



## 1st International Conference on Change and Complexity in Learning

Tuesday 19 - Wednesday 20 July 2022

University of South Australia

City West Campus

### Overview:

Education sits on the edge of a new age of innovation, with broadening access and growing opportunities for learning. All sectors - primary, secondary, tertiary, and corporate - face growing complexity as they respond to new technologies and globalization.

### Program

Tuesday 19 <sup>th</sup> July 2022	
8:00 am	<b>Registrations Open</b>
8:30 am	<b>Conference Opening:</b> Professor Joanne Cys, Provost & Chief Academic Officer Chancellery and Council Services, University of South Australia.
9:00 am – 10:00 am	<b>Keynote Presentation:</b> Professor Mary Uhl-Bien, BNSF Railway Endowed Professor of Leadership in the Neeley School of Business at Texas Christian University (TCU).
10:00 am – 10:30 am	<b>Networking</b>
10:30 am – 11:30 am	<b>Panel: <i>Defining the scope of change</i></b> <b>Chair:</b> Professor George Siemens Professor and Director: Centre for Change and Complexity in Learning (C3L). <b>Panellists:</b> <ol style="list-style-type: none"> <li>1. Professor Abelardo Pardo, Dean of Programs (Engineering) UniSA STEM.</li> <li>2. Dr Florence Gabriel, Lecturer: STEM Education, UniSA Education Futures.</li> <li>3. Alexei Fey, Chief Executive Officer, Comunet.</li> <li>4. Scott Bayliss, Chief Information Officer at Department for Education.</li> </ol>
11:30 am – 12:30 pm	<b>Panel: <i>Transforming Learning and Work</i></b> <b>Chair:</b> Dr Rebecca Marrone Research Fellow, UniSA Education Futures. <b>Panellists:</b> <ol style="list-style-type: none"> <li>1. Professor Debra Rowett, Discipline Leader: Pharmacy External Relations UniSA Clinical &amp; Health Sciences.</li> <li>2. Peter Keaney, Engineering Program Manager at Lockheed Martin.</li> <li>3. John Foley, Educational and Executive Leadership, Catholic Education.</li> </ol>
12:45 pm – 1:30 pm	<b>Keynote Presentation:</b> Professor Martin Westwell, Chief Executive of the Department for Education.
12:30 pm – 1:30 pm	<b>Lunch</b>
1:30 pm – 2:30 pm	<b>Panel: <i>AI to Augment Teaching and Learning</i></b> <b>Chair:</b> Professor Maarten de Laat, co-director Centre for Change and Complexity in Learning (C3L). <b>Panellists:</b> <ol style="list-style-type: none"> <li>1. Professor David Cropley, Engineering Innovation UniSA STEM.</li> <li>2. Dr Rebecca Marrone Research Fellow, UniSA Education Futures.</li> <li>3. Eric Wang, AL LearningLab.</li> <li>4. Jessica Jarett, AL LearningLab.</li> </ol>

