

24th Biennial World Conference of the WCGTC

# Developing the Future of Gifted Education

July 31 - August 1 & August 7 - 8, 2021

Virtual



World Council for  
Gifted and Talented Children



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# **Developing the Future of Gifted Education**

**July 31 - August 1 & August 7 - 8, 2021  
Virtual**

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# World Council for Gifted and Talented Children

*Worldwide Advocacy for Gifted Individuals*

July 10, 2021

Dear Participants in the 24<sup>th</sup> World Conference,

Welcome to the 24<sup>th</sup> World Conference of the World Council for Gifted and Talented Children! It is the first virtual conference for our organization which, as you know, is an accommodation made as the pandemic limited travel. A bonus of offering the conference virtually is that participants are representing more locations around our globe which is so important for a world organization.

The conference theme is *Developing the Future of Gifted Education*, and what an important theme that is. As educators, parents, and interested citizens, we need to be looking ahead in order to stay relevant. Research and best practices will be presented which can serve as the basis for making school, local, and national decisions that make a difference in the schooling and lives of children and young people with gifts and talents.

This World Conference is being presented with various new features. The days the conference will be held are over two weekends, another feature that is new to our World Conferences. One additional new feature is offering the conference on three time zones to make the conference more accessible to participants around the globe.

I am so glad you are participating in the 24<sup>th</sup> World Conference of the World Council for Gifted and Talented Children. I look forward to learning with you as we “develop the future of gifted education.”

Sincerely,

A handwritten signature in black ink that reads "Julia Link Roberts". The signature is written in a cursive style with a large, stylized 'J' and 'R'.

Julia Link Roberts  
President  
World Council for Gifted and Talented Children

Mahurin Professor of Gifted Studies  
Western Kentucky University





# World Council for Gifted and Talented Children

*Worldwide Advocacy for Gifted Individuals*

July 10, 2021

Dear World Conference Attendees,

As the global pandemic continues to impact our world, it was necessary to reimagine how the World Conference was made available to interested stakeholders around the globe. Thank you so much for joining this first-ever Virtual World Conference! While the conference looks different and we cannot meet face-to-face, we are excited about the opportunity to continue the tradition of networking and sharing ideas to reinvigorate our efforts to advocate and serve gifted individuals no matter where they live.

We have planned the conference over two consecutive weekends and centered the live sessions in different time zones to make it more accessible for attendees to participate in some parts of the World Conference. We will also make sure that all live sessions are recorded and made available for viewing for three months after the conference in case you have to miss a session of great interest to you. We are including a section in the PDF program for more information about viewing the sessions and the conference platform, SpotMe.

A huge thank you goes out to the members of the Executive Committee who have helped plan this virtual World Conference and provided invaluable feedback along the way. The staff at The Center for Gifted Studies at WKU have also been instrumental in assisting with various aspects of planning.

Please make sure to share your conference experience on social media using #WCGTC21 and tagging us on Facebook and Twitter @WCGTC and on Instagram @WCGTC2. If you have questions during the conference, please email [headquarters@world-gifted.org](mailto:headquarters@world-gifted.org). We welcome you to the 1<sup>st</sup> Virtual World Conference as we discuss *Developing the Future of Gifted Education!*

Sincerely,

Tyler Clark, Executive Administrator

# Executive Committee

2019 - 2021



**Julia Link Roberts**

*President*

Mahurin Professor of Gifted Studies and Executive Director of The Center for Gifted Studies and the Carol Martin Gatton Academy of Mathematics and Science Western Kentucky University  
Bowling Green, KY, USA



**Leonie Kronborg**

*Vice President*

Senior Lecturer/Coordinator of Postgraduate Studies in Gifted Education Monash University  
Clayton, Victoria, Australia



**Tracy Riley**

*Secretary*

Associate Professor and Dean, Research Massey University  
Palmerston North, New Zealand



**Margaret Sutherland**

*Treasurer*

Senior Lecturer in Social Justice Place and Lifelong Education University of Glasgow  
Glasgow, Scotland



**Eleonoor van Gerven**

*Member*

Managing Director Slim! Educatief  
Almere, Netherlands



**Anies al Hroub**

*Member*

Associate Professor of Educational Psychology & Special Education  
American University of Beirut  
Beirut, Lebanon



**Sue Prior**

*Member*

Prior Learning  
Hong Kong, China



**Tyler Clark**

*Executive Administrator*

World Council for Gifted and Talented Children  
Western Kentucky University  
Bowling Green, KY, USA

# Awards

In conjunction with the WCGTC biennial conference, the WCGTC Executive Committee presents awards in six different areas of recognition: distinguished service, creativity, research, leadership, emerging scholar, and emerging leader. Applications for these awards are submitted to WCGTC Headquarters, and the Scholarship and Awards Committee selects the recipients. The WCGTC Scholarship & Awards Committee has reviewed the nominations and announced the three World Conference Awards that will be officially presented at the 2021 World Conference, including:

## World Council Distinguished Service Award

**Julia Link Roberts** - Western Kentucky University, USA

**Leonie Kronborg** – Monash University, Australia

The recipient must have made an outstanding contribution to gifted education as reflected in service to the WCGTC and in the furtherance of its purposes over a period of ten years or more.

## International Creativity Award

**Barbara Kerr** – University of Kansas, USA

The recipient must have international recognition in the field of creativity and must have made significant contributions to promoting creativity in education.

## International Award for Research

**François Gagné** – Université du Québec à Montréal, Canada

The recipient must have international recognition in gifted education and made significant contributions through research in establishing gifted education as a recognized field of study in education, in extending the knowledge base of gifted education, and in improving the practice of gifted education.

## A. Harry Passow International Award for Leadership in Gifted Education

**Ann Robinson** – University of Arkansas at Little Rock, USA

The recipient must have international stature as a leader in gifted education—one whose life and work have significantly influenced policy and practices in gifted education or one who has made other outstanding contributions in promoting the cause of gifted education worldwide.



## Emerging Leader in Gifted Education Award

**Andrew Almazan** – Centro de Atención al Talento, Mexico

The recipient must be in the first 10 years of career in gifted education; evidence of advanced studies in gifted education, talent development, or creativity (e.g., certification, graduate degree); evidence of impact of teaching, research, and/or advocacy on gifted education in their country or region; evidence of outstanding promise for leadership; and evidence of service to gifted education.

## Emerging Scholar in Gifted Education Award

**M. Alexandra Vuyk** – Universidad Católica Nuestra Señora de la Asunción, Paraguay

The recipient must be a current member of the WCGTC; in the first 10 years of career in gifted education; evidence of graduation from their most recent advanced research degree gifted education, talent development, or creativity (i.e., Doctoral) within 10 years of the nomination; evidence of impact of research in gifted education in their country or region; evidence of outstanding promise for leadership; and evidence of service to gifted education.

# Scholarships

In any given conference year, the nominated Scholarship and Awards committee tries to provide some financial assistance to a small number of individuals who may otherwise not be able to attend the world conference. Normally this is done through application. After a review of the applicants, and dependent on their statements of need, and other criteria, a small number may be selected and offered one of a number of scholarships. The 2021 recipients are:

**Maya Antoun** (Lebanon)  
**Aida Younis** (Lebanon)  
**Keely P'Pool** (USA)  
**Aysil Agaya** (Turkey)  
**Mojmir Mykiska** (Czech Republic)

**Femke Hovinga-Tiller** (The Netherlands)  
**Dimitrios Moustakas** (Greece)  
**Sezem Camci Erdogan** (Turkey)  
**Madlena Arakeylan** (Armenia)  
**Alena Treat** (USA)

## Friends of the WCGTC

August 2019 - July 2021

We would like to express our gratitude to the following individuals for recently giving to the WCGTC scholarship fund either directly or through purchasing a silver, gold, or platinum membership. These donations make it possible to provide more opportunities to interested individuals around the globe to join us at the World Conferences. For more information about giving to the scholarship fund, visit [www.world-gifted.org/give](http://www.world-gifted.org/give).

**George Affeldt**, United States  
**Anita Burke**, Australia  
**Paula Christensen**  
**Tyler Clark**, United States  
**Pamela Clinkenbeard**, United States  
**Catherine Cook**, United States  
**Connie Cude**, United States  
**Hala Elhoweris**, United Arab Emirates  
**Denise Ford**, United States

**Shelagh Gallagher**, United States  
**Tracy Inman**, United States  
**Minh Kim**, Viet Nam  
**Barbara Lazarou**, Canada  
**Ivo Licka**, Germany  
**Joi Lin**, United States  
**Ian Macpherson**, New Zealand  
**Carmel Meehan**, Australia  
**Simona Mitrea**, Romania

## Social Media

#WCGTC21

The official hashtag of the 2021 Virtual World Conference is **#WCGTC21**. If you are posting on social media, please include this and tag us @WCGTC on Facebook and Twitter and @WCGTC2 on Instagram!

# WCGTC History

## History

The World Council for Gifted and Talented Children originated 45 years ago upon the inspiration of a prominent British educator of the gifted, Henry Collis. As Director of the National Association for Gifted Children, already having set up branches all over England, in Hamburg, and in Belfast, it was his vision to unite the educators of the gifted around the world, who were already convening at national levels. This vision evolved into a nonprofit organization of educators in the field of gifted education that spans the globe today.

## Current and Former Presidents

**Denise de Souza Fleith** (2021-2025)

**Julia Link Roberts** (2017-2021)

**Denise Fleith** (2017)

**Leslie Graves** (2013-2017)

**Taisir Subhi Yamin** (2009-2013)

**Den-Mo Tsai** (2005-2009)

**Klaus Urban** (2001-2005)

**Barbara Clark** (1997-2001)

**Wu-Tien Wu** (1993-1997)

**Norah Maier** (1989-1993)

**A. Harry Passow** (1985-1989)

**James Gallagher** (1981-1985)

**Henry Collins** (1979 – 1981)

**Dorothy Sisk** (1978 – 1979)

**Iraj Broomand** (1977 – 1978)

**Dan Bitan** (1975 – 1977)

The first world conference was held in 1975 in the Royal College of Surgeons in Lincoln's Inn, London, England. At this conference, in response to a proposal urging participants to join in a worldwide initiative to form an organization to advocate for the gifted children of the world, 150 educators in the field became members of

this founding organization. The World Council was officially incorporated and registered in the state of Delaware as a nonprofit organization on March 30, 1976. The officers at the time were President Dan Bitan, Vice President Henry Collis, Executive Vice-President Alexis DuPont DeBie, joint Secretaries Dorothy Sisk and Elizabeth Neuman, and Treasurer Bob Swain. A major undertaking was discussed at the San Francisco meeting: the creation of a journal. Levcho Zdravchev agreed to edit and publish a journal for the WCGTC, which was entitled GATE: Gifted and Talented Education. He published three issues of GATE, absorbing the cost of the journal through his Bulgarian office. In the 1990s, under the editorship of John Feldhusen, the name was changed to Gifted and Talented International. The current editors-in-chief are Megan Foley-Nicpon and Leonie Kronborg.

## Headquarters

The WCGTC Headquarters has been housed in several different locations since its incorporation in 1976. These have been primarily in the United States, with a brief stint in Canada. The Headquarters is currently located at Western Kentucky University in Kentucky, USA.

For further information, please contact:

Tyler Clark, Executive Administrator

World Council for Gifted and Talented Children  
Western Kentucky University

1906 College Heights Blvd #11030

Bowling Green, KY 42101-1030, USA

Email: [headquarters@world-gifted.org](mailto:headquarters@world-gifted.org) | Phone:  
1-270-745-4123



# Program at a Glance

## July 31 (Live Sessions in Australian Eastern Standard Time)

	Time AEST (Sydney)	Time CDT (Chicago)	Time BST (London)
Opening	9:45 AM – 10:00 AM	6:45 PM – 7:00 PM (July 30)	12:45 AM – 1:00 AM
Keynote (Anne Rinn)	10:00 AM – 11:00 AM	7:00 PM – 8:00 PM (July 30)	1:00 AM – 2:00 AM
Concurrent Sessions (three) <b>Sessions 84, 184, and 266</b>	11:15 AM – 12:15 PM	8:15 PM – 9:15 PM (July 30)	2:15 AM – 3:15 AM
Exhibitor Time and Roundtable Discussions	12:15 PM – 1:00 PM	9:15 PM – 10:00 PM (July 30)	3:15 AM – 4:00 AM
Panel Discussions (two) <b>Sessions 99, 127 (pre- recorded), and 253</b>	1:00 PM – 2:00 PM	10:00 PM – 11:00 PM (July 30)	4:00 AM – 5:00 AM
Concurrent Sessions (three) <b>Sessions 43, 78, and 124</b>	2:15 PM – 3:15 PM	11:15 PM – 12:15 AM (July 31)	5:15 AM – 6:15 AM
Keynote (Kobus Maree)	3:30 PM – 4:30 PM	12:30 AM – 1:30 AM (July 31)	6:30 AM – 7:30 AM

## August 1 (Live Sessions in British Summer Time)

	Time BST (London)	Time CDT (Chicago)	Time AEST (Sydney)
Keynote (Franzis Preckel)	10:00 AM – 11:00 AM	4:00 AM – 5:00 AM	7:00 PM – 8:00 PM
Concurrent Sessions (three) <b>Sessions 2, 27, and 44</b>	11:15 AM – 12:15 PM	5:15 AM – 6:15 AM	8:15 PM – 9:15 PM
Exhibitor Time and Roundtable Discussions	12:15 PM – 1:00 PM	6:15 AM – 7:00 AM	9:15 PM – 10:00 PM
Panel Discussions (two) <b>Sessions 86 and 109</b>	1:00 PM – 2:00 PM	7:00 AM – 8:00 AM	10:00 PM – 11:00 PM
Concurrent Sessions (three) <b>Sessions 207, 335, and 343</b>	2:15 PM – 3:15 PM	8:15 AM – 9:15 AM	11:15 PM (August 7) – 12:15 AM (August 8)
Keynote (Ugur Sak)	3:30 PM – 4:30 PM	9:30 AM – 10:30 AM	12:30 AM – 1:30 AM (August 8)

## August 7 (Live Sessions in British Summer Time)

	Time BST (London)	Time CDT (Chicago)	Time AEST (Sydney)
Keynote (Franzis Preckel)	10:00 AM – 11:00 AM	4:00 AM – 5:00 AM	7:00 PM – 8:00 PM
Concurrent Sessions (three) <b>Sessions 2, 27, and 44</b>	11:15 AM – 12:15 PM	5:15 AM – 6:15 AM	8:15 PM – 9:15 PM
Exhibitor Time and Roundtable Discussions	12:15 PM – 1:00 PM	6:15 AM – 7:00 AM	9:15 PM – 10:00 PM
Panel Discussions (two) <b>Sessions 86 and 109</b>	1:00 PM – 2:00 PM	7:00 AM – 8:00 AM	10:00 PM – 11:00 PM
Concurrent Sessions (three) <b>Sessions 207, 335, and 343</b>	2:15 PM – 3:15 PM	8:15 AM – 9:15 AM	11:15 PM (August 7) – 12:15 AM (August 8)
Keynote (Ugur Sak)	3:30 PM – 4:30 PM	9:30 AM – 10:30 AM	12:30 AM – 1:30 AM (August 8)

## August 8 (Live Sessions in Central Daylight Time in the US)

	Time CDT (Chicago)	Time BST (London)	Time AEST (Sydney)
Keynote (Mark Brown & Colm O'Reilly)	10:00 AM – 11:00 AM	4:00 PM – 5:00 PM	1:00 AM (August 9) – 2:00 AM (August 9)
Concurrent Sessions (three) <b>Sessions 293 and 319</b>	11:15 AM – 12:15 PM	5:15 PM – 6:15 PM	2:15 AM (August 9) – 3:15 AM (August 9)
Exhibitor Time and Roundtable Discussions	12:15 PM – 1:00 PM	6:15 PM – 7:00 PM	3:15 AM (August 9) – 4:00 AM (August 9)
Panel Discussions (two) <b>Sessions 77 and 365</b>	1:00 PM – 2:00 PM	7:00 PM – 8:00 PM	4:00 AM (August 9) – 5:00 AM (August 9)
Concurrent Sessions (three) <b>Sessions 17, 96, and 111</b>	2:15 PM – 3:15 PM	8:15 PM – 9:15 PM	5:15 AM (August 9) – 6:15 AM (August 9)
Keynote (Gilman Whiting)	3:30 PM – 4:30 PM	9:30 PM – 10:30 PM	6:30 AM (August 9) – 7:30 AM (August 9)
Closing	4:30 PM – 4:45 PM	10:30 PM – 10:45 PM	7:30 AM – 7:45 AM (August 9)



# Keynote Speakers



## **Anouke Bakx, Ph.D.**

### **Radboud University and Fontys University**

Anouke Bakx, PhD, is professor of Giftedness at Radboud University and associate professor at Fontys University of applied Sciences, where she is also academic director of the academic educational programme for teachers. Her area of expertise is teachers' professional development in the field of gifted education. She is the initiator of the educational labs on gifted education and co-founder of the Scientific Centre of Expertise RATiO (Radboud Talent in Development).

### **Improving education for gifted learners by bridging the gap between theory and practice**

Teacher-research is an effective means of professional development for teachers. Such research is often short-term, anecdotal, and more oriented to practice than to theory. On the other hand, scientific research often does not provide insights that are directly usable in educational practice. By connecting teachers, scientists, and teacher educators, different perspectives and habits can be brought together in our good practice field labs on gifted education. In these labs, primary school teachers, scientists, and teacher educators work together on research, aiming to improve education for gifted learners. In three-year periods, two kinds of research cycles are conducted. A practice-based research cycle conducted by teachers and supported by scientists addresses context-specific research questions from one primary school. The second research cycle concerns scientific research. Input for the research questions is collected in the participating schools, the scientific research cycle is conducted by scientists, and all twenty schools from the lab participate. The participating teachers, teacher educators, and scientists cooperate intensively in all phases of both research cycles. This close cooperation of scientists and practitioners is a new way of professionalization and research, aimed at improving education for gifted learners. Scientists and teachers cooperating closely on research in good practice field labs bridge the gap between theory and practice, leading towards evidence-informed improvement of education for gifted learners. In this keynote, the model of the labs is presented as an example that can be used in other countries and contexts. Examples are presented of teacher research and scientific studies from the lab. In addition, it presents how insights from the studies are nationally shared with the entire field of gifted education.

## Mark Brown, Ph.D. and Colm O'Reilly, Ph.D. Dublin City University



**Professor Mark Brown** is Ireland's first Chair of Digital Learning and Director of the National Institute for Digital Learning (NIDL). Mark returned 7-years ago to live in Ireland after his Great Grandparents set sail for New Zealand in 1876. He is proud of his Irish heritage and conference delegates may learn more about this 11% factor during the keynote. Mark is currently Treasurer of the European Distance and E-learning Network (EDEN) and serves on the Supervisory Board of the European Association of Distance Teaching Universities (EADTU). He is also an EDEN Fellow. Mark continues to maintain strong "down under" connections and is an Executive Committee member of the Open and Distance Learning Association of Australia (ODLAA). In 2017, the Commonwealth of Learning recognised Mark as a world leader in digital education, and only months before the start of the COVID-19 crisis, in November 2019 he was Chair of the ICDE World Conference on Online Learning in Dublin.



**Colm O'Reilly Ph.D** is the Director of the Irish Centre for Talented Youth (CTYI) at Dublin City University. CTYI provides fast paced classes for academically talented students aged 6 – 16 years from all over Ireland and overseas. Colm has worked in the area of gifted and talented education for the last 20 years and has written articles and presented papers 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 is currently the secretary of the European Council for High Ability and the treasurer for the European Talent Support Network. He serves on the advisory board for the Center for Gifted Education at the College of William and Mary and has just led an EU project to design an online programme for teachers of high ability students in regular classrooms.

### **Talent, Technology, and Transversal: A Three-Pronged Approach to Benefit Gifted Education**

Dublin City University (DCU) is home to the Irish Centre for Talented Youth (CTYI) and the National Institute for Digital Learning (NIDL). The NIDL is a world leader in developing new digital-enabled learning models, while CTYI is the largest and most extensive university-based program for gifted students in Europe.

The COVID-19 crisis presented many challenges for parents and guardians of high-ability students, with many gifted programs cancelled. Despite their best efforts, homeschooling during 2020 resulted in significant numbers of gifted students not having their diverse needs adequately stimulated or challenged. However, the pandemic also created a unique opportunity for some programs to move from face-to-face delivery to a digital format.

Using the three-pronged approach of Talent, Technology, and Transversal, this talk will share insights from the 2020 DCU experience and examine how we can use digital learning to redesign and reimagine traditional delivery models to benefit gifted students. Coming from an institution with an enabling culture

that encourages an ambitious and transformative mindset promoting creative solutions, this talk will demonstrate how CTYI moved a large gifted program for over 6,000 students fully online.

Using a Talent Development model, we will discuss how new digital technology, when anchored in lessons from the research literature, can help educators transverse new places and spaces for authentic and meaningful learning, creating valuable opportunities to develop transversal skills for gifted students. In the post-pandemic world, we argue this three-pronged approach paves the way for the future transformation of gifted education.



## **Jacobus Maree, Ph.D.**

### **University of Pretoria**

Jacobus G. Maree is an educational psychologist and a professor in the Department of Educational Psychology at the University of Pretoria. He holds doctoral degrees in Education (Career counselling), Mathematics Education, and Psychology. A globally renowned keynote speaker, he has received multiple awards for his work and he is the highest-rated scientist in the history of the Faculty of Education, University of Pretoria. Prof. Maree has authored or co-authored 90+ peer-reviewed articles and 75 books/ book chapters on career counselling, research, and related topics since 2011. In the same period, he has also presented invited workshops at conferences in 40+ countries across the world. Over the past seven years, he has spent a lot of time abroad as a visiting professor at various universities. He was awarded a fellowship of the IAAP in 2014 and received the Psychological Society of South Africa's Fellow Award (Lifetime Award in recognition of a person who has made exceptional contributions to Psychology in her/his life) in 2017.

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## **The Use of Integrative, Qualitative+Quantitative Career Counselling to Identify Gifted Learners and Help Them Design Successful Lives**

The world today is changing fundamentally at lightning speed. The situation in the Global South is particularly dire and is made worse by spiraling unemployment rates following major changes in the global economy and the impact of the COVID-19 pandemic. A strong response to these changes is needed from theoreticians, researchers, practitioners, and policymakers involved with gifted learners. This keynote first discusses the reality that, globally, millions of gifted learners have never been given a fair chance in life to construct themselves and their careers meaningfully. These learners (from across the diversity spectrum) may conceivably have made major contributions to humankind. The world may have lost the likes of a Mother Teresa, an Isaac Newton, an Albert Einstein, a Sigmund Freud, a Nelson Mandela, a Kofi Annan, or so many other luminaries.

Second, the keynote shows that by merging information obtained from

quantitative approaches (test “scores”) with information obtained from qualitative approaches (“stories”), career counsellors can identify giftedness and help gifted students experience a sense of hope and purpose in their lives and contribute to societal advancement.

Third, the keynote discusses the theory underlying an innovative, integrative qualitative+quantitative approach to career counselling for gifted learners. Three key themes of pertinence for career counsellors recur throughout the presentation. First, that they should help gifted learners advise themselves instead of being “advised” by “experts.” Second, that they should listen for instead of to gifted learners’ “stories” to help them choose and construct their careers and themselves, become adaptable and employable, and design purposeful and hopeful lives. Third, that they should help gifted learners connect what they know about themselves consciously with what they are aware about themselves subconsciously.



## **Franzis Preckel, Ph.D.**

### **University of Trier**

Franzis Preckel is full professor for giftedness research and education at the Department of Psychology of the University of Trier, Germany. She received her doctor's degree from the University of Muenster, Germany, in 2002. Her areas of expertise include intelligence and giftedness, talent development, personality factors related to achievement, and psychological assessment including test construction. In 2017, Franzis received the path breaker award of the AERA special interest group on Research on Giftedness, Creativity, and Talent. She has served as co-editor of *Gifted and Talented International* and *Diagnostica*. Franzis has published her research in top ranked journals including *Psychological Bulletin* or *Perspectives on Psychological Science*.

## **The Talent Development in Achievement Domains (TAD) Framework – An Integrative Psychological Perspective on Potential and Performance**

From a talent-development perspective, giftedness can be described as a person's potential for developing above-average achievement in certain domains. However, what comprises this potential? What is the role of abilities, personality traits or acquired psycho-social skills, and their respective profiles? Could it be that the defining features of potential and achievement change within the course of development? These central questions to understand potential and its development will be discussed by integrating different views from research on giftedness, expertise, and talent development within the Talent Development in Achievement Domains (TAD) Framework. The TAD framework resembles a general talent development framework applicable to a wide range of achievement domains. The framework resulted from the common effort of eleven international researchers from different fields of

psychology. It distinguishes four levels of talent development (aptitude, competence, expertise, transformational achievement), specifies level-dependent predictors and indicators of talent development, and outlines internal processes that lead to interest and success in a domain. Examples are given on how the TAD framework can be used for constructing talent-development models in specific domains. Practical implications for assessing and fostering potential will be highlighted.



## **Anne N. Rinn, Ph.D.**

### **University of North Texas**

Anne N. Rinn, Ph.D., is Professor of Educational Psychology at the University of North Texas, where she also serves as Director of the Office for Giftedness, Talent Development, and Creativity. She has a BS in Psychology from the University of Houston and a PhD in Educational Psychology from Indiana University. She has authored around 75 publications related to the social and emotional development of gifted and talented individuals and the psychosocial skills necessary for the development of talent. She is the author of *Social, Emotional, and Psychosocial Development of Gifted and Talented Individuals* (Rinn, 2020) and co-editor of *From Giftedness to Gifted Education: Reflecting Theory in Practice* (Plucker, Rinn, & Makel, 2017). She is currently co-editor of the *Journal of Advanced Academics*.

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## **Research on the Social and Emotional Development of Gifted Individuals: Moving the Field Forward**

The last century has seen paradigmatic shifts in the way we view giftedness and talent. With these shifts, our understanding about the nature and needs of gifted or potentially gifted students has also changed. While we once equated giftedness with high IQ and a host of social and emotional difficulties, our notion of giftedness has broadened and so must our understanding of the social and emotional development of gifted individuals. Instead of favoring one paradigmatic approach to giftedness over the other, in this presentation I advocate for using both paradigmatic lenses to better understand the social, emotional, and psychosocial development and needs of gifted individuals. Indeed, healthy social and emotional development sets the stage for the development of the psychosocial skills necessary for the development of talent.

I present guiding questions for researchers to consider as we move forward in our understanding of the social and emotional development of gifted individuals:

- What do we know and what should be researching? What does the future



hold for research on the social and emotional development of gifted individuals?

- To what extent does your paradigmatic lens shape the way you research and consider the social and emotional needs of gifted individuals?
- In what way can we use a systems approach to better understand the way individuals interact with their environment and the impact the environment has on talent development?
- How can the notion of intersectionality impact our understanding of the experiences of gifted individuals?
- How can we incorporate research from other disciplines into the field of gifted education in order to better understand the social and emotional development of gifted individuals?



## **Ugur Sak, Ph.D.**

### **Anadolu University**

Ugur Sak is Professor and founding director of the Center for Research and Practice for High Ability Education and founder of graduate programs on gifted education at Anadolu University and the founding editor of the journal “Talent” formerly known as the Turkish Journal of Giftedness and Education. He currently serves as the Editor-in-Chief of Gifted Education International. His scientific research has focused on the development of original models on the identification and education of gifted students, assessment of creativity and intelligence. He is the author of Selective Problem Solving Model (SPS), Creative Reversal Act (CREACT), Anadolu Sak Intelligence Scale (ASIS), and co-author of Creative Scientific Ability Test (C-SAT) and the Test of Scientific Creativity Animations for Children (TOSCAC). He has been an active participant in social networks in gifted education, being an executive board member of the Asia-Pacific Federation on Giftedness and a member of the qualification committee of the European Talent Support Network. His most recent work is the Fuzzy Conception of Giftedness. He is currently a visiting professor at Western University, Canada.

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JODIE MAHONY CENTER  
FOR GIFTED EDUCATION

## **The Fuzzy Theory: Debates on Conceptions of Giftedness**

The Fuzzy Conception of Giftedness (FCG) posits that conceptions and practices concerning giftedness (e.g., propositions and identification practices) are vague. The Fuzzy Conception of Giftedness itself is vague as well. The two editions of the landmark book *Conceptions of Giftedness* (Sternberg & Davidson, 1986, 2005) cover over 20 different conceptions of giftedness. Each conception has its own unique vagueness. In this talk, first, I will discuss the vagueness of the concept “giftedness,” with an emphasis on problems related to vagueness in conceptions of giftedness. Then, I will explain the Fuzzy Conception of Giftedness and suggest identification and education practices based on this conception. The FCG is composed of personal dispositions, stimulus conditions, and the between- and within-group interaction of

personal dispositions and stimulus conditions. The manifestation of giftedness is situated in the interaction. Therefore, the identification of and education for gifted students are strictly based on interactional models.



## **M. Alexandra Vuyk, Ph.D.**

### **Universidad Católica Nuestra Señora de la Asunción**

Alexandra Vuyk, Ph.D., is a professor of psychology in the Department of Psychology and the Department of Graduate Studies and Research at the School of Philosophy and Human Science, at the Universidad Católica Nuestra Señora de la Asunción in Asunción, Paraguay. Additionally, she is principal investigator in talent development projects at OMAPA (Multidisciplinary Organization for Support of Teachers and Students). At the National Council for Science and Technology in Paraguay, Dr. Vuyk is ranked as a level II researcher (second highest) in the National Program for Researcher Support and in the Selection Committee for said program. She is the delegate for Paraguay at the World Council for Gifted and Talented Children, associate editor at Gifted and Talented International, and on the editorial board of the Journal for Advanced Academics. Dr. Vuyk pioneered gifted education research, practice, and advocacy in her country. She is the founder of the Aikumby Center for Giftedness and Creativity, the first of its kind in the country, and REDPAC Paraguay, a network for professionals working with high-ability students. By means of this advocacy, the Ministry of Education and Sciences organized the First Seminar on High Ability Students in Paraguay in 2019 with Dr. Vuyk as the keynote speaker, as well as continued discussions for nationwide implementation of evidence-based practices for gifted students. She holds degrees from the University of Kansas (Ph.D. and M.S., counseling psychology) and Emporia State University (M.S., special education in gifted, talented and creative; B.S., psychology and philosophy). Her research interests include social and emotional development of intellectually and creatively gifted individuals, creative and non-linear career paths, and personality traits related to these paths.

### **Remain Open to Openness: The Controversy of Openness to Experience vs Overexcitabilities**

In 2016, I published a study in which I affirmed that openness to experience is a better construct to explain certain behaviors seen in gifted individuals than the common explanation of overexcitabilities. Overexcitabilities have become popular mainly through blogs and conversations, but not as much in the scientific literature. Dabrowski's Theory of Positive Disintegration is a complex theory that goes well beyond overexcitabilities, though it does not seem to trickle down to everyday conceptions.

Openness to experience, as conceptualized in the five-factor model of personality, explains overexcitabilities seamlessly through its underlying



facets. The overlap is not one hundred percent as initially hypothesized, a fact that was used by some researchers to try to negate the importance of openness or even to claim the study as incorrect. Yet science is self-correcting. So, now we know it does not “perfectly” overlap; instead, it overlaps “almost perfectly.” In the last seven years, many studies have investigated the relationship of openness to overexcitabilities. By revising these studies, most of which show partial overlap of overexcitabilities to the openness trait, we could potentially map the parts to facets of other traits in the five-factor model and empirically test these relationships.

The main statement prevails; we ought to stick to openness to experience to explain said behaviors. The five-factor model is supported by research, thus is a common language that permits interdisciplinary collaboration. Our field should not be a silo; science grows in cooperation. Let us strive to be open in science and in experience.



## **Gilman Whiting, Ph.D.**

### **Vanderbilt University**

Gilman Whiting, Ph.D., is an associate professor and the director of graduate studies for the Department of African American and Diaspora Studies. He directs the Scholar Identity Institute (SII) and the Black male initiative at Vanderbilt University in Nashville, Tennessee.

His areas of research include disparity and underperformance in special and gifted education; sociology of race, sports, and American culture; qualitative research methods; and young fatherhood initiatives.

In 2006 Whiting re-conceptualized his dissertation work on young Black and Brown fathers and created the Scholar Identity Model™ (SIM), a psycho-social model created to assist whole communities to rethink ways to combat academic apathy. The SIM and SII have been expanded to include all children across racial, ethnic, gender, and socioeconomic backgrounds.

