Global Educators Supporting Learners Through Crisis: Innovations, Challenges and Changes in Schools

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The COVID-19 pandemic led to unexpected disruptions to providing educational services across the globe (Daniel, 2020; Reich et al., 2020; Schleicher, 2020). In this virtual event, panelists from four different countries share recent innovations or resources currently developing within their country related to inclusive education, as well as challenges of providing special education services during the pandemic. Across all countries, current challenges resulting from the global pandemic includes access to curriculum and educational technology. Furthermore, initial teacher preparation and continual professional learning were identified as areas of need. Specifically, teacher development should consider pedagogy for virtual learning to ensure educators are prepared to provide instruction online or through other means of distance learning. Further ideas are shared to provide a better learning environment for all students during school closures. Discussion within breakout groups reveal similar disparities echoed across the globe, as well as hope and "lessons learned" for the future.

Panelists Biographies

Dr. Vicky G. Spencer, BCBA-D, LBA, is an Associate Professor and the Director of the Applied Behavior Analysis Graduate Program at Shenandoah University in the Department of Psychology. She has over 25 years of experience as a university professor and researcher and is a past president of DISES. **Dr. Deborah Tamakloe** is an Associate Professor of Special Education at Millersville University, Pennsylvania. Her research focuses on the areas of assistive technology, multiculturalism in special education, and pre-/in-service teacher preparation. Dr. Tamakloe has more than 20 years of teaching experience including graduate and undergraduate special education courses and K-12 inclusive education in Ghana. She is the incoming president of DISES. **Dr. Cina Mosito** is the Associate Professor of Inclusive Education at Nelson Mandela University in South Africa. Her research interests include inclusive education in teacher education and cognitive development of learners experiencing barriers to learning. **Marcheta Gail Hightower, M.Ed.**, is the co-founder and director of Sunshine Learning Difficulties Center, Dubai. She is a licensed special educator in Dubai, United Arab Emirates. Ms. Hightower's motto is, "Let's go to school."

Summary

The event focused on addressing educational supports for ALL learners around the world during crisis situations, with insights from South Africa, Saudi Arabia, United Arab Emirates, and Ghana. Each panelist spoke of positive practices and resources for teaching during a time of crisis, with a lens on both challenges and innovations in classrooms and teacher preparation programs around the world. The discussion started with panelists sharing recent innovations or resources developing in their country related to inclusive education.

South Africa

Since 1994, South Africa has been transitioning to a more inclusive education system with some special needs schools being converted to resource schools while other became "full service" special needs

schools. More students are attending mainstream schools than ever before. Dr. Mosito shared that although apartheid still has remnants, especially when it comes to resource distribution, there is a push for more equitable redistribution within government school to further inclusive education. Furthermore, while teacher preparation programs promoted inclusive education, different programs had different definitions or understandings of what "inclusion" really means.

A unique concern is that many special needs schools are concentrated in townships near major cities and some students with disabilities must stay in hostels near those schools. The COVID-19 social distancing and closures have resulted in hostels closing, which, in turn, has resulted in students not having the ability to live near schools that offer programs to meet their unique needs. Dr. Mosito mentioned social distancing protocols have also created a challenge for students with disabilities who require physical support or physical prompting.

Saudi Arabia

In Saudi Arabia, the Crown Prince published *Vision 2030* with the goal of creating sustainable economic growth and development with a focus on education. A challenge related to meeting this goal is that institutions of higher education are limited in terms of offering special education and general education teacher training. Some institutions offer courses or certificates, but full degree programs are not common. In the field of Autism, Saudi Arabia has partnered with organizations from the United States. However, the field of Applied Behavior Analysis (ABA) has been growing and some universities have been replacing special education programs with ABA programs. Capitalizing time with families has been identified as a priority, with the acknowledgement that the more families are involved, the greater student outcomes are. The school closures revealed that parents were not prepared to handle the level of involvement required to support their child's education in a virtual setting. Additionally, access to curriculum resources for families within the Arabic language is very limited.

Regarding access to education, Dr. Spencer shared that online instruction is discouraged and requires special approval prior to implementation. Only schools for males have received approval for online instruction, resulting in inequitable access to education during school closures. Additionally, while special education teachers earn more than general education teachers in Saudi Arabia, special education teachers are not required to have a degree resulting in students with disabilities having limited access to certified teachers. Because certified teachers do not work in the special needs schools, there is no pay incentive for certified teachers to work with students with disabilities, nor to offer inclusive classrooms. The disparities between teaching requirements and pay incentives between special education and general education is a significant barrier to inclusive education.

