WORLD GIFTEDNESS CENTER

2ND WORLD GIFTEDNESS CENTER INTERNATIONAL CONFERENCE

16 - 19 of October 2023 Virtual Conference

CONFERENCE PROGRAM

Hamdan bin Rashid Al Maktoum Foundation for Medical and Educational Sciences

Content Index

Message from the Chairman of the Board of Trustees of the Hamdan bin Rashid Al Maktoum Foundation for Medical and Educational Sciences

Welcome esteemed participants to the distinguished 2nd World Giftedness Center International Conference, scheduled virtually from the 16th to the 19th of October, 2023.

In the realm of gifted education and talent development, which holds boundless promise on a global scale, our journey has never been more purposeful. A continuous endeavor led by diligent researchers and dedicated practitioners is illuminating new pathways, advancing this burgeoning domain beyond measure.

Within the embrace of this unparalleled conference, our foremost objective remains the exchange of wisdom concerning giftedness and talent development. We aspire to accentuate the world's finest practices, united in the common pursuit of nurturing giftedness. This endeavor stands as a cornerstone, a testament to our commitment to forging resolute, empowered individuals who will shape a brighter collective destiny.

World Giftedness Center (WGC) is a visionary initiative infused with the indelible legacy of the late Sheikh Hamdan bin Rashid Al Maktoum. May his soul rest in peace. Until his final moments, the late Sheikh Hamdan was unwavering in his determination to elevate educational standards, setting new benchmarks in the realm of giftedness and talent development.

The late Sheikh Hamdan held a firm belief that each of us possesses inherent gifts waiting to be unearthed and nurtured for the betterment of our world. He knew that the crux lay in discovering and fostering these latent talents, crafting a reservoir of shared value that would reverberate across generations.

Our mission is to manifest to the world that while giftedness is indeed a divine endowment, it is equally imperative to embark on its exploration and cultivation. This task is a collective responsibility, uniting educators, practitioners, and researchers under a common banner. Our global assembly beckons luminary educators, distinguished practitioners, and accomplished researchers, converging from myriad corners of the globe. The canvas of our conference unfurls with a series of meticulously crafted workshops.

In closing, with great anticipation, I extend my heartfelt welcome to the second World Giftedness Center International Conference. Together, let us embark on a journey of enlightenment, empowerment, and shared growth, transcending boundaries to shape a future replete with promise.

May our collective efforts illuminate the path ahead.

H.E Humaid Mohamed Al Qutami
Chairman of the Board of Trustees
Hamdan bin Rashid Al Maktoum Foundation for Medical and Educational Sciences

Greeting Letter for Conference Participants
Dr. Mariam Ali Alghawi
Director at the World Giftedness Center

With sincere delight and anticipation, I extend a heartfelt welcome to all of you at the 2nd WORLD GIFTEDNESS CENTER INTERNATIONAL CONFERENCE. As we convene here, poised to embark on a voyage of exploration, innovation, and collaborative insight, we are reminded of the extraordinary potential harbored within gifted individuals and the profound influence they wield in shaping the world of tomorrow.

This conference is an exceptional source of inspiration, serving as a platform for exchanging innovative ideas and a jubilant celebration of the distinct attributes that distinguish gifted learners. Over the forthcoming days, we shall immerse ourselves in a diverse tapestry of subjects, ranging from avant-garde pedagogical strategies to the latest strides in research, all while embracing pragmatic approaches tailored to address the nuanced requirements of gifted students.

Gifted education transcends the notion of mere accelerated learning; it aspires to cultivate an all-encompassing environment where creativity, critical thinking, and empathy flourish harmoniously. By embracing the inherent talents within gifted learners, we are not merely shaping an intellectually dynamic future, but also a future underscored by social responsibility.

Beyond the formal proceedings, let us be mindful that the ideas sown in this fertile ground possess the potential to sprout into transformative educational practices, pioneering research, and a profound comprehension of the optimal means to champion gifted individuals on their path to distinction.

I extend my heartfelt gratitude to each participant for your presence within this vibrant community, unified in its dedication to unleashing the potential of gifted education. Together, let us embark on this enriching odyssey, working in harmony to craft a world with intellectual vitality and promise.

Warm regards,

Mariam Ali Alghawi, PhD
Director
World Giftedness Center
Hamdan bin Rashid Al Maktoum Foundation for Medical and Educational Sciences

About Conference

INTRODUCTION

The Biennial International Conference hosted by the World Giftedness Center is a significant event that emerges as one of the key outcomes of the World Giftedness Center (WGC).