He is the founding chair of the Achievement Gap Institute at the George W. Peabody College of Education at Vanderbilt, an intensive summer institute designed to work with key school personnel on issues of historical importance including equity, diversity, and inclusion.

Dr. Whiting's work has been used internationally in India, Australia, Belize, and Brazil. He consults with numerous school districts and programs nationally and internationally.

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## **Globally Reframing Giftedness: The Equity Work that Enables a Brighter, Stronger Future for All**

The utility, effectiveness, and equity of gifted and talented education is being questioned globally. Conversations about inequity can be heard from Australia to the Americas. State and local governmental agencies are either not supporting or cutting ties with gifted and talented programs and services. Is there a path forward? This keynote will address the historical foundations of gifted education and the ongoing struggle to make it equitable for all. Shifting the conversation from one fraught with misunderstanding and fear to one strengthened by lessons learned from past missteps and stronger policies and practices will enable a brighter, stronger future for gifted education.

# Concurrent Sessions Abstracts

## **17 #likeaboss: Growing up gifted, talented and female**

Eunice Gaerlan-Price  
Laidlaw College  
New Zealand

In the wake of women's increasing visibility in spaces of leadership across multiple societal spheres, what does it mean for girls today as they negotiate their journey to womanhood? This presentation explores the identity constructions of academically gifted and talented young women against the backdrop of postfeminist sentiment and a highly mediated and networked social landscape. This sociological research study uses the theoretical concepts of Pierre Bourdieu to understand the ways in which social structures interact with gifted and talented teenage girls' subjective experiences and their identity constructions. Furthermore, this study uniquely engages with the creative research method of collective storying to bring to life in a fictional format the complex lived experiences of gifted and talented girls.

## **211 20 Years on: The experience of out-of-school programs for precocious children**

Lilja Kristinsdóttir  
UC SYD  
Denmark

Meyvant Þórólfsson  
University of Iceland  
Iceland

In 2001-2004, an out-of-school program for gifted children named "Precocious Children – Proper Assignments" was run in the

capital region in Iceland. It featured activities for precocious children aged 10 to 14. Subsequently, a small organization named Ad Astra was founded, offering a similar program in 2007-2011 to children aged 11 to 15. The purpose of this study was to explore the experience of such programs. Data collection comprised qualitative data about the development of the programs and, consequently, quantitative data based on questionnaires assigned to participants and others concerned for retrospective examination 20 years after the first program started.

## **27 A comprehensive look at the new Gifted Rating Scales 2**

Angelina Paolozza  
MHS  
Canada

Mathangi Selvamenan  
MHS  
Canada

Steven Pfeiffer  
United States

A critical step in addressing the needs of the gifted is developing an assessment tool that can assist in better serving this special needs population. The need for a valid and reliable assessment tool led to the development of the Gifted Rating Scales Second Edition (GRS 2), a new version of the GRS, the most widely used gifted rating scale in the USA. This presentation introduces the new GRS 2, a teacher and parent rating scale to help identify gifted students. Information will be provided on test development, automated local and national norms, special features,

translated forms, and validity data.

## **43 Adaptation to online learning by Hong Kong families with gifted students during the COVID-19 pandemic**

Tze-ho Fung  
Hong Kong Academy for Gifted Education (HKAGE)  
Hong Kong

Regular face-to-face classes were cancelled due to COVID-19 in early 2020. Students had to learn alone at home. Thus, it is important to understand students' learning situations when switching to online mode and the factors associated with their successful experiences or failures. Using the Rough Set Theory approach, the following factors/attributes, in decreasing order of significance, had prominent associations with the efficiency of students' adaptation to online learning: School Support, Family Support, parental relationship, focused learning skills, time management skills, and parent education. The findings will provide insights for helping students to perform well in online learning.

## **293 Better together: When parents and professionals organize and advocate collaboratively for gifted children**

Alexandra Vuyk  
Red de Profesionales en Altas Capacidades / Universidad Catolica Nuestra Senora de la Asuncion  
Paraguay

Veronica Dura  
FUPAC - Fundacion Paraguaya de  
Altas Capacidades  
Paraguay

Liz Barrios  
REDPAC, Red de Profesionales en  
Altas Capacidades - Paraguay  
Paraguay

Maureen Montania  
REDPAC, Red de Profesionales en  
Altas Capacidades - Paraguay  
Paraguay

In this session, we will describe how collaborative work in two organizations is opening up paths for high-ability individuals in Paraguay, where provisions are incipient and awareness is minimal. A parent advocacy organization that began in 2017 joined with a network of professionals in 2020 to work in a coordinated manner to reach key stakeholders and impact decision makers. We will describe the steps taken including initial meetings with the Ministry of Education and Sciences, first awareness workshops, work conducted in schools as outside professionals, a congressional bill, and meetings for policy advancement, as well as future directions.

### **313 Beyond academics: Essential strategies for parenting and nurturing the whole gifted child**

Janette Boazman  
University of Dallas/DeBusk  
Foundation  
United States

Michele Kane  
Northeastern Illinois University  
United States

Tracy Inman  
Western Kentucky University  
United States

Kathleen Nilles  
NAGC  
United States

Effective parenting and caregiving for the gifted goes beyond the academic needs of individuals. Gifted individuals who reach their full potential have a greater opportunity to thrive and flourish across their lifespan. Realization of full potential includes development of emotional, social, physical, academic, and spiritual identities. Topics in this presentation include Sayler's model of Gifted and Thriving as one framework for research and holistic development; friendship and character development for gifted; practical approaches and strategies related to parenting; strategies to enhance relationships and the spiritual dimension; resources; and strategies beyond the classroom: the arts, clubs, family, parent groups, and advocacy strategies.

### **343 Comparative effects of differentiated education on intelligence and academic performance among gifted students**

Andrew Almazan Anaya  
CEDAT Talent Attention Center  
Mexico

This longitudinal large-scale comparative research project explored the different cognitive and academic performance outcomes from distinct educational strategies for gifted students in Latin America. Conducted among 1,600 students, it assessed changes in IQ (Intelligence Quotient) and SAT (Scholastic Assessment Test) scores over a two-year period when three distinct enriched education strategies for talented were applied. A control group of 400 gifted students remained within a traditional school approach. Statistically significant differences were found in both IQ and SAT scores between the specialized programs and traditional education, with a significant correlation between the number of hours of differentiated

programs and positive outcomes on intelligence and academic tests.

### **84 Considering gifts and talents through an ontological lens: Yolŋu Way, and Australian Aboriginal approach to talent development**

Genevieve Thraves  
University of New England  
Australia

Giftedness has long been recognized as a cultural construct and as such has been subject to occasional interrogation from an epistemological standpoint. Very little has been written, though, on the ontological implications of differing cultural conceptions of gifts and talents. This presentation will report the results of an Australian study that investigated Yolŋu (an Australian Aboriginal group) views of giftedness, talents, and talent development and will endeavor to frame the study's findings in terms of Yolŋu ontology.

### **96 Creating a network of specialist support**

Deb Walker  
New Zealand Centre for Gifted  
Education  
New Zealand

A network of educators with a common interest in improving outcomes for gifted learners can support each other to reach their goals. "For teacher, by teachers" is the mantra used in Networks of Expertise in New Zealand of which Gifted Aotearoa is one. Gifted Aotearoa is an infrastructure of supports designed to appeal to as many educators as possible. Five different "waka" — vehicles — target educators from novice practitioners through to those who need mentoring to lead and support. This presentation covers the establishment, general operation, and benefits seen from using a nationwide model to create connections that bring about change.

### **253 Designing for choice: Pedagogical and programmatic considerations**

Li Yun Grace Koh  
CHIJ St Nicholas Girls' School (Sec)  
Singapore

Chan Taiping, Joseph  
CHIJ St Nicholas Girls' School (Sec)  
Singapore

Lee Ruo-ning  
CHIJ St Nicholas Girls' School (Sec)  
Singapore

Law Huizhen, Sharon  
CHIJ St Nicholas Girls' School (Sec)  
Singapore

In order to align with the 21st-century competencies framework and to further promote self-directed learners, teachers from CHIJ St Nicholas Girls' School redesigned part of the curriculum to intentionally encourage student choice of what to and how to learn. With reference to self-determination theory, several lessons from history, chemistry, Chinese language, and project work were redesigned to explore the impact of choice on student attitude towards learning and mastery of the content and skills. The results of teacher observations, assessment of students' deliverables, and student surveys demonstrated that there was an increase in student motivation towards learning, students being more self-directed in their learning, and confidence in the application of disciplinary skills. The session will share the considerations and steps taken to design a curriculum for greater student choice.

### **184 Developing and operating a creative leadership program based on design thinking using action research**

Jung Kil Park  
Soongsil University  
South Korea

Ji Young Park  
Soongsil University  
South Korea

Song Hyun Park  
Soongsil University  
South Korea

Chanhee Jo  
Soongsil University  
South Korea

Heera Bae  
Soongsil University  
South Korea

This study was conducted as a field-centered problem-solving study through an action research method. In this study, a creative leadership program for adolescents that combines creativity, design thinking, and leadership was developed; a 60-hour program was operated for sixth graders in elementary school; and developers, instructors, coaches, students, and parents' perceptions and satisfaction with the program were surveyed. Effective measures for the development and operation of a creative leadership program based on design thinking for youths focused on the field were presented.

### **2 Does gifted program participation benefit all students equally?**

Kristen Stephens  
Duke University  
United States

William Darity, Jr.\*  
Duke University  
United States

Malik Henfield  
Loyola University Chicago  
United States

Madeline Carrig  
Duke University  
United States

Erica Phillips  
Duke University  
United States

It is often assumed that participation in gifted programs sets students up for future academic opportunity and success, but does gifted program participation benefit all students equally? This current study examines those malleable factors that mediate and/or moderate the effects of gifted program participation among high ability students who have traditionally been underrepresented in such programs. Gifted education policy implications will also be discussed.

### **139 Exploring twice-exceptionality in Dubai private schools: Awareness, perceptions, current practices, and suggested enhancing educational strategies**

Aida Younis  
British University in Dubai  
United Arab Emirates

The purpose of this transformative mixed-method study is to explore the awareness and perceptions of policymakers and educators about twice-exceptional students in Dubai's very good and outstanding private schools. Also, the twice-exceptionality practices of identification and supporting programs are examined. Thus, from a transdisciplinary approach, strategies to improve the education of twice-exceptional students are recommended to policymakers and educators. Findings reveal that policymakers and educators have limited awareness and inadequate perceptions of twice-exceptional students. Based on such findings, recommendations include enhancing awareness, improving perceptions, and setting valid identification and support programs to serve twice-exceptional children.



### **319 It's not segregated; it's simultaneous: Differentiating for the profoundly gifted — \*within\* a gifted program**

Jill Williford Wurman  
The Grayson School  
United States

Melissa Bilash  
The Grayson School  
United States

P. Susan Jackson  
Daimon Institute for the Highly Gifted Inc.  
Canada

Kimm Doherty  
The Grayson School  
United States

Ashley Freeborn  
The Grayson School  
United States

Derek J. Graves  
The Grayson School  
United States

How can we best feed voracious profoundly gifted (PG) minds within an environment that is already accelerated and offering more complex material? One gifted school offers the intellectual complexity the PG need and the companionship they deserve. This panel will include the school founder; a PG-specialist psychotherapist; the school counselor; and instructors of language arts and advanced mathematics who work with micro-groups or one-on-one with PG students every day. Their decades of combined expertise with PG students, in particular, will offer insight and advice about the day-to-day reality of implementing such a program and will also share information about educational and social-emotional outcomes.

124 Nurturing affective skills in Hong Kong's gifted and talented students

Hok Ling Amia Cheung  
Hong Kong Academy for Gifted Education  
Hong Kong

Jonathan Plucker  
Johns Hopkins University  
United States

Mary Simonsen  
Johns Hopkins University  
United States

Introducing affective education in contexts that emphasize traditional academic skills involves increasing awareness about affective education, providing resources to families of gifted and talented students, and laying the groundwork for integrating affective education into school curricula. Our comprehensive approach to integrating affective skills into educational landscapes is the first of its kind in Hong Kong. This presentation includes an overview of our research-driven approach to nurturing affective skills in gifted and talented students and overcoming contextual challenges as well as providing directions for future affective programming around the world.

### **44 Preparing educators to review and improve gifted services: A critical best practice**

Susan Corwith  
Northwestern University, Center for Talent Development  
United States

Effective program evaluations help identify priorities, select appropriate models and strategies, and create coalitions for change and continuous improvement (formative purpose). Since gifted programs are frequently under scrutiny, program evaluation is also useful for gathering and

analyzing data that can be used to demonstrate impact and compliance and to measure or benchmark growth over time (summative purpose). This session teaches participants about design principles for multi-faceted evaluations of local gifted services and strategies for engaging stakeholders in standards-based improvement. Success stories, cautionary tales, and common themes from recent reviews from a variety of school sizes and types will be shared.

### **137 STEAM and programming education for the gifted in a digital makerspace**

Ellen Egeland Flø  
University of Oslo  
Norway

During the last years, there has been a growing interest in using makerspaces as an approach to STEAM (science, technology, engineering, arts, and mathematics) education. However, little research has been conducted into how this can be done, particularly for the gifted. This research investigates two interventions to STEAM and programming education, one based on a makerspace approach where students design, program, and make subject-relevant physical artifacts, and the other based on a classical approach where students do not make or program any physical objects. Which of the two interventions, taught through a digital environment (Zoom) due to COVID-19, appears most effective?

### **108 Talent delayed/talent denied II: Boundary-breaking advocacy**

Shelagh Gallagher  
Engaged Education  
United States

Henry David Thoreau famously said that "the question is not what you look at but what you see." Instead

of seeing a public hostile towards gifted education, the North Carolina Association for Gifted and Talented decided to see statistics from reports like America Agrees that suggest that the public wants more gifted education, equitably accessible to all gifted students. We went a step further, holding an advocacy conference where people outside gifted education outnumbered those inside the field, in order to build a new advocacy base on behalf of gifted low-income students and gifted students of color.

### **78 The gifted speak about the gifted identity, human worth, and self-esteem**

Rosemary Keighley  
rosemarykeighley.com  
Australia

Gifted children attending, and adults who had attended, separate full-time gifted classes were interviewed. They were encouraged to raise topics of their own choosing and speak at length. Interviewees ranged in age from ten to 86 years. Several strong common themes emerged, the child data paralleling the adult data strikingly. This presentation focuses on the gifted identity, human worth, and self-esteem, exploring the inter-relationships that emerged between them as they affected both school and home life and later life. In the words of the subjects, some surprising outcomes from being identified as gifted are revealed, with their suggestions for improvement.

### **121 Transforming the INVISIBLE to VISIBLE: Developing an inclusive, empowering education for gifted LGBTQ+ students**

Alena Treat  
Upper Iowa University  
United States

Orla Dunne  
Centre For Talented Youth, Ireland  
Ireland

This presentation is a preview of our chapter for Vol. 2 of Introduction to Gifted Education. It begins with a powerful quote by Adrienne Rich that depicts the current inability for G/LGBTQ+ students to thrive in gifted education. Next, nine issues beginning with the letters in INVISIBLE are presented, followed by seven sets of solutions/advice starting with the letters in VISIBLE. Attendees will also receive a starter kit (sample unit, inclusive role play cards, case study, PowerPoint, essential questions, big ideas, discussion questions) to help transform gifted education into an environment in which G/LGBTQ+ students can thrive.

### **207 Twice-exceptional students who are gifted and have dyslexia: The “canaries in the mine”?**

Nancy Young  
Nancy Young Educational Consulting  
Canada

In many schools, students who are intellectually gifted and have dyslexia are at risk of not having their needs met and may not even be identified. These twice-exceptional (2e) students require programming that addresses their intellectual and personal strengths as they are learning to read, spell, and write. Emphasizing kindergarten through grade 3, this session summarizes the research and presents examples of teaching the structure of the English language. Attendees will see why these students may be the “canaries in the mine” that can help us improve reading and writing instruction for all students while providing enrichment opportunities for advanced students.

### **266 University teaching approaches that provide for gifted education, talent development, and/or creativity**

Leonie Kronborg  
Monash University  
Australia

Barbara A. Kerr  
University of Kansas  
United States

C. June Maker  
University of Arizona  
United States

Ann Robinson  
University of Arkansas Little Rock  
United States

A panel of four leading university academic educators who have led different successful programs in gifted education, talent development, and/or creativity at their universities for 20-plus years will each discuss aspects of their teaching programs. Questions will be posed to each panel member and be facilitated by another university educator for teachers of gifted education programs from a different country and context. The diverse approaches to teacher education/professional learning of teachers and psychologists will be discussed in relation to key knowledge areas that were emphasized. Key research that underpinned each of the academic's approaches to teaching the gifted, talented, and creative will be highlighted.

### **335 Using the metacognitive cycle to build executive functioning skills in gifted/2e learners**

Emily Kircher-Morris  
The Neurodiversity Podcast  
United States

Gifted students may struggle with executive functioning skills due to being twice-exceptional or experiencing asynchronous development. Whether you are a teacher, parent, or counselor, this session will help you learn how to empower students to take control of their executive functioning skills by teaching them how to use the Metacognitive Cycle — a process that involves self-monitoring, self-evaluating, and self-regulating.



# Panel Discussions

## **111 A call to action: Supporting equity, diversity, and access for gifted students**

Lynette Breedlove  
The Gatton Academy of Mathematics and Science  
United States

Tracy Inman  
The Center for Gifted Studies  
United States

Julia Robert  
The Center for Gifted Studies/The Gatton Academy of Mathematics and Science  
United States

Javetta Jones-Roberson  
McKinney Independent School District  
United States

A critical new document created by The Association for the Gifted will be shared that presents a summary of research along with recommended action to address equity and access in gifted education for underrepresented students. This issue is critical in the field as we must ensure all high-ability students' needs are met. This session will enable participants to understand the Excellence Gap in addition to the Achievement Gap; advocate for underrepresented populations based on current research, and identify resources to aid in the effort of identifying and serving under-represented students.

## **48 Beyond global awareness for the gifted: Decolonizing your classroom bookshelves**

Rhoda Myra Garces-Bacsal  
UAE University  
United Arab Emirates

Hala Elhoweris  
UAE University  
United Arab Emirates

Hind Tuaib Ghufli  
UAE University  
United Arab Emirates

Najla Sultan Al Owais  
UAE University  
United Arab Emirates

In order to “teach for social justice,” one must first be able to read for social justice. This session will push participants to reimagine the idea of reading as an act of resistance, hope, and transformation by introducing gifted educators to diverse picturebooks that allow spaces for cognitive disequilibrium, leading to the emergence of more pluralistic approaches and transformative pedagogies.

## **109 Early college entrance programs: A student perspective**

Lynette Breedlove  
The Gatton Academy of Mathematics and Science  
United States

Julia Link Roberts  
The Gatton Academy of Mathematics and Science  
United States

Early college entrance programs give high-ability and gifted students the opportunity to accelerate academically into an environment with extensive opportunities. They also specialize in providing social and

emotional support to their students and a community of true peers. The components of early college entrance programs address the whole child's needs in meaningful ways. Learn about a publicly-funded early college entrance program and hear directly from students about their experiences in this specialized environment. A panel of students will discuss why they chose to attend, the services they were provided, and how the program was meaningful to their development.

## **77 Gatekeepers in talent development: Deciders of who gets in and who stays out**

Frank C. Worrell  
University of California, Berkeley  
United States

Megan Foley Nicpon  
University of Iowa  
United States

Steve Portenga  
iPerformance Consultants  
United States

Steven E. Knotek  
University of North Carolina at Chapel Hill  
United States

Franzis Preckel  
University of Trier  
Germany

Paula Olszewski-Kubilius  
Center for Talent Development, Northwestern University  
United States

Rena Subotnik  
American Psychological Association  
United States

Gatekeepers are individuals who, on their own or within their agencies, decide whether to open doors for candidates or keep them out. Their role in every domain of talent development is acknowledged but wrapped in mystery sufficient to elicit our scholarly exploration. How does one become a gatekeeper? Does the label come with any training? How do gatekeepers operate at different levels of talent development in different domains? This session will introduce the concept of gatekeepers and gatekeeping, present the current state of research and propose ways that members of the audience can gain more insights into this exclusive club.

### **127 Gifted education programs in schools**

Ayesha Umar  
Ayesha Umar- Careers and Education  
Consultancy  
Australia

Donna Elizabeth Wright  
Bandiana Primary School  
Australia

Darryl Ward  
Albury High School  
Australia

Justin Beckett  
Australia

Three Australian school principals come together to discuss gifted education in schools facilitated by a gifted education consultant. The participants include the Australian Principal of the Year Awardee 2020, the Australian Council of Educational Leaders NSW Leadership Awardee 2019, and the biggest regional New South Wales independent school principal (K-12). Join us to learn about the challenges these school leaders have faced in implementing gifted education programs in their schools and how their students have excelled as a consequence of these programs.

### **86 Identifying the essential tensions in teaching gifted students**

Dr. Brian P. Godor  
Erasmus University Rotterdam  
Netherlands

Dr. Antonia Szymanski  
Western Kentucky University  
United States

Dr. Laurie Croft  
University of Iowa  
United States

Dr. Lianne Hoogeveen  
Radboud University Nijmegen  
Netherlands

The aim of this panel discussion is to further explore teaching pedagogies for gifted students and to actively engage each participant in this exploration. The central theme, the essential tensions in teaching the gifted, will cover several topics that are at the heart of teaching and inform the day-to-day pedagogical decisions made by teachers, such as excellence vs. equity, coverage vs. self-discovery, and monodisciplinary vs. pluridisciplinary, as well as several other central tensions.

### **365 Implications of family and personal dimensions on the development of 21st-century skills**

Connie Phelps  
Emporia State University  
United States

Kyung Hwa Lee  
Soongsil University  
South Korea

Todd Lubart  
University of Paris  
France

This intercultural study investigated the influence of the home environment, parenting style, self-efficacy, personality, and

achievement constructs on the development of 21st-century skills. Conducted in three countries, the study invited college students and educators to complete five peer-reviewed measures through an online survey. A goodness of fit model applied to results showed a correlation of measures in the three countries except for parenting style and self-efficacy. This panel discussion addresses each construct with intercultural implications for parents, educators, and mental health professionals who wish to support creative potential, development, and productivity in children, students, and clients.

### **99 Supporting the social and emotional well-being of gifted students in practice, not just in theory**

Madelaine Armstrong Willcocks  
New Zealand Centre for Gifted  
Education  
New Zealand

Smruti Pavlov  
New Zealand Centre for Gifted  
Education  
New Zealand

Ann Easter  
New Zealand

The New Zealand Centre for Gifted Education's (NZCGE) curriculum for gifted learners includes a specific content strand entitled Personal Development, aimed at supporting gifted students in gaining an understanding of what it means to be gifted and in building better intra- and interpersonal knowledge. Students who develop greater self-awareness become empowered to take better control of their social and emotional needs. The Centre sees ongoing powerful social and emotional outcomes for the students it works with, and the NZCGE panel is happy to discuss and share aspects of this content with the international gifted education community.

# On-Demand Sessions

## **327 “Pathological differentiation” in math is optimal differentiation in math**

Jill Williford Wurman  
The Grayson School  
United States

Melissa Bilash  
The Grayson School  
United States

Kimm Doherty  
The Grayson School  
United States

Derek J. Graves  
The Grayson School  
United States

Meghan Vetter  
The Grayson School  
United States

We know that differentiation is a best practice in gifted education, but sometimes it’s not clear how much differentiation is necessary. Does having two sections of Algebra count? Should we have three? Four? Our all-gifted PreK-12 school believes that what one might call “pathological differentiation” is the only way to truly meet students’ needs by providing sufficient challenge and complexity in math. Our students are growing by leaps and bounds, and parents are thrilled as well. We will share real-world practicalities: the data collection and analysis, administrative efforts, and teacher implementation of hyper-differentiated math courses at all levels.

## **19 “They’re all going to find out I’m a fraud!”: Combatting impostor syndrome in the gifted brain**

Matthew Zakreski  
The Neurodiversity Collective  
United States

Impostor Syndrome is a psychological phenomenon that causes people to doubt their accomplishments and fear being “discovered” to be a fraud. It is very common within the gifted population and has seriously negative impacts in personality development, self-esteem, and psychological health. This session will explore the maintaining factors of this syndrome and outline strategies to undo it.

## **134 (Re-)open debate: Multipotentiality and career choice**

Tillmann Grüneberg  
University of Leipzig  
Germany

Multipotentiality was first defined by Fredrickson as a characteristic possessed by an “individual who, when provided with appropriate environments, can select and develop any number of competencies to a high level” (1979). Thereafter, the term multipotentiality appeared in various publications concerning career choice (e.g., Kerr & Erb 1991; Emmett & Minor 1993). Since the summary of the first debate about the concept (Rysiew et al., 1999), there has been further empirical research and theoretical discussion (e.g., Greene 2006; Carduner 2011; Hurst & Riley 2014; Jung 2013/2020). The presentation will summarize existing findings (in German and English) in a systematic review and thus provide a basis for reopening the debate.

## **45 A Call for Nurturing Holistic Perception**

Shoshana Rosemarin  
Ariel University  
Israel

Analytic perception is a predominant function in the Western world, where the culture is individualistic. Thus, its evaluation is included in psychometric tests. However, the culture in the Eastern world is basically holistic. The gap between the two cultures, and yet, the use of the same test in both of them, leads to inequality among children from both regions. Research has shown that many instances, crucial to everyday life, like the perception of hazards while driving, are holistically based. By focusing only on the scientific cognitive style, the rest of the fields and occupations are unjustly ignored.

355 A comprehensive and dynamic talent scouting protocol to identify gifted students from traditionally underserved populations

Nielsen Pereira  
Purdue University  
United States

Ophélie Desmet  
Purdue University  
United States

In recent years, several identification practices have gained momentum in the field including the use of multiple measures, universal screening, and local norms. However, little research and guidance exists on how different identification measures and practices can be used as part of a comprehensive gifted identification protocol in schools. This presentation will focus on the procedures used to identify students to participate in a

talent development program offered in four schools in the United States. Presenters will also emphasize how principles of dynamic assessment and talent scouting were used to identify students from underrepresented populations for gifted services.

### **283 A design-based approach to managing gifted, low social-economic status students' motivation through an intrinsic modality**

Lineke van Tricht  
Bureau Talent  
Netherlands

Anouke Bakx  
Radboud University Nijmegen  
Netherlands

Lianne Hoogeveen  
Radboud University  
Netherlands

Gifted secondary school students in the Netherlands do not perform as well as gifted students elsewhere. Also, students from families with low social-economic status (SES) have fewer opportunities to excel in the higher levels of Dutch education. As motivation is an important predictor for school success and Dutch gifted students seem to have lower motivation for school than their age-mates in other countries, this design-based research project is aimed at developing a hands-on intervention program that manages gifted, low SES secondary school students' motivation. In this presentation, the first design and theoretical backgrounds are shared with the audience.

### **37 A Journey to discover the brightness: The Shining of Youth Potential in the Rural Area**

Tidarat Sakveerakul  
Thammasat University  
Thailand

Based on the belief that every human being has potential, regardless of where they live, they would show talent if given the chance. This research developed to promote social youth agents' ability by learning and working with people in rural areas, applying the skills and knowledge to discovery, and empowering the rural youth's capacity to improve exceptional potential in oneself. With the CBPAR, children and youth in rural areas discover their abilities through experiences including design, planning, and collaborating on creative projects.

### **129 A research of writing teaching course from the perspective of ARCS model**

Yingxi Zhai  
Beijing No.8 High School  
China

The intellectually gifted students are not interested in writing, lack of motivation and poor at writing ability. Guided by ARCS motivation model theory, mainly adopts literature research method, questionnaire survey method, observation method and interview method, this research aims to stimulate students' writing motivation. Through careful design of the introduction of writing course, selection of writing topics closely related to students' lives, setting up stage goals, decomposing and refining writing tasks, this research helps to arouse students' "attention" in writing, maintain "relevance", establish "confidence", and achieve "satisfaction" in writing course for both students and teachers.

### **104 A school-based program for gifted children in Norway: Block-based programming as differentiated learning**

Renate Andersen  
Oslo Metropolitan University, Norway  
Norway

Preliminary results are presented from an ongoing research project that is focused on how gifted children learn block-based programming as an integrated part of STEM subjects (science, technology, engineering, and mathematics). The methodological approach is design-based research through interventions in the classroom over a two-year period, with gifted children ranging from 12 to 15 years old. Main findings about characteristics of gifted children are that they 1) perceive block-based programming as motivating and engaging, 2) enjoy collaborating on solving tasks together, and 3) feel academically challenged by block-based programming compared to ordinary classroom teaching.

### **149 A study of holistic identity profiling of gifted and talented students in Malaysia**

Rorlinda Yusof  
Universiti Kebangsaan Malaysia  
Malaysia

This study aims to examine the identity profiling of gifted and talented students (GTs) and its relationship with academic performance. A total of 300 gifted students at the Malaysia National Gifted Centre, selected through a simple random sampling, responded to a holistic identity instrument. Descriptive and inferential statistics were used to determine the holistic identity profile of GTs and the relationship between identity with academic achievement. The findings showed that the holistic identity of students was at a high level (Mean = 4.09, SP = 0.449). Of the eight components, spiritual identity obtained the highest mean score (4.34), while leadership identity obtained the lowest (3.88). There was a weak relationship between holistic identity and academic performance ( $r = 0.164$ ,  $p < 0.01$ ). The findings imply

the importance of providing holistic identity activities in educational and counseling programs to improve the quality of holistic identity of GTs to an optimal level.

### **175 A study on the improvement of curriculum through analysis of creative confluence competency**

Hae Ree Kim  
Soongsil University  
South Korea

Soo Jin Park  
Soongsil University  
South Korea

Jin Kyung Yoon  
Soongsil University  
South Korea

Kyoungsoon Lew  
Soongsil University  
South Korea

The purpose of this study is to improve curriculum for the development of creative confluence competency. The study conducted a future creative confluence competency test targeting 558 college students from Soongsil University in Korea and analyzed the differences according to major, grade, and gender. The results of this study were as follows: First, there were differences in creativity confluence competency of university students by majors. Second, there was no difference by grade. Third, the result of gender difference was that male students were higher than female students in all areas. The results of this study can be helpful for the development of curriculum.

### **69 A Sydney independent, all-girls school K-12 gifted program for students and professional development for staff**

Desilee Tait  
Loreto  
Australia

Marisa Virtich  
Loreto  
Australia

Peta Jauncey  
Loreto  
Australia

We base our program on the definition of gifted and talented of François Gagné (2003). The definition reflects the distinction between potential and performance. The purpose of this research is to raise the potential of all our students K- 12. Using Gagné's model to identify and cater to our students, we have devised a three-year goal that all staff are encouraged to follow. The goal was devised by the school's executive team and is led by the gifted and talented faculty. At present we are over halfway toward the whole-school goal, and the progress with both staff and students has been significant. Findings so far have illustrated that pedagogical interventions as well as social and emotional professional development for staff are crucial to the success of this goal.

### **257 A systematic review on inclusion of gifted and talented students**

Francesco Marsili  
University of Perugia  
Italy

Silvia Dell'Anna\*  
Free University of Bozen-Bolzano  
Italy

Marta Pellegrini\*  
University of Florence  
Italy

The term "inclusive education" is often employed solely as a synonym for the placement of students with disabilities in the general education system (Nilholm & Göransson, 2017). Due to this misinterpretation, few studies have investigated inclusive approaches for gifted students. The

results of this systematic review are a guide for teachers, researchers, and policymakers who want to figure out the pedagogic and didactic implications of inclusive educational practices for the gifted. The aim is to open a dialogue among educational disciplines in order to better understand what has been done in the past and what should be done in the future for the inclusion of gifted students.

### **190 A teacher professional development for analyzing integrated lesson plans according to competency-based learning for scientifically and mathematically gifted students**

Noparat Sricharoen  
The Institute for the Promotion of Teaching Science and Technology  
Thailand

Siriwan Chatmaneecharoen  
Phuket Rajabhat University  
Thailand

Chitraporn Boonthanom  
Ramkhamhaeng University  
Thailand

A train-the-trainer program was initiated to promote competency-based learning intertwined with Bloom's taxonomy to enhance teachers' implementation of such a practice in a classroom setting. The teachers selected as trainers for the teacher professional development were 21 university lecturers and teachers. The program included lectures, analyses of lesson plans, discussions, and lesson plan construction. The research results showed that the participants had a better understanding of developing competency-based learning. They were very satisfied with the training course and agreed upon the appropriateness of the program and usefulness for teachers of gifted students in science and math.