United Arab Emirates (UAE)

In the United Arab Emirates (UAE), legislation was passed to support "people of determination," or people with disabilities, with access to education. While the term "inclusive education" has various interpretations, there are multiple initiatives to promote inclusiveness in society. This includes the Dubai Disability Strategy 2020 which aims to make the UAE the most disability-friendly country by 2020. To meet these strategic goals, the Ministry of Education oversees the public school system and offers several training programs related to their education initiatives. In Dubai, special permission is given to provide services to children in different settings outside of school buildings. Efforts are centered on maintaining as many services as possible for students, resulting in a blended model with some classes being offered face to face and others offered virtually. Fully online education is emerging in the UAE. In face-to-face settings, students are finding the mask requirements difficult to uphold as they are not used to wearing face masks.

Ms. Highwater echoed sentiments shared by the other panelists, and explained that in the UAE, school closures have resulted in students not receiving enough time with their teacher. For students with disabilities, ensuring collaboration across services has been one of the most significant challenges. Looking ahead, roles should be clearly defined to ensure that gaps in services are covered. For example, special educators should work with behavior specialists, psychologists, and others collaboratively to ensure all student needs are met.

Ghana

In Ghana, Dr. Tamakloe shared that the government has committed themselves to inclusive education, addressing the diversity of students, and ensuring access to learning. Despite these efforts, children with disabilities are still marginalized. Furthermore, there are 43 ethnic languages used in Ghana, thus presenting a challenge related to meeting the diverse needs of students who speak other languages. Progress has been made in building capacity of staff by requiring staff to obtain teaching degrees and by offering low-tech assistive technology devices for students with disabilities. There are still separate schools for students with disabilities, which poses a challenge to realizing full inclusion.

Specific challenges related to the pandemic include a lack of access to technology, health, economy, and gender-based violence. While many families have mobile devices, data is costly, and many rural communities do not have strong reception, resulting in limited internet access. School closures have also led to nutrition and economic consequences. The closing of businesses has reduced families' abilities to feed their children. Furthermore, gender equity issues have become more pronounced during COVID-19. Girls are more likely to be victims of gender-based sexual violence and exploitation for financial means. This has resulted in girls being exposed to a higher risk of health and reproductive issues, early marriage, and dropping out of school to maintain a family.

When asked about changes needed to provide a better learning environment, Dr. Tamakloe explained that the education system in Ghana is based on the ideals of the human capital theory, in that higher educational attainment leads to higher economic returns. As a result, the focus on the acquisition of values, attitudes, and skills fundamental for inclusive education is often neglected. Additionally, appropriate special education training for teachers would lead to better learning for all students as well as further creation of inclusive spaces where all students, including students with disabilities, are able to creatively express themselves and their talents.

Breakout Discussions

Breakout groups reflected on the panelists discussions and identified current challenges during the COVID-19 pandemic, changes in education due to the crisis, shared innovations and resources, and revealed their hopes for the future once schools reopen. Some of the challenges identified by the breakout groups included promoting independence in a virtual environment and students having trouble focusing during a Zoom call. Also, some countries, such as Saudi Arabia, had restrictions on providing remote learning. Furthermore, breakout groups shared concerns that learning loss would result in an overidentification for special education services. Lastly, a common theme was that educators did not have the technology skills to confidently provide online instruction.

Changes within education that were discussed included schools delivering food packets to families or having families pick up lunches from schools. In the U.S., there was a shift to online Individualized Education Program (IEP) supports and meetings. This shift in meetings was positively received and may continue as a trend after the pandemic. In Dubai, parents are turning to the Sunshine Center, a special needs school, to enroll students for the first time as means to give access for students to be educated online at home. The biggest shift globally is the move to remote learning changing the way educators use technology. This has posed an opportunity for universities to think about how to restructure teacher preparation so future educators are ready to provide instruction in an online environment.

Looking forward to the future, breakout groups hoped to see more online technology implemented within rural communities, more opportunities for professional development, and greater access to phones, apps, and other tools or technologies to further engage students and teachers. The general consensus is that the COVID-19 school closures are a learning opportunity and a chance to reflect and appreciate the role of teachers. There has been a positive shift to meeting the needs of the whole child; rather than focusing on assessment scores, school systems are now more considerate about the social-emotional and overall wellbeing of students.

Recording

A recording of ***Global Educators Supporting Learners Through Crisis: Innovations, Challenges and Changes in Schools*** can be accessed on the DISES YouTube page or here.

