or self-belief, can feel excluded from their age peers. Perhaps they feel that they have the potential to be ridiculed as their giftedness is not as readily visible? Do they feel like they fit in with other gifted children? If their success is hard fought or they never perform quite as well as they felt they could, they may even feel themselves somewhat of an imposter amongst the gifted community.

Meeting others who experience the same challenges can help them to feel less alone. Organisations that arrange clubs, courses or workshops or social events for their communities can be useful in this regard. CTYI classes bring together not only gifted students, but those who are twice exceptional. Similarly, organisations that deal directly with your child's particular special need are another place where these twice exceptional young people can find their tribe.

It is important to remember that children who have a learning difficulty can also be gifted. Their hig ability is regularly masked by their special need.

Students who are twice exceptional benefit from learning opportunities that focus on their strengths.33 Learning assignments where the focus shifts away from the disability toward the areas of strength, will allow students to feel successful, thereby growing their confidence, and ultimately nurturing their potential.

What to do with this information if you are a teacher?

- 1 It is important to remember that children who have a learning difficulty can also be gifted. Their high ability is regularly masked by their special need. Teachers need to be cognisant of this as it is often not clear to see. (In fact, it may help to assume this until proven otherwise!)
- 2 Take for example a child who is gifted with ADHD. They may appear disorganised, careless, absent-minded, talk a lot, demonstrate challenging behaviour with their peers, and fail to present tasks in a way that you would expect of a gifted or talented child. These symptoms make it impossible for them to show their true ability. Twice exceptional students need support and encouragement to fulfil their potential. Much like a plant growing in poor soil, they need regular attention, training, feeding, and a watchful eye to ensure that they don't succumb to the complexities of their situation.
- 3 Students who are dually exceptional often have more than just two exceptionalities. As a teacher, aim to have greater sensitivity to the diversity of student profiles, as giftedness could be a component of a student who is struggling or not seemingly to stand head and shoulders above the rest. Don't rely on narrow measures, such as test scores alone. Consider the use of wider criteria or measures that could be helpful in uncovering masked exceptional ability. Seek advice from your school's Special Needs Team who will be able to suggest ideas or investigate the inconsistency that you have spotted. This will lead to the better implementation of supports for these students.

- Keep in mind that students who are twice exceptional are likely to perform in between students who are gifted and those with a disability, making them difficult to spot. What may however be discernible is a level of frustration in their school experience.
- 5 Is it that your dually exceptional student struggles to believe in themselves? It can be really difficult for students who are academically gifted but are challenged by a special educational need. Take for instance a student who is gifted with profound dyslexia. If this student has a hard time producing high quality schoolwork, they will most likely have a poor self-concept. Self-concept is boosted by positive affirmations, but mostly by opportunities that help improve self-belief. Providing options that allow schoolwork to be submitted in more reasonable formats will certainly help, as will cognisance of a fragile self-concept when providing feedback etc. Teachers can be instrumental in helping such students recognise the resources they need and being available for help.
- Do you differentiate your course materials 6 for students who are gifted with a special educational need or needs? Do you give the student opportunities to extend their learning with a more challenging curriculum or advanced level resources? Do you offer them opportunities to learn more in-depth content? Do you give them different options in terms of presenting their work? Students who are twice exceptional benefit from learning opportunities that focus on their strengths.³³ Learning assignments where the focus shifts away from the disability toward the areas of strength, will allow students to feel successful, thereby growing their confidence, and ultimately nurturing their potential.

What to do with this information if you are an administrator or policy maker?

- Any policy on twice exceptional students 1 must firstly, and most importantly, move away from a one-size-fits-all approach and recognise the diversity and heterogeneity in the group. There are unique differences between the different special needs, and between the children themselves. Students who are twice exceptional do not fit into singular categories (e.g., gifted with dyslexia) because often there are a number of co-occurring disabilities, and because the children themselves can differ in how the special need presents.
- 2 Thus, policies should relate to the specific additional needs, and not take on an umbrella approach, because the needs of a child with a social/ communication need varies greatly from a child with a visual/reading need. This calls for more person-centred approaches in terms of identification and in terms of academic supports and social and emotional wellbeing.
- 3 Twice exceptional students are likely to exhibit high verbal and visual ability, but also difficulties with auditory or visual/auditory perception, and so the use of both psychometric and dynamic testing approaches is important in the appropriate identification of these children.³⁴

- Central to any policy and its 4 implementation are those who are affected by that policy: the child and their parents. These central stakeholders should not be left out of the equation, and dialogue with both is critically important to a successful implementation.³⁵
- 5 Teacher training in gifted education needs to include a comprehensive component on twice exceptional, as some variance exists across different countries that has proved it is not always fit for purpose.³⁶
- 6 Twice exceptional students can be accommodated in mainstream settings if they have access to appropriate teaching and learning strategies that stem from special education and talent development best practice.³⁷ Schools and universities can help twice exceptional students by offering them talent development opportunities as well as individualised enrichment programmes.



- 34 Al-Hroub, A. (2021). Utility of psychometric and dynamic assessments for identifying cognitive characteristics of twice-exceptional students. Frontiers in Psychology 12:747872. https://doi.org/10.3389/fpsyg.2021.747872
- 35 Gierczyk, M., & Hornby, G. (2021). Twice-exceptional students: Review of implications for special and inclusive education. Education Sciences, 11 (2), 85. https://doi.org/10.3390/educsci11020085
- 36 Dimitriadis, C., Georgeson, J., Paliokosta, P., Van Herweger, J. (2021) Twice-exceptional students of mathematics in England: What do the teachers know? Roeper Review, 43, 2, 99-111.

37 Ibid.

50

Gifted Disadvantaged Students

Leeanne Hinch - CTY Ireland





Gifted disadvantaged children are those who are academically gifted but who come from socio-economically disadvantaged backgrounds. This population of students is often overlooked in the education system because they come from low-income families, have limited access to educational resources, and lack the support they need to succeed academically.

These children face numerous challenges that can hinder their academic success and as a result we unfortunately tend to see that these students often don't perform as well as the general population. This is often referred to as an "excellence gap", which is when we see differences between subgroups of students who are performing at the highest levels of achievement.³⁸ Approximately 10% of CTYI students could be considered to be gifted disadvantaged students, and over the years we have tried to carry out research on this important group of children to determine how best we can help them to achieve.

One of the main challenges for these students is a lack of access to high-quality educational resources. In many countries students from low-income families often attend schools that are underfunded and lack quality resources. As a result, these students may not receive the same educational opportunities as their more well-off peers.³⁹ In Ireland, we are lucky to have the DEIS programme for schools which ensures that schools in socio-economically disadvantaged areas receive more funding than those in more affluent areas.