### **166 A tool to understand the concerns and information needs of Canadian gifted parents**

Debbie Clelland  
Debbie Clelland Coaching & Consulting  
Canada

Counselors working with gifted children sometimes encounter families who “don’t know what they don’t know.” This presentation will discuss a needs assessment that was developed to understand the concerns experienced by Canadian parents of gifted children and the information that they seek. First, we will look at the results from over 500 parents from four provinces, focusing on their top concerns, information needs, and implications for counseling. Then the potential for using this questionnaire to facilitate a comprehensive intake with these families will be discussed.

### **210 A virtual day at the museum: Exploring intellectual growth strategies with students and parents**

Dr. Dornswalo Wilkins-McCorey  
Virginia Beach City Public Schools  
United States

Angela Boubouheropoulos  
Virginia Beach City Public Schools  
United States

Due to the unprecedented need to adapt and pivot as a result of the global pandemic, a public-school division in Tidewater, Virginia, transformed a traditional, face-to-face field trip into an authentic and engaging virtual learning experience for students and parents in economically disadvantaged schools. As a result, students with high ability and potential were able to interact and utilize critical/creative thinking skills to explore famous works of art through a long-term

partnership with a prominent local arts museum in Norfolk, Virginia. This session will invite participants to consider alternative approaches for implementing a virtual learning experience to elicit gifted traits, attitudes, and behaviors.

### **83 Academic acceleration**

Ayesha Umar  
Ayesha Umar- Careers and Education Consultancy  
Australia

There is a plethora of empirical evidence about academic acceleration as best practice to cater to the needs of the gifted students. There are many different types of academic acceleration – including curriculum compacting, subject acceleration, mentoring, whole-year acceleration (grade skipping), two-year acceleration, and rapid acceleration. Despite the evidence that supports academic acceleration, parents and teachers are very apprehensive about whole-year acceleration or grade skipping due to the concern that gifted students who do it will be socially challenged. However, empirical research proves that students who were accelerated simultaneously progressed academically, socially, and personally.

### **200 Acceleration: Practical applications and policy implications**

Ann Lupkowski-Shoplik  
University of Iowa  
United States

Susan Assouline  
University of Iowa  
United States

The fact that academic acceleration is the best-researched and most effective academic intervention for gifted students, yet the most underused, defies logic. Presenters

will discuss common excuses and how acceleration can be implemented. Above-level testing helps discover students ready for more challenging curriculum or acceleration. Pre-assessment on specific topics helps identify students who have mastered material. They can be challenged by compacting curriculum or providing higher level content on a daily basis. Research demonstrates the effectiveness of all 20 forms of acceleration. Policy can help bridge the impasse between research and practice and make practice consistent across locations and time.

### **270 Adapting art spaces and education for hyperactive gifted students**

Delanie Almazan Anaya  
CEDAT Talent Attention Center  
Mexico

This research delved into the process of adapting Mexican art museums for the needs of gifted students who were dually diagnosed with hyperactivity. The qualitative study, which took place over the course of a semester, focused on researching the process of inclusion within museums, changes done to exhibitions to accommodate the students’ needs, how techniques of teaching art served as inclusive models, and the perspectives of students, professors, museum curators, and art directors. These findings formed a guide that described the process for inclusive audience engagement while providing an experience-based set of successful strategies for suitable learning environments for dually exceptional gifted children.

### **292 Adaptive formats of gifted education for sustainable development**

Christian Fischer  
University of Münster  
Germany

Christiane Fischer-Ontrup  
University of Münster  
Germany

The presentation focuses on adaptive learning architectures for sustainable individual talent development that in the long run should equally empower students to engage in sustainable development of their society. To achieve this goal, these adaptive formats of gifted education focus on strategies of self-regulated, research-based learning as well as on 21st-century skills with a view to the Sustainable Development Goals. Given increasing global challenges, such adaptive learning architectures can make an important contribution to developing the future of gifted education with a focus on the transformation process of (high) personal potential into (excellent) performance for the common good.

### **10 Advocating for the gifted in a general ed classroom**

Justin Villet  
Sphinx Gifted Consulting, LLC  
United States

Giftedness is a “mixed bag.” As someone who is gifted, there are a lot of opportunities and doors that open because of the way a gifted person thinks, but giftedness is wildly misunderstood, and gifted people usually have a really hard time in systems for which they have to conform. Through no fault of their own, educators usually don’t know much about giftedness, or what they do know is a little out-of-date. This presentation will help parents learn how to advocate for their gifted kids, as well as help educators find common ground with all stakeholders.

### **267 Aligning a graduate course in gifted education for all pre-service teachers with USA NAGC’s standard**

Joi Lin  
University of Denver  
United States

Norma Hafenstein  
University of Denver  
United States

Madeleine Adams  
University of Denver, Denver Public Schools  
United States

Our university is a leader in gifted education and professional learning and ensures all students in the teacher education program complete a full three-credit graduate course in gifted education. The course is a survey addressing characteristics and myths of giftedness, identification, differentiated instructional strategies, social and emotional needs, underserved students, and advocacy. With a commitment toward continuous improvement, two graduate students analyzed alignment and identified gaps between the course content and the USA’s National Association for Gifted Children’s Knowledge and Skill Standards for All Teachers (2014). A discussion of findings, recommendations, and quick wins for improvement will be shared with participants.

### **189 An empirical investigation of the early university entrance program in CTYI**

Cathy Woods  
Centre Talented Youth Ireland  
Ireland

Dr. Catriona Ledwith  
Centre Talented Youth Ireland  
Ireland

This research project aims to examine the student experience of the Early University Entrance program (EUE) and the impact this program may have on students’ transition to the

university. EUE is a dual-enrollment program at The Centre for Talented Youth Ireland at Dublin City University that allows gifted transition year students the opportunity to study a third level subject at an accelerated rate while also providing a benevolent environment at DCU with like-minded peers. There are currently no other courses of this nature operating in Ireland. Recent developments in program structure, philosophy, and content require a detailed and focused engagement with EUE to understand how this program has evolved to the growing success it is today. At a practical level, examining students’ perceived outcomes of EUE will enrich the program for future students and provide research that may expand the program at other universities.

### **176 An exploration of early childhood leadership development: Recognizing and supporting young leaders in different contexts**

Debra Hailey  
Southeastern Louisiana University  
United States

Michelle Fazio-Brunson  
Northwestern State University  
United States

Lacy Hitt-Davis  
Southeastern Louisiana University  
United States

Susan Zimlich  
Southeastern Louisiana University  
United States

This mixed methods research explores the attributes exhibited by young children who are leaders in and out of the classroom context. Many adults think that young leaders are generally well-behaved and model classroom students. However, research indicates that young leader attributes do not always fit that mold. For example, young leaders



may get into power struggles with teachers more frequently than non-leaders. Participants will learn how to recognize young leaders, ways to support young leaders, and teaching practices that support all children in making good decisions, having prosocial skills, and being responsible citizens.

**128 An exploration of home-school cooperation for online learning in a pandemic: A parent-mentor system**

Zimo Hu  
Beijing No.8 High School  
China

Due to the impact of COVID-19, online learning by students at home has become a main educational method. Inspired by the limitations of the current forms of online learning, the urgency of home-school cooperation, and the importance of intellectually gifted children's physical and mental development, this research proposes a new model of home-school cooperation for online learning: the parent-mentor system. Students carried out relevant scientific inquiry activities with the help of parent mentors, from topic selection to results presentation. Research results show that the parent-mentor system plays a positive role in promoting intellectually gifted children's motivation to learn and that performance is of great importance in home-school cooperation. With standardized implementation and good supervision from schools, the parent-mentor system can be used over the long term, become an important part of home-school cooperation, and promote the all-around development of students.

**151 An IQ test made for gifted and 2E learners**

Femke Hovinga  
SCALIQ

Netherlands

This session will feature the ins and outs of a new intelligence test designed to identify gifted students aged 5 to 11. With a measurement range of IQ 105-170, a strong theoretical background within the CHC model, an item-response theory approach, a focus on fluid over crystallized intelligence, non-verbal items, and relaxed time-limits, this new test measures what really matters in all populations, including English Language Learners and 2E students. Come and find out how the test was developed; what it looks like; and how, where, and when it can be used.

**368 An underestimated issue for gifted students: Resource rooms**

Sezen Camci Erdogan  
Istanbul University-Cerrahpaşa  
Turkey

The study aimed to determine the opinions of teachers who studied with gifted students in resource rooms on the quality of education in those resource rooms. More than 50 teachers volunteered to participate in the study, and they were assigned to work in the resource rooms. A semi-structured form was used to collect data; it asked for opinions on challenging issues in the resource room, etc. Although the data analysis of the study continues, the preliminary findings indicate that teachers need more competent, extended, and ongoing training on the characteristics, social-emotional needs, and education of gifted individuals.

**181 Applying Francoys Gagne's model in a school setting: An Australian model**  
**Leigh-ann Forman**

Grace Lutheran College  
Australia

In this presentation, participants will explore practical ways to incorporate the elements of Francoys Gagne's model into the school environment and its programs for gifted and talented students. The presentation will explore key ideas to explore when establishing programs for gifted and talented students and how to strike a balance between the holistic needs of gifted students and those of students with high levels of talent in specific subject areas or domains.

**289 Assessing creative problem solving in multiple domains in young children: Development and field testing in the USA and UAE**

June Maker  
University of Arizona  
United States

Randy Pease  
DISCOVER Projects  
United States

Kadir Bahar  
University of Georgia  
United States

The DISCOVER Projects at the University of Arizona and the Ministry of Education in the UAE cooperatively developed and field tested an innovative performance assessment for children ages four, five, and six. The final versions are different for the two countries because of cultural and language differences. Children solve closed, semi-open, and open problems in ten domains: auditory, bodily/somatic, emotional/intrapersonal, linguistic, mathematical, mechanical/technical, moral/ethical/spiritual, scientific/naturalistic, social/interpersonal, and visual/spatial. Children have developmentally appropriate materials and instructions; observers use tablet computers to record children's constructions and behaviors. All information is entered into a database and a profile of strengths generated for each child.

### **141 Assessment competence, self-regulated learning, and enrichment in gifted school development**

Corinna Schuster  
Westfälische-Wilhelms-Universität  
Münster  
Germany

Till Utesch  
Westfälische-Wilhelms-Universität  
Münster  
Germany

Marcus Kohnen  
Westfälische-Wilhelms-Universität  
Münster  
Germany

Christian Fischer  
Westfälische-Wilhelms-Universität  
Münster  
Germany

Implementing innovative concepts at schools is a highly complex process which requires symbiotic implementation strategies for considering the perspective of teachers, the organization, and different learning settings (Gräsel & Parchmann, 2004; Pfänder et al., 2018). Within three specific development projects the German project Leistung macht Schule (LemaS) (Vohrmann et al., 2018), sets out to contribute to school development by training assessment competence of teachers, support students in their self-regulated learning, and promote gifted students via enrichment programs. The three projects are united within a comprehensive pedagogical program and cover areas of better assessments in schools (i.e., instruments, situations) and individual promotion outside regular classes.

### **223 Audacity & Tenacity: Making bold thinking the native tongue of your gifted program**

Jill Williford Wurman  
The Grayson School  
United States

Melissa Bilash  
The Grayson School  
United States

A school for the gifted can nurture audacious thinking and tenacious behaviors by shifting attention and incentives from achievement to aspiration, and from performance to perseverance. Administrators and teachers must model bold thinking, stretching themselves, and taking risks by embracing the concept that “NOs are free.” We will offer concrete examples from our own experience, including adopting an astronaut, developing a unique-in-the-world play lab, and chatting with C-3PO. We will also describe how daily classroom activities across disciplines can be infused with these qualities, resulting in high engagement and more confident and innovative thinking across your school community that ultimately creates a culture of thinking.

### **113 Becoming an anti-racist: Essential conversations to disrupt racism in gifted education**

Robin Greene  
Denver Public Schools  
United States

Ellen Honeck  
Denver Public Schools  
United States

Equity and social justice work are critical to education, but are we ready for difficult and honest conversations? We will highlight our personal journey and work that we have been leading to challenge our bias, reckon with gifted education's past, and disrupt systems of oppression. We will ask hard questions and challenge participants to identify their role in equity work.

### **156 Best online resources to use with gifted students — virtual, face-to-face, or hybrid!**

Emily Hurst  
Alabama State Department of  
Education  
United States

Shirley Farrell  
Troy University  
United States

Kim Stephenson  
Prattville Christian Academy/  
University of Alabama  
United States

Gifted students need differentiated instruction to remain motivated and engaged in their learning. Online tools are useful in providing choice, promoting critical thinking, and making learning meaningful. As technology continues to evolve, the vast array of online resources can be overwhelming to sort through. Are you looking for online resources to incorporate in your classroom but don't have time to explore the rapidly growing list? Join this session as we explore apps, websites, and more to enhance learning for gifted students. Learn how to integrate these tools whether you are instructing students virtually, face-to-face, or in a hybrid model.

### **38 Best practices in professional learning and teacher preparation**

Christine Weber  
University of North Florida  
United States

Angela Novak  
East Carolina University  
United States

What are the best practices and research related to professional learning for educators working with gifted learners? Do you need ideas on how to design and implement

effective professional development experiences? This session focuses on different methods and strategies, special topics in gifted education, and what to include when planning opportunities for content area training by drawing on both the literature in the field and research-based best practices in professional learning. Join us as we explore these specific strategies designed to support effective professional learning and teacher preparation.

### **75 Best practices to support and empower gifted transgender and gender non-conforming students**

Orla Dunne  
Centre for Talented Youth, Ireland  
Ireland

This presentation aims to offer a practitioner perspective and specific strategies for educators working with gifted transgender and gender non-conforming (TGNC) students. Educators may feel overwhelmed by evolving terminology, school constraints, or divergent attitudes of school administrators, colleagues, parents/guardians, and other students. However, by championing gifted TGNC students' individual identities, forming collective spaces of support, and creating dialogue with colleagues and school leaders, educators can act as agents of social change and empower gifted TGNC students to realize their potential.

### **258 Bibliotherapy for twice-exceptional gifted learners**

Debbie Troxclair  
Lamar University  
United States

Eleonoor van Gerven  
Slim! Educatief  
Netherlands

In this session, participants will learn how to provide for the affective

needs of twice-exceptional gifted learners via the use of bibliotherapy. The bibliotherapy process will be explained and a demonstration of the strategy provided, with a focus on helping twice-exceptional learners understand the conceptual theme of identity (Halstead, 2002).

### **310 BIOTech Futures Challenge Anita Pickard**

Australia  
Tiane O'Connor

Australia  
The BIOTech Futures Challenge is a platform for students from high schools (ages 14–18) to be paired with world-class academics at Australian universities to tackle challenges in the area of biotechnology. Students work on their research proposals before presenting their final ideas to academics, industry representatives, and peers at our dedicated two-day symposium. Our presentation will delve into the how the BIOTech Futures Challenge came about, the opportunities to undertake projects in different areas of STEM, and how to join the BIOTech Futures Challenge for 2022.

### **24 Bossy pants, perfectionists, and slackers, oh my!**

Shannon Anderson  
Free Spirit Publishing  
United States

As a teacher, you know it's a challenge to meet not only students' academic needs but also their unique social and emotional needs. Learn strategies to help kids develop appropriate mindsets and coping strategies. As a gifted coordinator and teacher for 25 years, Shannon has helped create programming for the social and emotional growth of gifted students. She will share ideas for helping our students who need to

hone their leadership skills, provide tips for giving perfectionists a proper perspective, help you develop confidence in your shy students, and give teachers tools to motivate their unmotivated students. This session is packed with mentor text recommendations and lessons you'll use for years to come.

### **336 Bridging the gap between gifted, general, and special education classrooms**

Emily Kircher-Morris  
The Neurodiversity Podcast  
United States

Twice-exceptional (2e) learners are both gifted and have another diagnosis (like autism, ADHD, or a learning disability). Once 2e learners are placed in a gifted or special education class, they rarely are identified for their other exceptionality. How can educators use assessments and interventions to bridge the gap between all settings to support the strengths and struggles of 2e learners?

### **221 Building bridges between school and home with executive function strategies**

S. Ley-Anne Folks  
Westmount Charter School  
Canada

Heather Lai  
Westmount Charter School  
Canada

Executive Function (EF) development is a hot topic in education and is recognized as an important issue in gifted education as well. In our research we realized that compassion and empathy for students who struggle with EF delays are critical components for supporting growth. While it is important to develop EF skills in the classroom, children also need to apply these skills at home

and in their extra-curricular activities. This presentation reviews EF skills, looks at areas of home life that require Executive Function skills, and shares strategies that can be used at both school and home.

### **369 Call to action: A guidebook to realizing equity and excellence in gifted education**

Elizabeth Cross  
North Carolina Department of Public Instruction  
United States

Sneha Shah Coltrane  
North Carolina Department of Public Instruction  
United States

Stephanie Cyrus  
North Carolina Department of Public Instruction  
United States

Matt Makel  
Johns Hopkins University  
United States

In gifted education, we seek to meet the advanced learning needs of students all day, every day. However, inequities rooted in larger society plague education, often leading to inequitable representation in gifted programs. Although schools cannot fix larger societal inequities on their own, we can ensure that our actions do not compound these inequities. Our goal must be to promote both equity and excellence.

### **243 Card games for affective learning**

Stefanie McKoy  
University of Arkansas  
United States

A simple deck of cards offers endless possibilities for learning: obeying rules, honest play, turn taking, self-confidence, unwinding/relaxing,

waiting, and group interaction. During the presentation, learn how card games help students who are gifted improve communication, work through dramatizations, contend with textual aspects of cards, improve rapid thinking, and manage extreme emotions. Participants will also learn new games!

### **14 Categories of Urban's Test for Creative Thinking-Drawing Production as indicators of artistic giftedness in young adolescents**

Ekaterina Donii  
Moscow State University of Psychology and Education / Moscow Central Art Colleague  
Russia

Timely identification of their artistic giftedness gives children the opportunity to perform and develop their capabilities. However, we lack valid methods for identifying artistic giftedness. A number of indicators of artistic giftedness that are noted in the literature are also reflected in Urban's Test for Creative Thinking-Drawing Production. An analysis of the categories of the Urban test suggests that the presence of decorative details, contour, general theme, completeness, perspective, and humor can serve as indicators of artistic giftedness.

### **205 Challenges, joys, and decisions of creative and highly eminent women**

Sally Reis  
Neag School of Education, University of Connecticut  
United States

This session focuses on new research conducted on highly creative and eminent women, focusing on how the creative talents of girls and women evolve and how these creative women developed their creativity over time. The session will

include information about blocks to creative productivity and also what motivated these creative women to produce. The implications of the loss of women's talent on diminished creativity, leadership, innovation, and creative productivity will be discussed. The session will conclude with a positive call to action about how educators can make a difference in helping girls and women develop their talents and creativity.

### **147 Cognitive abilities of highly and mathematically gifted children**

Nina Krüger  
University of Hamburg  
Germany

Sören Fiedler\*  
Helmut-Schmidt-University Hamburg  
Germany

There are different definitions of intellectual talent. Manifestation of high general intelligence and subject-specific concepts have received considerable attention in psychological research, as represented in the CHC model of intelligence. This study aims to replicate and build on previous research by examining intellectually and mathematically gifted children. Results on the German Wechsler Intelligence Scale for Children-Fifth Edition (WISC-V) by 48 gifted children with an IQ of 130 or higher and by 35 mathematically gifted children from a talent-fostering project are compared to those of matched control samples. Limitations of the study and opportunities for further research are discussed.

### **41 Communication, concepts, connectivity, controversy: Strategies for supporting mathematical thinking**

Jennifer Holt  
Williamson County Schools  
United States



Stephanie Higgs  
Williamson County Schools  
United States

This presentation will include introductions to various mathematical tools and thinking processes to extend and enrich learning for gifted thinkers in the elementary grades. From differentiated warm-up problems to debate prompts to complex digital math puzzles, the instructors will expose participants to a variety of research-based skills and strategies that can be implemented as soon as the next day! Using strong mathematical vocabulary and evidence, we will prepare our learners to communicate like mathematicians, connect to universal themes, and debate with their peers in this 30-minute practical session for general education and gifted education teachers.

### **271 Community white spaces or gifted education?**

Nancy Hertzog  
United States

Researchers partnered with a non-profit community organization that focuses on advocacy for families of color to elicit input to gain a better understanding of barriers and challenges those families faced when accessing advanced learning opportunities in their local communities. Emergent themes from focus group interviews included limited information and communication from schools; experienced racism, bias, and alienation; and deficit thinking from educators. Overall, the unified message from families was clear; they referred to gifted education as “white spaces.” Presenters will address issues raised by the voices of families of color and advocate for increased access to gifted education.

68 Connections, calmness, and compassion in a chaotic world: Strategies for tweens and teens

Jessica Howard  
JAH Educational Consulting  
United States

Nanette Jones  
Colorado Association for Gifted and Talented  
United States

The impact and aftermath of the pandemic has led to constant unpredictability creating stress for our tweens and teens. Now more than ever we need to develop compassion in our gifted youth and help them create connections with friends, family, and community to deal with today’s reality. This session provides strategies to help create calm when things around them are chaotic.

### **143 Consulting with the employees working with gifted students: Methodology of the “Shirakatsy Lyceum” International Scientific-Educational Complex**

Gohar Beybutyan  
“Shirakatsy Lyceum” scientific educational complex  
Armenia

Although researchers have always been interested in gifted students, there is no working model that is universal and totally effective for all students and schools, despite the fact that there are thousands of successful examples. In this article we present the principles of the working methods at our school. The level that works with gifted students is teachers. The teachers’ trainings, the choice of the right methodology for each gifted student, and systematic approaches are our school’s main principles.

### **114 Creating access to inclusive gifted programs by shifting mindsets of adults**

Ellen Honeck  
Denver Public Schools  
United States

Robin Greene  
Denver Public Schools  
United States

This session will share a collaborative partnership created in a large urban public school district in the USA to understand and disrupt systemic barriers for students. The presenters will share the initial steps of the collaboration, challenges, and initial outcomes of this multiyear project. Suggestions and tips to do this work in your specific setting will be shared.

### **177 Creating and sustaining a gifted program: An honest account of an innovative secondary school gifted program for girls.**

Nicci Johnson  
Penrhos College  
Australia

Shannon Armitage  
Penrhos College  
Australia

The presenters will take you through their experiences in designing, launching, and evaluating a unique secondary school gifted program for girls. This presentation will explore our story from our successes to our challenges and how we dealt with them, as well as what we are doing to keep the momentum going. This no-holds-barred session will provide insight into leading change to benefit gifted students to ensure your school is offering them opportunities that enable them to reach their full potential.

### **164 Creating and using a Social and Emotional Learning Center of Excellence to support social and emotional learning**



Suzanne McFarland  
Menlo Park Academy  
United States

Nicole Becher  
Menlo Park Academy  
United States

Menlo Park Academy's Center of Excellence (COE) for Social and Emotional Learning (SEL) was developed by a standing committee including parents and school leadership/staff using Ohio's Strategic Plan as its basis along with pertinent research and informational literature to create the foundation to clarify, develop, expand, and assess the efficacy of our planning. Present activities include extending the scope of the Center to include coordination of SEL services, outreach to professional and parent communities, and assessment of work. The presentation will be based on work to create the COE and SEL programs that followed as a result of our study.

### **344 Creative experiences in the classroom: Impacting perceived stress and anxiety**

Rebecca Renegar  
Milton-Union Exempted Village Schools  
United States

Aimee Ashcraft  
Huber Heights City Schools  
United States

Creativity and intensities are hallmarks of giftedness that influence the affective needs of gifted children. Explore how a Martha Holden Jennings Foundation action-research project utilizes creativity instruction and experiences to develop creative capacity and improve student affect. Participants will learn practical strategies to foster creative development and engage mindfulness, promoting positive coping skills for stress and anxiety in the classroom.

### **153 Creative inspirations in STEAM: Biomimicry**

Shirley Farrell  
Troy University  
United States

Emily Hurst  
Alabama State Department of Education  
United States

Kim Stephenson  
Prattville Christian Academy/  
University of Alabama  
United States

Discover how gifted students can be inspired by nature to solve real-world problems (Van Tassel-Baska, 2005, 2014) and make connections between seemingly unrelated things. Biomimicry is the practice of learning from nature — mimicking form, behavior, and/or ecosystem — to solve human design challenges, and it is resurging in the design world. When gifted students are provided with inquiry research of nature (Ulger & Salih, 2020), they can find natural and tried-and-true strategies to help us in this changing world. For example, the African termite mounds inspired architects to develop more efficient internal climate control systems. Educational resources and lessons will be shared.

### **80 Creativity composure: Reasonable identification and practice, reasonably applied**

Yvonne de St. Croix  
IDEAL4Gifted  
United States

In recognizing gifted students for their creative talents, reasonable identification and practices must be reasonably applied. This session will consider and provide resources towards the methodology and pedagogy behind identification of creativity relative to gifted learners,

evaluate constraints associated with programming for creativity-identified gifted learners, and discuss the advancement of practices that enhance creative productivity for gifted learners.

### **285 Critical and creative thinking with visual tools**

Lisa Pagano  
Charlotte-Mecklenburg Schools  
United States

Trinette Atri  
Charlotte-Mecklenburg Schools  
United States

Marie Deegan  
Charlotte-Mecklenburg Schools  
United States

Andrea Kebert  
Charlotte-Mecklenburg Schools  
United States

Thinking Maps are powerful, portable learning tools that provide students with consistent ways to process and organize information. Learn how to maximize the use of Thinking Maps across content areas to infuse rigor and creativity for gifted and advanced learners. Strategies and examples will be shared for elevating thinking for gifted learners in all content areas!

### **126 Cross-cultural examination of student teachers' written stories on teaching gifted students in a regular (inclusive) classroom**

Erkki T. Lassila  
University of Oulu  
Finland

Manabu Sumida  
Ehime University  
Japan

Eeva Kaisa Hyry-Beihammer\*  
University of Education Upper Austria  
Austria

Lady Angela Rocena\*  
University of Philippines  
Philippines

Oktaý Kizkapan\*  
Nevşehir Hacı Bektaş Veli University  
Turkey

Despite a good body of scholarly work on pre- and in-service teachers' attitudes toward and conceptualizations of giftedness, there is a lack of qualitative cross-cultural comparative research on the issue. We address this gap via examining written stories by secondary education student teachers from five countries about teaching gifted students in an inclusive classroom. Our research provides knowledge for developing teacher education contents and practices that help the student teachers understand and plan for the needs of the gifted student population. In the presentation we discuss the themes of the research and its implications from a detailed comparative perspective.

### **106 Cyberbullying and the pandemic: Keeping gifted learners safe online**

Keri Guilbault, Ed.D.  
Johns Hopkins University  
United States

Bronwyn MacFarlane, Ph.D.  
University of Arkansas at Little Rock  
United States

Being bullied is a common experience characterized by being the target of repeated actions over time with an intent to harm. Students who are bullied are more likely to have academic and social adjustment challenges and are at risk for long-term problems, such as anxiety, depression, and post-traumatic stress. During the COVID-19 pandemic, schools across the world shifted to virtual learning environments,

where cyberbullying can occur. In this session, the presenters will share what is known about bullying, cyberbullying, and gifted students and will provide tips for how educators, parents, and caregivers can help keep their children safe online.

### **222 Designing an executive function-friendly classroom**

S.Ley-Anne Folks  
Westmount Charter School  
Canada

Heather Lai  
Westmount Charter School  
Canada

As a result of asynchronous development, Executive Function (EF) skills are often lagging in the gifted population and, in particular, in the twice-exceptional (2e) sub-population. In our previous action research project, we explored the effectiveness of teaching EF skills to these students. As a result of that research, we realized that more support was needed for students to consolidate those skills. This presentation provides methods of creating a classroom environment that promotes the use and continued development of EF skills. Join us as we share strategies and techniques for creating an EF friendly classroom.

### **202 Designing systemic interventions for underachieving gifted learners**

Eleonoor van Gerven  
Slim Educatief  
Netherlands

In this session we use the change and solution-focused approach to show how educators can design interventions for individual students who do not develop commensurate to their abilities. The approach is based on the notion of systemic influences on education. The process

of creating systemic interventions creates ownership and agency of the designed interventions which enhances the chances for success. The use of the systemic intervention protocol will be illustrated by vignettes and case studies.

### **146 Developing meaningful and creative virtual learning during the Corona pandemic among gifted primary-school students in the Kingdom of Bahrain**

Um Albaneen Yusuf Jamali  
Bahraini Ministry of Education  
Bahrain

This paper reports on a research study that examined the development of virtual learning as part of continual professional development in Bahraini primary schools. A series of workshops on integrating meaningful and creative learning in virtual classrooms was carried out for 30 members of the teaching staff, 60 observations of virtual sessions were conducted, and follow-up feedback was provided. The results from students' pre-post CAP (Creativity Assessment Package) comparison suggested significant increases in a number of creative thinking skills. Implications for school leaders and teachers denoted attending to teacher training regarding creative learning as an imperative aspect of virtual learning.

### **305 Developing self-regulation success in the virtual classroom**

Magdalena Fitzsimmons  
Baltimore County Public Schools  
United States

Claire Hughes  
College of Coastal Georgia  
United States

The virtual classroom has become a source of frustration for you and underachievement for your gifted

student. Now what? This presentation will explore ways in which teachers and parents can work together to help gifted kids develop self-regulatory behaviors that promote success and engagement in the online environment and strategies for maintaining them over time.

#### **148 Developing the future of gifted education by understanding and supporting your underserved gifted learners**

Amy Graefe  
University of Northern Colorado  
United States

Chin-Wen Lee  
Taipei Kuei Shan School  
Taiwan

Deeply understanding the strengths and areas of challenge for our gifted and high-potential learners from traditionally underserved populations lays the foundation for these students to grow and thrive. However, as educators, before we can begin to fully understand these students, we must continually work to know and appreciate who they are academically, culturally, socially, and emotionally. This presentation will focus on strategies and provide resources that educators can implement immediately to assist in creating and maintaining inclusive, culturally responsive learning environments that help them better understand and support their underserved gifted and high-potential learners.

#### **150 Developing the future: Supporting the strengths and interests of your underserved gifted child**

Amy Graefe  
University of Northern Colorado  
United States

Chin-Wen Lee  
Taipei Kuei Shan School  
Taiwan

It is important to the intellectual and affective development of underserved gifted and high-potential children that families provide appropriately challenging and enriching experiences. In this presentation, we will provide families with information about recognizing and cultivating strengths and interests in order to support their gifted child's development. We will also briefly discuss potential barriers to formal gifted identification and strategies for partnering with your child's teacher(s) to find ways to meet their cognitive and social-emotional needs. A special emphasis will be placed on strategies and activities that families can implement immediately to identify and nurture their children's gifts and talents.

#### **170 Development and validation of a creative school environment test for university students**

Ga Hyung Lee  
Research Institute for Gifted & Talented Education, Soongsil University  
South Korea

Kyung Hwa Lee  
Soongsil University  
South Korea

Hye jin Yang  
GFCE  
South Korea

The purpose of this study is to develop a creative school environment test (CSET) and to identify its reliability and validity. The creative school environment is important as a place where students can develop and improve their creativity when they are in school. According to previous studies, the factors and sub-variables of a creative school environment include a psychologically supportive environment where the teacher recognizes the importance of

creativity, models creativity, and encourages students' creative ideas; and a physically support environment that provides free time, materials, and space so that students can think creatively and produce creative output. The CSET will be used as an indicator for the development of creative school environments and of students' creativity.

#### **347 Differentiating for challenge with technology: Tools you can use today!**

Rebecca Renegar  
Milton-Union Exempted Village Schools  
United States

Update your teacher toolbox with some useful technology tools to increase learning within your classroom. This session will provide an overview of some excellent free and low-cost apps, websites, and programs that you can leverage to manage and implement differentiated instruction, meeting your students where they are and taking them farther. Participants will be encouraged to share their favorites as we learn together!

#### **252 Diverse teaching strategies supporting the emotional nature and needs of gifted children**

Raquel Bronsoler  
Universidad de los Niños  
Mexico

These challenging times demand more attention on creating a supportive environment for all gifted students. Emphasis will be placed on using different strategies and activities to create a psychologically safe environment where students feel comfortable to the point of expressing themselves freely. The need for focusing on emotions, attitudes, and values is extreme in these unprecedented times of

COVID-19. Helping children develop a positive self-concept and awareness of their personal likes and dislikes is essential for building on their communication, socialization, and emotional skills. Online challenges are also crucial.