2:30 pm – 3:00 pm	Networking
3:00 pm – 4:00 pm	<b>Keynote Presentation:</b> <i>Improving the Resilience of Educational Data Products</i> Professor Shazia Sadiq, School of Information Technology and Electrical Engineering, The University of Queensland.
<b>Wednesday 20<sup>th</sup> July 2022</b>	
8:30 am	<b>Conference Open</b>
9:00 am – 10:00 am	<b>Keynote Presentation:</b> Professor Shane Dawson, Executive Dean of UniSA Education Futures and Professor of Learning Analytics at the University of South Australia.
10:00 am – 10:30 am	<b>Networking</b>
10:30 am – 11:30 am	<b>Panel:</b> <i>Innovation in Primary/Secondary</i> <b>Chair:</b> Dr Florence Gabriel, Lecturer: STEM Education, UniSA Education Futures and Dr Malgorzata Korolkiewicz, Program Director, UniSA STEM.  <ol style="list-style-type: none"> <li>Wayne Jaeschke. Director of Research and Learning Services at Trinity College South Australia.</li> <li>Associate Professor Simon Leonard, STEM Education, UniSA Education Futures.</li> <li>Katherine Adnett, Teaching &amp; Learning Deputy Principal at Pulteney Grammar School.</li> <li>Adam Biggs, Mathematics Teacher · Saint Michael's College, Henley Beach.</li> </ol>
11:30 am – 12:30 pm	<b>Panel:</b> <i>Learning analytics, AI, and edTech: What's a leader to do?</i> <b>Chair:</b> Professor George Siemens Professor and Director: Centre for Change and Complexity in Learning (C3L). <b>Panellists:</b>  <ol style="list-style-type: none"> <li>Accenture</li> <li>Practera</li> <li>Microsoft</li> <li>Associate Professor Hassan Khosravi, Institute for Teaching and Learning Innovation, The University of Queensland.</li> </ol>
12:30 pm – 1:30 pm	<b>Lunch</b>
1:30 pm- 2:30pm	<b>Panel:</b> <i>Imagining new learning partnerships</i> <b>Chair:</b> Dr Srecko Joksimovic, Senior Lecturer, UniSA Education Futures. <b>Panellist:</b>  <ol style="list-style-type: none"> <li>Dr Maria Milosavljevic</li> <li>David Linke, Managing Director EduGrowth.</li> <li>Professor Lexing Xie, Australian National University Computational Media Lab.</li> </ol>
2:30 pm – 3:00 pm	<b>Networking</b>
3:00 pm – 4:00 pm	<b>Keynote Presentation:</b> Professor Dave Snowden, creator of the Cynefin Framework and originated the design of SenseMaker.

This conference, hosted by C3L, the top edtech research centre in Australia, will feature engaging panels and world-renowned keynote addresses on the most urgent challenges and opportunities facing today's education systems.

### Keynote Presenters



#### **Professor Mary Uhl-Bien**

Mary Uhl-Bien is the BNSF Railway Endowed Professor of Leadership in the Neeley School of Business at Texas Christian University (TCU). Prior to joining Neeley she was the Howard Hawks Chair in Business Ethics and Leadership at the University of Nebraska. She has also been a Visiting Scholar in Australia, Sweden, Denmark, Portugal and Spain.

Mary's research focuses on complexity leadership, relational leadership, and followership. She has published multiple books and numerous articles in journals including *Academy of Management Journal*, *Journal of Applied Psychology*, *Journal of Management*, and *The Leadership Quarterly*. Her work has been funded with a grant from Booz Allen Hamilton, and her research contributions have been recognized with two Decennial Awards and multiple Best Paper Awards. She was noted as the #6 Most Influential Leadership Scholar from 1990-2017 in an analysis by Zhou & Li in *The Leadership Quarterly* in 2019 and was identified in *Poets & Quants* as a Top 50 Undergraduate Business Professor in 2018.

Mary is a co-founder of the Network of Leadership Scholars (NLS) in the Academy of Management and was elected as both Division Chair and Representative-at-Large for Organizational Behavior, the largest division in the Academy with over 6000 members. She is active in executive education nationally and internationally, delivering workshops and classes for the Brookings Institute, the Gallup Organization, and universities in the U.S., Canada, Australia and Europe. She has given keynote presentations around the world and was a regular commentator for CNBC Squawk Box. She participated in a Fulbright-Hays grant to Mexico during the summer of 2003 and trained Russian businesspeople for the American Russian Center and in Magadan, Russia as part of a USAID grant at the University of Alaska Anchorage from 1993-1996. She served as an executive consultant for State Farm Insurance Co. from 1998-2004.



#### **Professor Martin Westwell**

Martin was appointed Chief Executive of the Department for Education in April 2022, following a successful 4 years as Chief Executive of the SACE Board.

Martin has worked extensively with education systems and other organisations in using evidence to inform policy, practice, innovation and impact in education.

He was a Chief Investigator in the national Australian Research Council (ARC) Science of Learning Research Centre and has worked with UNESCO using evidence to inform strategic planning of education in the Asia-Pacific region.

In 2018, Martin received the prestigious Australian Council for Educational Leaders' (ACEL) Gold Medal, awarded for the most outstanding contribution to the study and practice of educational administration and leadership



In 2007 Martin and his family moved to South Australia where he took the position of inaugural Director of the Flinders Centre for Science Education in the 21st Century and then Strategic Professor in the Science of Learning at Flinders University. Martin completed his degree and PhD at Cambridge University and was a Research Fellow at Lincoln College, Oxford University in biological chemistry.