This conference, now gearing up for its second edition scheduled for October 2023, stands as a pivotal platform dedicated to advocating and disseminating international best practices within the realm of gifted education and talent development.

By creating a biennial rendezvous, the World Giftedness Center International Conference provides a recurring forum for experts, practitioners, researchers, and educators to convene, thus further nurturing a global network of minds committed to propelling the fields of gifted education and talent development.

The conference embraces the virtual realm, ensuring accessibility and participation from individuals across the world. The event's focus remains steadfast in its commitment to amplifying international best practices within the sphere of gifted education and talent development.

Through a dynamic and innovative blend of interactive virtual workshops and insightful webinars, the conference seeks to provide a fertile ground for the cross-pollination of ideas, the sharing of experiences, and the exploration of cutting-edge methodologies.

CONFERENCE THEME

Practice Meets Research

Latest Trends in Talent Development

About Conference

The central theme of the World Giftedness Center Conference revolves around the idea of "Practice Meets Research - Latest Trends in Talent Development." This theme underscores the crucial link between putting research into action and staying at the forefront of knowledge in the sphere of fostering gifted individuals.

The emphasis here is on the importance of cooperation among professionals, educators, and researchers to translate theoretical insights into effective methods that bring advantages to gifted individuals.

It also brings attention to contemporary progress and innovative approaches in talent development, encompassing fresh tactics, approaches, and technologies that stem from ongoing research and real-world know-how.

The conference primarily focuses on talent development, honing in on the process of recognizing, nurturing, and optimizing the potential of those with exceptional abilities across various fields. In essence, this theme establishes the foundation for a conference that brings together specialists, practitioners, and researchers to delve into and exchange the latest advancements and practical uses in the continually evolving realm of giftedness and talent development.

TOPICS

- Talent Development
- Creativity
- Gifted Education
- Identification
- STEM Education
- Mentoring

PARTICIPATION

The World Giftedness Center welcomes researchers, educators, parents, and anyone interested in the field of gifted education and talent development from all over the world to participate in the conference.

Conference Agenda

DAY01

Time	Category	Name	Presentation/Workshop
16:00 - 16:10	Opening Speech and Introduction		
16:10 - 16:55	Keynote Speaker	Prof. Joseph Renzulli & Prof. Sally Reis	A Focus on Student Strengths & Interests
17:00 - 17:30	Speaker	Dr. Rena Subotnik	Insider Knowledge: A missing piece in the comprehensive development of STEM talent
17:30 - 18:00	Break		
18:00 - 18:30	Speaker	Prof. Paula Olszewski-Kubilius	Adopting a Talent Development Framework for Gifted Education: Implications for Practice
18:30 - 19:30	Webinar Speaker	Dr. Mingjing Zhu	Unlocking Potential: The Hector Children Academies and Their Systematic Approach to Fostering Gifted and Talented Students

DAY02

Time	Category	Name	Presentation/Workshop
16:10 – 16:55	Keynote Speaker	Prof. Abdullah Aljughaiman	Creativity is not just thinking skills
17:00 - 17:30	Speaker	Dr. Ahmed Abdulla Alabbasi	Creativity in Gifted Education Research: What do we Know and What Needs to be Explored?
17:30 - 18:00	Break		
18:00 - 18:30	Speaker	Prof. Elena L Grigorenko	A Network Model of Gifted Education

DAY03

Time	Category	Name	Presentation/Workshop
16:10 – 16:55	Keynote Speaker	Prof. Heidrun Stoeger	The Role of Mentoring in Talent Development
17:00 - 17:30	Speaker	Ms. Roslyn Mahrous	Principles of STEM Education: Exploring a system-wide action research project
17:30 - 18:00	Break		
18:00 - 18:30	Speaker	Dr. Paul Hernandez	Webs of science: The formation and impacts of effective mentorship networks for underrepresented students pursuing STEM careers
18:30 – 19:30	Webinar Speaker	Dr. Daniel Patrick Balestrini Dr. Kathrin Emmerdinger	Applying Key Elements of Evidence-Based Mentoring for Talent Development