### **173 Down the Rabbit Hole: Searching for Talent in Underrepresented Populations**

Linda Collins  
Park Hill School District  
United States

Christina Courtney  
Park Hill School District  
United States

Join this workshop, bring your local norming data, and walk away with the skills and a plan to increase equity and access in your school district. This interactive/participatory workshop will share one district's vision to eliminate barriers by teaching educators how to change the face of gifted services, enlarging the talent pool to include diverse gifted and talented students.

### **67 Dynamic differentiation through independent research projects: The I-LEARN Process**

Vicki Phelps  
Milligan University  
United States

When done well, independent research projects provide gifted students with meaningful learning opportunities, but how can they be developed and managed? The I-LEARN Process provides step-by-step procedures to individualize the research process for gifted students, while also integrating management techniques, reflective practice, and opportunities for sustained engagement and academic growth. Come learn more about this exciting and engaging instructional approach!

### **196 Early College Entrance**

Nanette Schmitt  
Grace Christian School  
United States

Abigail Schmitt  
Mary Baldwin University  
United States

Over the years, many parents have sent their gifted children to college at ages younger than the average. What if these children were able to join each other as a cohort, navigating the university years together while teenagers? Dr. Nanette Schmitt and her daughter, Abigail Schmitt, will share their struggles and successes with Abigail living on campus as a full-time college student starting at age 14 in the Program for the Exceptionally Gifted at Mary Baldwin University in Staunton, Virginia. Topics will include academics, responsibilities, the challenges of emotions, and how this experience differs from the typical elite boarding school.

### **291 Earning it in reverse: What should we expect of the gifted?**

Kristofor Wiley  
James Madison University  
United States

Seth Jaeger  
Colegio Nueva Granada  
Colombia

Does the gifted child inherit a burden of responsibility to society? Do any of us? The affective and academic curricula we deliver to gifted students inherently address the balance between personal and public. Come join two gifted educators and returned Peace Corps volunteers as we discuss the fabric of society, useful metaphors, and implications for our programming.

### **105 ECHA specialists in gifted education make a difference: RITHA specialists tell you how**

Lianne Hoogeveen  
Radboud University  
Netherlands

Ava Kam  
Radboud University  
Netherlands

Petra Spithost  
self employed  
Netherlands

Robert Keleman  
Varazdin County  
Croatia

The aim of this session is to show how RITHA (Radboud International Training on High Ability) Specialists make a difference in gifted education around the world. Questions to be addressed include the following: Who are gifted students and what defines them? What are the different ways in which their needs can be served? How do you know if the gifted program for your students is of high quality? How can you influence policy in gifted education in your country?

### **201 Educating gifted learners with dyscalculia**

Eleonoor van Gerven  
Slim Educatief  
Netherlands

Annemieke Weterings  
Weterings Onderwijs op Maat  
Netherlands

In this session, we explore the effects of flaws in the instructional strategies that may cause severe problems with math, and we provide strategies to prevent and remediate problems with math in a pre-diagnostic stage. This process helps to determine if a learning disability or systemic influences cause mathematical problems. A strength-based and talent-focused approach is presented. Participants will understand the importance of stimulating strategies,



the usefulness of compensation strategies, the relevance of remediating strategies, and the respect they need to show for the limitations caused by the disability by exempting the student when these limits are reached.

### **162 Educating our most rare: A school-within-a-gifted-school model for profoundly gifted learners**

P. Susan Jackson  
Daimon Institute for the Highly Gifted Inc.  
Canada

Melissa Bilash  
The Grayson School  
United States

The profoundly gifted (PG) comprise a small—seldom recognized and infrequently addressed— subgroup of humanity. The economics of education have been unsuited for creating individualized, accelerated, in-depth learning opportunities for this rare, vital subgroup of the human family. We use thorough pre-assessment, radical acceleration, and individualized curriculum so that profoundly gifted students can pursue deeper, more advanced learning in a highly differentiated program. We will demonstrate how our school serves the PG among its all-gifted PreK-12 student population, addressing social-emotional, intellectual, and talent-based needs in programming, planning, supports, and measured results.

### **255 Educational inclusion: Case study of a dual exceptional student**

Waleska Coutinho-Souto  
Universidade de Brasília  
Brazil

Denise Fleith  
Universidade de Brasília  
Brazil

In regards to gifted students, there has been an interest in carrying out studies involving those who present higher abilities simultaneously with behavioral, emotional, and/or learning difficulties, a phenomenon named dual exceptionality. The purpose of this case study was to analyze the educational inclusion of a gifted student with Asperger's syndrome from the perspective of his managers, his teachers, his mother, and the student himself. The educational inclusion of the participant was considered a complex and multidimensional process because it depended on the participation of the whole school community and family. It was verified that specialized educational service favored the inclusion of the student.

### **110 Educators' understanding about creativity and mathematics: A cross-cultural perspective**

Marcia A. B. Delcourt  
Western Connecticut State University  
United States

Jyoti Sharma  
University of Delhi  
India

Innovation and creativity go hand in hand. But do educators agree that creativity can be infused into every subject to produce innovative ideas? This presentation focuses on mathematics, a domain often revered for its precision. Educators in India and the United States were asked to define creativity and to justify six statements ranging from those that were mostly mathematical in nature to expressions defining mathematics as a creative entity. Results will be presented based on a qualitative analysis of the responses and a discussion of comparisons between countries. Implications for creative mathematics teaching, particularly for gifted and talented students, will be presented.

### **101 Effectively identifying and meeting the needs of gifted students in the classroom**

Keely P'Pool  
Edmonson County Public Schools  
United States

This session will focus on providing preservice and currently practicing teachers with strategies they can use to effectively meet the needs of gifted students in their classrooms. Several differentiation strategies will be explained as well as how preexisting lessons can be enhanced to incorporate more rigor and challenge for gifted students. Characteristics of multiple gifted populations (twice-exceptional, English language learners, underachieving, etc.) will be discussed to provide educators with insight about specific aspects of giftedness they should look for in these students who may otherwise remain unidentified and not receive the services to which they are entitled.

### **61 Effects of gender and grade level on the academic self-concept of gifted students in biology**

Colin Peperkorn  
Bielefeld University  
Germany

Claas Wegner\*  
Bielefeld University  
Germany

In existing research on the self-concept of gifted students, giftedness has often been based on global concepts that makes subject-specific and useful implications for teacher trainings difficult. To address this issue, the general and subject-related academic self-concept of gifted and nongifted students ( $N = 418$ ; age:  $M = 10.68$ ) in the subject of biology was investigated. Group comparisons revealed significant effects of giftedness on every



measured self-concept subscale. The effects of gender and grade level were examined to reveal aspects that need to be considered in gifted self-concept development. The results offer implications for biology classes and science enrichment programs.

### **187 Enabling student initiation and collaboration through on-campus service learning**

Sze Wing Venus Wong  
The Hong Kong Academy for Gifted Education  
Hong Kong

Hok-Ling Amia Cheung  
The Hong Kong Academy for Gifted Education  
Hong Kong

Tin-Ki Kelly Lau  
The Hong Kong Academy for Gifted Education  
Hong Kong

The Student Organizing Team (SOT) was a program designed to nurture students' self-initiation through peer and campus-service learning. Student members at The Hong Kong Academy for Gifted Education (HKAGE) had access to a wide range of programs from which to acquire knowledge. However, the SOT used a different approach to engage and allow students to take the lead to propose, design and implement learning programs for their peers. Diverse types of programs such as Chat Club, Student Forum, Camp Creation and the Voice of Gifted Learners were devised. Student organizers learned many lessons including ideation, collaboration, execution, evaluation, and in the contexts of diversity and epidemic challenges. The HKAGE staff in collaboration with the Jockey Club-funded project team employed a wide range of facilitations to prepare students' mindsets, provide training on event planning, and support their collaboration throughout the year-

long program of different student-initiated events.

### **168 Encouraging critical literacy in the gifted classroom**

Lakeitha Brooks  
Model Laboratory Schools at Eastern Kentucky University  
United States

Karen Edwards  
Model Laboratory Schools at Eastern Kentucky University  
United States

Jilliane McCardle  
Model Laboratory Schools at Eastern Kentucky University  
United States

During this interactive workshop, attendees will explore literacy as it relates to issues of social justice and the gifted learner. Using culturally responsive texts such as "Peaceful Fights for Equal Rights," "All Are Welcome," and "Just Ask" along with Learning for Justice's Social Justice Standards, participants will discover the relevance of these texts (and many others) in developing skills that students need to address and challenge complex social issues.

### **224 Engagement strategies to increase enthusiasm for learning and reduce anxiety in gifted learners**

Diane Heacox  
St. Catherine University  
United States

Have you observed gifted students who sometimes sit back while others actively engage? Or gifted learners who are so anxious about their performance that they seem to be spinning out? Active engagement can increase learning enthusiasm as well as address the anxiety of gifted learners. We will explore how active engagement's three dimensions of

behavior, cognition, and emotion can be utilized to optimize the learning experiences of gifted students. Practical information and go-to strategies will be provided.

### **107 Engaging teachers in professional growth to generate excellence in underserved gifted through advanced teacher education**

Gillian Eriksson  
University of Central Florida  
United States

Tony Capoverdi  
Seminole County Public Schools  
United States

The Teaching to Elevate course addresses the equity gap for marginalized high-ability students through a web-based course of ten modules. Through a six-year university/school district collaboration with 12 low-income, diverse, urban USA schools, teacher leaders received 60 hours of training that was later captured in a web course. Learn about the research effectiveness and course design and access the website with case studies of diverse types of high-ability learners. Part One examines achievement gaps, identification, culturally responsive learning, and schoolwide enrichment. Part Two infuses content areas using the inquiry model for language and literacy, mathematics, art, science, and engineering.

### **91 Engaging teachers in professional learning about content area curriculum**

Christine Weber  
University of North Florida  
United States

Emily Mofield  
Lipscomb University  
United States

Helping educators to understand high-quality instructional materials and their implementation in the classroom can support teachers' potential to improve student learning. So, what are the essential components of high-quality curriculum? How do these features benefit gifted student learning? How do gifted students learn best? These are just some of the questions to consider when designing professional learning that supports content area curriculum for educators working with gifted children. Join us as we explore the answers and consider examples of high-quality curriculum and a rubric to help design, select, and evaluate curriculum.

### **215 Enhancing curriculum and instruction in a dual language gifted and talented education classroom**

Jenna Nelson  
Concordia University Chicago  
United States

This study examines the curriculum and teaching practices of a dual language gifted and talented education (GATE) ELA classroom and investigates the curricular experiences of fifth-grade Latina learners. As a dual language (English-Spanish) GATE classroom, this learning space inherently considers the linguistic identities of these learners as fluent Spanish and English speakers. However, participants find that the curriculum does not reflect the experiences of diverse learners. The findings from this study present insights on the linguistic and literacy experiences of students in this context and how to academically support students participating in dual language GATE.

### **93 Equity begins with a talent development mindset**

Jeanne Paynter  
Educating Innovators  
United States

Which of our students have the potential to become tomorrow's innovators, those creative problem solvers who find unique solutions to enhance our lives? A talent development mindset believes that all of them may. This session presents strategies for identifying and nurturing talent in three phases: (1) uncover misconceptions and "reseed" attitudes about talent; (2) pre-assess talent aptitudes, target them in instructional goals, and systematically capture observations; and (3) use the language of talent development in daily instruction and communication with families. In these ways, a talent development mindset undergirds and naturally fosters a growth mindset.

### **50 Essential skills for effective online and blended learning among gifted and talented students**

Rachel Zorman  
The Henrietta Szold Institute  
Israel

What characterizes the educational environment in the COVID-19 age and beyond? Which skills do gifted and talented students need in order to succeed in online and blended learning (integrating online and classroom learning)? A review of the research literature relating to these questions will be presented. The implications of these findings for adapting educational and social environments to the needs of gifted and talented students during COVID-19 will be described in two programs that are grounded in the growth mindset psychological approach (Dweck, 2006): the National Mentoring Program and the Everest Program.

### **359 Essential understandings for social and emotional curriculum for gifted learners**

Bronwyn MacFarlane  
University of Arkansas at Little Rock  
United States  
Just as gifted students need differentiated academic curriculum, they also need differentiated social and emotional learning experiences to support their unique affective needs. Affective curriculum is essential for talented students to learn about making choices to optimize their potential, relate well to others, express themselves fully, and reflectively understand their abilities. As a result, affective curriculum should be more than fragmented collections of affective activities. This session will serve as a professional resource for providing differentiated learning experiences across the social and emotional spectrum.

### **81 Even by a millimeter: Proximity of synergy, civility, and citizenship in a globally aware educational system**

Yvonne de St. Croix  
IDEAL4Gifted  
United States

As evident in the teaching and learning occurring over the course of the global pandemic, collaboration and access are essential for providing equity to and promoting self-efficacy and innovation in gifted learners of diverse backgrounds. To prepare gifted learners for an increasingly global world, this presentation evaluates researched best practices, the development of curriculum and methods inherent to the authentic learning process, and the cultivation of a sense of self that enhances students' concepts and consciousness regarding an interconnected world.

### **66 Examining schooling choices for African American intellectually gifted children**

Keishana Barnes  
University of Memphis  
United States

I use autoethnography to begin to better understand African American mothers' decision-making processes regarding school choice for their intellectually gifted children. Tamminen, Poucher, & Povilaitis' (2017) work on examining conversations between parents and their adolescent athletes during the car ride home after sporting events serves as a model. I attempt to interpret my own talks with my son after he has attended his new school for intellectually gifted children, looking for themes as a way to organize my thoughts.

### **340 Existential acumen for gifted adolescents through reading**

Debra Mishak  
Winona State University  
United States

Paula Christensen  
Northwestern State University of Louisiana  
United States

Gifted adolescents should be provided with safe havens for exploration and facilitation to share and discover the universality of their affective needs and expressions. Existential philosophy can offer guidance in dealing with emotions and taking responsibility for their learning, and it can aid them in discovering their direction and purpose in life. An exciting way of sharing an existential journey with gifted students is through reading. This engaging presentation will provide participants with a bibliography of readings, introduce existential philosophy as a vehicle for facilitating gifted students, and offer insights as to how to use reading as a substantive addition to your repertoire.

### **192 Expanding access and opportunity for English learners**

Lisa Pagano  
Charlotte-Mecklenburg Schools  
United States

Amanda Aycoth  
Charlotte-Mecklenburg Schools  
United States

Alyssa Arrowsmith  
Charlotte-Mecklenburg Schools  
United States

The English Learner (EL) Services and Advanced Studies departments within a large, urban school district have partnered to advocate and expand opportunities for elementary English Learners by focusing on nurturing and identifying gifted potential and delivering rigorous opportunities with appropriate scaffolds to support student success. This strong partnership has resulted in a significant increase in the number of gifted ELs, targeted professional development for classroom teachers, enhanced learning experiences, and improved gifted services. The journey continues as the teams expand the work to secondary school to increase access and opportunities for students.

### **180 Experiences of teachers on their professional development: A qualitative study on teachers in Abu Dhabi**

Ahmed Hemdan  
United Arab Emirates University  
United Arab Emirates

Myra Bacsal  
United Arab Emirates University  
United Arab Emirates

Hala Elhoweris  
United Arab Emirates University  
United Arab Emirates

Mohamed Alzyoudi  
American University of the Emirates  
United Arab Emirates

Osha Almuhaury  
United Arab Emirates University  
United Arab Emirates

Mohamed Safi  
United Arab Emirates University  
United Arab Emirates

Ashraf Moustafa  
United Arab Emirates University  
United Arab Emirates

This research aims to highlight the voices of Abu Dhabi in-service teachers who received professional development (PD) training on teaching the gifted across ten workshops. A post-training focus group discussion was conducted across four groups (14 teachers) who had undergone said PD, facilitated by professors and instructors who have not taught any of the workshops included in the PD training. The research findings revealed how teachers conceptualized "innovation" in their own teaching practice with the gifted and the participants' perceptions on program impact, from their expectations of the PD to challenges faced in implementation to observations on behavioral changes.

### **227 Exploring social justice issues through literature**

Laura Cruickshank  
Westmount Charter School  
Canada

Heather Lai  
Westmount Charter School  
Canada

In our current climate, our young populations are exposed to many social justice issues. While many of these issues are difficult for even an adult to grapple with, it is imperative to address these challenges with children. In particular, gifted students have heightened emotional responses to these topics and

need guidance in navigating these sensitive subjects. Literature such as picture books are the ideal starting point for having these conversations while meeting the diverse needs of the students. Multi-leveled readers with specific learning needs including English language learners, 2e, ADHD, and ASD are supported through this medium. This presentation will provide literary resources and how to incorporate them in the classroom, for remote and in-person learning.

### **234 Exploring students' perceptions of leadership skills in a higher education pre and post training program**

Omar Muammar  
Imam Abdulrahman Bin Faisal  
University  
Saudi Arabia

Leadership skills are a prerequisite in the 21st-century marketplace. Yet graduates often leave the university with high knowledge in their field but less ability and confidence in these key skills. The purpose of this study was to estimate the impact of a two-day leadership training program focused on various leadership skills as perceived by student participants: leading self and others, effective communication, problem-solving, planning, and overall leadership skills. A pre- and post-assessment measured students' perception of leadership skills after attending the leadership program. The sample consisted of (N=96) undergraduate university students. A t-test revealed a significant overall difference in averages favoring the group who attended the program [ $t(95) = 3.89$ ,  $P < .001$ , Cohen's  $d = .79$ ]. The results showed that the training program was effective in developing students' leadership skills. Implications regarding the importance of and need for integrated and explicit instruction of leadership skills and recommendations for future research are included.

### **312 Exploring the effectiveness and quality of an online education program for supporting gifted students**

Leeanne Hinch  
Centre for Talented Youth, Ireland  
Ireland

Colm O'Reilly  
Centre for Talented Youth, Ireland  
Ireland

Cathy Woods  
Centre for Talented Youth, Ireland  
Ireland

Mojca Juriševič  
University of Ljubljana  
Slovenia

Neža Podlogar  
University of Ljubljana  
Slovenia

Georgia Tsoulfa  
CTY, Greece, Anatolia College  
Greece

Haido Samaras  
CTY, Greece, Anatolia College  
Greece

EGIFT is a free online learning platform for parents and teachers developed by European experts in gifted education to provide information on high-ability students. Appropriate teacher education has been identified as an area that would help to support the needs of gifted students, and changes need to be made at the teacher training level to provide guidelines for new teachers on how to work with gifted students (O'Reilly, 2018). In response to these needs, the EGIFT online learning platform was developed. The aim of this study is to evaluate the E-Gift program as a tool to inform parents and teachers, both pre-service and in-service, of high-ability children and gifted education.

### **348 Exploring the experiences of underachieving, profoundly gifted adolescents**

Marisa Soto-Harrison  
Sierra Gifted Educational Services  
United States

This presentation shares results from a phenomenological study completed in early 2020. The purpose of the study was to explore the factors contributing to underachievement among profoundly gifted adolescents. Underachievement was examined through multiple in-depth interviews with five adolescent/young adult participants ranging from 18-25 years of age. Information will be shared regarding personal experiences and the perceived barriers and/or supports to achievement during adolescence and as they transitioned into young adulthood. The implications and effects of expectations, a major contributing factor to underachievement in this population, is explored in depth. This presentation provides recommendations that can be used to avoid underachievement and support profoundly gifted individuals and their families. The results obtained from this study are valuable for parents, educators, and psychologists who support the academic and social emotional needs of profoundly gifted adolescents.

### **216 Facilitating transitions between remote learning and in-school learning**

S. Ley-Anne Folks  
Westmount Charter School  
Canada

Heather Lai  
Westmount Charter School  
Canada

Our presentation explores the triumphs and tribulations of both remote and in-person learning



during these extraordinary times. As we explore differentiation techniques and effective strategies for each educational environment, we will share methods that apply to both the gifted and 2e population. Transitions are often difficult for twice-exceptional learners, and these dramatic and sudden shifts between remote and in-person learning are especially challenging for them. Drawing on our experience with both in-person and remote learning, we invite you to join us as we discuss successful methods and strategies for facilitating transitions between the two learning environments.

### **191 Factors Affecting Irish Primary Teachers' Differentiation for High Ability Students**

Sarah Kearns  
Ireland

Joyce Senior  
University College Dublin  
Ireland

With every diversifying classroom, Ireland promotes an inclusive approach to education for all. Placing high-ability students in this discussion moves us away from a debate about place and provision and instead focuses on pedagogy. This has significant implications for practice and provides potential opportunities for high-ability learners. The purpose of this study was to identify factors influencing primary teacher differentiation practices for these students. By considering the results, we will explore the challenges faced by teachers when differentiating learning experiences for this cohort of students and consider steps towards better supporting teachers in this area.

### **116 Factors influencing the link between perceived educational support and the creative attitude of Polish students**

Piotr Gindrich  
Maria Curie Skłodowska University  
Poland

Zdzisław Kazanowski\*  
Maria Curie-Skłodowska University  
Poland

The main objective of this study is to examine how gender, age, and place of residence can affect the basic link between perceived educational support and creative attitude in a randomized sample of Polish high school students (N=270). A series of factors influencing student creative behavior was assessed. It is hypothesized that (1) there is a strong relationship between perceived educational support and student creative attitude and (2) the interactions of gender, age, and place of residence with perceived educational support regarding the main effect on student creative attitude will be statistically significant. A factorial MANOVA was used to test the hypotheses.

### **328 Failure is the ONLY option: The "F" word we should say every day at school**

Jill Williford Wurman  
The Grayson School  
United States

Melissa Bilash  
The Grayson School  
United States

Failure is crucial to learning, but success is what students are taught to value most highly. In our PreK-12 gifted school, failure is not only acceptable but embraced and even sought-after: we teach that failure is inherently part of bold efforts; big ideas; and genuine, full-hearted effort. Gifted students can overcome intellectual rigidity and risk-aversion and instead learn to explore and experiment, developing resilience and creative problem-solving abilities

necessary for success in academic pursuits and beyond. We will share practical examples of incorporating failure into the culture of gifted classroom and the surprising rewards of celebrating failures rather than successes.

### **352 Finding your inner Baby Yoda: Increasing the emotional intelligence of the gifted daily**

Karen Selby  
Kalamazoo Regional Theater  
United States

What if you could increase the emotional intelligence of every student in your class, every day? Emotional intelligence has been studied and quantified for decades. The correlation between high emotional intelligence and positive life-outcome measures like scoring high on college entrance exams is well documented. What is less well known is what teachers, leaders, students, and parents can do to positively impact students' emotional intelligence. This research is based upon the work of international executive coaches and parents working with their own children.

### **326 First Online Enrichment Platform for Gifted and Talented Children in Turkey**

Ayşe Cilacı Tombuş  
Maltepe University  
Turkey

Önder Tombuş\*  
Maltepe University  
Turkey

Our study presents an online enrichment ecosystem that enables gifted and brilliant students in Turkey to use their potential and improve themselves by providing efficient use, dissemination and sharing of the available resources such as localized content and expertise



from an industrial engineering perspective. Our platform also serves for their families, teachers, and school administrators, and apply innovative digital tools to revolutionize teaching and learning. [www.ustunveyetenekli.com](http://www.ustunveyetenekli.com) is the first online education platform designed for gifted and talented children in Turkey. It was funded by TUBITAK (THE SCIENTIFIC AND TECHNOLOGICAL RESEARCH COUNCIL OF TURKEY). We will present both the study and platform development steps. We have used Moodle Learning Management System to develop our platform including course, quiz, homework, chat, forum, wiki, questionnaire modules. Course content and material has been prepared for STEM, thinking skills, financial literacy, introduction to engineering and coding for ages between 7-11.

### **98 Flexible, future-focused learning for gifted learners in Aotearoa New Zealand**

Madelaine Armstrong Willcocks  
New Zealand Centre for Gifted Education  
New Zealand

Flexible learning opportunities can be used to support the varied needs of gifted learners. These opportunities have been vital in this current pandemic but have been a regular feature of gifted education in New Zealand for some time. A flexible learning model and pathway is offered by the New Zealand Centre for Gifted Education (NZCGE) as part of its broader remit to enhance recognition, access, and support for gifted learners. This presentation outlines the model of flexible learning taken by NZCGE and the role of the current initiatives at government level in New Zealand to support gifted learners.

### **238 Forest School for high achievers**

Karen Killeen  
International School of Uganda  
Uganda

Forest School grew in Scandinavia in the 1970s. In the UK, Ofsted, a government schools regulator, said that all primary school students should have access to a Forest School setting. Forest School takes learning outside of the classroom and uses natural resources to stimulate creativity and innovation. The methodology encourages teaching to move towards a facilitator role, which is perfect for those students who thrive on challenge and curiosity and yet are at risk of underachieving. Follow me through a Forest School case study targeting older primary school students whom this international school has identified as high achievers. This session is open to all educators and parents.

### **361 Fostering creativity in underrepresented students through biography: An application of culturally responsive teaching strategies**

Merve Topak-Jamsran  
Jodie Mahony Center for Gifted Education  
United States

Children from different cultural backgrounds bring knowledge and life experiences into the classroom, including family norms, values, traditions, and historical contexts that shape their individuality. Most factors influencing creativity are tied to the environment and culture in which the person exists (Runco, 2010). In addition to knowledge about diversity and how it shapes creativity, teachers need to convert this understanding into culturally responsive instructional strategies (Gay, 2002). In this session, participants learn how to incorporate culturally responsive teaching strategies, the principles

of fostering creativity in classrooms, and the power of using biographies of creative, diverse figures through exemplary hands-on activities.

### **203 Fostering well-being and career development in gifted adolescents**

**Mandy Wai-chan Chan**

The University of Hong Kong  
China

Jimmy de la Torre  
The University of Hong Kong  
China

Mantak Yuen  
The University of Hong Kong  
China

Gifted learners need support services to guide them through the process of career development so they can then make positive contributions to society. In this presentation, first the unique social and emotional needs of gifted learners are explored. The interplay between environmental and personal factors in the talent development of gifted learners will also be reviewed. Next, there will be a discussion on ways of fostering the well-being and career development of gifted learners through a strength-based approach in positive psychology, coaching and career counselling, and service-learning. Lastly, the implications for teacher and parent education will be discussed.

### **136 From "No" to "Go": What next when driving whole school growth in gifted education**

Melinda Gindy  
Australian Association for the Education of the Gifted and Talented  
Australia

Robinson and Campbell (2010) purport that practice, especially in leading-edge schools, should feed

into theory and shape policy (p. 3). Given that quality gifted education practices are not simply “one size fits all,” how do schools grow their provisions for gifted students when resources are thin and educators are at maximum cognitive load? Utilizing the Coalface Experience and embedded research across multiple sectors, the presenter will explore the strong foundations of successful gifted education and journey through the development of broad and robust gifted education practice. Delegates will engage with practical strategies and have opportunity for personal reflection relevant to their individual circumstance.

### **308 Gender differences in gifted adolescents**

Madlena Arakelyan  
Yerevan State Medical University after Mkhitar Heratsi  
Armenia

Present research aims to analyze the gender differences in gifted adolescents in the context of personal traits in Yerevan, Armenia. The initial sample consisted of 500 high school students aged 16-18. In the course of study, 35 of 500 participants were defined as gifted. To reveal the psychological identities of the participants, the Big Five personality test was applied. Gifted female adolescents show neurotic tendencies manifested through anxiety, depression, self-criticism and emotional instability. Gifted males show vulnerability to neurosis by displaying self-criticism and emotional instability. The results, particularly neurotic tendencies among both genders, are in line with the research conducted in other countries.

### **242 Gifted advocacy: Building a social media movement**

Stefanie McKoy  
University of Arkansas-Fayetteville - Fayetteville, AR  
United States

Gifted advocacy is important to the support and continuity of quality gifted education. Online social media is an effective tool for helping address the needs of students who are gifted, promoting educational needs, and advocating for change. Social movements are happening online, and gifted advocacy needs a voice. This presentation provides advice for effective online advocacy.

### **286 Gifted and talented education in Arkansas: Accuracy of identification and efficacy of programming**

Bich Thi Tran  
University of Arkansas  
United States

Studies focused on rural gifted education's effectiveness are particularly rare. This study leverages achievement and demographic data of third through eighth grade students to assess the effectiveness of gifted and talented (G/T) programs in Arkansas, USA, known as a relatively rural state. Using regression analysis and controlling for student characteristics, we investigate the association of gifted services with student outcomes for students who scored above the 95th percentile for math or reading relative to a similar ability group that did not gain access to gifted services. We found that students with G/T services experience significant gains in their academic achievements across five cohorts.

### **230 Gifted and Talented International: A resource for professional development**

Laurie Croft  
Belin-Blank Center for Gifted Education and Talent Development  
United States

Anna Payne  
Baylor University  
United States

Teachers joining the WCGTC can utilize Gifted and Talented International (GTI), the organization's scholarly journal, as a resource for professional development. While all articles have information of importance for educators to understand, some speak directly to issues of critical consequence to teachers. This qualitative study explores 20 years of GTI for articles addressing teachers' attitudes, beliefs, professional growth, pedagogical practices, and strategies facilitating a positive impact on students. International organizations and reports identify issues that contribute to teacher success; GTI could ensure that its volumes include articles that are relevant to developing teacher expertise with gifted children across the globe.

### **374 Gifted and Talented Response to Intervention to aid in identifying and servicing gifted learners**

Toddie Adams  
Marshall County School District  
United States

Gifted and Talented Response to Intervention (GT/RtI) is a three-tiered delivery model used to meet the needs of exceptional children in general education classrooms. GT/RtI offers research-based differentiated instruction for high-ability students and allows for progress monitoring to assess the growth of gifted and potentially gifted children in the various areas of giftedness. Because GT/RtI provides opportunities for enriched and accelerated learning and gathers qualitative and quantitative data to evaluate the whole child, identification of gifted learners moves beyond test scores to focus on definitions of giftedness and gifted behaviors exhibited in children

including those in federally identified groups.

### **199 Gifted and talented teacher leaders: Critical attributes and strategies for your success**

Diane Heacox  
St. Catherine University  
United States

Whether you have the term “gifted” in your job title or not, many teachers are viewed by their colleagues as teacher leaders for gifted education in their schools. With the shift to more online or blended learning, the needs of gifted learners may have gone unaddressed. Teachers need to continue to empower gifted students with more challenge and complexity as well as more control and encouragement for their independence. Yet, educators cannot stand alone. As a teacher leader, learn how to become increasingly effective, collaborate successfully with others, and value differing perspectives in face-to-face or online settings.

### **339 Gifted children education advocacy: A never-ending story**

Eva Vondrakova  
Association for Talent and Giftedness (STaN)  
Czechia

Those who are interested in helping gifted children to fulfill their potential can find enough information about the topic; however, the praxis is often far behind. Using examples from our counseling center, we will show what problems usually hinder the successful development of the potential and personality of gifted children. Problems are often connected with attitudes towards the gifted. We came across a negative attitude (“caring for the gifted is immoral”) not only in the general public, but unfortunately also among experts in the field of education.

Therefore, advocacy is still one of the main tasks on which the success of gifted education depends.

### **206 Gifted Children Enrichment Program of APCS in Portugal**

Ana Fernandes  
APCS - Portuguese Association of Gifted Children  
Portugal

Marcela Pinho  
APCS - Portuguese Association of Gifted Children  
Portugal

The Gifted Children Enrichment Program of the Portuguese Association for Gifted Children (APCS) was the first such program in Portugal and has existed since 1995. The program goals are to identify gifted children, to promote children’s well-being, to guide children’s parents and teachers, and to develop partnerships with the community. The program provides activities for the children that help them to develop their gifts and talents and training for their parents and teachers. This program has brought benefits to students, parents, teachers, school, and society. As a result, initiatives have been created to promote development and inclusive education (Serra, 2021).

### **119 Gifted girls: The times have changed – have they?**

Annette Heinbokel  
Institute fuer Enrichment und Akzeleration  
Germany

Girls are as gifted as boys, though they don’t make it as clear when they are not sufficiently challenged, so they are less often identified as gifted. Their visible behavior is a mixture of their genetic endowment and education. These differences in behavior, in interests, and in their choice of subjects would not matter if

they had no influence on their careers as adults. Quite apart from laws, rules, and traditions in different countries, girls need self-confidence to make use of all the options that are on offer and open to them. Different ways to achieve that goal will be presented.

