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Tech Schools Mediating School-Industry STE(A)M Partnerships Using Design Thinking

Engaging with industry and community provides teachers with opportunities to connect curriculum to authentic issues through STE(A)M projects. This can foster aspiration in STEM careers which is one of 10 recommendations by Education Services Australia (2018, p. 15). Yet, according to The Australian Industry Group (2017) the process of partnering with industry can be unsustainable for schools and industry if it is poorly coordinated.

Tech Schools in Victoria are developing structured approaches to school industry partnerships which go beyond the usual excursion or incursion. Using seven stages of design thinking, teachers can strategically draw on industry at key points of a project from co-designing a unit, to interviewing, rapid prototyping and pitching solutions to industry.

This paper presents research from a three-year study on Tech Schools as mediating organisations for authentic STE(A)M partnerships between schools and industry. Two case studies from this research are provided. First, the co-design of interdisciplinary programs with industry. Second, integrating an industry competition into a STE(A)M subject. This is supplemented with a unit outline with examples of industry involvement in the seven stages of the design thinking process and the role of Tech Schools as mediating organisations.

A strategic and sustainable approach is needed for school-industry partnerships, allowing teachers to meet curriculum outcomes and industry to meaningfully engage. Tech School programs provide a useful structure for diverse forms of industry engagement, as well as highlighting a need for educational organisations which can mediate school-industry partnerships.

References

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