DAY04

Time	Category	Name	Presentation/Workshop
16:10 – 16:55	Keynote Speaker	Prof. C. June Maker	Identifying Gifted Students for the 21st Century Context
17:00 - 17:30	Speaker	Prof. Alaa Eldin A. Ayoub	Development of the Hamdan Giftedness Test: Psychometric Analysis Strategies According to Advanced Global Models (Rasch Model)
17:30 - 18:00	Break		
18:00 - 18:30	Speaker	Prof. Megan Foley Nicpon	Best practices in Identification of Twice-Exceptional Students for Talent Development Opportunities
18:30 – 19:30	Webinar Speaker	Prof. Albert Ziegler	From Traditional to Modern Gifted Identification: A Practical Guide

Conference Speakers

A Focus on Student Strengths & Interests

Dr. Joseph S. Renzulli | joseph.renzulli@uconn.edu
Dr. Sally M. Reis | sally.reis@uconn.edu

PRESENTATION ABSTRACT

Although most people agree that there is a need to make special educational provisions for students with superior potentials for innovation, controversies have existed for more than a century about the best ways to serve gifted students. These controversies exist along two interrelated dimensions. One dimension deals with the type of pedagogy or theoretical rationale that should guide education for the development of innovative abilities; and the second deals with the ways in which service delivery vehicles should be organized and implemented. The Schoolwide Enrichment Model (SEM) is a plan that attempts to address these controversies by (1) focusing on a pedagogy that approximates the cognitive and co-cognitive factors that bring creative productive persons to our attention, and (2) organizing programs around a continuum of services model that accommodates a wide variety of potentials across academic domains as well as other arenas in which potentials can be directed toward high levels of performance. The Schoolwide Enrichment Model also applies the know-how of education for innovation to the process of total school improvement. Based on the belief that "a rising tide lifts all ships," the SEM includes specific vehicles for providing all students with opportunities for “high end” learning, but it is also designed to guarantee that traditionally high achieving students receive the maximum amount of challenge and curricular differentiation. The model is composed of three interacting dimensions: Organizational Components and Service Delivery Components, and the School Structures upon which these components are brought to bear. In this regard, the SEM is different from other approaches to programming for innovative potential because it is designed to embrace rather than replace traditional programs for the development of giftedness. This goal is accomplished by targeting the individual strengths of all students in the areas of abilities, interests, and learning styles; and using this information to organize specific service delivery mechanisms that promote innovation and creative productivity. These mechanisms include: curricular modification, creativity training, experiences in innovation and invention, grouping practices, targeted individual and small group investigative opportunities, alternative scheduling patterns, and guides for developing differentiated curricular activities. To develop the talents of all students, the model focuses on two aspects of the work of classroom teachers and enrichment specialists who are specially trained in developing creative/productive thinking. The first aspect deals with defining and delivering truly differentiated services to targeted students based on their individual strengths. The second aspect is concerned with strategies for integrating general enrichment into the total school program, providing vehicles for the extension of general enrichment to targeted students, developing a cooperative support system between special program teachers and the general faculty.

Conference Speakers

A Focus on Student Strengths & Interests

Dr. Joseph S. Renzulli | joseph.renzulli@uconn.edu
Dr. Sally M. Reis | sally.reis@uconn.edu

SPEAKER BIO

Dr. Joseph Renzulli

Dr. Joseph Renzulli is a Distinguished Professor at the University of Connecticut. His research and practical applications of his major theories have focused on total school improvement by using student strengths and interests to promote increased achievement and high levels of enjoyment and engagement in learning.

His books and articles have been translated into several languages and his work is widely used around the world. In 2022 he was voted # 3 among World's Top 30 Education Professionals.

Prof. Sally M. Reis

Prof. Sally M. Reis is the former Vice Provost of Academic Affairs and a Board of Trustees Distinguished Professor at The University of Connecticut. She holds the Letitia Neag Morgan Endowed Chair in Educational Psychology. She was a public school teacher for 15 years, 11 of which were spent working with academically talented students on the elementary, junior high, and high school levels.

She is a well-known scholar and has authored or co-authored over 280 articles, books, book chapters, monographs and technical reports. Her research interests related to academic talent development, differentiation of instruction, enrichment programs, and diverse groups of talented students.

She is also interested in extensions of the Schoolwide Enrichment Model for academically talented students and as a way to expand offerings and provide general enrichment to identify talents and potentials in all students. Sally is a past President of the National Association for Gifted Children, has earned multiple awards for distinguished scholarship, and is a fellow of the American Psychological Association.

Conference Speakers

Creativity is not just thinking skills

Prof. Abdullah Aljughaiman | alju9390@gmail.com

PRESENTATION ABSTRACT

Creativity is often associated with thinking skills, such as idea generation and problem-solving. However, creativity is not limited to just thinking skills. It is a complex phenomenon that involves multiple dimensions, including affective, motivational, and contextual factors.