However, many of the additional supports that these schools provide are typically aimed at students who might be at risk of struggling academically, rather than those who are highly able and need additional challenges to thrive. This means that if

gifted students in Ireland are not being appropriately challenged in their schools, they would need external opportunities to enrich their learning, which they may not be able to afford. These students will invariably have less access to the appropriate resources and activities that their more well-off peers can seek out. Without access to challenging coursework and academic support, these students may struggle to reach their full potential.

These students may not receive appropriate resources and challenging academic opportunities as they are less likely to be nominated for identification than their peers, and also less likely to be identified even after they have been nominated. Unfortunately, teachers are less likely to believe that students from these backgrounds are highly able, which means that any indications of their ability would be missed, where it would likely be picked up in a middle-class student. 40 41

Another challenge these students often face is a lack of support and guidance from their parents and other family members. It's important to be aware that this is not out of a lack of desire to help their children. On the contrary! All of our experience in CTYI shows that these parents do want to help their children academically.^{42 43} However, parents from low-income families may have limited education or knowledge about the education

- 38 Plucker, J.A. and Peters, S.J., 2020. Excellence gaps in education: Expanding opportunities for talented students. Harvard Education Press
- 39 Cross, J.R., Frazier, A.D., Kim, M. and Cross, T.L., 2018. A comparison of perceptions of barriers to academic success among high-ability students from high-and low-income groups: Exposing poverty of a different kind. Gifted Child Quarterly, 62(1), pp.111-129.
- 40 McBee, M. T., Peters, S. J., & Miller, E. M. (2016). The impact of the nomination stage on gifted program identification: A comprehensive psychometric analysis. Gifted Child Quarterly, 60(4), 258–278.
- 41 Harradine, C.C., Coleman, M.R.B., & Winn, D.-M.C., (2014). Recognizing academic potential in students of color: Findings of U-STARS~PLUS. Gifted Child Quarterly, 58(1), 24-34.
- 42 Healion, E., 2013. Perceived effects of an academic enrichment programme for potentially gifted students from a socio-economic disadvantaged area using critical action research (Doctoral dissertation, Dublin City University).
- 43 Carroll, E., 2020. Student experiences of an out of school academic enrichment programme for high ability students transitioning from DEIS primary schools to DEIS secondary schools (Doctoral dissertation, Dublin City University).

system, which can make it difficult for them to advocate for their children's academic needs. Parents with limited experience of the education system are less likely to notice their child's abilities, and less likely to know what to do if they do spot it.44

These families may also have limited financial resources, which can make it much harder for them to provide their children with any additional resources their child might need to succeed academically.45 Disadvantaged children can also experience social and emotional issues that can affect their academic performance including anxiety and self-esteem issues.⁴⁶ A lot of research has been carried out examining socio-economically disadvantaged populations and what we see time and again is that these difficulties can make it challenging for students to focus on their academic work which may lead to underachievement.



- 44 Harris, A., & Goodall, J. (2008). Do parents know they matter? Engaging all parents in learning. Educational Research, 50(3), 277-289.
- 45 Olszewski-Kubilius, P., & Clarenbach, J. (2012). Unlocking emergent talent: Supporting high achievement of low-income, high ability students. Williamsburg, VA: National Association for Gifted Children (NJ1)
- 46 Smokowski, P.R., Guo, S., Rose, R., Evans, C.B., Cotter, K.L. and Bacallao, M., 2014. Multilevel risk factors and developmental assets for internalizing symptoms and self-esteem in disadvantaged adolescents: Modeling longitudinal trajectories from the Rural Adaptation Project. Development and psychopathology, 26(4pt2), pp.1495-1513
- 47 Healion, E., 2013. Perceived effects of an academic enrichment programme for potentially gifted students from a socio-economic disadvantaged area using critical action research (Doctoral dissertation, Dublin City University).
- 48 Breslin, E.E., 2016. Exploring the experience of high-ability students from socio-economic disadvantaged schools participating in a summer academic programme (Doctoral dissertation, Dublin City University).
- 49 Carroll, E., 2020. Student experiences of an out of school academic enrichment programme for high ability students transitioning from DEIS primary schools to DEIS secondary schools (Doctoral dissertation, Dublin City University).

There are several different things that we can do to support the academic success of gifted disadvantaged students, such as offering enrichment programmes. Programmes for gifted disadvantaged students can be run either in or out-of-school. Although in-school programmes have been very successful in other countries, it can be tricky to manage in Ireland as provisions for gifted students are not mandated nor funded.

Out-of-school enrichment programmes have been offered by CTYI which has allowed some students to go beyond their standard curriculum in areas that they might be interested in. In CTYI, we have had successes with programmes for students at both primary and secondary level. ^{47 48 49} The students, parents, and schoolteachers of these children have told us that these programmes really benefited the students who took part, both academically and with their confidence.

'You iust can't hav viously going to be children chools and to be opportunities for th<u>em,</u> because at the moment they don't feel there's enoua

What to do with this information if you are a student?

- Seek out challenging opportunities! Try to take the initiative to seek out challenging academic opportunities within and outside the school setting. This can include advanced courses, online resources, library materials, and educational programs or clubs that provide intellectually stimulating activities. We often find that students from disadvantaged backgrounds might not be as confident in their abilities as they should be. So, it might be scary or feel a bit weird, but you should put yourself forward for things you come across that might benefit you. You should have confidence in your abilities and your potential!
- 2 Advocate for your educational needs: Be an advocate for yourself by talking to your teachers, career guidance teacher, or your principal about your academic needs. Try to explain to them what you feel that you are capable of, the things you're interested in, what ambitions you have, and maybe some of the things in your life that you feel might be making things harder for you. You can ask them for more challenging coursework or support in accessing materials that you feel might be helpful to you.

Mentors are also important for giving you an insight into what a career might be like when you don't know anybody else who is doing that job.

- Seek out mentors or role models: It could 3 be really helpful to you to find someone who has navigated the education system and is studying or working in an area you are interested in. Mentors can provide valuable insights, advice, and support to you during your journey, and they could be particularly helpful to you if very few people in your family have finished school or gone to university. The CAO process and applying for colleges can seem really daunting if nobody at home has done that before. You can reach out to teachers or your career guidance teacher, or professionals in your field of interest to try to find a mentor. Mentors are also important for giving you an insight into what a career might be like when you don't know anybody else who is doing that job.
- 4 Create a support network: It can be really beneficial to you to try to connect with other like-minded peers, whether within your school or through local organisations or online communities. Engaging with peers who share your intellectual interests can provide opportunities for discussion, collaboration, and learning beyond the classroom. But more importantly, you can find people who understand you and who will encourage and support you.

