Plenary Panel 2
Mathematics education reform post 2020: Conversations towards building back better

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ABSTRACT

In this panel we provoke conversation about directions for mathematics education reform post 2020 with a view towards building towards 'better' quality and equitable mathematics teaching and learning for the future. Our topic coheres well with the theme of this year's International Day of Mathematics which is "Mathematics for a Better World". The panel will engage with equity issues relating to two interrelated aspects addressed in relation to 'building back better' post 2020 and as we emerge from the crippling challenges of the pandemic.

The first issue relates to transitions towards remote and online teaching and learning in mathematics education. This transition has recently gained speed due to the massive closure of, and disruption to, schools as a result of COVID across the globe. While online learning opportunities bring the possibility for increased access to quality mathematics education resources there is enormous unevenness in systemic and individual preparedness to optimise these opportunities. This unevenness plays out across countries and within countries and there is concern that the digital divide could exacerbate inequities across gender/social-class/race.

The second relates to the United Nations Sustainable Development Goals which were established in 2015 and aim to 'build a better future' by 2030. While the vast majority of countries are signatories on the SDGs, of which the fourth focuses on quality education for all, five years on these goals are far behind in meeting these targets. The recent impact of COVID is likely to have exacerbated the challenges of progress yet some argue that emerging from the pandemic provides an opportunity for using the SDGs as a 'roadmap' to 'building back better'. The phrase 'Build Back Better' initially emerged from the UN Conference on Disaster risk reduction in 2015. In 2020 the world became increasingly aware of other 'disasters' beyond the pandemic. Some of this increasing visibility is as a result of increasing access to digital news and social media. For example, the increasing exposure of extreme systemic racial inequality gave rise to the Black Lives Matter movement that began in the United States and gained momentum across the globe. 2020 also witnessed several climate related 'natural' disasters. The disasters of 2020 have furthermore disproportionately impacted those with fewer resources. The panelists provoke conversation through sharing insights and asking a range of questions about the role of mathematics education in providing a better footing to achieve the SDGs and so build towards a more equitable future and a better world.

Our panelists, and the respondents, contribute voices and perspectives from diverse geographical backgrounds and research interests and expertise. The intention is to provoke conversation through sharing insights and posing challenging questions in relation to the above issues for our mathematics education community to grapple with.