This presentation will explore the various dimensions of creativity and highlight the importance of considering all aspects of creativity in promoting and fostering creative thinking.

It will also discuss practical strategies for developing creativity, including the importance of divergent thinking, curiosity, and intrinsic motivation. By the end of this presentation, participants will have a better understanding of the multifaceted nature of creativity and be equipped with practical tools to enhance creative abilities.

SPEAKER BIO

Prof. Abdullah Aljughaiman is a full professor at the Education College in King Faisal University, Saudi Arabia. He is the founder of Gifted Education in Public Schools in S A (the first in the region 2001), and also the founder of The National Research Center of Giftedness and Creativity in S A (the first in the region).

Prof. Aljughaiman contributed on establishment of several identification tools and programs to serve gifted students in S A and some of the Arab countries, such as: Alef test, AlefYa Battery, Apprenticeships, Mentorship, Ithra (Career counseling program), International Summer Programs…etc.

The primary focus of Prof. Aljughaiman's professional activities is the development and education of gifted and talented students.

Conference Speakers

The Role of Mentoring in Talent Development

Prof. Dr. Heidrun Stoeger | heidrun.stoeger@paedagogik.uni-regensburg.de

PRESENTATION ABSTRACT

Mentoring can be a promising method of talent development as it allows for highly individualized support of learners tailored to their developmental stage, their knowledge and skill level, as well as their individual needs. However, the promise of mentoring often goes unrealized due to inadequate planning and ineffective implementation.

In this presentation, conditions of effective mentoring will be reviewed, the role of mentoring on different stages of talent development will be discussed, and examples of mentoring programs targeting different developmental stages of talent development will be described.

SPEAKER BIO

Prof. Dr. Heidrun Stoeger is full professor for educational sciences at the University of Regensburg (Germany). She holds the Chair for School Research, School Development, and Evaluation.

She is vice president of the International Research Association for Talent Development and Excellence (IRATDE). She served from 2007 to 2014 as editor in chief of the journal High Ability Studies.

Prof. Dr. Stoeger has more than 250 publications on talent development, self-regulated learning, motivation, fine motor skills, and teacher education. She is a member of several national and international scientific boards and expert commissions in the field of giftedness research and gifted education.

Conference Speakers

Identifying Gifted Students for the 21st Century Context

Prof. C. June Maker | junemaker@hotmail.com

PRESENTATION ABSTRACT

The world we live in is very different from the 20th Century; the world of the future, in which our students will live, is unknown. Why, then, do we continue to use IQ tests created for the world of the past? We need to assess the 21st Century Skills of creativity, critical thinking, cooperation, and communication (4 Cs) rather than simple knowledge.

Knowledge can be accessed easily by everyone, but the ability to use it in creative, innovative ways is more important than simply possessing it. For the past 40 years, I have been experimenting with various methods to identify children and youth with the greatest potential for the world of the future. Following the important principles of engaging, developmentally appropriate, and potential to elicit important problem-solving behaviors in targeted areas, we have field tested, applied, and evaluated the success of performance-based assessments of the four Cs and ten talent areas for different ages and developmental levels.

Using these methods, in countries as diverse as the USA, UK, Chile, Mexico, France, Lebanon, UAE, and Canada, we have achieved equity across cultures, language groups, nations, and economic groups in identification of giftedness. We also have found that engaging students in solving real problems is an effective way to identify hidden talents in the 21st Century Skills. I will give examples, share important experiences, review relevant research, and give reasons why performance assessments are more successful than those relying on written or verbal responses.

SPEAKER BIO

C. June Maker, Ph.D., Litt.D., Professor Emerita, University of Arizona, developed and coordinated masters' and doctoral programs in education of the gifted for 40 years. Her textbooks on curriculum and teaching strategies are used in the USA and other countries. She serves on editorial boards of several international journals.

She received the International Research Award from the World Council on Gifted and Talented Students and an honorary Litt.D from Western Kentucky University. Her main research is on performance-based assessments and creative problem solving. She is a frequent keynote speaker.

Conference Speakers

Creativity in Gifted Education Research: What do we Know and What Needs to be Explored?