5 Avoiding financial barriers: Finances are an unfortunate but real barrier to entry to some opportunities that you might be interested in and deserve to take part in. If you see something that you would like to take part in (such as CTYI for example) consider reaching out to ask if there are any scholarships available or reduced fees offered through financial aid programmes. Not all programmes advertise these things very prominently but they are often available, or the group may be able to find some sponsorship for you to attend.

If you are interested in attending 3rd level, many have a dedicated department aimed at supporting students from under-represented groups, such as DCU's Access service. You can reach out to departments like this before you apply to college to see what support might be available to you. They may be able to offer financial support, subsidised accommodation, or reduced entry requirements, depending on your circumstances.



54

6 Utilise technology and online resources: Take advantage of technology and online resources to access educational materials and courses that align with your interests and abilities. Online platforms offer a wide range of free or low-cost resources, including virtual classes, educational websites, and forums where you can connect with experts in your field of interest. Self-directed learning such as this can be incredibly helpful to you.



What to do with this information if you are a parent?

- Understand your child's unique needs: This is important for all parents, but this is something that could be really helpful when you're the parent of a child who may be overlooked in school. Talk to your child about how they find school and what their goals are. Try to educate yourself about giftedness and the characteristics associated with it. Understand that giftedness can appear in different ways and that your child may have specific academic, social, and emotional needs that require attention. CTYI has helped to produce an online learning platform about this called EGIFT that parents can access to learn more.
- 2 Advocate for your child's education: Although we've recommended for students to advocate for themselves, not all students have the confidence for this and even if they did, it could be more effective when coming from both parent and child. Communicate regularly with teachers, career guidance teachers or the principal to ensure they are aware of your child's giftedness and to discuss appropriate academic opportunities and support. Attend parent-teacher conferences and actively engage in discussions about your child's progress.
- 3 Seek out enrichment opportunities: Look for educational opportunities beyond the regular classroom. Encourage your child to participate in academic competitions, summer programs (such as CTYI), or specialised workshops that align with their interests and talents. If you do find an enrichment program for your child but it requires a fee then you should consider asking if they have reduced fees or scholarships that your child could apply for. Some programmes will offer something for families who may not be able to afford to send their child at a full rate.
- 4 Speak to your child's teacher: It may be difficult for you to find appropriate opportunities for your child, so ask your child's teachers to keep your child in mind for any academic or mentorship opportunities that they become aware of that might suit your child. If your child shows an interest in coding, for example, and you haven't a clue how to support your child in that area, don't panic. Your child's teacher might be aware of resources or opportunities that your child could take advantage of. Even if they don't, they might know who else to ask, and it definitely can't hurt for them to know your child's interests and ambitions.

- 5 Foster a love for learning: Try to nurture a positive attitude towards learning in your child. Encourage curiosity, exploration, and independent thinking. Bring them to the library and help them to access resources, such as books, educational games, and online platforms, that support their intellectual growth and encourage a love for learning beyond the school environment.
- 6 Build a strong support network: Connect with other parents of gifted students, either within your community or through online platforms. Establishing a support network can provide valuable resources, advice, and emotional support. It also allows for opportunities for collaboration and sharing of experiences.



CTYI has helped to produce an online learning platform about this called EGIFT that parents can access to learn more.

Available supports: Take advantage of 7 available resources and support services. Scholarships, grants, and financial aid opportunities that can help overcome financial barriers to accessing enrichment programs or specialised educational resources are available, they just aren't always immediately obvious. Explore community organisations or nonprofits that provide mentoring or tutoring services for disadvantaged students. Contact the Access departments within universities that your child might be interested in attending to see what supports they could offer your child if they registered as a student.

What to do with this information if you are a teacher?

Understand that gifted disadvantaged students exist: This might seem pretty obvious, but one of the main reasons why myths that there are no gifted disadvantaged students persists is that some teachers rarely or never put them forward for opportunities. Highly able students can be born into any family, with any background.

Gifted students are not all from white, upper middle-class families, but unfortunately from our experience, the children of parents addicted to drugs, Irish Travellers, refugees, or children from many other minority backgrounds are less likely to be identified as gifted. Please remember, you are just as likely to find a gifted student in a direct provision centre as you are in a feepaying private school.

2 Identify gifted disadvantaged students early: Time and again across all the literature we see that teachers aren't identifying these students despite this being one of the most important things we as educators can do to help these students. You should try to research how to identify and support gifted disadvantaged students early. This includes understanding the different ways that giftedness can manifest in disadvantaged populations and the factors that may be masking their potential.

You can use assessment tools, including culturally responsive assessments, to identify giftedness in disadvantaged students. Wide and varied assessment approaches can help to identify these students, rather than rigidly sticking to one assessment tool that may not suit this group of students. If you work in a disadvantaged setting where many of the students would come from socioeconomically disadvantaged backgrounds and the area has low educational attainment in general, it may not be fair to compare the results your students are scoring on assessments to the results of students in more affluent backgrounds or national scores. Consider what the local norms might be for your school or area and then identify who are the students achieving or capable of achieving at the higher levels there.

- 3 Provide challenging and differentiated instruction: Gifted disadvantaged students benefit from teaching that meets their individual needs. You should consider using a variety of teaching strategies, such as flexible grouping, curriculum compacting, tiered assignments, and project-based learning, to provide appropriate levels of challenge and support. Differentiated instruction can help to prevent boredom and disengagement, which can lead to underachievement.
- 4 Provide access to enrichment opportunities: Gifted disadvantaged students should have access to enrichment opportunities that broaden their horizons and expose them to new experiences. You could encourage your school to partner with external groups to provide internships, job shadowing, and other career development opportunities.

Highly able students can be born into any family, with any background. You can recommend or encourage students to attend summer programs and academic competitions that provide opportunities for gifted disadvantaged students to challenge themselves academically and develop new skills. After school programmes for these students can also be organised internally so that students can stay after school for enrichment activities to support their learning. If taking that route, your school needs to consider whether programmes to support gifted disadvantaged students should be open to all high ability students or only those who have been identified as being from disadvantaged backgrounds.

There have been successes with both homogeneous and heterogeneous groupings, however VanTassel-Baska⁵⁰ notes that students from disadvantaged backgrounds may not be academically prepared to jump directly into such a challenging environment and may benefit from a homogeneous course first.

