

AI and Higher Education: Reflections and Experiences in Greater China Region



**Focus on AI and Teacher Education in
Macao: Issues, Challenges and
Innovations in Higher Education**

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Biography:

Lianghuo Fan is Dean and Chair Professor at the Faculty of Education, University of Macau, and he is also Director of the Centre for STEM and AI Education of the Faculty. Prior to joining the University of Macau, he was Distinguished Professor of the School of Mathematical Sciences and Director of the Asian Centre for Mathematics Education at East China Normal University, Shanghai, China since 2018. From 2010 to 2018, he was Chair (Professor) in Education and Director of the Mathematics and Science Education Research Centre at Southampton Education School, University of Southampton. Prof. Fan obtained his PhD from the University of Chicago, and has extensive experience in education and research in Chinese mainland, USA, Singapore, UK and now Macao SAR, for over twenty years. Prof. Fan's research interests include mathematics education, teacher education, and the integration of technology (including AI) in education. He is also interested in international and comparative education, and in mathematics, algorithms for polynomial division and its application in various areas of mathematics and scientific computation.

Prof. Fan is the author or lead editor of some acclaimed books, including *Investigating the Pedagogy of Mathematics: How Do Teachers Develop Their Knowledge? How Chinese Learn Mathematics*, and *How Chinese Teach Mathematics*. In mathematics, he generalized the classical synthetic division and hence established a new and general theorem of polynomial division, for which his key article has been downloaded more than 17,000 times at the University of Southampton's eprints, recognized as one of the most accessed works in pure mathematics.