Dr. Ahmed M. Abdulla Alabbasi | ahmedmda@agu.edu.bh

PRESENTATION ABSTRACT

Research on differences between gifted and nongifted students have examined cognitive abilities, including intelligence quotient differences, higher-order thinking skills as well as critical, evaluative, and creative thinking. The first objective of this paper is to shed light on creativity in gifted education research. The literature review revealed that the majority of studies on gifted education have focused on enhancing divergent/creative thinking abilities, namely fluency, flexibility, and originality (i.e., creative process) through different techniques and strategies. However, little attention has been paid to other cognitive processes related to creative cognition, such as problem finding and evaluative thinking.

Moreover, creativity is much more than divergent/creative thinking; it includes other aspects, including creative potential, creative climate, and creative personality. Therefore, the second aim of this paper is to discuss recent investigations of creativity in gifted education literature and highlight areas that should be addressed. Finally, the paper discusses recent advancements in assessing divergent thinking in creativity research and how educators in the field of gifted education can benefit from such an advancement in creativity measurement. Although research on creatively gifted students in recent years has emerged, there are still areas that need to be explored.

SPEAKER BIO

Ahmed Alabbasi is the Chairperson of the Department of Gifted Education at the Arabian Gulf University. Dr. Ahmed earned his PhD in Gifted and Creative Education from the University of Georgia in 2016. He also earned a professional certificate in Leadership Development from Harvard Kennedy School of Executive Education, and a professional certificate in Leading and Building a Culture of Innovation from Harvard Business School.

Dr. Ahmed is the Director and co-founder of the Medical Students Gifted and Talented Program at the Arabian Gulf University. His research interests include creativity, giftedness, divergent thinking, problem finding, and emotional intelligence.

Conference Speakers

Principles of STEM Education: Exploring a system-wide action research project

Roslyn Mahrous | roslyn.mahrous@gmail.com

PRESENTATION ABSTRACT

The Alice Springs Declaration (2019) set all educators the goal of developing students that are confident and creative individuals, successful lifelong learners, active and informed members of the community; students who are resilient and develop the skills and strategies they need to tackle current and future challenges. In conjunction with the National STEM Education Strategy (2016 – 2026) where all Australian Education ministers agreed to the strategy, The Archdiocese of Sydney Catholic Schools placed STEM Education at the forefront of its learning agenda to provide schools with a framework for school leaders and students to implement STEM Education into their contexts.

STEM Education provides opportunities for students to empathise with real-world, authentic problems that place curiosity, relevance and motivation as the cornerstones of sustained engagement and meaningful learning which nurtures students as global citizens.

This presentation will explore and unpack:

- local and global research around key characteristics of knowledge and capabilities in STEM Education which led to the development of six key principles of STEM Education and how they work in synergy to develop creative and divergent thinking skills in all gifted learners.
- The literature around what is not STEM and models of integration into curriculum.
- The action research methodology and project used to launch STEM Education across the 150 Primary, Secondary and K-12 schools which make up the Archdiocese of Sydney, findings, successes, and areas for growth.
- Best practice modelled by schools and ways they catered for gifted learners.

SPEAKER BIO

Roslyn is an experienced educator with over 25 years of teaching and leadership experience in Catholic schools, within the tertiary space as well as with NESA (NSW Education Standards Authority).

Among her other previous leadership roles, was that as NSW Co-director of Tournament of Minds where collaboration, creative and critical thinking were at the heart of the skills and dispositions demonstrated by this transdisciplinary experience.

Conference Speakers

Adopting a Talent Development Framework for Gifted Education: Implications for Practice

Dr. Paula Olszewski-Kubilius | p-olszewski-kubilius@northwestern.edu

PRESENTATION ABSTRACT

Talent Development is increasingly being used as a framework for gifted programming in schools. This approach has the advantage of being able to meet the needs or a larger range of students, those with emerging talents and those already demonstrating advanced achievement and provide them with opportunities for growth and improvement.

But what does a talent development approach to gifted services really mean and entail? In this session, we will explore the features of the talent development framework and their implications for practice including: assessment for identification and learning for different domains and stages of talent development; programming models for each stage of talent development from potential to competency to expertise; the role and integration of outside of school or supplemental programs; and the cultivation of psychosocial skills that support achievement at each stage of development.

SPEAKER BIO

Dr. Paula Olszewski-Kubilius is the director of the Center for Talent Development at Northwestern University and a professor in the School of Education and Social Policy.