### **132 Gifted learners environmental perceptions about the present mathematics situation in South Africa**

Annari Milne  
Central University of Technology (CUT)  
South Africa

Mike Mhlolo\*  
Central University of Technology  
South Africa

South Africa is now realizing that to transform student potential into skills that are needed in the 21st century, well-structured talent development programs must be put in place for its gifted students. This paper reports the findings of a qualitative study embedded in Gagne’s differentiated model of gifts and talents to determine the perceptions of gifted mathematics learners in their present inclusive classrooms about the education systems and factors influencing their achievement. The analysis of these results clearly indicated that the South African mathematics curriculum needs to be differentiated in order to give all learners access to mathematics.

### **174 Gifted learning and talent development in the classroom: The role of the intuitive theory of action**

John Munro  
Australian Catholic University  
Australia

This presentation describes a model for identifying and responding to gifted learning in the classroom context. International evidence

suggests that educators frequently lack ability in these areas. The presentation also reports evidence that gifted students use fluid analogizing and hierarchical thinking spontaneously and selectively to generate lesson interpretations that have the characteristics of intuitive theories of action (ITA). These ITAs are personal and subjective and include possibilities the student has not yet tested. In addition, the presentation describes the metrics used to quantify the ITAs of both verbally and non-verbally gifted students in classrooms. These tools lead directly to identifying gifted understanding and to appropriate differentiation of lessons.

### **16 Gifted students and students with trauma: Twice exceptional?**

Melissa Sadin  
Ducks & Lions: Trauma Sensitive Resources  
United States

More than one in four children in every classroom are exposed to prolonged trauma that impacts their neurobiological development. There is a unique intersection where trauma-informed care meets gifted education. The problem to be examined in this session is that most gifted education teachers lack the training needed to support the unique internalizing and externalizing behaviors of their students with trauma. In this highly engaging session, participants will realize the prevalence of trauma. Appropriate topics in neurobiology and child development will be discussed to assist participants in recognizing the impact of trauma on learning and behavior. Strategies for building resilience for students who have experienced trauma in the classroom will be provided. Small group activities will provide participants with the opportunity to practice learned strategies. Finally,

a discussion of the importance of resisting retraumatization for students in our schools and classrooms will be conducted.

### **356 Gifted students' learning experiences in an online enrichment program**

Aakash Chowkase  
Purdue University-West Lafayette  
United States

Yao Yang  
Purdue University-West Lafayette  
United States

Kristen Seward  
Purdue University-West Lafayette  
United States

Abdullah TUZGEN  
Purdue University-West Lafayette  
United States

Tugce Karatas  
Purdue University-West Lafayette  
United States

The purpose of this concurrent mixed-method study was to explore the learning experiences of gifted students during their participation in an online enrichment program. Sixty-eight students (25 girls) in grades 3-8 participated in a four-weekend-long enrichment program at a Midwestern USA university in February 2021. Three surveys were administered to collect data from students, program staff, and teachers to examine differences in perceptions of classroom quality among them. Perceptions of classroom quality were investigated in STEM and non-STEM classes and by grade levels. Critical elements of a quality online enrichment program and best practices for online enrichment programs are discussed.

### **315 Guiding 2e and gifted learners through a global pandemic**

Brian Lux  
Rockingham County Public Schools/  
Camp Sequoia  
United States

The needs of twice-exceptional (2e) learners could often be mismanaged or even absent during the global pandemic. Lessons learned while facilitating a residential summer program for 2e learners in 2020 provided real-world specialized learning strategies for gifted and 2e learners in multiple schools during the 2020-21 academic year. Blended in-person attendance with an alternating-day schedule made providing developmentally appropriate instructional strategies that supported academic growth and addressed social-emotional needs a challenge. This presentation outlines interventions, strategies, home/school collaborations, and outcomes both from a residential and a K-5 perspective, geared towards supporting students while maintaining important connections with parents and key stakeholders.

### **276 Handwriting and spelling: Are the foundations of writing really necessary in gifted education?**

Miriam Ramzy  
Foothills School Division  
Canada

Writing by hand continues to be the most common method students use to communicate their knowledge in school, and a large percentage of the day involves written tasks. This session will examine if instruction in the foundations of writing, handwriting, and spelling have a role in young gifted children's education. This presentation will disseminate the chief findings from the presenter's dissertation which looked at how grade one gifted children's writing changed after one year of explicit and systematic instruction in handwriting and spelling. The results from this



study have the potential to inform teacher programs, curriculum, pedagogy, and policy.

### **318 Hidden in plain sight: How understanding intelligence, personality, and privilege helps us find and educate gifted students**

Barbara Kerr  
University of Kansas  
United States

Maria Alexandria Vuyk  
Universidad Católica "Nuestra Señora de la Asunción"  
Paraguay

Cognitive abilities, personality, and privilege are all powerful predictors of academic achievement, career success, and well-being. None of these variables alone, however, can predict appropriate educational programming for gifted students. The use of intelligence scores alone will underpredict the talent of less privileged students. Commonly used tests of overexcitabilities confuse openness to experience, a factor associated with creative achievement, with neuroticism, a factor associated with mental health disorders. We will show how methods that use culturally appropriate, valid measures of ability, personality, and privilege can find giftedness hidden in plain sight, with examples of student profiles.

### **155 Hope, kindness, gratitude: Antidotes to apathy, fear, and anger**

Michele Kane  
Northeastern Illinois University  
United States

Dorothy Sisk  
Lamar University  
United States

When sensitive gifted youngsters are surrounded by news of social injustice, violence, climate collapse,

and the global pandemic, life can be daunting, and they can have difficulty in maintaining a sense of positivity about the world. Evidence-based approaches are emerging that demonstrate the encouraging effects of qualities such as hope, gratitude, and kindness, which foster well-being and inner balance. This session provides strategies for helping gifted children maintain equilibrium including mindfulness, self-compassion, creative expression, developing an optimistic style, and generating pathways to service.

### **260 How to be an effective teacher for gifted learners with ADHD**

Debbie Troxclair  
Lamar University  
United States

Eleonoor van Gerven  
Slim! Educatief  
Netherlands

Gifted learners with ADHD may have difficulties with executive skills. These difficulties may result in behavioral problems and/or learning struggles. These difficulties may also mask their high abilities and/or their high abilities may result in these learners hiding or ignoring their struggles. In either case, these students often have difficulty achieving their maximum potential. In this presentation, theory will be integrated with practice so that teachers can assist twice-exceptional gifted learners in both developing their gifts and coping with their struggles.

### **342 How to inspire gifted students: Teacher, strategies, and environment created**

Claudia A. Cornejo-Araya  
Universidad Católica del Maule  
Chile

Leonie Kronborg  
Monash University  
Australia

This doctoral research presents the three main theoretical categories of a constructivist grounded theory study. The study aimed to identify what makes a teacher inspiring from the perspectives of gifted and highly able students in Victoria, Australia. The process was conducted through a constant comparative method, and memos were organized to facilitate this process. The interrelated categories that emerged were "Being a knowledgeable and passionate teacher," "Creating an academically safe learning environment," and "Teaching above and beyond the recommended curriculum." These categories constitute the basis of a model for inspirational teachers and highlight the importance of teachers' enthusiasm to teach these students.

### **157 How to support gifted students to develop their talents in non-formal and informal settings**

Kerstin Brausewetter  
Brausewetter Institute for Talent Development in Teaching and Learning  
Germany

The objective is to support gifted students in developing their individual talents. To achieve this goal, Largo's concept of "fit" versus "misfit" (Largo & Jenni, 2007) is applied to get an idea of the student's needs. The ProfilPASS tool (German Institute for Adult Education, n.d.) is used to assess the student's skills acquired in various settings. Examples for appropriate activities in different domains and in non-formal and informal settings will be presented.

### **88 How to teach and assess the five aptitudes of STEM innovators**

Jeanne Paynter  
Educating Innovators  
United States

How can we fill the STEM talent gap, which has root causes in beliefs,



K-12 education, geography, and demographics? Research shows that the middle grades are the time to identify and nurture STEM potential. There are five STEM-specific aptitudes that undergird high achievement: engagement in STEM, investigation, problem solving, spatial reasoning, and mathematical reasoning. To nurture these aptitudes in all children, we can create instructional goals that target them in the context of performance-based STEM content and skills. Teachers and learners assess the STEM talent aptitudes using developmental learning progressions to create rubrics.

## **92 How to teach and assess the seven aptitudes of innovators**

Jeanne Paynter  
Educating Innovators  
United States

Research on innovation reveals that there are seven cognitive and psychosocial aptitudes that undergird high achievement across disciplines. What if you could create instructional goals to teach the aptitudes of innovators, such as curiosity, creativity, insight, metacognition, or persistence, while still addressing the required curriculum content standards? This session presents a process for creating talent-targeted goals to identify and nurture the aptitudes of innovators in all children. These talent goals are rooted in rich content and applied in performances of understanding. Both teachers and learners can assess talent goals using the talent aptitude learning progressions to create developmental rubrics.

## **300 Identification and services: Three regions and approaches to services in the United States**

Wendy A Behrens  
Minnesota Department of Education  
United States

Peter Laing  
Arizona Department of Education  
United States

Bruce Riegel  
Maryland State Department of Education  
United States

Without a federal mandate to identify or serve gifted students in the United States, state education agencies and local education agencies are responsible for determining programs and services for gifted students. Although decentralization allows states to respond to the specific needs of their population, it results in a wide disparity in services across and within states. In this session, three state directors of gifted education will discuss identification of students for services and program models. The presenters represent diverse populations located in the East, West, and Midwest regions of the United States.

## **138 Identification of students gifted within spatial ability – an IRT approach**

Ellen Egeland Flø  
University of Oslo  
Norway

Lately, there has been an increasing focus on students with high spatial ability because it has demonstrated a robust correlation with STEM (science, technology, engineering, mathematics) achievement. Schools have generally not been offering these students proper differentiation, nor have they been widely identified. This research investigates whether items on a qualitative checklist can demonstrate good psychometric qualities for identification of high spatial-ability students through the application of item response theory (IRT). Further, the ability estimates are validated against the spatial reasoning instrument (SRI)

in an attempt to bridge the gap of quantitative and qualitative research on high spatial ability students.

## **237 Identifying exceptional talent in STEM: Increasing diversity and assessing creative problem solving**

C. June Maker  
University of Arizona  
United States

Randy Pease  
DISCOVER Projects  
United States

Kadir Bahar  
University of Georgia  
United States

In the Cultivating Diverse Talent in STEM Project, assessments of creative problem solving in life science, physical science, and math were developed, field tested, and combined with an assessment of spatial analytical ability to identify students with exceptional talent in STEM. Students were compared with conventionally identified (GPA, letters of recommendation, self-statements) gifted learners. Significant differences were found in GPA, ethnicity, and parent level of education. Although the GPAs of conventionally-identified students were significantly higher (3.71) than students identified with new assessments (3.07), those identified with the new assessments scored higher on all performance assessments and at similar levels on concept maps and math.

## **161 Igniting new ways of learning for the rural and remote gifted students**

Silvia Rudmann  
Aurora College  
Australia

This session will present insight into the creation and ongoing development of the gifted education

practices of Aurora College, the first selective, virtual high school for gifted students living in rural and remote areas of NSW. This one-of-a-kind public school allows students in these communities to remain with their families while enhancing opportunities for their talent development. Aurora College delivers innovative virtual pedagogies with the vision to empower learning and to motivate and equip gifted students to pursue higher education and become future leaders in their rural communities. Gifted students find their “tribe” at Aurora College, and their sense of isolation and lack of opportunities fade away.

### **70 Impact of acceleration programs on the psychological well-being of gifted adults**

NUR EVA  
UNIVERSITAS NEGERI MALANG  
Indonesia

The purpose of this study was to determine the impact of accelerated programs on the psychological well-being of gifted adults. The research used the phenomenology method. Participants are five students over 18 years old who have taken accelerated programs in junior and senior high schools. The data collection method is in-depth interviews. Interview themes are based on dimensions of psychological well-being, namely self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. The data analysis technique used thematic analysis

### **18 Improv-ing social skills: Using improv games to develop social skills in gifted students**

Matthew Zakreski  
The Neurodiversity Collective  
United States

Improvise acting (or Improv) games are a fun and effective way to

teach and shape social skills. These games rely on quick thinking, verbal skill, creativity, and enthusiasm. As the content for the games is supplied by the participants, having broad and varied interests also serve to make the games better. Research has indicated that Improv games are effective in teaching prosocial behavior, emotional resiliency, cognitive flexibility, failure tolerance, and sustained social engagement.

### **197 Improving additional support for learning: What does is mean for highly able learners?**

Margaret Sutherland  
University of Glasgow  
United Kingdom

In 2019 the Scottish Government set up an independent review of the implementation of additional support for learning in schools in Scotland. Since the Additional Support for Learning (Scotland) Act includes highly able learners, this review was important for those working in the field. This paper will examine the results and recommendations of the review and the subsequent joint action plan for additional support for learning. Qualitative document analysis was used to determine where the needs of highly able learners were recognized and how the joint action plan offers support.

### **269 In search of equity: Providing access to training and resources through free online resources**

Bruce Riegel  
Maryland State Department of Education  
United States

Wendy Behrens  
Minnesota Department of Education  
United States

Using Jacob Javits Grant funds, state One created an online platform that

serves as a repository of resources for educators/families/stakeholders and includes data, identification, service models, instructional strategies, and training modules for equitable identification. Using its Jacob Javits Grant, state Two funded Project North Star, a three-prong approach that elevates identification and support for disadvantaged/underserved rural gifted populations by training educators, leaders, and the community; culturally responsive training modules developed by the state’s Department of Education are free and available through a learning management system. Universal Plus?? utilizes North Star’s modules, increasing identification of students, particularly in computer science, who are English language learners, twice-exceptional, or from traditionally underrepresented racial/ethnic groups.

### **159 Incorporating case studies in equity-driven professional learning with educators of gifted children**

Angela Novak  
East Carolina University  
United States

Katie Lewis  
York College of Pennsylvania  
United States

Christine Weber  
University of North Florida  
United States

Carefully crafted professional learning can positively impact teacher perceptions of marginalized gifted learners by using case studies to examine scenarios that teachers of the gifted may encounter in the classroom. This session presents the benefits of using case studies while facilitating teacher training, whether pre-service or in-service, for teachers of gifted children, overlaid with seven principles of equity-driven professional learning. Participants will

briefly walk through an example of a case study, seeing an example of the case study in practice.

### **64 Increasing equity through the use of district demographic norms**

Candace Huehls  
Indianapolis Public Schools  
United States

At the beginning of the 2020-21 school year, a large, urban district in the Midwestern USA began using district demographic norms for identification. Census testing revealed a large disparity in test scores across racial lines, and this change was necessary. This session will focus on equitable representation in programming and what our early results reveal.

### **346 Infusing the Reggio Emilia approach in regular education classrooms as inclusive practice for gifted students**

Martina Brazzolotto  
District of Campodarsego  
Italy

Joyce Miller  
Texas A&M University Commerce  
United States

Connie Phelps  
Emporia State University  
United States

Our study implemented a qualitative illustrative case study design (Mertler & Charles, 2008) as the conceptual framework. We conducted two virtual visits and interviews with school administrators in American Reggio Emilia Approach (REA) schools and two onsite visits to the Malaguzzi Centre with handwritten transcription in Italian. Our study analyzed 12 hours of transcription for each pedagogical theme. School A in the Midwest USA represented a "full on" REA school, while School B in the Southwest USA

typified a franchised, REA-inspired school. Administrators in Schools A and B each received our study protocol prior to the visit, and both visits included all eight pedagogical themes.

### **249 Insight into a bright mind: The latest neuroscience of giftedness and living as liberated beings**

Nicole Tetreault  
Bridges Graduate School for Cognitive Diversity in Education  
United States

Gifted individuals perceive and respond to the world with elevated receptivity and processing which originates from our neurobiology and physiology. Neuroscience is illuminating how no two brains are alike. Each of our brains is as unique as our fingerprints. Revolutionize your thinking by understanding how gifted experiences may be intense because we are simply hard-wired differently! Learn about recent studies that report how high-IQ individuals can be uniquely at risk for psychological and physiological conditions. Explore positive practices centered around neuroscience and psychology to support the whole individual. When we tap into our essence, we live and thrive as liberated beings.

### **325 Intuitive thinking, creative thinking, and artistic gifts: Identifying them and not suffocating them**

Federica Mormando  
Eurotalent Italia  
Italy

IQ does not take into account non-measurable gifts (artistic talents, intuitive thinking, creative thinking) and adult gifts. The presence of these talents is too often not understood by the school, family, or society, and very often it does not coincide with a very high IQ. Based on many years of

experience, my session explains how to identify non-measurable gifts and above all how not to suffocate them. Examples are shown in figurative, musical, mathematical, and intuitive and creative thinking fields. This presentation is about children, teens, and adults who rediscover forgotten talents.

### **198 Investigating neurodiversity**

Debbie Troxclair  
Lamar University  
United States

Claire Hughes  
College of Coastal Georgia  
United States

Twice-exceptional gifted learners may experience internal emotional struggles because of the dissonance of high intelligence coupled with a concurrent disability. By participating in a thematic, interdisciplinary-conceptual unit, Normal vs. Neurodiversity, twice-exceptional middle school learners can experience opportunities for inter and/or intrapersonal development and quiet internal turmoil.

### **21 It's not like Sheldon: When giftedness and autism spectrum disorder interact**

Matthew Zakreski  
The Neurodiversity Collective  
United States

There is significant overlap between the traits of a gifted child and a child on the autism spectrum. These similarities can be confusing to families, teachers, and even mental health professionals and can impede access to correct services. This session will seek to explain the differences between giftedness, autism, and twice-exceptionality involving both.

### **35 Keys to successful collaboration, co-teaching, and coaching in gifted education**

Emily Mofield  
Lipscomb University  
United States

Vicki Phelps  
Milligan University  
United States

Collaborative teaching practices support regular education teachers in learning skills and strategies to differentiate for gifted students. Learn the tools and “how-to” steps for facilitating and sustaining collaborative teaching and instructional coaching in ways that build capacity for teachers to challenge and support gifted students all day every day.

### **8 Keyword equity: Making an equitable gifted system from scratch**

Justin Villet  
Sphinx Gifted Consulting, LLC  
United States

Gifted systems are difficult to create because of a variety of factors, but creating equitable gifted systems are even more difficult because they tend to challenge the way in which many educators think of “giftedness.” Over the past decade, more and more states have been creating legislation that define the term or requirements, but without much guidance. Creating a gifted system has political, cultural, academic, and equitable implications; this presentation will help guide educators through those implications.

### **76 Know thyself, express thyself, apply thyself: Purposeful empowerment in goal setting for gifted learners**

Vicki Phelps  
Milligan University  
United States

Karah Lewis  
Sumner County Schools  
United States

How do social-emotional awareness and self-regulation impact effective goal-setting, motivation, and academic achievement in gifted learners? Come learn how metacognitive and personalized goal-setting processes lead to purposeful empowerment for gifted learners. This session provides a successful approach to goal-setting through reflective focus on intrapersonal awareness, interpersonal skills, and application to learning. Handouts, helpful hints, and examples of practice are provided.

### **102 Leading change through gifted education policy innovation in NSW, Australia**

Bohdan Balla-Gow  
NSW Department of Education  
Australia

Carmela May  
NSW Department of Education  
Australia

Marek Brewster  
NSW Department of Education  
Australia

Lynda Lovett  
NSW Department of Education  
Australia

In 2017, the New South Wales (NSW) Department of Education, Australia, commenced the development of a policy in high potential and gifted education as a response to emerging research in the field. Mark Scott, secretary of the NSW Department of Education, also announced a policy review in his speech “The Promise of Potential,” presented at the previous WCGTC conference. This current presentation describes the policy implementation journey for educational leaders. Each stage of

the implementation process is firmly supported by data and backed by research.

29 Lessons learned from remote instruction with gifted learners during the COVID-19 pandemic

Kimberly McCormick  
University of Cincinnati  
United States

Keri Guilbault  
Johns Hopkins University  
United States

Educators in schools across the globe faced unprecedented challenges because of the COVID-19 pandemic. Beginning in the spring of 2020, educators were faced with the challenge of supporting the diverse learning needs of students through remote learning. With such a quick transition, were our most advanced learners left to support themselves, or did this environment allow gifted learners to thrive? In this presentation, the researchers will share results of a study that explored the challenges and teaching practices implemented with gifted learners during the pandemic. Recommendations for future blended or online learning strategies that may benefit gifted learners will be presented.

### **179 Life satisfaction of gifted and average adolescents in Hong Kong**

Mantak Yuen  
University of Hong Kong  
Hong Kong

Lue Fang  
National University of Singapore  
Singapore

Eric Fung  
Hong Kong Academy for Gifted Education  
Hong Kong



Jiahong Zhang  
University of Wisconsin-Madison  
United States

Serene Chan  
The University of Hong Kong  
Hong Kong

Florence Wu  
The University of Hong Kong  
Hong Kong

Jimmy K.Y. Wong  
Hong Kong Academy for Gifted  
Education  
Hong Kong

This presentation provides a brief overview of the life satisfaction of adolescents and reports data from a study in Hong Kong to examine properties of a Chinese version of the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS). The scale was completed by 676 Chinese adolescents attending the Hong Kong Academy of Gifted Education, and 702 students of average achievement in mainstream high schools. Results indicated that gifted students conceptualize life satisfaction in the same way as their average-attainment peers in regular schools. Results support the applicability of BMSLSS for use with Chinese students. Practical strategies for enhancing life satisfaction are suggested.

### **259 Linking community problem solving and leadership**

April Michele  
Future Problem Solving Program  
International  
United States

Gifted learners of all ages are often hyper-aware of local and global events – political, environmental, humanitarian, and a multitude of others. As our brightest students develop awareness of community concerns, the tools for how to take action or problem-solve can be

immensely empowering. Community Problem Solving (CmPS) offers strategies that open students' minds to prepare them for citizenship in a global society. Today's students delight in active learning experiences with authentic outcomes. As Dr. E. Paul Torrance stated, "The genius of the future will be the creative mind adapting itself to the shape of things to come."

### **158 Living with loss: Easing the pain**

Dorothy Sisk  
Lamar University  
United States

Michele Kane  
Northeastern Illinois University  
United States

Loss has been pervasive and often seismic in the current global pandemic. Because of their intensity, sensitivity, and depth of thinking and feeling, gifted students often have far more difficulty than other students in coping with losses and staying focused on learning. The focus of this session is to provide strategies and tools to help gifted students understand their sense of loss and build resilience and self-regulation so they can be successful in online education.

### **272 Long-term effects of second-language instruction on gifted students' verbal intelligence**

Andrew Almazan Anaya  
CEDAT Talent Attention Center  
Mexico

This comparative research found how second-language instruction at school relates to increases in gifted students' verbal intelligence scores ten years later. One-hundred college students, aged 18 and 19 years old, were evaluated with the WAIS IV, the Scholastic Assessment

Test (SAT), and a report on past language experiences. This research showed that verbal intelligence scores, measured through Verbal IQ and Verbal SAT, were significantly correlated with a history of second-language instruction and students' bilingual proficiency. It proved, through comparative grouping, that the cognitive demand of acquiring and using a second language may have had long-term cognitive effects.

### **263 Low-income gifted students: What are we missing?**

Justin Pata  
Katy Independent School District  
United States

There tends to be a different response when trauma and/or low income is a factor in education. These factors cause the brain to be focused on different things. We will explore research that identifies the shortcomings in gifted identification in low-income schools and the reasons that these shortcomings might happen. We will then discuss how to better identify and serve these students.

### **226 Making friends with our fears**

Laura Cruickshank  
Westmount Charter School  
Canada

Heather Lai  
Westmount Charter School  
Canada

Psychologist Kazimierz Dabrowski identified that the gifted are emotionally overexcited; they tend to have intense emotional lives. When these intensities combine with their asynchronous development, gifted children can experience high levels of anxiety. Dabrowski also recognized that the creative process is important in personality development of the gifted and talented. Art education



can provide gifted students with opportunities to explore their emotions. The art process allows for understanding of intense fear, rage, anxiety, joy, or ecstasy. Exploring fears through art provides a necessary tool for emotional regulation. In this second iteration of our program, we have weaved in using technology in a remote setting.

### **131 Maladaptive perfectionism and academic achievement in undergraduate gifted students: The role of the buffering effect**

Fitriani Yustikasari Lubis  
Universitas Padjadjaran  
Indonesia

Lydia Freyani Hawadi  
Universitas Indonesia  
Indonesia

Rose Mini Agoes Salim  
Universitas Indonesia  
Indonesia

Urip Purwono  
Universitas Padjadjaran  
Indonesia

This study explains the changing impact of maladaptive perfectionism on academic achievement when teachers' perceived expectations, self-compassion, and goal adjustment intervene. This study uses a mixed-method approach and explanatory sequential design to test the proposed moderated mediation theoretical model. In the quantitative stage, 86 undergraduate gifted student respondents filled out four questionnaires. In the qualitative stage, interviews with eight respondents were selected from the first stage. The results show that perfectionism produces a negative effect on academic achievement and teacher perceptions strengthen attitudes of perfectionism. Self-compassion and goal disengagement can reduce the negative impact

of perfectionism on academic achievement.

### **309 Mawhiba's summer enrichment programs in the time of COVID-19**

Khalid Alsharif  
Mawhiba  
Saudi Arabia

Sondos Alwahieb  
Mawhiba  
Saudi Arabia

2020 was a challenging and exceptional year with the restrictions implemented due to the COVID-19 pandemic. In consideration of the students' health and safety, Mawhiba decided to conduct its summer enrichment programs remotely and applied all the precautionary coronavirus-related health measures. The programs served 3,985 students in two sessions during July and August 2020 for three weeks each. A study was conducted to measure the quality of the programs and to find out to what extent the programs have an impact on students' knowledge and skills when they are applied remotely

### **367 Milestones in creative thinking since the Marland report**

Connie Phelps  
Emporia State University  
United States

Todd Lubart  
University of Paris  
France

Considered a milestone in gifted education, the Marland Report defined six areas of high performance potential or achievement for three to five percent of the school population. Listed after general intellectual ability and specific academic aptitude criteria, performance-based "creative or productive thinking" appeared third as a criterion for giftedness.

In this context, creative thinking seemed associated with achievement or demonstrated ability. This session discusses results from a bibliometric study tracing advancements and understandings in the field of creativity since the Marland Report. Presenters offer educators and psychologists suggestions to identify and develop creative potential through domain-specific measures in schools.

### **122 Mindfulness in nature: Wake up the wild**

Dorothy Sisk  
Lamar University  
United States

Michele Kane  
Northeastern Illinois University  
United States

Solastalgia is distress caused by environmental damage and sparks the grief, sadness and despair experienced by many gifted students in response to this devastation. Mindful awareness is an effective and calming countermeasure to the students' existential and psychic pain. This session is intended to honor our connection to the Earth by empowering gifted students to become global stewards and environmental activists.

### **229 Mission (im)possible: Parenting twice-exceptional children holistically through an ecological framework**

Lin Lim  
Bridges Education Group  
United States

Parents often struggle to understand and thus effectively parent twice-exceptional (2e) children. A nuanced understanding of the complexities of 2e children is presented followed by a theoretical framework to aid parents in parenting 2e children across their

development, with a case study illustration.

### **287 Montessori: A home for gifted children**

Louise Reid  
University of Central Florida  
United States

Jennifer D. Moss  
Emporia State University  
United States

Connie Phelps  
Emporia State University  
United States

Gifted students can benefit immensely from an environment that encourages them to soar while being carefully guided by very well-trained guides. The Montessori Method is an ideal learning environment due to its "follow the child" philosophy, its interest-driven curriculum, and its tradition of seeking learning opportunities outside of the classroom. It is ideal for children who have been identified as gifted very young, since the ability to accelerate is flexible and simple. All children are encouraged to work at their own pace, follow their interests, and develop their talents while working closely with their guides (teachers) on their challenges.

### **30 Motivational pathways leading to gifted underachievement: Longitudinal trajectory classes and educational outcomes**

Alicia Ramos  
KU Leuven  
Belgium

This study used a longitudinal, person-oriented approach to examine a developmental theory of motivational belief patterns leading to underachievement among high-ability students (Pathways to Underachievement model, or PUM;

Snyder & Linnenbrink-Garcia, 2013). We tested the PUM on a sample of high-ability students ( $IQ \geq 120$ ) during the first two years of secondary school in Belgium ( $N=403$ ). Results indicated an adaptive class and two maladaptive classes. The maladaptive classes largely corresponded with the predictions of the PUM in terms of motivational development patterns and school outcomes, as they showed higher disengagement and underachievement across student, parent, teacher, and measured perspectives.

### **262 Moving gifted math students beyond problem solving: Using problem posing to foster creativity**

Anna Payne  
Baylor University  
United States

Shirley Fortenbaugh  
Loudoun County Public Schools  
United States

It is crucial that gifted children are given opportunities to pose their own mathematical problems. Inquiry-oriented mathematics instruction must include not only problem solving but also problem-posing opportunities. Encouraging these opportunities can enhance students' creative thinking, increase mathematical understanding, and develop appreciation for mathematics. Participants will discuss the importance of incorporating problem-posing activities into their classrooms, observe structures and routines that would allow problem posing in their own classrooms, examine rich examples of problem solving and posing tasks, and use a rubric (Sheffield, 2000) to score problems posed by students to evaluate their creativity.

### **218 MOVING MIND: RESIDENTIAL SUMMER CAMP FOR FAMILIES WITH GIFTED CHILDREN**

M. Viviana Castelli  
Step-net Onlus  
Italy

During the 10 years of experience with the gifted children and their parents, I have developed several projects in support of parenting and their gifted children. I accompanied their school and family paths, experimenting with good practices and creating paths by networking all the professional figures who contribute to the happy growth of children: parents, teachers, educators, psychologists, health experts. In this long, challenging and exciting experience I found it essential to focus on 3 main objectives: awareness, sharing, identity. They are aimed at achieving well-being and developing emotional skills. The most focused project is Moving Mind Summer Camp. The program provides for active involvement of families. Children and teenagers are involved in activities by psychologists, experts, and educators in the areas of specific competence. At the same time the parents make their way. Mum and dad participate in peer-to-peer workshops and experiential workshops led by experts and psychologists.

### **295 NASA balloon-powered car**

Denise Zigler  
JPL NASA  
United States

The primary learning outcomes of this lesson, the NASA Balloon-Powered Car, will provide problem-solving opportunities to use with gifted learners using the scientific process. The participants will be inspired to challenge gifted students to use inquiry coupled with critical thinking skills and apply Newton's second and third laws of motion in the creation of the NASA Balloon-Powered Car. The participants will also examine NASA teacher websites.

### **288 Never let a crisis go to waste: Transforming gifted instruction for hybrid and remote learning**

Casie Gaebler  
American Community School of Abu Dhabi  
United Arab Emirates

This session offers a variety of practical learning strategies for gifted and talented K-12 learners in hybrid/blended, remote, and asynchronous learning environments. Participants will leave with a set of learning strategies to engage gifted and talented students, spark curiosity, and promote critical thinking that can be modified for their particular content areas. Participants will also examine a curated list of digital platforms, resources, and tools for hybrid/blended, remote, and asynchronous learning to support gifted and talented learners in this new learning environment and promote permanent shifts in approaches to gifted education.

### **225 New directions on the schoolwide enrichment model**

Joseph Renzulli  
Neag School of Education, University of Connecticut  
United States

Sally Reis  
Neag School of Education, University of Connecticut  
United States

This session will provide an overview of the Schoolwide Enrichment Model (SEM), introducing strategies for implementing the model in a variety of schools. The model, based on more than four decades of research and development, is a comprehensive system for infusing education with high-end learning and talent development strategies. It is one of the most frequently implemented models for talent development in

the world. This session will introduce services offered in the SEM, including the total talent portfolios, curriculum modification techniques, and enrichment teaching and learning, as well as new directions that have been implemented in the SEM over the last decade.

### **71 Nine research-based principles for schools seeking to empower the career development of gifted adolescent girls**

Rebecca D. Napier  
Catholic Education of South Australia, Gifted Pathways  
Australia

This presentation reports findings and recommendations from a qualitative, cross-sectional study of the factors influencing the career development of 18 girls in selective-entry high school programs in three Australian schools. It examines participants' perceptions of the factors influencing their career-related values, goals, and decision-making processes. Findings highlight the interrelated influence of perceived personal traits, strengths, and interests. Relationships and experiences grounded in home, school, and community contexts are also discussed. This paper makes a significant contribution to the field by presenting nine principles relevant to high school career-related policy development, program design, assessment, and daily classroom practices.