#### **Professor Shazia Sadiq**

Shazia Sadiq FTSE is Professor of Computer Science at the School of Information Technology and Electrical Engineering, The University of Queensland. She is part of the Data Science research group that has received the highest ranking for excellence in research for Australia in every round of ERA. She has published over 150 peer-reviewed publications and attracted over \$15million in research funding from the Australian Research Council, industry and various national and international funding bodies on topics related to data quality and effective use, process modelling, governance and compliance.

Shazia has been a devoted lecturer for two decades, and an advocate of learning analytics for improving personalized learning and graduate outcomes. In 2012, she received an institutional award for teaching excellence and in 2016 she spearheaded the highly successful Master of Data Science

program at UQ, that is helping overcome skill shortages in Queensland for qualified data scientists.

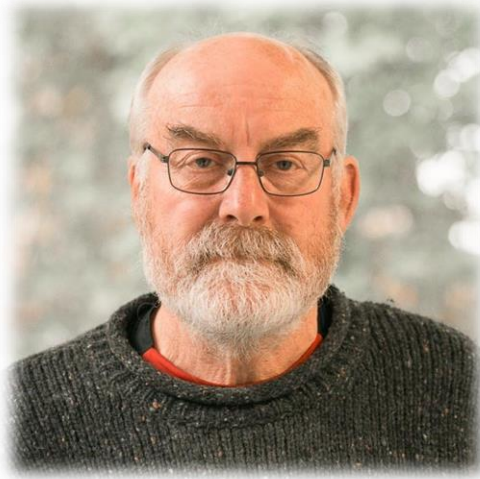
Shazia is currently Chair of the National Committee on Information and Communication Sciences at the Australian Academy of Science, a member of The Australian Research Council College of Experts 2018-2021, and Centre Director for the ARC Industry Transformation Training Centre on Information Resilience 2020-2025



#### **Professor Shane Dawson**

Shane Dawson is the Executive Dean of UniSA Education Futures and Professor of Learning Analytics at the University of South Australia. He has published widely on topics from creative capacity to social network analysis and the application of learner ICT interaction data to inform and benchmark teaching and learning quality. His current research interests relate to complex systems and academic leadership to aid adoption and application of advanced technologies and analytics in education. He is a founding executive member of the Society for Learning Analytics Research, past program and conference chair of the International Learning Analytics and Knowledge conference and an inaugural co-editor of the Journal for Learning Analytics.

With the support of many talented colleagues, Shane has been involved in the development of numerous open source software including the Online Video Annotations for Learning (OVAL), OnTask (a personalised learner feedback tool), and SNAPP, a social network visualization tool designed for teaching staff to better understand, identify and evaluate student learning, engagement, academic performance and creative capacity.



### **Professor Dave Snowden**

Dave is the creator of the Cynefin Framework and originated the design of SenseMaker®, the world's first distributed ethnography tool. He is the lead author of *Managing Complexity (and Chaos) in Times of Crisis: A Field Guide for Decision Makers Inspired by The Cynefin® Framework*, a shared effort between the Joint Research Centre (JRC), the European Commission's Science and Knowledge Service, and the Cynefin Centre.

He has pioneered a science-based approach to organisations drawing on anthropology, neuroscience, and complex adaptive systems theory. By using natural science as a constraint on the understanding of social systems this avoids many of the issues associated with inductive or case-based approaches to research. Dave is a popular and passionate keynote speaker on a range of subjects and is well known for his pragmatic cynicism and iconoclastic style.

Dave holds positions as extra-ordinary Professor at the Universities of Pretoria and Stellenbosch as well as visiting Professor at the University of Hull. He has held similar positions at Bangor University, Hong Kong Polytechnic University, Canberra University, the University of Warwick and The University of Surrey. He held the position of senior fellow at the Institute of Defence and Strategic Studies at Nanyang University and the Civil Service College in Singapore during a sabbatical period in Nanyang.