- 5 Provide culturally responsive education: This approach to teaching connects students' cultures, languages, and life experiences with what they learn in school, and this is critical for supporting gifted disadvantaged students. You could incorporate the cultural backgrounds and experiences of gifted disadvantaged students into your instruction, making it more meaningful and relevant. Culturally responsive education also helps to foster a positive school climate and improve student engagement.
- 6 Consider social and emotional support: Gifted disadvantaged students can have unique social and emotional challenges that may impact their academic success. You should keep an eye out for this, and if possible, see if the school can provide social and emotional support, such as through a guidance teacher or peer mentoring programs. This could help

50 VanTassel-Baska, J. (2018). Achievement unlocked: Effective curriculum interventions with low-income students. Gifted Child Quarterly, 62(1), 68–82

these students cope with stress and build resilience. You can also build positive relationships with gifted disadvantaged students, providing a safe and supportive learning environment.

7 Involve parents, families, and community: Parents and families play a critical role in supporting the academic success of their children. You should involve parents and families in the educational process, providing opportunities for them to share their perspective on their child. It would be helpful to provide them with updates on their child's progress and collaborate with them on strategies for supporting their child's academic success.

You could also help to initiate a wider collaboration between schools, families, and community or external organisations. When all parties work together, they can provide students with a comprehensive support system that addresses their academic, social, and emotional needs. You as the teacher can provide academic resources and support, while external organisations can offer extracurricular activities and enrichment programs. Families can then serve as advocates for their children's academic needs and provide emotional support.

> "No science, no book clubs, nothing like that... if any of that was offered, she would have jumped at it in a heartbeat."

What to do with this information if you are an administrator or policy maker?

Provide professional development for educators: Without appropriate professional development, teachers will not know how to identify and support these students. It's imperative that ongoing professional development is offered for educators which focuses on understanding and effectively supporting the needs of gifted disadvantaged students.

Differentiation, culturally responsive teaching practices, social-emotional support, and addressing bias and stereotypes that may hinder these students' progress are all topics that should be included. These children have unique needs and characteristics so it would be helpful to implement policies such as this which would raise awareness among educators, administrators, and parents.

- 2 Support a culturally responsive curriculum: Developing policies that promote culturally responsive curriculum and instruction for all students, including gifted disadvantaged students is incredibly important. Incorporating diverse perspectives, experiences, and cultural references into the curriculum can make the learning more meaningful and relevant. This can help engage gifted disadvantaged students and foster their academic growth.
- 3 Provide equitable access to resources: Policy initiatives such as the DEIS schools programme can really support those in communities at risk of disadvantage and social exclusion, but specific plans need to be put in place for highly able students within these groups. Supporting these students appropriately may include allocating funds for enrichment programs, educational technology, advanced coursework, and extracurricular activities.

- 4 Encourage collaboration and partnerships: One key thing that these students often lack even when they finish university is access to the connections their more affluent peers tend to benefit from. It's important to foster collaboration between schools, community organisations, businesses, and other stakeholders to support gifted disadvantaged students. Partnerships such as these could provide students with access to mentorship programs. internships, and enrichment activities beyond the school environment which could help them to develop essential skills and networks.
- 5 Encourage family and parent engagement: Parents without a history of educational attainment themselves can struggle with helping their highly able child navigate the education system. Anyone who has attempted to fill out a CAO form without the help of someone who has done it before has gotten a small glimpse into what this is like. Providing resources and support for parents to navigate the education system, understand their child's needs, and actively advocate for appropriate academic challenges could have a positive impact on these children.
- 6 Support research and data collection: Resources should be allocated to research initiatives focused on understanding the unique needs, challenges, and success factors for gifted disadvantaged students. We in CTYI have carried out research in this area for many years, but our programmes only reach a small proportion of these students.

Collecting data on their academic achievement, participation in advanced coursework, access to resources, and social-emotional well-being will give us a better picture of these students. Data such as this can then inform evidencebased policies and interventions tailored to meet their specific needs.

Gifted LGBTQ Students

Orla Dunne – CTY Ireland





'Starting to realise that I was non-binary was stressful for me because I felt like it was another tier away from normal that I was going to have to contend with.'

The above quote is from a participant in my own study, which explored the experiences of gifted LGBTQ young people in Ireland.⁵¹ This project was a mixed methods study, with a participant sample of current post-primary students and recent university students, who were identified as gifted and attended CTYI summer programmes between 2017 and 2019. I had 155 participants in total, over an online questionnaire, interviews and focus groups. Of the entire group, 77% identified as LGBTQ and 28% identified as a gender other than cisgender male or female. It was the first study on the experiences of gifted LGBTQ young people in Ireland and will be discussed later in this section.

Although gifted students can generally face difficulties with stigmas and stereotypes, these stereotypes are mixed and typically less overwhelmingly hostile than those encountered by LGBTQ students. However, young people who are gifted and LGBTQ must contend with the challenges of both! The field of gifted LGBTQ research is still relatively small, particularly compared to other subfields within gifted education.

There have only been a handful of empirical studies conducted with gifted LGBTQ young people and all are based within the United States. Some of the gifted LGBTQ participants in my study spoke about experiences which were informed by the cultural context of schools in Ireland, while some participants reported experiences that were guite similar to their US peers. This section of the resource booklet will discuss existing gifted LGBTQ research, followed by the experiences of gifted LGBTQ young people in Ireland.

Being different in two ways, sometimes more, can be a uniquely isolating experience. peers due to accelerated

Gifted LGBTQ Research

All gifted students face issues surrounding identity formation and healthy psychosocial development and may engage in social coping strategies designed to avoid being stigmatised in social or academic situations.⁵² Gifted LGBTQ students may face identity struggles at a younger age than their peers due to accelerated cognitive development and the desire to pursue information about sexual orientation and gender identity.⁵³ Many participants in Wikoff et al's study began exploring their sexual orientation identity around the age of 12-14 with some speaking to an awareness of being 'different', but being unsure how to interpret this emotion.54

Being different in two ways, sometimes more, can be a uniquely isolating experience. The gifted LGBTQ participants in Peterson and Rischar's study struggled with anxiety, depression, and feelings of isolation, attributing this to the feeling of being twice different.⁵⁵ Participants in Wikoff et al's study described how the foundations of their identity differed-gifted identity was more of an assigned identity, whereas sexual/gender identity was more of a discovery process.⁵⁶ The intersection of the two was complicated for some but helped others.