Panel Resource List

Dr. Vicky G. Spencer, BCBA-D, LBA

- *Autism Speaks* https://www.autismspeaks.org/ A website that provides information on autism spectrum disorders for individuals with autism and their families. The content is evidence-based and has excellent resources.
- Barbera, M. (n.d.). *Autism Podcast: Turn Autism Around with Dr. Mary Barbera.* This is a weekly autism podcast series which focuses on helping parents and professionals reduce stress, live happier lives, and help their child or student with autism reach their fullest potential.
- *LDOnline* http://www.ldonline.org/ A website that provides information on learning disabilities and ADHD. The content is evidence-based and offers a wide range of resources for children, families, teachers, and other professionals.
- Mastropieri, M. A. & Scruggs, T. E. (2018). *The Inclusive Classroom: Strategies for Effective Differentiated Instruction*, 6th Ed. Pearson.
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- Steinbrenner, J. R., Hume, K., Odom, S. L. et al. (2020). *Evidence-Based Practices for Children, Youth, and Young Adults with Autism.* National Clearinghouse on Autism Evidence and Practice Review Team.
- Evidence-Based Practices from NCAEP: https://ncaep.fpg.unc.edu/sites/ncaep.fpg.unc.edu/files/imce/documents/EBP%20Report%202020.pdf

Marcheta Gail Hightower, M.Ed.

- **iCademy Middle East:** https://icademymiddleeast.com/iCademy Middle East is a NEASC accredited, American Online School for students in Kindergarten through Grade 12. They are fully Knowledge and Human Development Authority licensed and provide NCAA eligible courses. It is a fully digital, rich online curriculum, offering online lessons through the support of certified teachers, interactive activities, and teacher led virtual classroom sessions. Part of Pansophic Learning, a US-based international education company, and have operated in Dubai since 2007. The blended learning model allows students to study at home, or in their Learning Center in Dubai Knowledge Park.
- **Madrasa:** https://madrasa.org/?lang=en A free e-learning platform that provides Arabic language educational content for Arab students. Madrasa is part of the Mohammed Bin Rashid Al Maktoum Global Initiatives (MBRGI), providing more than 5,000 educational videos focused on physics, chemistry, biology, mathematics, and general science, covering various educational curricula and targeting all levels of students from kindergarten to grade 12. It also offers exercises and applications of different scientific syllabus. The scientific content taught is aligned with the curricula approved in the Arab World through the Translation Challenge. The Translation Challenge is the largest scientific translation project launched by His Highness Sheikh Mohammed bin Rashid Al Maktoum.
- **The Digital School:** https://www.thedigitalschool.org/en/ An initiative by Mohammed bin Rashid Al Maktoum Global Initiatives (MBRGI) to provide a certified online education to students who do not have easy access to formal education. It particularly targets young people in refugee camps and marginalized communities. The school blends live and self-paced virtual classes in Math, Science, Arabic, Computer Studies and English powered by interactive simulation, game-based learning and artificial intelligence-driven learning modules. Students will be assessed through interactive activities, tasks and digital engagement systems. The initial phase of the school started in November 2020 with 20,000 students. The Digital School will officially receive its first batch of students in September 2021, for the academic year 2021-2022. It aims to reach one million students by the year 2026.

- **Hamdan Bin Mohammed Smart University Cloud Campus**: https://cloudcampus.hbmsu.ac.ae/ An online learning platform launched by the university targeting casual learners. Cloud Campus disseminates knowledge through 60-90 second videos using the micro-learning method for maximum knowledge retention. It also offers round-the-clock support from a team of experts as it is an online learning community made up of academics, fellow learners, private companies, and government organizations. Outside the Cloud Campus, the university also offers accredited Bachelor's and Master's programs, that can be taken online.
- **Duroosi:** https://www.youtube.com/user/DuroosiEtisalat The Ministry of Education, Etisalat, and Google partnered to launch and develop YouTube tutorials aimed for the online education of Grade 11 and 12 students. Duroosi is a YouTube channel with 600 tutorials, covering a variety of subjects based on the national curriculum, and intended to help families cut back on the high cost of private tuitions. Ministry of Education scanned all the important topics for Grades 11 and 12 and brought the material to Etisalat, which produced the YouTube videos in Arabic.
- **Diwan eBook reader:** https://www.moe.gov.ae/en/pages/ereader.aspx Ministry of Education launched the Diwan eBook reader, an app that facilitates the downloading of books and online study. It lets teachers and students from the government schools view and interact with the learning curriculum electronically.
- **Edraak:** https://www.edraak.org/en/ An open online course platform that is an initiative of the Queen Rania Foundation. The platform will broadcast the best Arab professors to the region, offering original Arabic courses to enrich Arab education. Through partnership with edX, the platform will also give Arab learners access in Arabic to courses taught and developed at top tier institutions like HarvardX, MITX, and UC Berkeley. All courses are delivered at no cost to the learner. It offers online higher education as well as K-12 education courses.
- **Digital Classrooms:**
    - **Google Classroom:** https://classroom.google.com Google Classroom is a free web service developed by Google for schools that aims to simplify creating, distributing, and grading assignments. The primary purpose of Google Classroom is to streamline the process of sharing files between teachers and students.
    - **Moodle:** https://moodle.org/ Moodle is a free and open-source learning management system distributed under the GNU General Public License. Developed on pedagogical principles, Moodle is used for blended learning, distance education, flipped classroom and other e-learning projects in schools, universities, workplaces, and other sectors. It can be used for communication between students and teachers and sharing of resources.
    - **Blackboard Learn:** https://www.blackboard.com/en-me Virtual Learning Environment and Learning Management System. Web-based course-management system designed to allow students and faculty to participate in classes delivered online or use online materials and activities to complement face-to-face teaching. Allows you to provide content to students in a central location, communicate with students quickly, and provide grades in an electronic format to students.
    - **Edmodo:** https://go.edmodo.com/students/ Platform that allows teachers to share content, distribute quizzes and assignments, and manage communication with students, colleagues, and parents. A communication, collaboration, and coaching platform for K-12 schools and teachers. Has a teacher-centric design, where students and parents can only join if invited by a teacher.
    - **Seesaw:** https://web.seesaw.me/about Enables teachers to share content, distribute quizzes, assignments, and manage communication with students, as well as provide feedback/marking on work uploaded by students. A virtual classroom platform that creates a learning loop between students, teachers, and families.
    - **Managebac:** https://www.managebac.com/ Planning, assessment, and reporting platform for the IB Curriculum. Provides a curriculum first learning platform that combines and allows for curriculum planning, assessment, reporting, and attendance. Allows for collaboration between coordinators, teachers, students, and parents.