### **144 No more dreams deferred: Breaking the barriers to self-advocacy for underserved gifted learners**

Deb Douglas  
GT Carpe Diem, LLC  
United States

Joy Lawson Davis  
Johns Hopkins University  
United States

Gifted children who speak up for themselves are more apt to discover the intellectual challenges and emotional support they want and need. However, systemic barriers can keep some from finding and using their voices. Discover ways to empower the self-advocacy of underserved gifted students based on the research and life experiences of expert presenters.

### **320 Numbers and voices of perfectionism in talented students from Paraguay**

Alexandra Vuyk  
OMAPA - Organizacion Multidisciplinaria de Apoyo a Profesores y Alumnos / Universidad Catolica Nuestra Senora de la Asuncion  
Paraguay

Maureen Montania  
OMAPA - Organizacion Multidisciplinaria de Apoyo a Profesores y Alumnos  
Paraguay

Perfectionism does not seem to be a central characteristic of giftedness, despite popular assertions to the contrary; gifted students score similarly to the general population on maladaptive perfectionism and slightly higher on adaptive perfectionism (Stricker et al, 2019). We sought to replicate these results in Paraguay and examine lived experiences of talented adolescents through a mixed-methods study. We compared mathematically talented adolescents with adolescents in general education using culturally validated tests of perfectionism and conducted five focus groups of 10-12 participants to understand conceptions and experiences of perfectionism. We will discuss results and culturally relevant implications for practice.

## **154 Nurturing creativity through technology**

Shirley Farrell  
Troy University at Montgomery  
United States

Kim Stephenson  
Prattville Christian Academy/  
University of Alabama  
United States

Emily Hurst  
Alabama State Department of  
Education  
United States

Do you want to increase creativity for your advanced learners through technology but don't have the tools to implement activities for your virtual, in-person, or blended classroom? Are you looking for ways to engage creativity and challenge your high-ability students in an innovative way? Join this session to explore various websites and apps to develop creativity in gifted students.

## **298 Nurturing excellence: Maximizing the agency, curiosity, and confidence of gifted secondary students**

Ryan McClintock  
Douglas County School District  
United States

The nuanced and complex needs of secondary gifted learners are not sufficiently met through accelerated coursework alone. Modern gifted programming must provide students opportunities to express their thinking – to enact and demonstrate their learning in ways that value their contributions and potential for development. To do so requires design, implementation, and leadership of programming that maximizes the learners' agency, curiosity, and confidence. Such programming must allow students to construct and share products of

their learning with respect to issues of global importance. This session will explore learning environments designed to maximize the agency, confidence, and curiosity of gifted and talented secondary students.

## **329 Observation — will you see gifted children through different eyes after this lecture?**

Christine Picker  
Germany

Observation is part of the professional activity of educators, psychologists, therapists, and teachers in kindergartens and schools. In order to see and assess gifted children objectively, it is useful to know the answers to these questions: What influences my perception in conversations and situations in which non-standardized observations take place? What do I have to keep in mind when observing gifted children? Which conclusions may I draw and which ones not? This lecture shows best-practice examples and will help participants self-reflect on perception in the observation of children. Participants will learn strategies to understand children's behavior at home, in daycare centers, and at schools.

## **281 On belief, determination and peer support: Gifted, disadvantaged students maintaining education aspirations through lockdown**

Katrina Reynen OAM  
Skyline Education Foundation  
Australia

Dr Elizabeth Hartnell-Young  
Skyline Education Foundation  
Australia

In early 2020, Skyline recognized a need to respond to a number of challenges students and alumni were experiencing with their study,

employment, and mental health. Skyline made strategic changes to its program, introducing new and enhancing existing activities including a Pathways Program to assist students with navigating pathways into university; additional study assistance through a study club, tutorial program, and exam revision sessions; facilitated weekly Zoom sessions for students and alumni to connect; and mental health support through a partnership with the Cairnmillar Institute.

## **115 One school district's five-year equity journey with universal screening and local norms**

Amity Butler  
Northshore School District  
United States

Austina De Bonte  
Northwest Gifted Child Association  
United States

Michelle Reid  
Northshore School District  
United States

Northshore School District, 15 miles northeast of Seattle, has been on an equity journey for the past five years. Learn how this school district of 23,000 students invested in broad universal screening for its highly-capable program and identified 11 times more English Language Learners, low-income students, and students with disabilities (twice-exceptional) over four years of universal screening. The biggest equity gains were realized when universal screening was combined with local norms, a result clearly evident in the data. Using NNAT and Iowa Assessments for first graders resulted in fully proportional representation of ELL students in that grade level.



## **11 One-room schoolhouses 2.0: Differentiating in today's classrooms**

Lynette Breedlove  
The Gatton Academy of Mathematics  
and Science  
United States

Tracy Inman  
The Center for Gifted Studies  
United States

Teachers in one-room schoolhouses differentiated daily; they had to. Yet differentiation remains one of the most challenging aspects of teaching today. Tackle that challenge head-on by exploring research-based, practical strategies for both pre-assessment and differentiation. Leave with tools to differentiate process, content, and by readiness. Presenters will share lessons from primary, intermediate, and secondary classrooms complete with pre-assessments and differentiated learning experiences.

## **241 Online learning extensions for advanced learners**

Stefanie McKoy  
University of Arkansas-Fayetteville -  
Fayetteville  
United States

Krystal Merry  
University of Arkansas  
United States

Due to the pandemic and subsequent increase in virtual instruction, teachers need to provide enrichment opportunities to advanced learners through online experiences. This presentation provides teachers with online learning extensions for advanced learners. Online extensions include virtual field trips, science experiments, learning courses, and creation. Teachers will walk away with a toolbox of resource for the virtual or seated classroom.

## **265 Online learning practices for (re)engaging gifted students**

Michelle Ronksley-Pavia  
Griffith University  
Australia

Michelle Neumann\*  
Griffith University  
Australia

Gifted students who underachieve exist in all regions of the globe. Finding solutions to the disengagement of gifted students is an internationally recognized issue. This case study set out to explore engaging online pedagogies used in high school settings in regional Australia to ascertain pedagogical approaches that were being leveraged to (re)engage gifted students across their learning. This study sought to determine what enablers of (re)engagement were for gifted students through online learning, with a focus around four engagement dimensions: behavioural; emotional; affective; and cognitive. Findings from the study suggest ways to strengthen gifted students' engagement and classroom learning.

## **341 Open to personality differences: The implications of openness to experience for understanding giftedness**

Shelagh Gallagher  
Engaged Education  
United States

The field of personality psychology provides substantial data about the personality correlates of intelligence, creativity, and achievement as described in the Five Factor Model, especially the factor openness to experience. This session will take a look at the implications of research about openness to experience and gifted education. Included in the discussion will be the definition of

openness; measurement issues; the triangulation of openness, intelligence, and creativity; similarities and differences with overexcitabilities; and some new data with gifted students.

## **351 Paradigm shifts: How teaching twice-exceptional (2e) students changed pedagogy**

Karen Arnstein  
University of Redlands  
United States

This presentation reports part of the findings from a collective case study conducted for a dissertation. Its purpose was to examine the developmental transitions of preadolescent, twice-exceptional (2e) students as perceived by parents and teachers of the twice-exceptional. The twice-exceptional students were those identified as gifted and having ADHD as the second exceptionality. Teacher participants were interviewed to gather rich data reflecting their experiences teaching twice-exceptional students. The theoretical framework utilized was Erikson's (1968) theory of psychosocial development. Findings suggest that when teachers are provided support, three themes emerged: teaching the whole child, paradigm shifts in pedagogy, and mastering differentiation.

## **278 Parents' perception on a summer residential enrichment program for gifted students**

Abdullah Tuzgen  
Purdue  
United States

Bekir Akce  
Purdue  
United States

University-based summer residential enrichment programs may offer a challenging academic environment



and a supportive and improving social environment (Wu & Gentry, 2014). Therefore, these programs would be a good option for parents looking for quality summertime experiences for their children who want to improve their academic skills. Parents' perceptions about how special programs affect their children and contribute to their development are the basis for decisions regarding young children's participation in these programs (Olszewski-Kubilius & Lee, 2004). Parents tend to look for social and cultural educational benefits for students, personal growth, and staff (teacher, counselor, administrator) quality. (Lehto et al., 2017).

### **301 Personality traits and overexcitabilities as predictors of creativity among university students in Lebanon and the USA**

Anies Al-Hroub  
American University of Beirut/  
University of Connecticut  
Lebanon

James Kaufman  
University of Connecticut  
United States

Hansika Kapoor  
India

The purpose of this study was to examine the role of the big five personality traits and types of overexcitability (OE) in predicting creativity across domains. The participants were 1020 (407 males; 613 females) university students from Lebanon (n = 515) and the USA (n = 505). The findings indicated that everyday creativity was predicted by being part of the Lebanese sample; higher conscientiousness and extraversion; lower neuroticism; and higher psychomotor, sensual, intellectual, and emotional OEs. Scholarly creativity was predicted by being older and female, as well as by

higher extraversion, openness, and intellectual OE. Performance creativity was explained by being younger and part of the American sample, by higher openness and extraversion but lower conscientiousness, and higher sensual and imaginal OEs. Mechanical/scientific creativity was predicted by being male and part of the American sample, lower extraversion and emotional OE, but higher psychomotor and intellectual OEs.

### **251 Personalized education for gifted adolescents in British Columbia, Canada**

Lucy Shepelev  
UBC, Ministry of Education and  
Vancouver School Board  
Canada

Daria Danylchuk  
UBC  
Canada

Amy Safarik  
UBC, Ministry of Education and  
Vancouver School Board  
Canada

Dean Sheardown  
UBC, Ministry of Education and  
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David Wilkie  
UBC, Ministry of Education and  
Vancouver School Board  
Canada

Katie Cooper-Smith  
UBC, Ministry of Education and  
Vancouver School Board  
Canada

Penelope Fitzgerald  
UBC, Ministry of Education and  
Vancouver School Board  
Canada

Unique in Canada since its initiation in 1993, the University Transition

Program optimizes the wellness and dedication to talent development of high-ability and gifted adolescents. Initiated by the University of British Columbia, the Vancouver School Board, and the British Columbia Ministry of Education, the program features a pre-university identity and an intensive communiversity experience with conceptually advanced curriculum. Key findings discussed include appropriate curriculum, pedagogy, counseling, and related research; and the impact of opportunities for learning with professors and through International Global Citizenship Tours, peer-mentoring, and advanced-level and self-generated problem solving applied to wicked unresolved problems.

### **74 Pivot, with purpose: How IDEAL4Gifted is synthesizing gifted education for future-ready, student-centered learning**

Yvonne de St. Croix  
IDEAL4Gifted  
United States

IDEAL4Gifted is a student-centered online learning community devoted to Innovative, Differentiated, Enriched, Accelerated Learning (IDEAL) that is tailored to students who are gifted, twice-exceptional, or advanced and to those who have the potential to learn beyond their grade level. We design curriculum and methods based on professionally researched best practices in gifted education that can result in the fulfillment, satisfaction, and enjoyment that is inherent in the authentic learning process. Join us to cultivate your own intellectual, principled, creative, and enriching foundation allowing gifted students to become the next visionaries, innovators, and leaders by identifying and cultivating their abilities through creative, challenging, and differentiated programming.

### **338 Platforms for addressing systemic racism as a global phenomenon: Creating future-thinking global citizens**

Joyce Miller  
Texas A&M University Commerce  
United States

Connie Phelps  
Emporia State University  
United States

Martina Brazzolotto  
District of Campodarsego  
Italy

The 2020 coronavirus pandemic and the murder of George Floyd initiated the need for virtual environments for gifted children to express feelings about systematic racism. This session details two virtual summer enrichment camps: (1) three-week North Italy camps addressing scientific explorations, creative writing, and philosophy for children ages 5-11 years and (2) a three-week camp for gifted children ages 5-12 in the Midwest USA employing the Renzulli Learning System. It concludes with a description of a five-day USA civil rights tour with an interracial group of Black/African American, White, and Latinx students. Implications for creating future-thinking global citizens are made.

### **277 Preparing for successful acceleration**

Wendy A Behrens  
Minnesota Department of Education  
United States

Ann Shoplik  
University of Iowa  
United States

Acceleration is well-supported by research, and tools are available for making informed decisions. Good candidates show advanced academic ability, high aptitude for future

learning, and strong achievement. An acceleration evaluation committee is critical in determining the need and most appropriate available learning environment for acceleration candidates. Typically chaired by the building principal or gifted coordinator, the team often includes the gifted coordinator/specialist, school counselor and/or school psychologist, an administrator, a current teacher, a teacher at the proposed level, and a parent/guardian. In this session, presenters will discuss the role of committee members and provide a sample acceleration procedure.

### **117 Principals' and teachers' perceptions of giftedness and gifted programs at Armenian schools in Lebanon**

Lory Sinabian  
M & H Arslanian Djemaran school  
Lebanon

Ketty Sarouphim-McGill\*  
Lebanese American University  
Lebanon

This study examines school principals' and teachers' perceptions of giftedness and gifted programs. The sample consisted of 80 K-12 teachers and seven principals from 15 Armenian schools in Lebanon. A mixed-method design was used involving collection of quantitative (survey) and qualitative (interviews) data. The results showed a similar pattern of responses among both teachers and principals. The majority viewed giftedness as a fluid trait affected by environmental influences. For most participants, giftedness was perceived as domain-specific rather than a generalized excellence in all domains. Both teachers and principals highly supported having special programs for gifted students at their schools. Future studies should include more representative samples for solid conclusions.

### **118 Problem-based learning is social and emotional learning**

Jeanne Paynter  
Educating Innovators  
United States

Problem-based learning (PBL) motivates and challenges students through engagement in real problems in which they see themselves as stakeholders. PBL also presents an authentic context to achieve social and emotional learning objectives for self and social awareness, management, relationship building, and responsible decision making. The Five-P planning elements can be used to craft a problem scenario that is prompted by a local need or issue with a personalized purpose in which students have an authentic part to play in creating a professional product that meets the proficiency criteria. The resulting problems for investigation develop both academic and social and emotional learning goals.

### **275 Professional learning strategies for educators working with gifted and diverse learners**

Cecelia Boswell  
Austin Creek Education Systems  
United States

Wendy A. Behrens  
Minnesota Department of Education  
United States

Christine Weber  
University of North Florida  
United States

What does the research say about best practices related to professional learning? How is professional learning different from professional development? In this session, come explore a variety of professional learning strategies including the use of case studies, which can enhance the understanding of gifted and

diverse learners, and ways to best differentiate their instructional needs in the classroom. Session presenters will share a summary document with best practices to enhance professional learning plans and a sample case study with attendees.

### **163 Psychological development of highly-profoundly gifted students and overexcitabilities: Empowering equity in identification**

Vanessa R. Wood  
International Gifted Consortium,  
Research Center for The Highly—  
Profoundly Gifted  
United States

Krystyna C. Laycraft  
International Gifted Consortium,  
Research Center for The Highly-  
Profoundly Gifted  
United States

We will summarize, based on a literature review, the social, emotional, physical, cognitive, and altruistic behaviors and development of giftedness and the differentiating sensitivity, intensity, awareness, and unique development of highly-profoundly gifted students. We will identify the correlations of overexcitabilities and developing dynamisms from Dabrowski's theory of positive disintegration to aid teachers, school administrators, psychologists, and researchers in the equitable identification of potential giftedness and the significantly greater-than-typical behaviors and development of highly-profoundly gifted children and adolescence. Attendees will be empowered with an inclusive understanding of giftedness and the ability to translate behaviors and development into equitable identification of the diversity of gifted learners.

### **133 Quest for knowledge and career choice**

Tillmann Grüneberg  
University of Leipzig  
Germany

Task commitment and other motivational factors are important components of dynamic and multifactorial conceptions of giftedness (e.g., Renzulli 1978, Heller, 2000, Gagné, 2014). A specific interest for the profound acquisition of knowledge was introduced into giftedness research by Lehwald (1983, 1985) with the German term "Erkenntnisstreben" (translated: quest or striving for knowledge). A questionnaire on this concept was included in the selection of diagnostic tools based on Heller's Munich model (Heller & Perleth, 2007). The session will show results of a study (n=465) revising the original questionnaire and enhancing it to use in the career counseling of gifted students.

### **73 Raising the bar: The competencies of specialists in gifted education**

Eleonoor van Gerven  
Slim Educatief  
Netherlands

Internationally, there have been shifts in our understanding of the importance of meeting the needs of gifted learners. These shifts call on the knowledge and skills of specialists in gifted education and therefore have consequences for the way we educate these specialists. The basis for their teacher education should be a competency profile of specialists in gifted education with interplay with competencies usually associated with general education. In this session, a competency matrix for specialists in gifted education that reflects this development will be presented. The study that underpins the matrix includes stakeholders' understanding of the competencies of specialists in gifted education.

### **228 Reading marvelous literature to support mathematical learning!**

Laura Cruickshank  
Westmount Charter School  
Canada

Heather Lai  
Westmount Charter School  
Canada

As gifted students can be asynchronous with their learning, using literature to explore math allows for different entry points for students. There are many benefits of using books in learning math: vocabulary development, exposure to diverse situations, deep connections with mathematical concepts, and literacy skills. The use of literature can be a springboard for integration and inquiry-based learning, which solidifies all other curricular areas. Multi-leveled readers with specific learning needs including English language learners, 2e, ADHD, and ASD are supported through this medium. This presentation will provide resources to support the interconnection of numeracy and literacy.

### **321 Reading what your readers need: Differentiation in language arts for gifted students**

Melissa Bilash  
The Grayson School  
United States

Kimm Doherty  
The Grayson School  
United States

Amanda Biscoglio  
The Grayson School  
United States

Shannon Fitzpatrick  
The Grayson School  
United States

Alyssa Lucas  
The Grayson School  
United States

How can an elementary language arts teacher actually provide differentiation that acknowledges and feeds the wide variation in each student's individual brain — while also providing shared material for shared discourse and analysis? In other words, how can you have group discussions and teach to the top rather than “dumbing it down”? In this session, a team of PreK-5th grade teachers in an all-gifted school will share practical, real-world techniques gleaned from decades of experience. Participants will take away research-based and road-tested information they can put to immediate use in their own classrooms and schools to best cultivate reader growth.

### **330 Reflecting, sharing, and networking: Perspectives of an online practicum course for teachers of the gifted**

Paula Christensen  
Northwestern State University of Louisiana  
United States

The practicum course in graduate programs offers the opportunity for beginning professionals to reflect on their teaching, share experiences with fellow classmates, and build a networking community while engaged in teaching students with gifts and talents. Offering the practicum course online affords unique possibilities that requires appropriate planning, structure, and maintenance. The purpose of this presentation is to offer a perspective from almost two decades of teaching a practicum course online delineating the strengths and opportunities for professional development and networking among teachers of students with gifts and talents through a distinctive and rigorous

learning environment.

### **20 Riding out the storm: Managing emotional intensity in gifted students**

Matthew Zakreski  
The Neurodiversity Collective  
United States

Gifted individuals are marked by their intensity, particularly their emotional intensity. These emotional outbursts can be very disruptive and dysregulating to the students and their peers, parents, teachers, and community supports. This session will focus on the psychology and neuroscience behind emotional intensity and give concrete, accessible techniques that will allow for the development of self-regulation skills.

### **130 Robotics and aerospace education as learning models for elementary level gifted students**

Dafne Almazan Anaya  
CEDAT Talent Attention Center  
Mexico

Robotics and engineering technology in education promotes gifted students' learning through cognitive stimulation. However, the psycho-educative effects on these students and their impact on the students' education required further research. We performed a yearlong qualitative intervention with ten children, exploring the process and effects of robotics and aerospace technology lessons in a full-time special education program, designed in America for gifted students, on social skills, verbal expression, and learning processes. We found improved learning skills and teamwork behavior through having a challenging goal within their education. Using technology as a learning tool enhanced gifted students' social intelligence and verbal abilities.

### **209 Rural Educator Perceptions: Project I-REECCH Year 1 Implementation**

Norma Hafenstein  
University of Denver  
United States

Kristina Hesbol  
University of Denver  
United States

Lindsey Reinert  
University of Denver  
United States

Joi Lin  
University of Denver  
United States

Fayaz Amiri  
University of Denver  
United States

The need for the support of rural students and the development of talent in rural settings is well documented (Fox & VanSant, 2011; Hafenstein, Hesbol & Taylor, 2018). The goal of the Jacob K. Javits-funded project I-REECCH (Impacting Rural Education through Expanding Culturally-responsive curriculum, Computer science training, and Higher-order thinking-skills development) is to significantly increase identification of and service to traditionally underrepresented gifted and talented student populations in rural Colorado. This mixed methods study will share year-one preliminary results, provide strategies to recognize inequities in gifted programming, and propose interventions.

### **248 School district strategies to address equity and access to advanced learning opportunities**

Nancy Hertzog  
University of Washington  
United States

Gifted programs have been labeled elitist and used as hallmark examples



of inequitable educational opportunities. To create equitable access to advanced learning opportunities such as those found in gifted education, educators need to go beyond identification policies. We need changes in belief systems, state laws, policies, teaching practices, and the demographics of the educator workforce. Presenters will share results from a qualitative study in one state in which 17 administrators were interviewed regarding the strategies they employed to address inequities in their school districts. They modified curriculum and instruction, added professional development, and increased supports for students' mental health and well-being.

## **72 Science camp for enhancing stem skills of gifted young children**

Azizah Mohd Zahidi  
Pusat GENIUS@Pintar Negara  
Malaysia

Children naturally learn through exploring and discovering while doing activities. Therefore, introducing science to children at an early age may build on their inquisitiveness. Science helps children to understand the world because they gather information about the world. This study investigates the effectiveness of science camp (Junior Science Camp) on young children's understanding and knowledge about science. One-hundred-and-three children aged four to six years old participated in the three-day camp. Data were collected using pre and post-tests and a survey (parent evaluation of the camp). Data from the survey were used to triangulate the quantitative data from the pre and post-tests. Findings showed that the camp was effective in enhancing the young children's understanding and increasing their knowledge about science. Implications of this study are related to the design of future science camps and also the methodology and instruments of future research.

## **322 SCOUTing for talent**

Kelly Waters  
Spartanburg Preparatory School  
United States

"Talent development" is currently a common trend and catch phrase in the world of giftedness. SCOUTing for Talent is a session that will walk you and your program through a talent development program designed for grades K-2 that enhances natural talent and grows the environment to meet the needs of giftedness. SCOUTing for Talent works, and your primary grades will benefit greatly from these training methods and effective teaching practices.

## **364 Seeing the unseen: Exemplary practices for gifted program evaluation**

Kate Bachtel  
SoulSpark Learning & Boulder Valley  
School District  
United States

How does one discern the quality of a gifted program? This session will share the results of a comprehensive program evaluation and IRB-reviewed study that explores the aspirations and practices of a school designed to empower diverse gifted children. The community has been pursuing this mission for more than 25 years. Eisner's educational criticism research approach is utilized to grow understanding of the program's intricacies. Themes that emerged from descriptions, interpretations, and evaluations facilitate recommendations for others aiming to optimize gifted student development. Participants will leave with a research-informed framework to support gifted program design and evaluation.

## **274 Serving the needs of your smart kids: How school leaders create a supportive school culture for the advanced learner**

Brenda Small  
Lead Smart Education, LLC  
United States

Leaders, teachers, and advocates will learn how to create the ultimate environment for advanced learners by shifting a few resources. It takes work to discover the gaps in advanced student education within a school's infrastructure. It takes even more work to displace current thoughts and practices to create a stimulating, nurturing and productive environment. This purposeful action is critical in the leader's quest to serve advanced learners at their ability levels. A tidal wave of accelerated and blended classes, additional extra-curricular offerings, poignant teacher training, and relevant social and emotional resources will impact all levels of learners with new opportunities to excel. Students need these champions in schools! Steps are provided on how to hire with purpose and provide training to enrich a gifted mindset. Tips are given on how to navigate the barriers of innovative gifted education practices by school leadership.

## **7 Shifting definitions of gifted ESL: Impact on gifted English language learners**

Hoda Kilani  
Right Career Fit  
Canada

Are the special needs of young English language learners (ELL) being detected and provided for in Canada? In more specific terms, how are gifted English language learners (GELL) faring in the Canadian education system? Driven by the belief that specialized support for GELL is crucial, in this presentation I delve into the fractious issue of cultural differences of GELL in the Canadian context. This presentation seeks to address the dearth of worldwide research on GELL classroom experiences by opening up



discussion on the consequences of cultural dichotomies to promote the need for further research.

### **264 Show me the way: Pets for caring and coping in the lives of twice-exceptional children**

Michelle Ronksley-Pavia  
Griffith University  
Australia

In the field of twice-exceptionality, there has been no known research to date relating to the importance and therapeutic effects that pets might hold for twice-exceptional young people. In a wider study pertaining to the lived experiences of eight twice-exceptional children, a significant incidental unexpected finding emerged — the role that pets played in their support networks and their lives. Pets emerged as important components of the children's lives, particularly in enhancing stress reduction. Findings from this study suggest increased social and emotional well-being for these children who had pets and had bonded with them.

### **9 So you have to be a counselor, even though you're not one ...**

Justin Villet  
Sphinx Gifted Consulting, LLC  
United States

Social-emotional development for students, especially for gifted and twice-exceptional kids, is essential for the growth and development of the whole child. Most educators agree with this statement. The problem is that many educators are asked to encourage social-emotional development without really knowing what it means, how to integrate it into a class that is content-mastery driven, and how to make sure social-emotional development has staying power. This presentation outlines some of these issues and guides

educators through creating a system that integrates content mastery and skill mastery.

### **362 Social and emotional learning for socially gifted students' well-being**

Susen Smith  
University of New South Wales and  
NSW Department of Education and  
Training  
Australia

Bohdan Balla-Gow  
Educational Support and Rural  
Initiatives, Educational Standards  
Directorate  
Australia

Carmela May  
Educational Support and Rural  
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Australia

Lynda Lovett  
Educational Support and Rural  
Initiatives, Educational Standards  
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Australia

Marek Brewster  
NSW Department of Education  
Australia

Social giftedness is one mental domain in Gagné's Differentiated Model of Gifted and Talent. The characteristics and behaviors of socially gifted (SG) children will be elaborated, such as their capacity for leadership and friendship building and being extremely articulate and empathetic. According to the CASEL framework, learning founded on self-awareness of strengths, self-regulation of challenges, and goal setting within constructive and collaborative learning environments helps build social and emotional competencies (SEC). Broadly, explicit social and emotional learning (SEL) is critical

for successful academic learning and achievement, psychosocial growth, emotional stability, and well-being development. Specifically, what SEC and SEL are required for the well-being of socially gifted students?

### **302 Social problems and social coping of academically high-achieving females before the onset of disordered eating**

Jennifer Krafchek  
Monash University  
Australia

Leonie Kronborg  
Monash University  
Australia

Research has shown that there is a relationship between social problems with friends and symptoms of eating disorders in adolescents, and that the use of maladaptive coping strategies to deal with these social problems contributes to the development of eating disorders. Studies have found that gifted students can experience social problems. This presentation will focus on the findings of a qualitative study of the social problems and social coping strategies of 14 academically high-achieving females before the onset of their symptoms of disordered eating in high school. The findings offer insights into effective social coping strategies that gifted students could use.

### **304 Some key issues and associated implications in gifted education in the Asia-Pacific: An inclusive review**

Susen Smith  
University of NSW  
Australia

The Asia-Pacific region encompasses most of the world's population, but much of the Asia-Pacific countries' research and practice are underrepresented in the world's gifted education and research

literature. Based on a wide-ranging review, this proposal identifies some of the key issues in gifted education in the Asia-Pacific region. This review uncovered a diverse range of issues regarding the practical applications needed to nurture the talent development of gifted children, youth, and adults and to support families, educators, researchers, mentors, and advocates. Some of these key issues in gifted education in the Asia-Pacific and some associated implications will be highlighted in this presentation.

### **34 STEM talent development profile of underrepresented students**

Yao Yang  
Purdue University-West Lafayette  
United States

This retrospective, qualitative study investigated the talent development process of fifteen underrepresented graduate students in science, technology, engineering, and mathematics (STEM) disciplines. It was found that underrepresented students were confronted with challenges, such as sense of otherness, a pressured self-proving process, imposter syndrome mentality, and a chilly atmosphere in STEM disciplines. They benefited from sustained supporting networks. They also developed responsibility through community services and fighting for social justice. STEM academic rigor in high school was critical for them to move forward in STEM. The suggestions for designing effective educational services for underrepresented students with talents in STEM are also presented.

### **306 Student agency: three schools' journeys in addressing underachieving gifted in their contexts**

Lye Chan Long  
Aldea group  
Singapore

Adrienne Erwin  
St George Christian School  
Australia

Justin Brayley  
Newington College  
Australia

Amy Kirk  
Newington College  
Australia

The presentation discusses how three Australian schools have addressed the issue of underachieving gifted students at their schools. The programs are based on an action research project, IGNITE, that studied the effect of self-differentiation on student agency and achievement in 2016-17; the results were published in Gifted Education International in 2020. Presenters will share how their programs have impacted underachievers by using interventions and identification processes relevant to their school and year levels.

### **217 Successfully including 2e learners in a gifted classroom**

S. Ley-Anne Folks  
Westmount Charter School  
Canada

Heather Lai  
Westmount Charter School  
Canada

Twice-exceptional (2e) learners benefit holistically from inclusion in the educational community of their intellectually gifted peers. We present methodologies and strategies to integrate 2e learners in congregated gifted classrooms. Proactively focusing on the overall needs of all students in the class, we discuss how to provide universal,

small group and individualized supports for 2e students with SLDs, ADHD, ASD and other challenges. Focusing on the unique needs of 2e learners while providing gifted programming for all students is a delicate balance requiring clear understanding of student needs and interests combined with the ability to make decisions based on research and experience.

### **244 Supporting gifted children through crisis: New insights into Dabrowski's theory**

Christiane Wells  
Institute for the Study of Advanced Development  
United States

Tina Harlow  
Guiding Bright  
United States

Gifted individuals, with their intensities and sensitivities, are sometimes diagnosed with mental disorders. Individuals may identify so strongly with their diagnoses that they begin to see themselves as broken. Dabrowski's theory of positive disintegration provides an alternative framework for understanding neurodiverse individuals' intense experience outside of the biomedical model. From our perspectives as therapists and researchers, we will provide tangible applications of Dabrowski's theory for gifted individuals in light of modern psychological research. We will unveil a new tool for mental health practitioners and educators that will flip the current paradigm and provide responses that better meet children's needs.

### **23 Supporting Gifted ELs in the Latinx Community: A Culturally Responsive Approach**

Robin Greene  
Denver Public Schools  
United States

Michelle DuBois  
Boulder Valley Schools  
United States

English language learners who are also advanced and gifted learners are some of our most at risk students. These learners come with unique academic, intellectual, cultural, social and emotional needs that are overlooked in a typical classroom environment. In this session, participants will analyze the critical elements of identification, professional learning, instructional practices, and policy necessary for gifted and advanced English learners to thrive. Participants will identify key steps and develop an action plan using research-based and classroom-tested approaches. A Culturally Responsive Gifted Framework for implementing culturally responsive assessments, identification, and programming practices is presented.

### **26 Supporting growth beyond grades: Promoting psychosocial skills for gifted students from special populations**

Megan Parker Peters  
Lipscomb University  
United States

Emily Mofield  
Lipscomb University  
United States

When supporting twice-exceptional students and gifted students from diverse backgrounds, it is important to leverage the funds of knowledge and personal strengths that such students bring to the classroom. Achievement is affected by a number of factors, including motivation and the match between student needs and the classroom environment. In this session, presenters will introduce, model, and practice practical interventions participants can use to address underachievement, enhance motivation, and develop resilience

especially among twice-exceptional students and students from culturally, linguistically, and economically diverse backgrounds.

### **317 Taking the lead: Developing leadership skills in the gifted education professional**

Christine Deitz  
University of Arkansas at Little Rock  
United States

What processes best prepare gifted teachers to be leaders in their schools and communities? One-hundred teachers in a rigorous teacher leadership program were surveyed. This session shares the results of the survey and provides insights regarding best practices for preparing gifted education teachers to strengthen leadership skills.