Her most recent works include two coedited books with Rena Subotnik and Frank Worrell: The Psychology of High Performance: Developing Human Potential into Domain-Specific Performance, published by the American Psychological Association, and Talent Development as a Framework for Gifted Education, published by Prufrock Press. She has served as editor of Gifted Child Quarterly, coeditor of the Journal of Secondary Gifted Education, and editorial review board member for Gifted and Talented International, The Roeper Review, and Gifted Child Today.

She is a past president of the the National Association for the Gifted and has received awards for her work including the Distinguished Scholar Award (2009) and the Gifted Child Paper of the Year Award (2011, 2017, 2020) and Paper of the Decade (2020) from NAGC.

Conference Speakers

A Network Model of Gifted Education

Dr. Elena L. Grigorenko | elena.grigorenko@yale.edu

PRESENTATION ABSTRACT

In this presentation, Dr. Grigorenko will present her comments and illustrations on a distributed model of gifted education a network model of gifted education. This model assumes the presence of a network of centralized and local hubs, interconnected through both gifted and talented students and their mentors.

The network assumes that both students and mentors need to be able and willing to work in both a concentrated environment (i.e., when they are brought together at a centralized hub for intense and relatively brief content- and/or skill-driven interactions) and a dispersed environment (i.e., when they are brought back to their local hubs for systematic and prolonged interactions).

The former is viewed as a network energizer, whereas the latter is a network stabilizer. The balanced approach to intensity, variety, and duration of educational experiences available through the network provides opportunities for gifted and talented students to crystallize their already-identified and developed and discover yet-to-be-identified and developed content competencies and performance skills.

SPEAKER BIO

Dr. Elena L. Grigorenko received her Ph.D. in general (cognitive) psychology from Moscow State University, Russia; her Ph.D. in developmental psychology and genetics from Yale University, USA; and her re-specialization in clinical (forensic) psychology from Fielding University, USA. Currently, Dr. Grigorenko is affiliated with five universities: Baylor College of Medicine, University of Houston, and Yale University in the USA, and Sirius University of Science and Technology, and Moscow State University of Psychology and Education in Russia.

Dr. Grigorenko has published more than 600 peer-reviewed articles, book chapters, and books and received multiple professional awards for her work.

Conference Speakers

Development of the Hamdan Giftedness Test: Psychometric Analysis Strategies According to Advanced Global Models (Rasch Model)

Prof. Dr. Alaa Eldin Abdel Hamed Ayoub | alaaeldinaa@agu.edu.bh

PRESENTATION ABSTRACT

This study aimed to assess the psychometric properties of Hamdan Giftedness Test by applying Rasch model. Hamdan Giftedness Test comprise of the five cognitive ability tests; Verbal Ability I (Semantic Information Processing), Preknowledge in Science (Conceptual Information Processing), Verbal Ability II (Comprehension), Preknowledge in Mathematics (Quantitative Information Processing), and Nonverbal Ability. All test items were designed for the four respective age groups (grade 4-6, grade 7-8, grade 9-10, grade 11-12).

Participants in this study were 12071 students (4009 male and 8062 female) and they are representatives of the seven governorates of the UAE. The results of the psychometric analysis of Hamdan Giftedness Test includes validity and reliability, item calibration and differential item functioning (DIF) assessment. Standardized residual variance, Largest standardized residual correlations were used to identify dependent item. Moreover, difficulty coefficients estimated according to Rasch model with different methods were used to handle missing values. Additionally, the results contained the percentiles / standards table, which showed the values of the raw scores and the estimated abilities values according to Rasch model corresponding to the percentile ranks. Finally, Cut-off scores were also set to identify gifted students.

SPEAKER BIO

Alaa Eldin A. Ayoub is a full professor of Measurement and Evaluation, and the Vice Dean of College of Graduate Studies at the Arabian Gulf University in Bahrain. He had received several grants such as DAAD. He had more than 60 research papers in various international journals.

Dr. Ayoub received multiple awards such as Khalifa Award of Education, Hamdan – Alecso award for distinguished educational research, Applied Research Global Award of Gifted Education from World Gifted Center, Rashid Bin Humaid Cultural & Sciences Award (UAE), the first prize for distinguished professor in scientific research (Saudi Arabia).

Conference Speakers

Webs of science: The formation and impacts of effective mentorship networks for underrepresented students pursuing STEM careers

Dr. Paul R. Hernandez | prhernandez@tamu.edu

PRESENTATION ABSTRACT

Mentorship can be part of the solution to developing a more diverse global scientific workforce, but mentorship models focused on dyadic mentoring can reproduce hierarchies the reinforce the status quo. Reframing mentoring relationships as developmental mentor networks can more accurately describe the experiences of protégé, can deepen our understanding of how, why, and for whom mentoring "works," and can empower protégé to effectively pursue their STEM career goals.