- 52 Cross, T.L., Coleman, L.J. and Stewart, R.A. (1993). The social cognition of gifted adolescents: An exploration of the stigma of giftedness paradigm, Roeper Review, 16(1).
- 44(4)
- Implications for School Counselors, Journal of LGBTQ Issues in Counseling, 15(3).
- 55 Peterson and Rischar, 'Gifted and Gay: A Study of the Adolescent Experience'.
- 56 Wikoff et al., 'Experiences of Gifted LGBTQ+ Students and Implications for School Counselors'.
- 57 Cross, J.R. and Cross, T.L. (2015) Clinical and Mental Health Issues in Counselling the Gifted Individual, Journal of Counseling & Development, 93(2).
- Students, Journal of Counseling & Development, 93(2).
- 59 Cross, T.L. and Swiatek, M. (2009) Social Coping Among Academically Gifted Adolescents in a Residential Setting: A Longitudinal Study, Gifted Child Quarterly, 53.
- Talent Development and Creativity, 2(1).
- American Males in Education, 10(1), 20.
- 62 Wikoff et al., 'Experiences of Gifted LGBTQ+ Students and Implications for School Counselors'.

51 Dunne, O. (2023). The Experiences of Gifted LGBTQ Post-Primary Students in Ireland [Doctoral thesis, Dublin City University]. Dublin. https://doras.dcu.ie/28015/

Gifted LGBTQ

students may face

identity struggles at a

younger age than their

cognitive development

and the desire to pursue

information about sexual

orientation and gender

identity.

A lack of clear social norms can lead to uncertainty and anxiety, particularly when a gifted student is also LGBTQ.⁵⁷ Gifted students who diverge from what is considered the norm in their school, or amongst peers, may face difficulties.58 Without a supportive environment, which acknowledges and supports their talents and skills, students may engage in inappropriate coping strategies, such as denying their talents, underachieving, or masking their giftedness from classmates to gain peer acceptance.⁵⁹

Managing the intersections of their identities may also be challenging. Gifted LGBTQ students may choose to push their high ability to the forefront, in order to deflect attention from their sexual orientation or gender identity.⁶⁰ Students who are part of multiple marginalised groups may feel torn between balancing each of the various aspects of their identity, or feel the need to internalise one identity in order to externalise the other.⁶¹ In Wikoff et al's study, participants stated that peer relationships were generally more difficult in terms of their gifted identity, compared to their sexual/ gender identity.62

53 Peterson, J.S. and Rischar, H. (2000). Gifted and Gay: A Study of the Adolescent Experience, Gifted Child Quarterly,

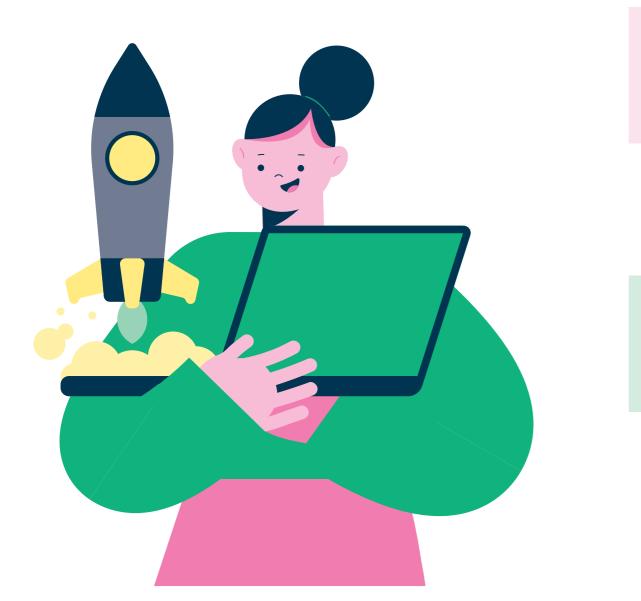
54 Wikoff, H.D., Lane, E.M.D. and Beck, M.J. (2021) "We Need to Feel Safe": Experiences of Gifted LGBTQ+ Students and

58 Kerr, B.A. and Multon, K.D. (2015) The Development of Gender Identity, Gender Roles, and Gender Relations in Gifted

60 Wexelbaum, R., & Hoover, J. (2014). Gifted and LGBTIQ: A Comprehensive Research Review. International Journal for

61 Sewell, C. J. P. (2019). Being Black, Male, Gay and Gifted: Reflections on Childhood and Teaching. Journal of African

One participant in Hutcheson and Tieso's study explained that hearing statements like 'that's so gay', or homophobic slurs, in school felt 'very disturbing and distressing... especially in the moment when you're pursuing your sexuality or trying to figure out who you are.' ⁶³ From a positive standpoint, a participant in Peterson and Rischar's study felt that his advanced language skills allowed him to 'spar, debate, and argue with the most adroit gay basher.' ⁶⁴ Participants in Wikoff et al's study spoke of the value of connecting with peers who shared either gifted and/ or LGBTQ identities, through gifted programming, advanced classes and extracurricular activities.⁶⁵



63 Hutcheson, V. H., & Tieso, C. L. (2014). Social Coping of Gifted and LGBTQ Adolescents. *Journal for the Education of the Gifted*, 37(4), p. 363.

64 Peterson and Rischar, 'Gifted and Gay: A Study of the Adolescent Experience', p. 239.

65 Wikoff et al., 'Experiences of Gifted LGBTQ+ Students and Implications for School Counselors'

The Experiences of Gifted LGBTQ Young People in Ireland

I found that for the 155 participants in my study, generally post-primary schools in Ireland are quite a varied environment for gifted LGBTQ young people. Unfortunately, the majority of these students are still experiencing high rates of negative, anti-LGBTQ language, with 62% reporting that they heard 'gay' used in a negative way frequently, 53% reporting they heard negative remarks about sexual orientation frequently and 38% reporting that they heard negative remarks about gender identity frequently.

Despite the frequency of negative language, about half of participants stated their peers and teachers were somewhat accepting. In contrast, the overall climate for gifted LGBTQ students at CTYI was considered very positive. In terms of negative language, two thirds of participants reported that they never heard 'gay' used in a negative way (57%), that they never heard negative remarks about sexual orientation (65.5%) and that they never heard negative remarks about gender identity (59.9%).

> "I've never had more of a social life than in CTYI. Like outside of it I was friendly with people but I didn't have friends. And I think a lot of that was to do with everyone being so welcoming, LGBTQ or not, it didn't matter, you just got along with people and that was it. I think people just had this understand of at CTYI it's an ingroup, so it's easier to connect with everybody."

The majority of study participants felt that CTYI staff and their CTYI peers are more supportive than staff and peers in their school. There were also higher rates of intervention in instances of hearing this type of language at CTYI than at school, for students and staff. An overwhelming majority of participants stated that CTYI staff are very supportive of LGBTQ people (88%), as are their CTYI peers (95.8%). Participants spoke about the value of having not only supportive leadership, but also openly (and happily) LGBTQ leadership. Affirming extra curricular activities at CTYI were discussed as having a positive impact.