### **182 Talent development and early career awareness: Stories from a creative cross-disciplinary workshop**

Serene Chan  
The University of Hong Kong  
Hong Kong

Suzannie Kit-ying Leung  
The Chinese University of Hong Kong  
Hong Kong

Mantak Yuen  
The University of Hong Kong  
Hong Kong

Do young children think about what it means to have a career in life? Twelve primary school children participated in a two-day cross-disciplinary workshop in which creative expression was integrated with elements of early career awareness. Opportunities were provided for self-exploration and expression through the creation of poetry, drawings, and a mixed-media collage. At the end of the workshop, the children were interviewed, and findings indicate that children do start to develop

career awareness early. In this group, children's self-knowledge of strengths and interests positively affected talent development. The stories of their career dreams will be shared in this presentation.

### **214 Teacher-student relationships that inspire gifted student engagement**

Laurie Croft  
Belin-Blank Center for Gifted Education and Talent Development  
United States

Anna Payne  
Baylor University  
United States

Teacher quality is acknowledged as a critical factor in student achievement (Wenglinsky, 2000), and teacher-student relationships (TSR) have been determined to be important factors for students' school engagement, and academic achievement (e.g. Valiente, Lemery-Chalfant, Swanson, & Reiser, 2008). Roorda, Koomen, Spilt, and Oort (2011), through a meta-analysis of 92 articles describing 99 studies, found that positive relationships were correlated with both student engagement and achievement. TSRs have rarely been explored from the student perspective (Dickerson, 2020), but gifted students' comments about teachers' impact permit session participants to better envision teacher characteristics and competencies that contribute to gifted students' academic success.

### **42 Teaching and learning critical thinking using the UN Sustainable Development Goals: Two hybrid teaching formats in the time of Corona**

David Rott  
University of Muenster  
Germany

Marcus Kohnen  
University of Muenster  
Germany

This presentation gives insight into two teaching formats aiming to integrate critical thinking as a teaching objective in gifted education. Both formats use the UN Sustainable Development Goals as subject matter, taking into account different age groups and school levels. Students are given challenges in the context of the UN Sustainable Development Goals and can design their own projects in project-based lessons. These scenarios are framed by digital offerings from the teachers. In the Corona pandemic, the opening up of lessons has proven to be a challenge: the students are mostly distance learners but are expected to cooperate with their classmates and exchange ideas with their teachers. The learning architectures of both formats are presented, as well as first impressions of the students' learning.

### **58 Teaching languages to gifted children**

Alberta Novello  
University of Padua  
Italy

Gifted and talented students show specific features in the language-learning process that need to be considered when tailoring inclusive language programs. The session aims to present the results of a survey on gifted aspects of learning a language as well as students' favorite language activities. Data from the survey will be shown regarding teachers' and students' perspectives. Some proposals to successfully include gifted students in the language classroom will then be described.

### **358 Teaching science to gifted learners**

Bronwyn MacFarlane  
University of Arkansas at Little Rock  
United States

Deborah Dailey  
University of Central Arkansas  
United States

Science education is critical to developing future talent among K-12 students to advance the human experience and create new innovations in solving diverse problems spanning across medical improvements, renewable energy, novel materials, global security, agricultural processes, mechanical refinements, and more. This session will focus upon recent research findings and best practices for delivering quality science education to gifted learners.

### **279 The adults fighting to save gifted education: The legislative organizer, educational researcher, teacher, and parent**

Terence Friedrichs  
Friedrichs Education  
United States

William Keilty  
Hamline University  
United States

Larry Fowler  
Mayo High School  
United States

Shailesh Bhor  
Innovate Instruction, Ignite Learning  
Nonprofit  
United States

Panelists share their most recent legislative efforts for expanding their state's gifted and advanced education programming despite forces attempting to reduce such instruction. Presenters expand on four educational advocacy principles of Roberts and Inman (2006). First, they sought "kindred spirits" as they

battled insufficient statewide gifted/advanced services, agreeing along the way with fellow advocates on underlying causes — unfollowed mandates, inequitable services, and insufficient funding. Second, with activist teens, they crafted district-specific advocacy messages for significantly better services. Third, they communicated effectively with legislators through individualized messaging for strengthened mandates, equitable services, and adequate funding. And fourth, they persisted toward goals, despite sociopolitical barriers.

### **324 The authentic scholar model: An approach for structuring the education of gifted students**

Melissa Bilash  
The Grayson School  
United States

Kristina Ayers Paul  
Lower Merion School District  
United States

Since opening in 2015, The Grayson School has used the Authentic Scholar Model (ASM) to structure education for the gifted students it serves. The ASM has four tenets: 1) Educators need to know where to begin with each student; pre-assessment is essential; 2) Authentic learning runs on its own timetable; pacing that is aligned with each student's needs is critical; 3) Innovation requires the marriage of expert-level knowledge and skilled thinking to solve problems; train students to think; and 4) Well-designed projects give students an intellectual playground where knowledge is applied, cross-disciplinary thinking engaged, and the thrill of discovery activated.

### **171 The Colorado Gifted and Talented Student Board**



Allie Lindsey  
The Colorado Gifted and Talented  
Student Board  
United States

Mae Chen  
The Colorado Gifted and Talented  
Student Board  
United States

Katie Smela  
The Colorado Gifted and Talented  
Student Board  
United States

Cagla Numanoglu  
The Colorado Gifted and Talented  
Student Board  
United States

The Colorado Gifted and Talented Student Board is an entirely student-founded and student-managed organization striving to provide a platform for gifted student advocacy and to enhance the general gifted and talented (GT) experience through the advancement and unification of GT programs via active student input. Please join us for a discussion of our plan in offering Colorado GT students an improved educational experience and information on how to challenge and empower your students to do the same.

### **357 The colors of twice-exceptionality in film media**

Martina Brazzolotto  
District of Campodarsego (Italy)  
Italy

Connie Phelps  
Emporia State University  
United States

Linda Collins  
Park Hill School District  
United States

Baum and Owen (2017) stated that individuals with twice-exceptionality may remain unrecognizable since

their disability overshadows their giftedness, and their giftedness masks their disability. However, gifts (yellow) and disability (blue) create unique twice-exceptional (green) individuals from the resulting secondary color. This session examines which “colors” society attributes to twice-exceptionality aspects of giftedness and disability through television and movies. Since media reflects societal beliefs and perceptions, they influence reality. Our study examined ten years of film media for protagonists characterized by their giftedness and disability. The session offers perspectives and strategies to support the lived experiences of twice-exceptional children and adolescents.

### **185 The dual mediating effects of MSCE and SDL on the Relationship between creativity and F3C**

JuSung Jun  
Soongsil University  
South Korea

Kyung Hwa Lee  
Soongsil University  
South Korea

Ga Hyung Lee  
Research Institute for Gifted & Talented Education, Soongsil University  
South Korea

The purpose of this study was to examine the dual mediating effects of MSCE (metacognition support classroom environment) and SDL (self-directed learning) on the relationship between creativity and F3C (future creative confluence competency). The samples of the study were 511 college students attending Soongsil University in Seoul, Korea. Collected data was analyzed with Hayes’ PROCESS Macro (2013). The major findings were as follows: First, there were positive correlations among creativity, MSCE,

SDL, and F3C. Second, there were dual mediating effects of MSCE and SDL on the relationship between creativity and F3C.

353 The essence of a national gifted education framework

Ronald Reznik  
Wellington C. Mepham High School  
United States

This presentation extols the need for a national gifted education framework in the United States and examines the current state of affairs in the realm of gifted education through an analysis of the conditions of such programs in other nations and their successful implementation in these nations as well as other relevant data.

### **223 The global cooperative synergy group: An essential paradigm shift**

C. June Maker  
University of Arizona  
United States

Randy Pease  
DISCOVER Projects  
United States

Hala Elhowheris  
United Arab Emirates University  
United Arab Emirates

Manoj Chandra Handa  
New South Wales Department of Education  
Australia

The vision of the GCS Group is to develop in young people the ability and the commitment to think globally and act locally to solve STEM and social problems through Real Engagement in Active Problem Solving (REAPS). With a base of knowledge, young people will be led to be creative and innovative entrepreneurs through collaboration not competition. At this time, eight countries are involved: Australia,



Chile, China, Mexico, Saudi Arabia, Turkey, United Arab Emirates, and United States of America. The co-founders and two national coordinators will share their research and experiences with the REAPS model and their collaboration.

### **51 The identification of academically talented children in Norwegian kindergartens: Potential, achievement, and error**

Janine Campbell  
University of Stavanger  
Norway

This study evaluated the psychometric characteristics of three instruments for identifying kindergarten students with high academic potential. Data were collected through the Norwegian “Skoleklar” project, where 243 preschoolers were assessed for academic potential by teachers, parents, and a test, and the consistency of those assessments with academic results were evaluated in kindergarten and eighth grade (n=136). Findings indicate that each scale was too imprecise for one-step identification of academic talent, but in combination they were sufficiently precise for the screening of a larger group from which children with exceptional academic talent could be identified with further testing.

### **120 The impact of school closings on gifted services: Recommendations for a post-COVID-19 world**

Charlton Wolfgang  
Millersville University  
United States

Dan Snyderman  
Millersville University  
United States

This qualitative study explored the perspectives and lived experiences of teachers of the gifted and

parents/guardians of gifted learners within the context of the COVID-19 pandemic and provided a deeper understanding of gifted education by determining the meaning of these experiences. A particular focus was placed on the role of remote learning and its impact on instruction and the social-emotional well-being of gifted learners. Recommendations to best meet gifted needs post-COVID, including a preliminary model for meeting gifted learners’ needs in a virtual format, will be shared and discussed in this session.

### **193 The impact of the I-Mentoring enrichment program on enhancing gifted/talented students’ creative problem-solving abilities**

Hala Elhoweris  
United Arab Emirates University  
United Arab Emirates

Ahmed Hemdan  
UAE University  
United Arab Emirates

Myra Bacsal  
UAE University  
United Arab Emirates

Maxwell Opoku  
UAE University  
United Arab Emirates

Najah Al Mohammedi  
UAE University  
United Arab Emirates

June Maker  
University of Arizona  
United States

Randal Pease  
United States

In many countries, including the UAE, there is overwhelming interest in setting as a national goal the cultivation of talented students in STEAM. Given the global demands for STEAM jobs, which are predicted

to increase drastically in the next few years, there are too few studies focused on nurturing talented students in STEAM in countries such as the UAE. This mixed-method study aims to share the impact of an iMentoring enrichment program, utilizing the Real Engagement in Active Problem Solving (REAPS) teaching model, provided to 70 teacher-nominated gifted and talented high school students to develop the students’ creative problem-solving skills.

### **145 The impact of virtual technology development and the COVID-19 pandemic on pedagogical aspects of the Odyssey program**

Orni Meerbaum Salant  
Future Scientists Center for  
Advancing the Gifted and Talented,  
Maimonides Fund  
Israel

Eli Fried  
Future Scientists Center for  
Advancing the Gifted and Talented,  
Maimonides Fund  
Israel

Technological development together with the COVID-19 pandemic have led to creative destruction of the way educational systems communicate with youngsters and expose them to new knowledge. The Future Scientists Center’s Odyssey out-of-school program enables talented and gifted youngsters to engage in scientific academic studies; it initially was implemented in face-to-face meetings. The program emphasizes the development of cognitive, personal, and interpersonal skills and competencies. Modifying from face-to-face to virtual settings opened us up to innovative ideas that changed our pedagogical approach. The virtual environment confronted us with challenges regarding interpersonal communication between students;

in the future we plan to explore methods to face these challenges.

### **349 The kids fighting to save gifted education**

Terence Friedrichs  
Friedrichs Education  
United States

Amogh Kulkarni  
Wayzata (MN) High School  
United States

Devesh Bhor  
East Ridge High School  
United States

Anushka Chaudhari  
EastView High School  
United States

Three US high school students and their mentor describe the teens' legislative advocacy for statewide expansion of gifted and advanced education, despite growing US sociopolitical forces to reduce existing mandates and funding. First, the mentor explains how the youth, as actors with minimal sociopolitical power (Freire, 1970), learned more about their characteristic sensitivity, inquiry, and social justice needs. Second, utilizing broadly effective Freirian principles, they advocated within their schools to students, teachers, and school boards for more state-funded and -mandated education allied with their needs. Third, they explain successful advocacy for such education outside school, targeting newspapers and legislators.

### **213 The magic of the mediator: Maximizing authentic relationships in the classroom & beyond**

Dr. Dornswalo Wilkins-McCorey  
Virginia Beach City Public Schools  
United States

The purpose of this session is to

demonstrate how the practitioner can implement a pedagogy of confidence while focusing on a strengths-based approach via the seven high operational practices and the power of mediation to create authentic relationships that extend beyond the classroom. Since 2016, one school division has applied social and emotional structures to build authentic relationships with culturally, linguistically, and economically diverse students. This session will provide examples of strategies that practitioners utilized to affirm students' strengths, build relationships, elicit high intellectual performance, provide enrichment, amplify student voices, and capitalize on students' lived experiences in elementary, middle, and high school.

### **232 The new irrelevance of intelligence**

Alan D. Thompson  
Life Architect  
Australia

Much like the rapid pace of progress in all of our technology, innovations like artificial intelligence and neural lace are changing our world significantly and offering up new ways of being. Neural lace, or "brain mesh," is an implantable brain-computer interface. Such an interface allows any individual to achieve symbiosis with superintelligence: instant access to processing, memory, learning, and artificial general intelligence at an unprecedented scale. What if we are heading towards a major increase in intelligence for all humans, towards the equivalent of a 1,000 IQ (as theorized by Professor Steven Hsu)? And what might this new world look like?

### **337 The parenting playbook: Coaching gifted children for success**

Emily Kircher-Morris  
The Neurodiversity Podcast  
United States

If only raising gifted kids were as easy as everyone thinks! Parents of high-ability kids know that finding ways to coach their child to become an independent, confident, and successful young adult is harder than most people realize. This session focuses on helping parents find neurodiversity-affirming strategies to support their gifted sons and daughters. (Teachers welcome, too!)

### **165 The potential impact of asynchronous development on executive function in individuals who are gifted**

Rebecca Johnson  
University of North Texas  
United States

Asynchronous development, described as uneven development, is considered by some experts in gifted education to be a defining trait of giftedness. Social-emotional and environmental influences including mismatched educational environments may add to the complexity of asynchronous development and being gifted. Asynchronous development in the context of giftedness may present unique challenges in acquiring and maintaining skills associated with executive function, ultimately affecting potential, productivity, and goal achievement. This presentation will discuss the potential impact of asynchronous development on executive function in individuals who are gifted. Practical implications for parents, educators, and others working with gifted individuals will be addressed.

### **350 The Rubik's Cube and the future of STEAM education using six-sided platonic solids**

Dan Van der Vieren  
You Can Do The Rubik's Cube  
United States

The Rubik's Cube has become an international, iconic puzzle with numerous individuals attempting to solve it in record time. More recently, the Rubik's Cube has inspired many to attain new feats, such as solving blind-folded, solving with one's feet, solving underwater, or solving while juggling, to name a few. One application that has been gaining momentum in the United States and Canada is with STEAM education, using the cubes to create mosaic art. Numerous templates have been designed for the mosaics, but with enough creativity, images of nearly anything can be pixelated to augment the curriculum in STEM classrooms.

**47 The satisfaction of basic psychological needs through leisure activities by gifted secondary students in Hong Kong**

Man-chun Ngan  
The Hong Kong Academy for Gifted Education (HKAGE)  
Hong Kong

Tze-ho Fung  
Hong Kong Academy for Gifted Education (HKAGE)  
Hong Kong

Participation in leisure activities is indispensable for the development of adolescents. It is important to understand how these activities could lead to the fulfilment of basic psychological needs for competence, relatedness, and autonomy, and the (indirect) impacts of satisfying these needs on life satisfaction and social interaction anxiety. The results from Structural Equation Modeling supported the theory that participation in leisure activities, especially in social activities, had a direct positive impact to relatedness,

autonomy, and competence, which subsequently had a direct, positive impact to life satisfaction and/or a negative impact to social interaction anxiety. These findings provide insights for planning activities to benefit students.

**46 The seven guiding principles of equity-driven professional learning for gifted teachers**

Katie Lewis  
York College of Pennsylvania  
United States

Christine Weber  
University of North Florida  
United States

Angela Novak  
East Carolina University  
United States

This session will present seven guiding principles for culturally responsive professional learning for gifted teachers, developed by the authors, that are deeply rooted in foundational literature of gifted education, professional learning best practices, and culturally relevant teaching and leadership pedagogy. Participants will view samples of a professional learning plan with the seven principles in action and have opportunities to brainstorm ways to apply the principles to their own districts.

**178 The Year 9 Project: Building agency and engagement in the middle school English classroom for high ability/gifted students**

Briony Schroor  
Nossal High School  
Australia

Sue Lee-Ack  
Australia

Shane Woon  
Nossal High School  
Australia

Inspired by the documentary film *Most Likely to Succeed* (Greg Whiteley, 2015) and propelled by a desire to enhance student engagement in English and extend the most able of our year nine students (14–15-year-olds), we designed a curriculum we call *The Year 9 Project*. The cornerstones of the project are agency and choice (Framework for Improving Student Outcomes: The Education State, 2015). Students choose which texts they will study, when they will study them, and which tasks they will complete. We provide course templates and classroom support, and the students plan their own English adventures. Chaos, of course, ensues; but so too does wonderful creativity.

**282 They are just lazy — or are they?**

Michelle Vignon  
Makana Soul  
United States

When a gifted individual is not doing the work, the first assumption is that the person is lazy. The majority of the time, it is not laziness but rather a deeper issue that is leading to the lack of work being produced. Until the why and the deeper issues are discovered, the person will not change. In this presentation, the participants will learn the various causes of "laziness" and various strategies to approach this issue.

**314 Thrive a minority: Hispanic, immigrant, and gifted students in America**

Keila Moreno Mugabo  
University of Arkansas at Little Rock  
United States

Ann Robinson  
University of Arkansas at Little Rock  
United States

Immigration has been prevalent from the conception of the United States. In recent years, approximately half of the immigrant population has been from Spanish-speaking countries. This trend has led to the rise of a special population of gifted students who have specific strengths and needs. The challenges these students encounter as they adapt to a new country can prevent them from being identified. This session will discuss certain aspects relevant to this special population and propose a framework for identifying gaps in the existing literature and needed research on Hispanic immigrant and non-immigrant gifted students.

### **36 Tier-rific online differentiation: Making the most of online and blended learning for gifted learners**

Vicki Phelps  
Milligan University  
United States

As technology continues to drive instruction, how can online and blended learning be effectively managed and differentiated for the gifted population? Come learn how to evaluate online resources for gifted learners, as well as how to use innovation and research-based gifted pedagogy to pre-assess, differentiate, and assess online and blended learning with your students. Session includes ready-to-implement resources, applications, and ideas for your classroom.

### **54 Toolbox for gifted education**

Todd Stanley  
The Gifted Guy LLC  
United States

There is more than one way to work with gifted students. It is best for teachers to develop a toolbox of strategies for working with gifted students that both fits the need of

the student and the capability of the teacher. This session will look at ten of these strategies, ranging from pre-assessment and in-class enrichment options to outside learning experiences and academic competitions, as well as how involved each of these strategies will be in the overall classroom.

### **316 Twice-exceptional children and their growth mindset pathway for success**

Valeria Fontanals  
My Optimal Child  
United States

Twice-exceptional (2e) children may face many challenges in their everyday living and school performance. Even though they all may have received the same diagnosis, their prognosis differs from one case to the other. Most likely, their growth or fixed mindset is to blame. I will discuss the growth mindset approach and its impact on 2e children's view of their ability, and I will provide practical interventions to help children become their best version of themselves.

### **250 Types and profiles of exceptionally talented students in STEM: An exploration using Q factor analysis**

C. June Maker  
University of Arizona  
United States

Randy Pease  
DISCOVER Projects  
United States

Kadir Bahar  
University of Georgia  
United States

The purpose of the research was to identify types and profiles of exceptionally talented STEM high school students from different

cultural and social-economic status groups. Using Q Factor Analysis (correlating people rather than variables), a method employed in only two studies of gifted students, 43 students clustered on 13 factors and 81.18% of the total variance was explained. Factors included high and low achievers; students from diverse ethnicities, cultures, and environments; students with high and low creativity; and nine other clusters. Characteristics and profiles of types of students are described and compared with types and profiles in other studies and theories.

### **94 Understanding and preventing suicidal behavior among students with gifts and talents**

Tracy Cross  
William & Mary  
United States

Jennifer Cross  
William & Mary  
United States

In the United States, deaths by suicide have increased by 30% over the past 30 years. Studies about suicidal behavior among students with gifts and talents is quite limited in numbers and in interpretable findings. In addition, no national-level data exist that may be helpful in understanding the suicidal behavior of students with gifts and talents. Without greater understanding of the phenomenon, prevention efforts will be inadequate. Developed from decades of research on the suicide of gifted students, the spiral model of suicidal behavior among students with gifts and talents provides a framework for both research and prevention efforts.

### **167 Understanding gifted yearnings through Satir's model**



Debbie Clelland  
Debbie Clelland Coaching &  
Consulting  
Canada

Gifted children and adults experience yearnings for things such as acceptance, belonging, freedom, and peace. In today's world, sometimes those can be hard to come by. Instead, we may be only coping rather than thriving. Virginia Satir developed a model to help us understand our yearnings. This model explains why sometimes our feelings, perceptions, and expectations can get in the way of getting these needs met. This presentation will discuss Satir's model and how we can support ourselves and our children with more clarity and compassion.

### **59 Understanding the needs of twice-exceptional learners: Bridging research to practice**

Wendy A Behrens  
Minnesota Department of Education  
United States

C. Matthew Fugate  
University of Houston-Downtown  
United States

Cecelia Boswell  
Austin Creek Educational Systems  
United States

Eleonoor van Gerven  
Slim! Educatief  
Netherlands

Claire Hughes  
College of Coastal Georgia  
United States

Gifted students with disabilities, known as twice-exceptional or 2e learners, are at-risk when their instructional and social and emotional needs are not supported. Though their co-occurring conditions are not uncommon, they may be difficult to recognize. This session

looks at the lived experiences of gifted learners who are diagnosed with autism spectrum disorder, ADHD, or executive functioning disorder or are dyslexic. Attendees will hear strength-based vignettes that illustrate student profiles they may encounter.

### **212 Understanding your gifted child's brain ... and your own!**

Pamela Clinkenbeard  
University of Wisconsin-Whitewater  
United States

Erin Miller  
Bridgewater College  
United States

The field of neuroscience is booming worldwide, including neuroscience research on giftedness, talent, and creativity. But what does brain research really tell families and educators about parenting and teaching gifted and talented students? How might the science translate to the practice, and what role does neuroscience play in the development of more equitable gifted education? This session will touch on what we know (and don't yet know) about the neuroscience of learning, creativity, and emotion, and what that research means in practice for gifted students.

### **57 Using academic extra-curricular activities to enrich your gifted students**

Todd Stanley  
The Gifted Guy LLC  
United States

Learning does not need to occur only within the school day or in the classroom. There are tons of authentic experiences students can have by participating in extra-curriculars geared toward challenging the minds of gifted students. For instance, students participating

in Model United Nations not only learn how to form an argument and defend it through public speaking, they gain a global awareness as well. Chess teaches kids logic in the form of strategy as well as critical thinking and problem solving. Future City Builders allows students to be creative about what they envision cities of the future might look like and how they can best utilize technology to make it more environmentally friendly. This session will look at the benefits of such programs and offer plenty of choices to match the right program with the right level of kid.

### **55 Using advisory groups to make SEL intentional with gifted students**

Todd Stanley  
The Gifted Guy LLC  
United States

Schools often address the academic needs of our students, but how well are they meeting the social/emotional needs of our gifted students? It can be argued that these needs sometimes are more important than academic ones, and yet schools sometimes do not put into place a space for students to address social and emotional needs. I will be talking about how our gifted team, called the Gateway Program, has used town hall meetings and advisory groups to address these needs for our students.

### **169 Using narrative therapy techniques with gifted children in counseling and classroom settings**

Abdullah Tuzgen  
Purdue  
United States

In school settings, counselors and teachers need more efficient ways to identify and understand students' concerns. Narrative therapy has the potential to be very useful with creatively gifted children. In



this presentation, the participants will learn how narrative therapy techniques encourage students to use creativity to externalize their problems safely. Three techniques — writing a letter to the problem, outsider witness, and the tree of life — will be explained. The researcher will share the result from implementing these three techniques in a summer program.

### **311 Validity and utility of the Test of Creative Thinking-Drawing Production for Dutch adolescents**

Ophelie Desmet  
Purdue University  
United States

Yao Yang  
Purdue University  
United States

Lianne Hoogeveen  
Radboud university  
Netherlands

We examined the divergent validity and utility of the Test for Creative Thinking-Drawing Production (TCT-DP) in a gifted identification protocol that included measures of intelligence, school motivation, inquisitiveness, creativity, and academic achievement. We concluded that the TCT-DP provides valuable additional information on creativity for high-ability identification in which measures of intelligence, school motivation, and inquisitiveness are already included. Thus, this study's findings provide evidence for the utility and divergent validity of the TCT-DP when used with a Dutch population. This session will address our research findings and practical implications about using creativity tests within gifted identification protocols.

### **31 Validity check for a diagnostic tool of natural scientific abilities at kindergarten age**

Maria Sophie Schäfers  
Bielefeld University  
Germany

Claas Wegner\*  
Bielefeld University  
Germany

This presentation focuses on natural scientific giftedness at kindergarten age. Studies show that natural scientific skills acquired in kindergarten have an influence on school performance (Morgan et al., 2016; Guo et al., 2015; authors anonymized). As there is a shortage of skilled workers in the STEM sector, it has been suggested to motivate gifted and interested children early on in school to pursue a natural scientific career. Therefore, a test of natural scientific abilities was developed for kindergarten children to explore their strengths and abilities in the natural sciences and to provide subsequent individualized support.

### **345 Virtual peace rooms: A digital respite for self-regulation**

Rebecca Renegar  
Milton-Union Exempted Village Schools  
United States  
Aimee Ashcraft  
Huber Heights City Schools  
United States

When stressed or anxious, gifted students often need space to re-regulate before they resume learning. Many classrooms utilize calming corners — physical places where students practice mindfulness and self-regulative strategies. Virtual peace rooms give students a place and tools to aid that process in remote environments. Join us to create your own virtual peace room filled with resources to support gifted students!

### **125 Visual-spatial gifted students: Identifying the powerhouses of 21st-century innovation**

Marla Caviness-French  
Jeffco Public Schools  
United States

Leanne Cook  
Elizabeth School District  
United States

Mariah Koogle  
Cherry Creek Public Schools  
United States

Gifted identification for visual-spatial (non-verbal) students is becoming increasingly difficult because these thinkers' gifts and talents don't always shine in the academic setting. Yet, in the real world, these visual-spatial thinkers are developing the innovations that are powering the future of business, entertainment, athletics, and space missions. How can the identification, educational programming, and career education for visual-spatial learners be enhanced and addressed in the secondary school setting? This presentation will provide alternatives for identification for these learners and universal teaching strategies and enrichment options appropriate for any school world-wide.

### **62 Voices from parents of gifted children: Challenges and strategies to foster talent development**

Denise Fleith  
University of Brasilia  
Brazil

Daniela Vilarinho-Pereira  
Purdue University/University of Brasilia

United States  
Renata Muniz Prado  
University of Brasilia  
Brazil

This study investigated challenges faced by families of gifted children, as well as parental styles, practices, and strategies to foster children's

talents. The authoritative parental style was the most frequent among the participants. Parents mentioned challenges such as providing opportunities for children to develop their talents, helping children be free to grow up without feeling compelled to meet standards, and mediating the relationship between children and the school. Participants highlighted values related to education and effort. They sought psychological services for their children as well as schools whose characteristics could fit their children's needs. Practical implications are discussed.

### **284 What can we learn about improving gifted identification by studying how accurate the process is in Arkansas?**

Bich Thi Tran  
University of Arkansas  
United States

In this study, we examined the accuracy of the gifted identification process in Arkansas, USA, by comparing the degree to which students who were academically talented — in the top 5% on the third grade state assessment in reading and mathematics — were identified for gifted and talented (G/T) services. Across five years of cohorts, we found that roughly 30% of the top achievers in third grade were not identified as G/T. Multivariate models indicate that high-achieving students from lower socio-economic families were less likely to be identified as G/T. Our study has policy implications for G/T screening strategies.

### **33 What talented girls can learn from talented women: A qualitative study in the Netherlands**

Ingeborg Veldman- de Jonge  
Het Talent, and Radboud University  
Netherlands

Previous studies have shown that

gifted girls have specific needs in education to help them develop their academic potential. However, none of these studies focused on the Dutch population; this study does. What choices did women make, and what were the facilitating or hindering factors in making these personal decisions? Interviews with ten participants provided in-depth descriptions of participants' personal experiences. They described a clear focus on what they wanted to achieve and how they wanted to achieve it, whether in school, their careers, or their personal lives. Overall, the findings from this study are in line with those of previous research, but some of the findings were surprising.

### **90 What's your school's talent development plan?**

Houston Barber  
Frankfort Independent Schools  
United States

Jonathan Plucker  
Johns Hopkins University  
United States

In a series of recent studies, the lack of coordination among advanced learning policies and programs within schools and districts has become apparent. One strategy for increasing coordination among services within a school district is the creation of talent development plans. In this session, we will discuss how to construct talent development plans, share examples from districts, and provide advice for creating plans for your schools and districts.

### **97 Which sections of gifted theories are missing? Gifted students in public mental health settings**

Andree Therrien  
AT A CISSS des Laurentides  
Canada

We will analyze the various gifted

theories in relation to admissible youth mental health public services. Which theory sections are missing for a healthy development for the gifted? What are their reference patterns? What are the common threads and characteristics according to their age? What are the differences between those already identified from those that aren't? We will study existing confusions between diagnosed symptoms and characteristics of the gifted. Theories inform interventions that allow better identification of the gaps keeping gifted students from achieving their full potential.

### **245 World Hope Project: An experience in diverse collaboration and interdependence**

Tina Harlow  
Guiding Bright  
United States

The World Hope Project is an international children's video troupe, comprised of kids ages 6-17 from 26 countries, with a mission of spreading messages of hope and ideas for positive societal change. While providing hope to the viewing audience, this project also provides invaluable opportunities to the gifted children participating in the project. Together, they brainstorm tangible solutions for the global issues that cause them concern and voice their ideas through video. The World Hope Project fosters international connections, creativity, appreciation of differences, compassion, support of one another's ideas, optimism, and the intrinsic power of collaboration to catalyze positive change.

### **28 Young Women LEAD clubs: Empowering with inclusive leadership for high school girls**

Kimberly Clayton-Code  
Institute for Talent Development and Gifted Studies  
United States

Join us for this interactive presentation of the Young Women LEAD initiative. Young Women LEAD (YWL), a movement to empower girls and to empower girls to support each other, has been taking place annually the past 12 years in 28 states with 33,500 girls participating. We will share our successes and lessons learned from coordinating and hosting annual free Young Women LEAD conferences and clubs for gifted and high-potential high school girls. YWL club topics include philanthropy, financial literacy, inclusive leadership, 21st-century leadership skills, the neuroscience of confidence, and careers in STEM. Participants will be provided with free access to the conference and club curriculum.

# Audio-Visual Presentations

## **280 A laboratory for the early identification of giftedness**

Larisa Kalinina  
Samara State University of Social  
Sciences and Education  
Russia

Dmitry Ivanov  
Samara State University of Social  
Sciences and Education  
Russia

Nikolai Nikitin  
Samara State University of Social  
Sciences and Education  
Russia

A description of a laboratory designed to identify the giftedness of six-year-olds is presented. The materials are the result of an analysis of scientific papers and empirical experience. The laboratory is unique in its special approach to research: SAHTM (Science, Art, Humanities, Technology, Mathematics). The possibility that gifted behavior has a biological basis and that children and adult authors may learn about the world through artistic experiments is considered.

## **135 A self-coaching app for career choice: Development and application**

Tillmann Grüneberg  
University of Leipzig  
Germany

The pandemic showed how important it is to provide students with digital options for career orientation. This audio-visual presentation traces the process of creating a ten-step career orientation program based on career choice and

gifted research, as well as counseling and workshop practice (cf. Grüneberg 2019). The presentation will explain the structure (project management tools, steps, and tasks, profile) of the app DEEP! (published March 2021) and present its specific tools (e.g. self-reflection questions, 360-degree feedback, etc.). The presentation includes initial user feedback and will also cover the limits of self-coaching, as well as its use in gifted counseling.