This session will highlight research on developmental mentor network theory, including factors the promote the formation of diverse and robust mentorship networks and the impacts these networks can have on STEM career development.

SPEAKER BIO

Paul R. Hernandez, Ph.D., is an Associate Professor in the Department of Teaching, Learning, & Culture and the Department of Educational Psychology in the School of Education and Human Development at Texas A&M University.

With funding from the National Institutes of Health and the National Science Foundation, his research focuses on the developmental mentoring relationships and social contexts that support motivation and persistence in higher education with a particular focus on students from historically underrepresented groups pursuing STEM degrees and careers.

Conference Speakers

Best practices in Identification of Twice-Exceptional Students for Talent Development Opportunities

Prof. Megan Foley Nicpon | megan-foley-nicpon@uiowa.edu

PRESENTATION ABSTRACT

The term "twice-exceptional" is becoming increasingly mainstream, but best practices in identification remain illusive. In this presentation, I will examine what researchers are suggesting are best practices in identification of students with disabilities for talent development opportunities.

I will focus on ways to maximize their potential while accommodating for their behavioral, psychological, and/or social challenges in home and educational settings.

SPEAKER BIO

Megan Foley-Nicpon is the Myron and Jacqueline Blank Endowed Chair and Director of the University of Iowa's Belin-Blank Center, as well as a licensed psychologist and professor of Counseling Psychology.

Dr. Foley-Nicpon's research and clinical interests include assessment and intervention with high ability students with disabilities, and the social and emotional development of talented and diverse students. She regularly writes and presents about high ability, counseling psychology, and twice-exceptionality.

Conference Speakers

Insider Knowledge: A missing piece in the comprehensive development of STEM talent

Dr. Rena Subotnik | subotnik0@berkeley.edu

PRESENTATION ABSTRACT

Sharing insider knowledge is important for equity in talent development. Every one of us has had an experience where we thought we had a chance of winning an opportunity, only to find out there were some implicit rules we did not follow. This might include failure to realize that the support of a key individual is needed to have your idea approved or supported by others. It could include understanding the importance of attending certain social events for networking or gaining supporters for your research agenda.

Insider knowledge is complex in that it is particular to a career or domain and important in making decisions and finding successful solutions, such as when to employ strategic risk taking or how to respond to chance factors. It also varies by developmental level. That is, there are unspoken rules at each stage of an education and career trajectory. As professionals, we can do a lot to level the playing field in a domain by making insider knowledge more explicit to those who are upcoming in a field.

SPEAKER BIO

Rena F. Subotnik PhD serves as Research Associate at the Academic Talent Development Program, University of California, Berkeley, Graduate School of Education. She is co-author of the Talent Development Megamodel (TDMM), appearing in publications such as Scientific American, Scientific American Mind, Annals of the New York Academy of Sciences, Frontiers in Psychology, Psychological Science in the Public Interest, and the Annual Review of Psychology.

Dr. Subotnik has been awarded grants from the U.S. Center for Disease Control and Prevention, the National Science Foundation, the Institute of Education Sciences, the Dreyfus Foundation, the American Psychological Foundation, and the U.S. Department of Education to support her projects.

Conference Speakers

Unlocking Potential: The Hector Children Academies and Their Systematic Approach to Fostering Gifted and Talented Students

Dr. Mingjing Zhu | mingjing.zhu0807@gmail.com

PRESENTATION ABSTRACT

Since 2010, the Hector Children Academies (HCA) has been supporting highly gifted and talented elementary school children through specialized programs alongside regular education. It was established through the initiative and continuous funding of the Hector Foundation II, with strong support from the State of Baden-Württemberg in Germany and school administrations. With over 23,000 participants each year from 2,100 schools, the program offers 15 Hector Core Courses and additional STEM-focused courses. The Core Courses are developed following rigorous research standards to ensure high-quality content.

Teachers are asked to nominate gifted students by considering characteristics such as exceptional cognitive abilities, creativity, and specific interests, regardless of their background or gender. To further minimize selection biases in the nomination process, a FIPS+ study tests for alternatives which would include standardized tests.

With a systematic approach to providing research-based learning opportunities for highly gifted and talented children, HCA unlocks their potential, fosters student competence growth, and promotes talent development.

