Re-imagining the Future of Design and Technology Education

An opportunity for curriculum innovation

In England as an educational discipline Design and Technology is arguably in decay. Deliberations about the subject’s value and purpose within the core curriculum have taken place since its inception (Bid et al., 2017), however these debates have not been formalised by the subject’s community to create a solid research base and, in practice the subject’s vision has not ever been fully realised (B停放, 2017). As the subject declines, so does the community of colleagues teaching and researching within the field, and hence the potential to develop robust.

If there is to be any hope of reversing the subject’s decline, we need to do something significant. Hence, considering the future of design and technology, the principal aim of this research is to investigate what a re-designed design and technology could look like.

Methodology

The work is underpinned by social constructionism, and adopts methods derived from an approach informed by constructivist grounded theory (Charmaz, 2014), using elicited responses from participants who were approached on the basis that each was a key stakeholder within the UK design and technology community in response to the following question:

“What should a re-imagined design and technology curriculum look like?”

Analysis focused on how theoretical aspects of the study relate to what is happening in practice and seeks to present individual participant perspectives together in the form of a living narrative (Shanahan, 2015) to create a coherent whole from which future work can be worked and to use through our adoption of this approach as we seek deliberately to present our findings and analysis as a “work in progress”. Initial coding identified activity falling into three broad central themes: ideation, realisation and critique. Ideation refers to the creation of authentic opportunities to engage in speculative questioning and deferred judgment, always encouraged to consider alternative technological solutions to human centric problems. Realisation to the skill to create a physical response to a given question as a transformative pedagogy. The development of autonomy and ability to interpret, to develop meta-cognitive skills and fine motor skills. Critique, technology explained through authentic activity, contextualised within society, as a tool to serve human needs in order to develop a better society for all citizens. Not the present, with an eye on the future, cognisant of the notion that just because you can does not always mean that you should.

Discussion

Research brought to the fore a breadth of opinion and elicited some areas of ‘non-negotiable’ common ground. Features of what possible design and technology’s curriculum intentions emerged: knowledge, experiences and dispositions.

Curriculum intentions

Spanning all participant responses, a series of desirable dispositions for emergent Participants felt strongly that the subject should seek to develop team building, communication (including the extrapolation of ideas), collaboration and resilience. Experience relates to what learners need and what is important to know. Authentic approaches to problem solving and an awareness of human needs and wants within a technological society. Knowledge extends beyond the boundaries of the subject and relates to a broader body of knowledge: dimensions of knowledge considered in relation to political and global agendas, knowledge for action and within the context of other subject disciplines.

Tensions

Tensions focused around political drivers, fiscal demands and the academic versus vocational debate. Half of the participants made reference to design and technology’s vocational heritage. During analysis it became clear that there are tensions between the concept of a discipline we which we need and a body of knowledge, and one which advocates trades which could be perceived as being more aligned with established subject origins and traditions.

Acknowledgement

We would like to thank those who responded to our call for their perspectives on the future of design and technology education. Without the community’s engagement this starting point for further discussion would not be possible, hence the support and encouragement received from the community has been very much appreciated.

Selected References


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