## **183 A study on the measurement factors of metacognitive strategy**

Eun Ju Choi  
Soongsil University  
South Korea

Kyunghwa Lee  
Soongsil University  
South Korea

The purpose of this study was to deduce the components of metacognitive strategy. In previous studies and various literature, metacognitive strategy was defined as a method to help utilize metacognition effectively. Its components were divided into five domains and sub-factors were identified. The components of metacognitive strategy are the pre-prepared and planning domain, the task/text orientation domain, the composition and structuring domain, the execution domain, and the monitoring and evaluation domain. The sub-factors are comprehending, analyzing, elaboration, summarizing, defining the goals and sub-goals, global/local planning, connections of knowledge, summarizing, clarifying and predicting, monitoring, evaluating, and reflecting the solution. In this study, the

concept and constituent factors of metacognitive strategy will be shared and measurement tests will be developed and utilized in curriculum and programs for gifted students.

## **82 A toolkit for teacher recognition of underachieving gifted students: An intervention study with Victorian teachers**

Kerri Lyons  
Victoria University  
Australia

Underachievement by gifted students is an area of concern. It has been estimated that up to 42,500 gifted students are underachieving in Victoria, Australia, alone. A researcher-generated identification toolkit was given to 11 teachers participating in the research, along with a professional learning introduction to the toolkit. Participants also completed a pre- and post-survey to identify their knowledge prior to and post-use of the toolkit intervention. Interviews were also conducted. Findings indicated an increase in teachers' ability to identify giftedness and underachieving gifted students through use of the toolkit, but also differing views and limited expertise.

## **186 Affective dimensions of STEM education for gifted students: The case for an empathy map**

Wing-Leung Yeung  
Hong Kong Academy for Gifted  
Education  
Hong Kong

Oi-Lam Ng  
The Chinese University of Hong Kong  
Hong Kong

Ho-Seen Christie So  
Hong Kong Academy for Gifted  
Education  
Hong Kong

Ching-Man Tracy Kwok  
Hong Kong Academy for Gifted  
Education  
Hong Kong

This study reports on the design and implementation of a STEM enrichment program infused with affective elements. Specifically, it features a design-thinking approach to developing solutions to a self-selected problem addressing the United Nations Sustainable Development Goals. Thirty secondary school gifted students enrolled in the pilot study. Assuming empathy to be a core value of the design-thinking process and aligned with affective dimensions of thinking and learning, we investigate students' design-thinking development and STEM learning processes while implementing an empathy map as a pedagogical tool. We discuss our implications and insights for offering humanistic perspectives of STEM curricular design, especially for gifted students.

### **188 Beyond just a CV: Good practice sharing in a personal and career development program for gifted students**

Hoi-Ying, Iris Kung  
The Hong Kong Academy for Gifted  
Education  
Hong Kong

Ho-Seen, Christie So  
The Hong Kong Academy for Gifted  
Education  
Hong Kong

Ching-Man, Tracy Kwok  
The Hong Kong Academy for Gifted  
Education  
Hong Kong

Gifted students are often eager and have a high ability to learn, resulting in excellent performance and achievements in various fields. However, when it comes to making decisions about future study or career plans, they often encounter difficulties in choosing among many options. The Hong Kong Academy for Gifted Education has launched a pilot program named Aspirations: CV Challengers, which aims to help high school gifted students understand themselves and better prepare for immediate and future learning and career aspirations. Students were able to explore future career goals through discussions, job searching, mock interviews, personal profiling, self-reflection activities, and more. Unlike many CV-writing workshops, affective elements were infused in the program. According to student feedback, the intended affective learning outcomes were well-achieved by the students. In this session, some findings and strategies will be presented and discussed.

### **360 Bibliotherapy through a Gifted Lens**

Jervaise Pileggi  
Woodland Park School District  
United States

This presentation is a review of the literature around clinical and developmental bibliotherapy through the lens of socioemotional needs and the development of gifted individuals. This session will share the differences between clinical and developmental bibliotherapy and how it is used by gifted individuals and different domains, such as coping mechanisms and understanding self and environment.

### **22 Character development of gifted and talented children**

Kubra Kirca Demirbaga  
Durham University  
United Kingdom

This study explores the views of teachers about the character development of gifted and talented students in Turkey. This mixed methods research uses a critical realist approach, unusual in the field, outlining stratified ontology and uncovering causal mechanisms. By examining the powers and liabilities of macro-, meso-, and micro-level entities concerning the data, and employing the three-stage critical realist methodology of identification of demi-regularities, abduction, and retroduction, the gifted and talented label ideology was found to be the causal mechanism shaping teachers' views at the empirical layer.

### **235 Conceptual literacy units for gifted boys**

Julia Wilson  
Sydney Grammar School  
Australia

"They keep me on my toes!" Do you ever say that to yourself? Do you ever say that to a colleague? You're not alone. It's one of the magical things about teaching in gifted education — there's never a dull moment! Planning, creating, and implementing engaging and innovative programs isn't easy. However, it's essential. In this presentation, I will share examples of conceptual literacy units that stimulate highly able and gifted learners, with a focus on primary-age gifted boys. It will be practical and relevant, with big ideas, key questions, real-life connections, and "hooks" and ideas that you can implement in your classroom tomorrow.

### **160 Droppin' the "G": Transitioning from gifted and talented to an Academic Talent Development (ATD) program**

Sarah Bond  
The Southport School  
Australia



Jasna Poeszus  
The Southport School  
Australia

The Southport School is committed to research-based practice. Gagné (2015) suggests we should “substitute the labels of ‘gifted children’ and ‘gifted education’ for the more relevant terms ‘talentee,’ ‘academically talented,’ and ‘academic talent development.’” Aligned to this model, our Academic Talent Development (ATD) program identification matrix reflects a distinct academic focus. Considerations include nomination (parent-, teacher-, and self-), ability (using the Cognitive Abilities Test - CAT4), achievement (using above-level Progressive Achievement Tests – PATs), gifted characteristics, and prior performance (grades). This session will provide a brief overview of our program philosophy, research base, and identification processes.

### **372 Educational model for teaching all students in public education schools, including gifted and talented students, suitable for every teacher everywhere**

Mohammad Rawas  
Ministry of Education  
Saudi Arabia

This presentation aims to present a proposed educational model to teach all students in public education schools, including gifted and talented students, to suit every teacher everywhere. The model answers the main question, “What are the basic methods to support all students, including gifted ones, to meet their needs in public schools?” The following three questions stem from the main question: Question 1: in what ways can the learner’s strengths be documented to support meeting his or her needs within the regular classroom? Question 2: what appointments can be made to make educational decisions appropriate to

the needs of the student to develop the overall performance? Question 3: what are the appropriate methods for the development of performance for all students, including the talented and those with outstanding performance?

### **233 Enhancing emotional control and communication skills of intellectual-gifted students via literature education in the first language**

Li Weng  
Beijing No.8 High School  
China

Compared to other children, intellectually gifted children may show weaker capacity in emotional control and social communication skills. They could misunderstand others, which could affect their emotional management and social interaction performance. Using literature from the student’s first language can help them understand semantic implications, customary behaviors, and basic rules of the adult world. We have made three teaching attempts. First, through students’ feedback, teachers discover and accumulate students’ blind spots in semantic cognition; Second, guiding students to compare their own understanding with the author’s intentions. Finally, parent’s reading to children can help students discover the concerns of adults and behavioral norms in the adult world. The research results showed that the three teaching methods can improve students’ ability to correctly understand the ideas of others, thereby effectively improving the emotional management and social interaction performance of intellectually gifted children.

### **268 Game-based screening of gifted children’s abilities**

Šárka Portešová  
Masaryk University  
Czechia

Michal Jabůrek  
Masaryk University  
Czechia

Ondřej Straka  
Masaryk University  
Czechia

This presentation will discuss an online, game-based assessment system for the identification of gifted children. Each test is presented as an easy-to-understand video game and includes gamified features, such as a narrative, comics, sounds, points, and many more. Currently, five games measuring five different abilities (quantitative, deductive and inductive reasoning, associative memory, and mathematical knowledge and achievement) are available. The system records additional variables for each item, such as completion times, solution changes, etc. Consequently, the problem-solving strategies of any student can be analyzed in detail. When the game is completed, a report for parents and teachers is automatically generated. Thus, a school can use the results to conduct a follow-up assessment or adapt the individual educational plan of a student. All games underwent multiple validation studies and each normative sample consisted of more than 1,000 students.

### **296 Gifted students at Faculties of Teacher Education**

Jasna Arrigoni  
Faculty of Teacher Education  
University of Rijeka  
Croatia

Danijela Blanuša Trošelj  
Faculty of Teacher Education  
University of Rijeka  
Croatia

Potentially gifted children and young people differ from their peers in their way of learning and social-emotional characteristics. Monitoring their progress aims to create the conditions for a potentially gifted young person to become a gifted adult and thus contribute to community development. However, insights into the relevant scientific sources reveal that, with the completion of secondary education and the transition to higher education, significant scientific interests but also the support gifted students receive in practice cease. Therefore, this research aims to investigate university instructors' opinions on the discovery, ways of encouraging, use of teaching strategies, and open questions about their previous experiences. The obtained results contribute to the change of educational policies of institutions and universities as a whole and the strengthening of resources for the support of gifted students.

### **247 Identification of underrepresented populations for gifted programs**

Mashaal Alhibs  
King Saud University  
United States

The identification of English-language learners (ELL) for gifted programs is a persistent issue and one of the biggest concerns in the field of gifted education. The number of ELL students is increasing, but the representation of these students in gifted and talented programming remains disproportionate. Educators have researched and discussed several approaches to identify gifted students who come from groups that have consistently been underrepresented for gifted programs in America. Three highly interrelated approaches have been the focus of recent research and will be the central point of this presentation: local

norms, nonverbal ability tests, and teacher rating scales.

### **236 Interdisciplinary perspective on giftedness: a state-of-being heightened aware.**

Truus Van der Kaaij  
affiliation: Radboud University  
Nijmegen The Netherlands  
Netherlands  
In both 'Trait'- and recent 'Non-Trait'- perspectives on giftedness, a philosophical analysis is missing that accounts for an explanation of giftedness. Interdisciplinarity (philosophy and psychology) provides a holistic view-of-man (body, psyche, divinity), allowing a third perspective, the 'State-of-being' determined by a gliding scale of awareness. Neuropsychologist Solms (2018) 'moved' awareness, a form of homeostasis, from the generally conceived cortico-centric approach to affect (sensitivity), generated in the upper brain stem: we are not aware, unless felt. Awareness, the ability to feel things (Harari, 2020), is broader than intelligence. This study contributes to an explanation of 'the typical problems' of the gifted.

### **195 Nurturing giftedness through drama on Zoom in a pandemic**

Celene Chang  
Hong Kong

Can drama education be used to develop talent, even when it is delivered through Zoom? There were 66 seventh-grade students in a local school, where English is an Additional Language, who participated in a year-long program to write and perform an original script on stage. The pandemic brought an end to face-to-face classes. Drama education, which had been highly interactive and physical, had to adapt. In this presentation, we share teaching practices that can help students to continue to develop their giftedness and demonstrate

Renzulli's Three-Ring Conception of Giftedness, even with the constraints imposed by the pandemic.

### **140 Online learning during the COVID-19 pandemic: Perspectives from Hong Kong gifted students**

Angela Siu  
The Chinese University of Hong  
Kong  
Hong Kong

This study examined how students perceived the experience of online learning due to the COVID-19 pandemic. A total of 424 gifted students completed a short questionnaire and two open-ended questions on their views about online learning. Results indicated that students viewed online learning as time-saving, convenient, and flexible, with students in upper grades placing a stronger emphasis on these attributes than those from lower grades. Qualitative analysis suggested that students faced many challenges in their learning, including limited communication and interaction with teachers and peers, difficulty in focusing on and engaging in online classes, and extensive screen time.

### **239 Perceptions of economically challenged families regarding giftedness and family involvement: A literature review**

Jennifer Lemoine  
University of Denver  
United States

This presentation will present an overview of the current literature about the underrepresentation of economically disadvantaged students in gifted education. It will include subtopics on economic disadvantage and cognitive, social, and language development; the impact of poverty on academic

achievement; the impact of poverty on gifted identification; the school's role in supporting students with an economic disadvantage; and the role of family involvement.

### **112 Pre-service education professionals' knowledge of twice-exceptionality**

Eric Field  
Belin-Blank International Center  
for Gifted Education and Talent  
Development  
United States

Research efforts have used the Twice-Exceptional Needs Assessment Survey (Foley-Nicpon, Assouline, & Colangelo, 2013), as well as its recent Australian replication (Wormald & Bannister-Tyrell, 2021), to measure what teachers and other education professionals know about working with twice-exceptional students. However, there has not been a strong focus on what pre-service education professionals know about working with twice-exceptional students. This research will survey a broad sample of pre-service education professions in the United States to evaluate what pre-service teachers are learning about how to educate twice-exceptional students.

### **3 Preparing school leaders to meet the needs of gifted students: Case studies of differently performing schools**

Abdullah Almalky  
Ministry of Education  
Saudi Arabia

The role of school principals is essential and critical to the success of inclusive educational programs, including those provided for gifted students (Garner & Forbes, 2013; Inglesby, 2014). However, this role represents an intersection between special education, general education, and educational leadership (Lashley

& Boscardin, 2003). Many countries that have had modern school systems for a long time have succeeded in integrating gifted education services into the school formulation. However, in Arab and Gulf countries, where a modern school system has not been in place for very long (often for just a few decades), gifted students face more challenges.

### **194 Promoting active learning by connecting passionate learners Through STEM Club, STEAM Club, Creative Club, and Global Club**

Ho-Seen Christie So  
The Hong Kong Academy for Gifted  
Education  
Hong Kong

Tsz-Yan Kathy Cheung  
The Hong Kong Academy for Gifted  
Education  
Hong Kong

Hok-Ling Cheung  
The Hong Kong Academy for Gifted  
Education  
Hong Kong

Hoi-Ying Kung  
The Hong Kong Academy for Gifted  
Education  
Hong Kong

A series of community-based learning programs was piloted to engage gifted students who had immense interests in STEM, creativity, and global and local issues. The programs adapted active and collaborative learning for cognitive and affective outcomes in different themes and domains. From an institutional learner survey, it was found that gifted students were keen on having more interaction with their peers. An inventive mindset and capability were nurtured along with a range of instructional strategies to encourage self and peer learning, self-initiation, collaboration, and compassion for oneself and others. The experience of deploying these strategies will be

presented and discussed.

### **40 Socioeconomic and sociocultural status as the determinants of access to the Center for Science and Arts**

Fatih Dereli  
Trakya University  
Turkey

This study aims to examine the socioeconomic and sociocultural structures of gifted and talented students and their families at the Center for Science and Arts (BILSEM). The participant group of this research will be the families of 57,360 gifted and talented students studying at the BILSEM. Participants (approximately 1,000 families) will be selected by simple random sampling. To collect data, an e-form prepared via Microsoft Forms will be sent to the participants. In the form prepared by the researcher, there are a total of 30 questions aimed at determining the socioeconomic and sociocultural characteristics of the families and their children.

### **87 Student teachers' implicit attitudes toward gifted students in Germany**

Sandra Klaubert  
University of Erfurt  
Germany

The purpose of the presentation is to provide insights into the development of a Single-Category Implicit Association Test (SC-IAT) assessing the implicit attitudes of student teachers in Germany toward gifted and talented students. The author will show the results of pre-studies that have already been conducted by briefly explaining the dualism of attitudes and their meaning, especially for teacher education.

### **15 Support education room and advanced history education for superior and talented students**

Serife Bektas  
Munzur Üniversitesi  
Turkey

A study of historical thinking was conducted in Turkey, assessing learning in the two main schools in education for gifted and talented children. The two schools are the BILSEM (Science and Art Center) and the supportive education rooms which use acceleration and enrichment. The study included observations using Egan's historical thinking stages of 185 gifted students. The students were taught courses in advanced history and the philosophy of history. At the conclusion of the course, each student was required to submit an academic essay as the outcome of the course. This session will report on this study.

### **290 Talented girls to eminent visual artists: The influence of childhood and adolescence on artistic creativity**

Katrina Ginis  
Monash University  
Australia

Sandra Stewart\*  
Monash University  
Australia

Leonie Kronborg  
Monash University  
Australia

The development of talents and exceptional capacities can be significantly influenced by experiences during childhood and adolescence. This qualitative research explored the interaction of potential abilities and early life experiences, including environmental enrichment and education, on the

creative development of ten eminent female Australian visual artists. This investigation contributes to psychological understandings of how creativity and artistic talent evolve and can be fostered to enable the realization of creative potential. The findings, including facilitative factors and sensitive developmental periods that were evident, have implications for educating, supporting, and empowering current and emerging female artists to excel for the benefit of society.

### **95 The Collaborative Gifted Program**

Ayesha Umar  
Ayesha Umar-Careers and Education Consultancy  
Australia

The Collaborative Gifted Program is a first-of-its-kind program designed and delivered at a government primary school in Australia. The school was a finalist for the Victorian Education Award for Outstanding Provision for High-Ability Students in 2020. It is a talent development program based on developing collaboration among stakeholders to nurture gifted students. It draws on the concept of family engagement in education and flourishes on teacher-parent coordination or home-school relationships. Three separate training sessions are held every term for gifted students, teachers, and parents.

### **363 The effects of secondary school teacher wellbeing on creativity-fostering teacher behaviors: Emotional intelligence as mediator**

Farida Kurniawati  
Universitas Indonesia  
Indonesia

Shahnaz Safitri  
Universitas Indonesia  
Indonesia

Creativity is an essential skill in the 21st century, yet according to Global Creativity Index, Indonesian students do not possess it. This finding leads to the question of whether these students are encouraged to think creatively. Since the teaching profession is stressful and has high administrative workloads, we aim to explore whether teachers' wellbeing predicted creativity-fostering teacher behavior (CFTB) in learning, and whether emotional intelligence (EI) moderates the potential impact of teacher wellbeing on CFTB. The data gathered through an online questionnaire from 302 secondary teachers (69.8% female; M-age=40.08) showed that EI moderated the relationship between teacher wellbeing and CFTB.

### **299 The history of gifted education in the United States**

Anna Armitage  
United States

The history of gifted education in the United States is a topic rarely discussed for its practical import to the field, but it provides understanding and context for many of the challenges in gifted education today. Issues of equity and diversity in gifted education began at the field's inception, while many of the ways to support gifted learners have been agreed upon for nearly 100 years. The history of gifted education must be understood if we are to support the goals of equitable and appropriate gifted education in the 21st century.

### **307 The influence of a creative classroom atmosphere on the creativity of gifted children: An experimental study**

Li Cheng  
China

Xiaowei Zhang  
China



Lihong Wang  
China

A creative classroom climate has an impact on the creativity of gifted children, but there is still not enough empirical evidence to support this hypothesis. The purpose of this study was to compare the creativity level of gifted children in different educational settings (a creative classroom atmosphere vs. a traditional classroom atmosphere). Creativity was rated by the level of decision-making in the activity, with both fluency and originality scores. The results reveal that gifted children in the creative classroom atmosphere scored higher on creativity than those in the traditional classroom atmosphere. The finding may provide guidelines for the construction of a classroom environment for gifted children's education.

### **208 The role of parental support in the development of gifted dancers**

Maria Aleksandrovich  
Pomeranian University  
Poland

This presentation will address the question of how families can support gifted dancers. The study is based on the theoretical ideas of Jung (1979), who wrote that the education of gifted and talented children makes considerable demands on the psychological, intellectual, moral, and artistic susceptibilities of the educator; and of Strelau (2004), who underlined the importance of nearest surrounding for talent development. During the presentation, the above-mentioned ideas will be discussed and the results of empirical studies conducted in Poland, Belarus, and Russia of ballet dancers' parental support will be reported.

### **60 The transnational mobility of gifted and talented people**

Alberto Abad  
Universidade Federal de Juiz de Fora - UFJF (Brasil)  
Brazil

The 21st century is showing a global increase in international migration, including the transnational mobility of gifted and talented people. However, there is little research on gifted and talented people's transnational mobility in the psychology of migration. This study aims to describe the transnational mobility process of gifted and talented Latin American people and analyze the individual, cultural, and social aspects and personal expectations of transnational mobility with talent development. The technical-empirical instruments consist of a demographic characterization questionnaire in Portuguese, Spanish, and English and a semi-structured interview script.

### **261 Twice-exceptional identification and identity formation**

Robin Tobin  
Denver Public Schools & University of Denver  
United States

The purpose of this study is to explore the relationships among the age of twice-exceptional identification, order of identification (which exceptionality was first), and academic performance within the theoretical framework of Identity Formation.

### **297 Views of psychological counselors and guidance counselors about the career development of gifted students**

Nüket Afat  
İstanbul Sabahattin Zaim University  
Turkey

The aim of the study is to examine the views of psychological counselors and

guidance counselors about the career development of gifted students. This study used a qualitative research method and a case study design. The working group is 42 psychological counselors and guidance candidates at a foundation university in Istanbul. Within the scope of the research, the questions "Which career choices do gifted individuals prefer?" and "What are the effects of the career choices of gifted individuals?" were posed. The content analysis method of the data will determine possible sub-themes and gather them under various themes according to the distribution of the opinions of the participants.

### **142 Virtual reality and creativity**

Robert Kelemen  
Varazdin County  
Croatia

Lianne Hoogveen  
Radboud University Nijmegen  
Netherlands

Marjolijn van Weerdenburg  
Radboud University Nijmegen  
Netherlands

This submission reports on the findings of a systematic literature review on virtual and augmented reality and creativity in educational settings. The research investigates the implementation of virtual and augmented reality and virtual worlds for teaching creativity. The submission also makes connections between models of creativity and virtual worlds, as supported by the findings of the research.

### **85 Whose rights and duties? Conflicts between teachers and parents of gifted children**

Nava Ben Artzey  
Ono Academic College  
Israel

Fulfilling the needs of a gifted child



in a mixed-ability classroom can be a source of tension between parents and teachers. This study applied theoretical and practical tools to describe factors that inhibit the parent-teacher relationship. It draws on Positioning Theory to understand strategies used by parents with teachers. In-depth interviews using a qualitative research design were conducted with 40 parents from Israel. Speech act analysis and Bamberg's proposal were implemented, and three types of strategies were identified: Law Enforcers, Motivators, and Mentors. For each type, parents attribute different rights and duties to themselves and to the teachers. These findings indicate that it is not a lack of knowledge or the impact of decentralization on school decision-making that inhibits parent-teacher collaboration. The analysis also reveals the interaction between the psychological and behavioral aspects of parents; these are not necessarily congruent.

### **123 Younger gifted voices: Self-reflection and creativity designing the future of education**

Carolyn Giles  
Born to Soar  
Australia

Lost between discussion of the compliant and the disruptive gifted child is the recognition of the child's need to seek a personalized learning journey. The Enterpotens Program was designed to act as a circuit breaker to prevent developing traits of underachievement from becoming established practices. The program aims to enable parents to step back from their role as advocates and enable young, gifted children to develop skills as communicators of their learning needs. By filtering their reflective thoughts through their personal lens of creativity, children can become the designers of their

own learning. Elements of this program will be shared to encourage thoughtful deliberation.

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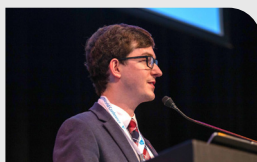
2021 marks 40 years The Center for Gifted Studies has been serving children who are gifted and talented, their educators, and their parents. Located on the campus of Western Kentucky University in Bowling Green, Kentucky, The Center, under the direction of Dr. Julia Roberts, has become one of the preeminent advocates for gifted education in the United States.

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The Center has a long history with the World Council for Gifted and Talented Children. Dr. Roberts first attended in 1987 (Salt Lake) and has since attended a total of 14 World Conferences. She has served as Delegate, Treasurer, and as President. As Dr. Roberts says, "I've seen the world through the World Council."



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In addition to The Center's longstanding attendance at World Conferences, the WCGTC headquarters is also located on WKU's campus. Dr. Tyler Clark has been Executive Administrator since 2015 and has been involved with hosting the World Conferences since 2013.

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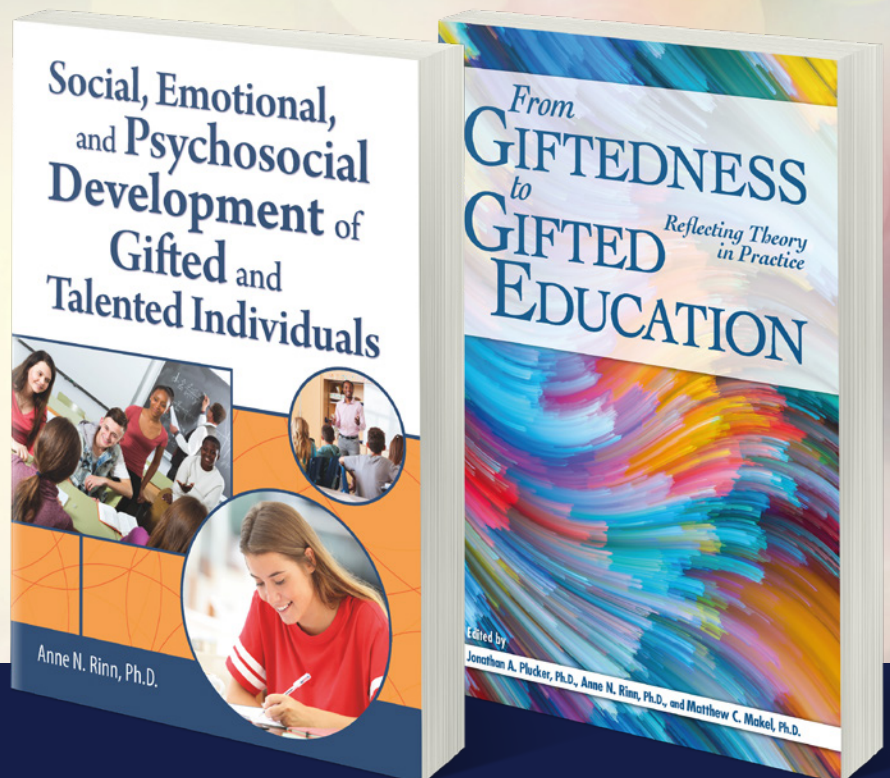
# KEYNOTE PRESENTATION

Research on the Social and Emotional Development of Gifted Individuals: Moving the Field Forward

ANNE N. RINN, PH.D.

Instead of favoring one paradigmatic approach to giftedness over the other, in this presentation keynote speaker Anne N. Rinn, Ph.D., advocates for using multiple paradigmatic lenses to better understand the social, emotional, and psychosocial development and needs of gifted individuals, and presents guiding questions for researchers to consider as they move forward in their understanding of the social and emotional development of gifted individuals.

Learn more at [worldgifted2021.com/keynotes](http://worldgifted2021.com/keynotes).





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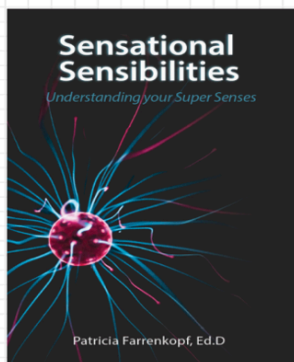
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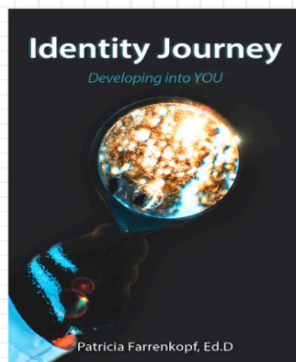
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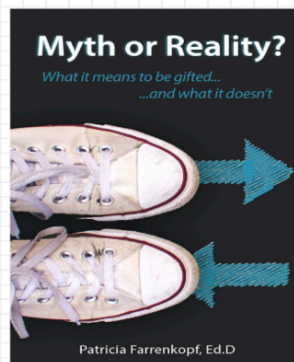
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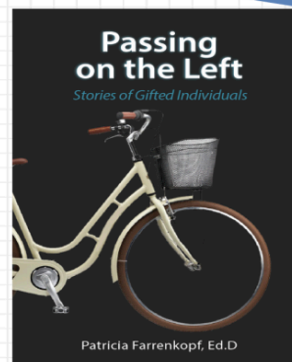
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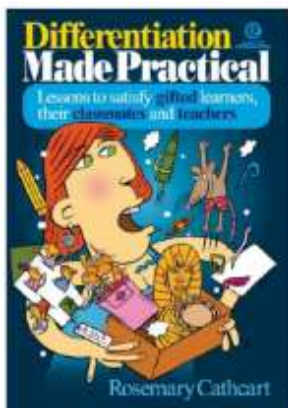
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- Association of Talent and Giftedness (STaT – Czech Republic)
- Associazione Italiana Farfalle (AIF), Italy
- Australian Association for the Education of the Gifted (AAEGT)
- Centers of Excellence of Varaždin County (Croatia)
- The Center for Gifted Studies at Western Kentucky University
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- Chinese Culture and Education Center
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# Delegates

2019 - 2021

- Australia: Carmel Meehan, Margaret Plunkett, Michelle Ronksley-Pavia, Susan Knopfmacher (Alternate)
- Bangladesh: Zahirul Islam
- Brazil: Jane Farias Chagas Ferreira, Daniela Vilarinho-Rezende, Maria Lucia Sabatella, Eunice Soriando de Alencar (Alternate)
- Canada: Bruce Shore, Andree Therrien
- Columbia: Seth Jager
- Costa Rica: David Bolaños
- Czech Republic: Eva Vondrakova, Stansilav Zelenda
- Denmark: Ole Kyed
- Ecuador: Fanny Alencastro, Daniela Ayora
- Egypt: Nermeen Abou Gaza, Yasmin Hussein
- Estonia: Viire Sepp
- Finland: Sonja Laine
- Germany: Christian Fischer, Annette Heinbokel, Klaus Urban
- Greece: Sofia Theodoridou, Konstantinos Koutsantonis
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# Gifted and Talented International

THE OFFICIAL JOURNAL OF THE WORLD COUNCIL  
FOR GIFTED AND TALENTED CHILDREN

**Gifted and Talented International (GTI)** is an international, refereed journal publishing articles that significantly contribute to our understanding and promotion of giftedness, talent, and creativity in children, adolescents, and adults. Its purpose is to share current theory, research, and practice in gifted education with its audience of international educators, scholars, researchers, and parents.

**GTI** publishes original research, theoretical studies, systematic literature review papers or accounts of practice. Integrative literature reviews and theoretical pieces that appreciate empirical work are welcome. Topics include:

- development, personality and individual differences, affect and motivation, social behavior and cross-cultural issues in relation to giftedness, talent, and creativity;
- identification, education, and fostering of giftedness, talent, and creativity;
- teacher education and professional development;
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- counseling issues.

**Gifted and Talented International** is the official journal of the **World Council for Gifted and Talented Children (WCGTC)**, a worldwide non-profit organization that provides advocacy and support for gifted children with an active membership of educators, scholars, researchers, parents, and others interested in the development and education of gifted and talented children of all ages. For more information about **WCGTC**, visit: [www.world-gifted.org](http://www.world-gifted.org).

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# Worldwide Advocacy *for* Gifted Individuals



The World Council for Gifted and Talented Children, Inc. (WCGTC) is a worldwide nonprofit organization that has provided advocacy and support for gifted children for more than 40 years. The WCGTC is a diverse organization networking the globe with an active membership of educators, scholars, researchers, parents, and others interested in the development and education of gifted and talented children of all ages.

The WCGTC consists of its Members, Executive Committee, Delegates from member countries, and a Headquarters that relocated to Western Kentucky University in Bowling Green, Kentucky in 2011.

## Publications

*World Gifted* is the official bulletin of the World Council for Gifted and Talented Children. It contains the latest news and information concerning the organization, its membership, and the international gifted education community. It is published one - three times each year.

*Gifted and Talented International (GTI)* is the official journal of the World Council. Its purpose is to share current theory, research, and practice in gifted education with its audience of international educators, scholars, researchers, and parents. *GTI* is refereed by an editorial review board of leading international educators of the gifted. It is published twice a year.



## World Conference



The WCGTC hosts a biennial World Conference at a major international city during late July or early August in odd-numbered years. World Conferences provide unique opportunities for individuals interested in developing gifted education and talent development to gather from around the globe to discuss the vital matters, issues, and concerns that impact the field of gifted education.

## Membership

While we are known best for our biennial World Conference, the spirit of sharing actually goes on year-round among our membership. By joining the WCGTC you can become part of this vital network and have access to hundreds of other peers while learning about the latest developments in the field of gifted education. Join today at [world-gifted.org/join](http://world-gifted.org/join).

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The World Council for Gifted and Talented Children

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