SPEAKER BIO

Dr. Mingjing Zhu holds a Ph.D. degree in Educational Psychology from the University of Munich, Germany. Currently, she is a research scientist at the Hector Research Institute of Education Sciences and Psychology, University of Tuebingen, Germany.

She is part of the scientific monitoring of the Hector Children Academies, which offers programs to promote the talent development of gifted elementary school children. Her research interests include talent development, motivation, teacher and family influence, and educational effectiveness. Before working at the University of Tuebingen, Dr. Zhu contributed to research-based initiatives leading to the establishment of the World Giftedness Center.

Conference Speakers

Applying Key Elements of Evidence-Based Mentoring for Talent Development

Dr. Kathrin Emmerdinger | kathrin.emmerdinger@paedagogik.uni-regensburg.de
Dr. Daniel Patrick Balestrini | daniel-patrick.balestrini@ur.de

PRESENTATION ABSTRACT

Humanity faces unparalleled challenges requiring concerted transformational efforts for creative problem solving at a global scale (e.g., slowing global warming and biodiversity loss). Leaders and innovators with the highest levels of expertise and creativity must rise to these challenges. Mentoring can offer highly effective individualized support for developing the highest levels of expertise and innovation when implemented properly. In this workshop, we will describe key elements of effective mentoring for talent development.

The key elements include mentor–mentee alignment of expectations about mentor roles and support, various mentoring phases, goal-oriented mentoring, essential training topics for mentees and mentors, ongoing program monitoring and support, and formative program evaluation and adaptation. Workshop attendees will learn about evidence-based mentoring approaches for talent development, what makes them effective, and how they can be applied in various settings involving mentoring and talent development.

SPEAKER BIO

Dr. Kathrin Emmerdinger is lecturer in the Department of School Development, Research, and Evaluation at the University of Regensburg, Germany. She coordinates a Germany-wide research project focusing on mentoring in schools and teaches classes for preservice teachers.
Dr. Emmerdinger holds a Ph.D. in educational psychology from University of Regensburg and has published research on topics related to learning and instruction, mentoring and talent development.

Dr. Balestrini is lecturer in the Department of School Development, Research, and Evaluation at the University of Regensburg, Germany. He coordinates Global Talent Mentoring and teaches classes for preservice teachers.
Dr. Balestrini holds degrees in music (UC Davis), music history (University of Mainz), and education (University of Regensburg) and has published research on topics related to giftedness and talent development.

Conference Speakers

From Traditional to Modern Gifted Identification: A Practical Guide

Prof. Albert Ziegler | albert.ziegler@fau.de

PRESENTATION ABSTRACT

Traditionally, gifted identification sought to identify individuals who possessed special characteristics. Often, this was limited to a high IQ. Modern gifted identification instead seeks to identify learning pathways for talents. Accordingly, the focus of identification is not on individuals' traits, but on their learning, their learning resources, and their learning environment.

The webinar will present the identification approach used by the Statewide Counseling and Research Center for the Gifted at the University of Erlangen-Nuremberg, Germany. Unlike traditional approaches to gifted identification, the output of identification is not simply a decision of whether gifted or not. Rather, the output is a learning pathway to Excellence. This diagnostic requires new measurement tools. It is not status-oriented (gifted: yes or no?), but support-oriented (how can the next learning and development steps best be supported?).

SPEAKER BIO

Albert Ziegler, PhD, is Chair Professor of Educational Psychology and Research on Excellence at the University of Erlangen-Nuremberg, Germany. He is the Founding Director of the Statewide Counseling and Research Center for the Gifted.

He has published approximately 450 books, chapters and articles in the fields of talent development and educational psychology. He developed the Actiotope Model of Giftedness, which promotes a systemic conception of giftedness. In his research, his main interests are learning resources and effective learning environments, self-regulated learning, mentoring, and gifted identification.

WGC Announcement

Announcement of the 3rd WGC International Conference in 2025

We are very happy to announce that the 3rd World Giftedness Center International Conference will be held from Monday October 20 to Thursday October 23, 2025.

Save the dates!

We look forward to seeing you again!

Follow updates on our website: www.wgc.ae

WORLD GIFTEDNESS CENTER

2ND WORLD GIFTEDNESS CENTER INTERNATIONAL CONFERENCE

16 - 19 of October 2023 Virtual Conference

CONFERENCE PROGRAM

Hamdan bin Rashid Al Maktoum Foundation for Medical and Educational Sciences