In terms of identity development, the participants had varying experiences of coming out, forming peer relationships, support structures and general acceptance. All participants reported that their experience at CTYI had a positive impact on their social and emotional growth. CTYI gave them the space to meet like-minded peers, to find mentorship in CTYI staff members (many who are former students) and to feel generally affirmed throughout their time on campus.

CTYI gave students the space to meet like minded eers, to find mentorship in CTYI staff members (many of which are former students) and to feel generally affirmed in their identity! Below is a vignette of the experiences of one of my participants, Olivia. Olivia is a twentyyear-old, transgender woman and lesbian. The vignette is composed of several sections from her interview, condensed for clarity.

> 'My coming out story is difficult. I was outed as trans when some guys at my school found my second social media profile. That was scary and going to school I didn't know what was going to happen. For the entire year, I never went to the canteen. I had to stop going to PE because I was worried if anything would happen to me it would be there. The idea of going to PE gave me panic attacks.

Using social media, the same group of guys would dehumanise me, deadname me, make crude drawings of me, share photos from my private social media and say really awful things. Being a 15-year-old girl, who was very socially isolated at school... That was awful. At this point I told my deputy principal and one of the teachers, with the help of another CTYI student. That meant a lot to me. So, I did have some support but it was hard, it felt like the only people I had in school were teachers.

But then things got better! That summer I applied to CTYI with my name for the first time. When I got the letter saying Olivia, I was like wow... Because I had never seen that before. That was great. Then being in a girl's RA group straight away, that was amazing. Getting to just be myself for two weeks was an experience like no other. My confidence grew so much. I started to be really outspoken, social and friendly, way more than I ever was before. It was amazing. It wasn't like school at all, it was better. Those two weeks were some of the most important... I'd say arguably the two most important weeks of my life.

When I went back to school I felt so much more confident. When the musical came around, the teachers encouraged me to audition for a female part. I didn't think I would get cast but I did! Getting to do something a year prior that I never would have thought I would get to do, it was just something else. Being on a stage, it felt right.

I'll always be proud of the girl I became in CTYI.'

What to do with this information if you are a student?

- 1 The most important thing you can do as a gifted LGBTQ young person is to understand that you are amazing just the way you are. There is nothing wrong with any part of your identity. No amount of negative rhetoric about your identity from peers, adults, the media or strangers on the internet can change this.
- 2 During your identity discovery process, you might want to look for information about being LGBTQ. Be careful using the internet for this!! Try to access information from websites and groups specifically for LGBTQ youth in Ireland. Talk to your parents, guardians, or a safe adult about the information you are looking for.
- 3 If you have a specific interest, embrace it and find people who appreciate it! One participant in my study said, 'the majority of people in CTYI have these kinds of quirks or a unique interest. There is just something about them that you don't see in a large part of the population.'

The most important thing you can do as a gifted LGBTQ young person is to understand that you are amazing just the way you are.

- 4 Read through the earlier sections in this booklet and consider how being gifted and LGBTQ might play into parts of your personality. Developing coping strategies can help in moments of emotional instability, like focusing on how to solve a problem rather than focusing on the problem itself.
- Remember there is no one way to be gifted and LGBTQ! You might be someone who is extraverted and wants to share your identity loudly and proudlythat's great! Or you might be someone who is more introverted and wants to share your identity only with a few people or in a more subtle way-that's also great! Over time you will learn how you want to express yourself and you should feel comfortable doing this any way you like.
- If you are feeling overwhelmed, anxious 6 or depressed, or if you are experiencing bullying and harassment in any environment, find an adult you can trust to talk with. This might be a parent/ guardian, another relative, a teacher or a CTYI staff member. When we bottle up negative emotions inside, they can come out in hurtful and dangerous ways. A problem shared is always a problem halved!

Remember there is no one way to be gifted and LGBTQ!

What to do with this information if you are a parent?

- 1 In Wikoff et al.'s study, the gifted LGBTQ participants considered their giftedness as an assigned identity and their LGBTQ identity as a self-discovery process.⁶⁷ As a parent of a gifted LGBTQ child you might have similar feelings! Support your child as they navigate this discovery process. You may also need support during this time and it is often helpful to talk to other parents with similar experiences. There are parent groups across Ireland, some of which are listed in the resource section below.
- 2 Being LGBTQ is something that is often framed as being rooted in struggle, or challenges. One of the gifted non-binary students in my study spoke about how frustrating this was to them because they found so much joy in their identity, for them coming out was a wonderful discovery process and not something to be seen as a misfortune.
- 3 Fears about your child's future life are perfectly normal, particularly in a world so keen to eliminate any identities that are 'different'. However, you should consider how communicating your fears may affect your child's perception of their identity. If your child feels being LGBTQ is something to worry about, this affects positive identity development. In contrast, a child whose identity is embraced in the home is far better prepared to deal with the rest of the world.
- Gifted students are naturally curious and 4 may want to actively seek out more information about their identity. However, as we all know, the internet is both an excellent resource and a source of potentially harmful information!

Therefore, it is important to maintain an open dialogue with your child about the type of knowledge they are looking for, or finding. Encourage your child to access age-appropriate material or media about being LGBTQ. The organisation Stonewall has an excellent list of LGBTQ inclusive books, divided by age. It is linked in the resource list at the end of this section.

- 5 Encourage your child to find a hobby or activity where they might meet other peers with similar interests. As discussed in the earlier Psychology section, gifted students not only have their academic abilities in common, but will also likely have similar interests in music, hobbies, sports, or student government as their peers. If your child spends all their time developing the talent that is their passion, they may miss out on developing social skills with their peers! There are also specific groups run for LGBTQ young people in Ireland, which can be found in the resources section below.
- 6 If your child is the victim of anti-LGBTQ bullying, harassment, language or being made to feel uncomfortable regarding their identity, challenge this with the school. Sometimes this type of bullying can be guite insidious, or consist of regular micro-aggressions. Perhaps you might worry about making 'a big deal' out of something or drawing further attention to your child as being different. This should be dealt with just as any incident of bullying or harassment would be. Without adequate intervention, this type of negative action can slowly wear away at a child's self-esteem and sometimes snowball into more serious incidents.

What to do with this information if you are a teacher?

As discussed in the introduction, one of the strongest predictors of a less hostile climate for gifted LGBTQ young people is the presence of supportive teachers. Teachers set the tone both within and outside of the classroom, wielding tremendous power over whether this student population feels happy, safe and supported, or not.