    - **Fusion:** https://www.fusionvle.com/ Virtual learning environment where students are assigned to virtual learning spaces, one for each class. They can access resources and tasks for each lesson and see their home learning assignments. They can also upload work for teachers and share learning experiences via online forums. Delivers real-time teaching and learning with built-in assessment and communications.
- **Tools for Audio/Video Lesson Delivery:**
    - **Microsoft Teams:** https://www.microsoft.com/en/microsoft-teams/log-in Collaboration and video conferencing service that enables groups to communicate from any location via text chat, voice call, or video conference. It offers chat and video conferencing, file storage, and application integration
    - **GoToMeeting:** https://www.gotomeeting.com/en-ae An audio video conferencing tool that hosts audio or video meetings, training sessions, presentations, and conference calls. It offers a range of features including: screen sharing, meeting transcription, and drawing and annotation.
    - **Zoom:** https://zoom.us Cloud-based video communications app that enables virtual video and audio conferencing, webinars, live chats, screen-sharing, and other collaborative capabilities.
    - **Pamoja**: https://pamojaeducation.com/ Platform that allows students to attend virtual classes online. Provides a space for interactive online lessons including screencasts from teachers, multimedia presentations, and live sessions via Skype. It hosts blogs, forums, and web documents to enable student and student-teacher collaboration. The lesson suite provides teachers with tailor made resources to use in the classroom, including content broken into lessons, assessment, and monitoring tools.
- **Additional Supplementary Learning Content:**
    - **Khan Academy:** https://www.khanacademy.org/ Set of online learning tools for students about a range of subjects including math, art, computer programming, economics, physics, chemistry, biology, medicine, finance, history, and more. The website produces short video lessons and includes supplementary practice exercises and materials for educators at different levels of skill. Students can follow lessons at their own pace and is completely free for students.
    - **Brainpop:** https://jr.brainpop.com/ BrainPop is a group of educational websites with over 1,000 short animated movies for students in grades K-12, together with quizzes and related materials, covering the subjects of science, social studies, English, math, engineering and technology, health, and arts and music. BrainPop is available by subscription but has some free content, including a movie of the day, several free movies from each topic area, educators' materials, including lesson plans, and an extensive library of educational games called GameUp. Its free smartphone and tablet application accesses BrainPop's free and subscription content. It offers subscriptions for schools, families, and home-schoolers.
    - **Mathletics:** https://www.mathletics.com/me/ Online mathematics platform with various resources and assignments personalized to support students' learning. It is designed for hybrid classrooms and home learning. Gives students fun practice and fluency activities, problem solving and reasoning questions, and provides learning certificates and points. Teaches in an interactive learning style designed to replicate the use of a personal tutor to address the balance between teacher-led instruction and independent student-driven learning
    - **Explore Learning Gizmos:** https://www.explorelearning.com/ Library of interactive math and science simulations for grades 3-12.
    - **Raz-Kids:** https://www.raz-kids.com/ Online literacy platform including reading books and related comprehension questions to support students' learning. Delivers interactive, leveled eBooks spanning 29 levels alongside corresponding eQuizzes to test comprehension, providing teachers with skill reports for data-driven instruction. Provides

online running records that let teachers digitally assess each student, saving classroom time

- **Kognity:** https://kognity.com/ Digital publisher for interactive, online textbooks. They have adapted the traditional textbook to digitally consumable text with video examples, 3D models and practice tests to make the content more interactive and engaging. All textbooks are curriculum-aligned and are designed to enhance deeper learning.

Dr. Cina Mosito

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Dr. Deborah Tamakloe

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