

Trees of Convergency

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WORKSHOP MODE

The workshop will be in-person.

OVERVIEW OF WORKSHOP

The workshop will focus on enhancing the convergent thinking associated with engineering education. Convergent thinking is a process that allows us as professionals to engage with a different mode of thinking at an instant. The 2035 ACED report asks us as educators to create curriculum that will engage the new generation of engineering. Creativity is a big part of this new generation of students. To link this process of convergent thinking and creativity, Bob Ross styles of painting is used to explain advanced topics across disciplines.

ACTIVITIES

Participants will collaboratively engage in this method of convergent thinking in two settings. The first setting is as a large group where we will break down the idea of 'constructivism' from the lens of engineering education pedagogy. The group will create one piece of art through a collaborative nature that documents the key topics of constructivism and how it links to the future of engineering education. Once completed, discipline specific groups will be formed to repeat the process. The completed drawings of discipline specific topics will then be shared with the rest of the groups to extract concepts to see if the convergent thinking process has been achieved throughout the session. Finally, to wrap up the session, groups will create badges of their art and ask other conference delegates to see if they can determine any of the developed concepts. This will be collated and sent to workshop participants.

TARGET AUDIENCE

Any participant is welcome to attend this workshop.

OUTCOMES

It is expected that this activity will allow for the dissemination of this exercise throughout institutions and begin to enhance academics creativity acumen.

KEYWORDS

Bob Ross, STEAM, Convergent thinking.

PRESENTERS' BACKGROUNDS

Associate Professor Andrew Maxwell has a technical focus in electronics and communications at the University of Southern Queensland, School of Engineering with over two decades of tertiary education experience. He is also multi-instrumentalist musician with decades of live performance experience across a range of styles, having released numerous CDs. He combines these skills to explore methods to increase engagement and informal learning.

Ms Chris McAlister is Professional fellow in Surveying at the University of Southern Queensland. Chris is the first-year experience and employability lead in the School of Surveying and Built Environment. Chris is currently undertaking a PhD evaluation the educational interventions promoting STEM carriers.

Dr Zachery Quince is an ECR in engineering education at the university of Southern Queensland. He has had almost a decade of tertiary education at multiple institutions. He works within the School of Engineering's learning and teaching group to deliver effective and personalised assessment items in all fields of engineering.