- 1 Challenge anti-LGBTQ language every single time it occurs. Ensure when you are doing this that students know why it is wrong, not that it is simply 'bad language'. While some students may feel they are using certain terms in a joking manner with friends, the LGBTQ student in your class will never hear those words used without feeling a sense of anxiety and isolation.
- 2 Teachers can cultivate a classroom environment that values different subjects, activities and interests equally, as well as provide academic and creative extra-curricular activities for students. Several gifted LGBTQ participants in my study spoke about the value of engaging with creative outlets, like music and drama. One of my interviewees, Joe, found it really frustrating that academic pursuits or the arts were not considered as equal to sports, 'the school placed more value on sports than academic pursuits or the arts. I was really book smart as a kid and someone who focused on their studies, especially art. It felt like people undervalued you not only if you were dedicated to your subjects but if they were specific subjects like art or home economics.'

- 3 If you are designing materials, policies or curriculum to support LGBTQ young people, consider including students in this process. Engaging students in decision making and cultivating participation in larger systems offers a powerful learning opportunity for students, giving them the chance to listen and be listened to!
- For any social or relationship focused education, teachers should ensure that all types of relationships are discussed, not only those between men and women. This is especially important for classes that also include information on sexual health. This should be introduced as part of the overall conversation and not as an aside, or singular aspect of the course.
- 5 Normalise the inclusion of LGBTQ in class content! Some teachers may feel that LGBTQ inclusion happens primarily in classes like SPHE (Social, Personal and Health Education), but all teachers can create an inclusive classroom environment. If you teach maths, you could include gender neutral pronouns in a written problem. If you teach English, history, music or art, you can note the sexual orientation of prominent figures in the field. If you teach politics, you can speak about relevant legislation. Include positive representations of LGBTQ people in class narratives, allowing students to see them as role models.
- 6 If one of your gifted students expresses an interest in LGBTQ topics, teachers can encourage them to focus on a relevant project. Several participants in my study spoke about how valuable they found this type of independent learning.

What to do with this information if you are an administrator or policy maker?

- 1 The first step for administrators or policy makers is the most important one- implement a comprehensive policy on how homophobic and transphobic bullying/ harassment is defined (e.g. repeatedly misgendering someone after being corrected will be deemed bullying) and the steps which will be taken when it occurs.
- 2 The Anti-Bullying Guidelines include explicit recommendations for the implementation of education and prevention strategies regarding homophobic bullying and language, therefore all related policies should recognise the impact of anti-LGBTQ language, which is often minimised compared to incidents of targeted harassment.⁶⁸ Language is a key factor in creating a negative climate for gifted LGBTQ young people.
- 3 Administrators can provide those who work with gifted students the training they need to support these students in every aspect of their identity, recognising that some challenges may arise not just from being gifted, but other aspects of their identity.⁶⁹

Implement a policy on how homophobic and transphobic bullying/ harassment is defined and the steps which will be taken when it occurs.

- 4 A clear process for transgender and gender nonconforming students to change their name and pronouns is also helpful. Students can sometimes feel intimidated to approach this and a specific policy and process minimises this. While this should be communicated to all staff, it may be helpful to appoint the duty of working with this process to a specific person.
- 5 All efforts to address homophobic and transphobic bullying should be a school/ organisation wide process! As an administrator or policy maker, you can ensure there is a top down approach to supporting this student population and eliminating (as much as possible) incidents of bullying and harassment.

All efforts to address homophobic and transphobic bullying should be a school/ organisation wide process!

> Recognise that some challenges may arise from being gifted, as well as other aspects of a student's identity!

68 Farrelly, G., O'Higgins Norman, J. and O'Leary, M. (2017) 'Custodians of silences? School principal perspectives on the incidence and nature of homophobic bullying in primary schools in Ireland', *Irish Educational Studies*, *36*(2).

69 O'Donoghue, K. and Guerin, S. (2017) 'Homophobic and transphobic bullying: barriers and supports to school intervention', Sex Education, 17(2).

External Resources

LGBTQ Inclusive Books

 Stonewall has an excellent list of LGBTQ inclusive book recommendations, with age based reading guides. https://www. stonewall.org.uk/lgbtq-inclusive-bookschildren-and-young-people

LGBTQ Youth Groups in Ireland

- Belong To run youth groups across Ireland, for LGBTQ young people to develop friendships, get support, share your experiences, hang out, and chat. Activities range from pizza nights and special events to clothing swaps and information nights on a range of LGBTQ issues – determined by the group members. https://www.belongto.org/ youngpeople/youth-groups/
- TENI (Transgender Equality Network Ireland) has a variety of support groups available. TransParenCI & Transformers are a set of support groups, where parents and young people meet at the same time in the same venue but separate spaces for privacy. TENI also has a group for parents of children aged 12 and under. https://teni.ie/supports/

LGBTQ Workshops for Schools and Workplaces

 ShoutOut promotes inclusion through education by delivering LGBTQ
Educational Programmes for teachers, parents & guardians, social workers, youth workers, as well as workplaces.
https://www.shoutout.ie/



Author Biographies

Dr. Colm O'Reilly is the Director of the Irish Centre for Talented Youth (CTYI) at Dublin City University. Colm has worked in the area of gifted and talented education for the last 30 years and has written articles and presented papers including keynotes at numerous conferences around Europe and worldwide. His research interests include working with gifted students in out of school programmes and their academic and social development. He has written numerous book chapters and reports in this area and has published two books on gifted education.

He is currently the secretary of the European Council for High Ability (ECHA) and serves on the executive committee for the European Talent Support Network (ETSN). In 2019 he led a team of European experts in designing the first European Union online course for teachers of gifted students in regular classrooms (EGift).

During Colm's tenure as Director of CTYI the Centre has won numerous educational awards including Best Educational Outreach programme in Ireland on two occasions. In 2023 Colm was awarded the A Harry Passow Award for Leadership in Gifted Education by the World Council for Gifted and Talented Children. He serves on the advisory board for the Center for Gifted Education at the College of William and Mary and is currently editing the European Handbook for Gifted Education which will be published at the end of the year.



Dr. Tracy L. Cross, holds an endowed chair, Jody and Layton Smith Professor of Psychology and Gifted Education, and is the executive director of the Center for Gifted Education and the Institute for Research on the Suicide of Gifted Students at William & Mary. Previously he served Ball State University as the George and Frances Ball Distinguished Professor of Psychology and Gifted Studies, the founder and executive director of the Center for Gifted Studies and Talent Development, and the Institute for Research on the Psychology of Gifted Students. For nine years, he served as the Executive Director of the Indiana Academy for Science, Mathematics, and Humanities, which is a residential high school for intellectually gifted adolescents. He has hundreds of publications and served as editor of five journals in the field of gifted studies.

Tracy received the Distinguished Service Award from both The Association for the Gifted of the Council for Exceptional Children and the National Association for Gifted Children, the Early Leader and Early Scholar Awards and the Distinguished Scholar Award from NAGC, six Outstanding Research on Intelligence or Intellectual Giftedness awards and a Lifetime Achievement Award from the MENSA Education and Research Foundation, the Inaugural Diversity Award from the NAGC Network on Gifted Gay, Lesbian, Bi-sexual, Transgender and Questioning, and was inducted into the 2022 NAGC Legacy Archive.

Tracy developed an interest in the lived experience of gifted students while working with his mentor, Dr. Lawrence J. Coleman, as a doctoral student at the University of Tennessee. They conducted numerous ground-breaking studies on the stigma of giftedness. He became involved in research on suicide among gifted students following a contagion episode at a residential high school for gifted students. His efforts to help gifted students thrive psychologically, socially, and academically have improved the lives of countless students and their families over the years.

Dr. Jennifer Riedl Cross is the

Director of Research at the William & Mary Center for Gifted Education. She also directs the research of the W&M Institute for Research on the Suicide of Gifted Students. Jennifer holds a doctorate in educational psychology with a specialty in cognitive and social processes from Ball State University. She is the editor of the research journal Gifted Child Quarterly, a publication of the National Association for Gifted Children. She and Tracy L. Cross co-edited the Handbook for Counsellors Serving Students with Gifts and Talents, now in its second edition. They are co-authors of Suicide among gifted children and adolescents, 2nd ed. and numerous articles on suicide and mental health among students with gifts and talents.

Jennifer served as co-chair of the inaugural W&M Suicide Prevention Coalition and co-led the implementation of a suicide prevention training program for students, faculty and staff at W&M. As a social psychologist, Jennifer has studied peer relationships, with a particular focus on adolescent crowds. This interest came about through her research on the development of a social dominance orientation, an individual's preference for hierarchical or egalitarian intergroup relations. Her research in the field of gifted education emphasizes its social aspects, particularly the individual social experience of being a high-ability student.

Jennifer has worked closely with Dr. Colm O'Reilly and Dr. Tracy L. Cross to conduct studies of educators, parents and students attending the Centre for Talented Youth-Ireland (CTYI). They are frequent co-authors and co-present often at conferences around the world. Her preference for person-centred analytic techniques has allowed deep exploration of the heterogeneity in these different groups. **Dr. Catriona Ledwith** is Assistant Director with the Centre for Talented Youth, Ireland, based in Dublin City University, and began working in the field of giftedness over 20 years ago. Starting out as a second level science teacher, it was her seasonal work at the Centre that she found most inspiring. This led to her working there full-time, and completing a Masters during this time. She subsequently earned her PhD in Gifted Education in 2013, based on academic acceleration.

Catriona developed Ireland's only Early University Entrance programme as part of her PhD, and her thesis focussed on the social, personal and academic outcomes of the programme. In 2014, she widened the remit of the programme, and it now offers 20 courses and has grown to an annual student cohort of over 600 academically gifted young people from across the island of Ireland. Catriona also directly manages several of the Centre's programmes for primary and secondary school students.

Her research interests are in gifted education, acceleration and dual exceptionality. She has spoken at conferences and published several chapters on the merits of academic acceleration for academically gifted students. She has given lectures on gifted education to trainee teachers and in schools alike. She is currently supervising masters and PhD students on research in the field.

Catriona holds an undergraduate degree in Chemistry with French from Dublin City University, a Higher Diploma in Second Level Education from Trinity College Dublin, and a Masters in Education & Training Management, also from Dublin City University. **Dr. Leeanne Hinch** is the academic coordinator for the Centre for Talented Youth, Ireland (CTYI). She has a B.Sc. in Science Education from Dublin City University, where she qualified as a chemistry and mathematics teacher for second-level students. She also holds a PhD in Science Education from Dublin City University, specifically focussing on the preparation of pre-service science teachers, and influencing their approaches to inquiry-based science education and assessment.

Prior to her position as academic coordinator, Leeanne worked for several years as an instructor for CTYI, where she developed and taught numerous science courses for academically advanced students between the ages of 6 and 17. She has worked in gifted education for over 10 years, and regularly gives lectures and workshops in this area to teachers and parents, and has presented papers at conferences around the world. She has published articles within this field and written book chapters for major gifted education textbooks. Leeanne was recently awarded the Charlemont Grant from the Royal Irish Academy for her work relating to gifted disadvantaged students. Leeanne is also the Irish correspondent for the European Council for High Ability.

Her research interests include gifted disadvantaged students, inquiry-based science education, effective practices for teaching science to gifted students, professional development for teachers, and the views of parents and teachers towards gifted children. **Dr. Orla Dunne** is the Residential Coordinator at Centre for Talented Youth, Ireland (CTYI) at Dublin City University (DCU). Orla joined CTYI as a student in 2004 and attended four summer programmes. CTYI had a profound impact on her and so she returned as staff several years later! Orla is dedicated to working with the residential team and developing best practices to support the social and emotional needs of gifted students attending CTYI programmes.

Orla is passionate about cross-university cooperation and has worked with Prof. Niamh Stack and the Psychology Department at Mary Immaculate College on multiple projects. Orla founded CTYI's collaboration with the Notre Dame University Global Gateway programme in Dublin, with CTYI taking Notre Dame students as interns each summer. This year, the first CTYI Notre Dame student focused event will take place, with students from the Notre Dame pre-collegiate programme and CTYI students joining together for workshops and talks on the theme of sustainability.

Orla holds a B.A. and M.Phil. in literature from Trinity College Dublin. In 2023, she graduated with a doctorate in educational leadership from DCU. Orla's research focuses on gifted LGBTQ young people and is the first of its kind in Europe. She has written book chapters for major gifted education textbooks, presented at multiple conferences internationally and regularly delivers lectures and workshops in both educational and corporate settings. She was the recipient of a Higher Education Authority Global Impact Grant, to create open access materials on working with gifted LGBTQ students.

Her research was most recently published in the SENG Journal. Orla currently sits on the board of directors for ShoutOut, an organisation in Ireland that promotes inclusion through LGBTQ educational programmes.











Centre for Talented Youth, Ireland Dublin City University www.dcu.ie/ctyi

Center for Gifted Education

William & Mary Williamsburg, VA https://cfge.wm.edu