

Virtual Reality: It's Impact on Art and Design Education

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Acknowledgements to Banbury Activate Learning College Digital Technology Team

As Virtual Reality technology advances in society, so does its presence in education and industry. But how and when should it be used in learning? Exploring the capabilities and impact of Virtual Reality learning in Art and Design will provide both teachers and students with not just understanding and exposure to an ever-advancing field, but also the opportunity to capitalise on the strengths of this media, and build foundational experiences which could inform future career choices.

The Study

A study was conducted at Banbury Activate learning college at the beginning of 2018 on a sample of level 3 Art and Design students, with the intention to discover the impact Virtual Reality software and media can have on Art and Design education in comparison to older and more traditional non- Virtual Reality software and media. Participating students were asked a series of questions before, during and after design activities which included considering 4 intrinsic aspects to learning; Motivation, Excitement, Appeal, and Confidence. Students used HTC VIVE headset goggles and controllers with the Google Tilt Brush Programme for Virtual Reality media equipment.

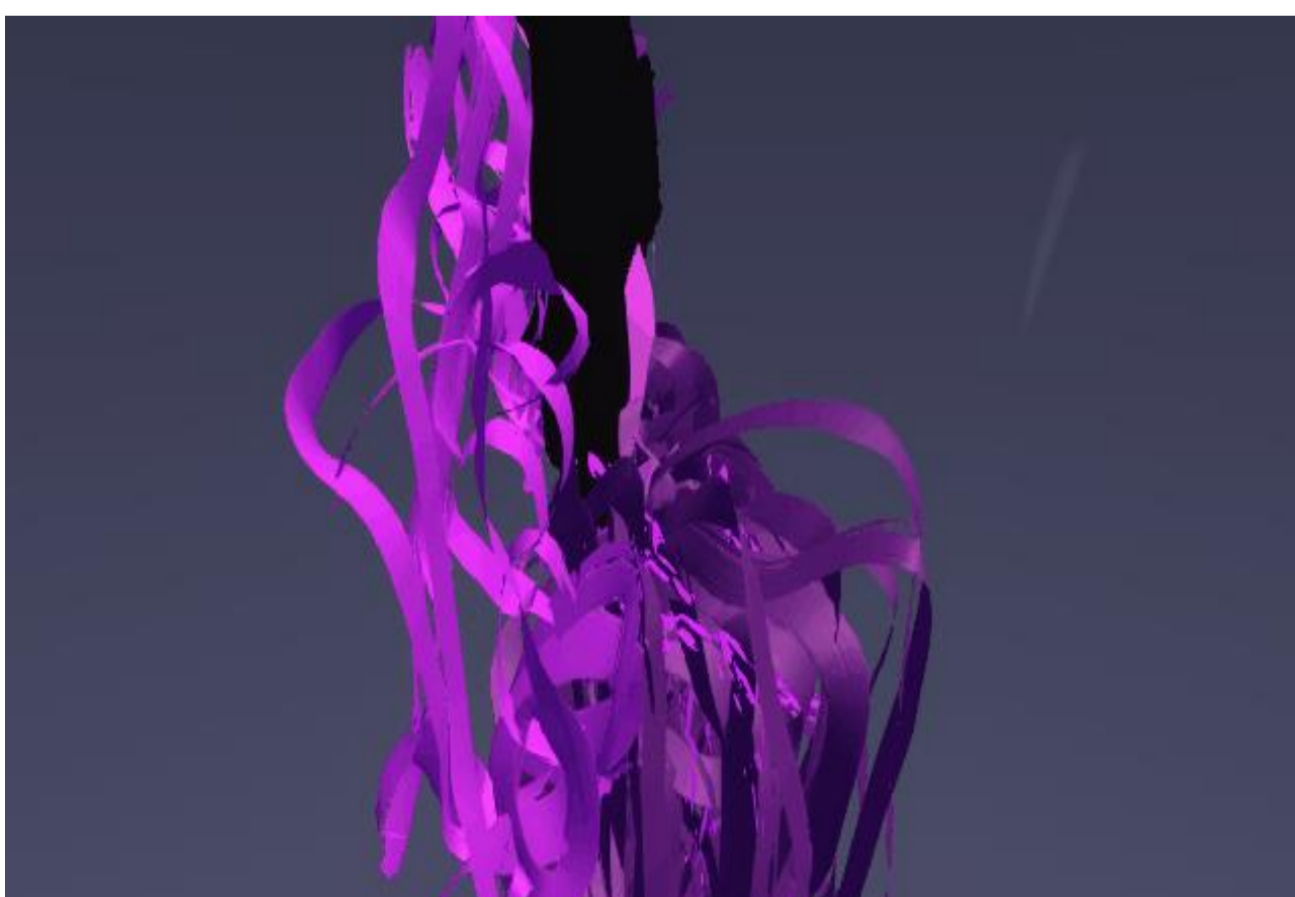


Image 2. Virtual reality Purple Ribbons Dress Design (2018)

Summary

The study revealed that Virtual Reality technology was both 'Quick, Easy and Enjoyable' to create Art & Design work with.



Image 1 Virtual Reality Demo, (2016).

Despite only 50% of students having ever used Virtual Reality before, and non having used it for Design & Artistic purposes, students achieved the same grades using Virtual Reality technology as they did using older and more familiar non – Virtual Reality technology and media.

83% of participating students gave positive feedback to using Virtual Reality for Art and Design purposes. The observing teacher reported a 100% inquisitive and engaging response from all students, as they were fully immersed in the experience and task using Virtual Reality for Art and Design.

'This is rare as students will often take regular breaks, become distracted or procrastinate from their work. Each student made the most of every minute using Virtual Reality media.'

The study showed that on average students motivation, excitement, appeal to media, and confidence levels all rose after students had used Virtual Reality. The greatest impact was on student confidence levels which rose by

an average increase of 1.3. In comparison, students response levels after non – Virtual Reality media tasks, fell for 3 out of the 4 considered intrinsic factors to learning. Only excitement levels saw an average increase of 0.08.

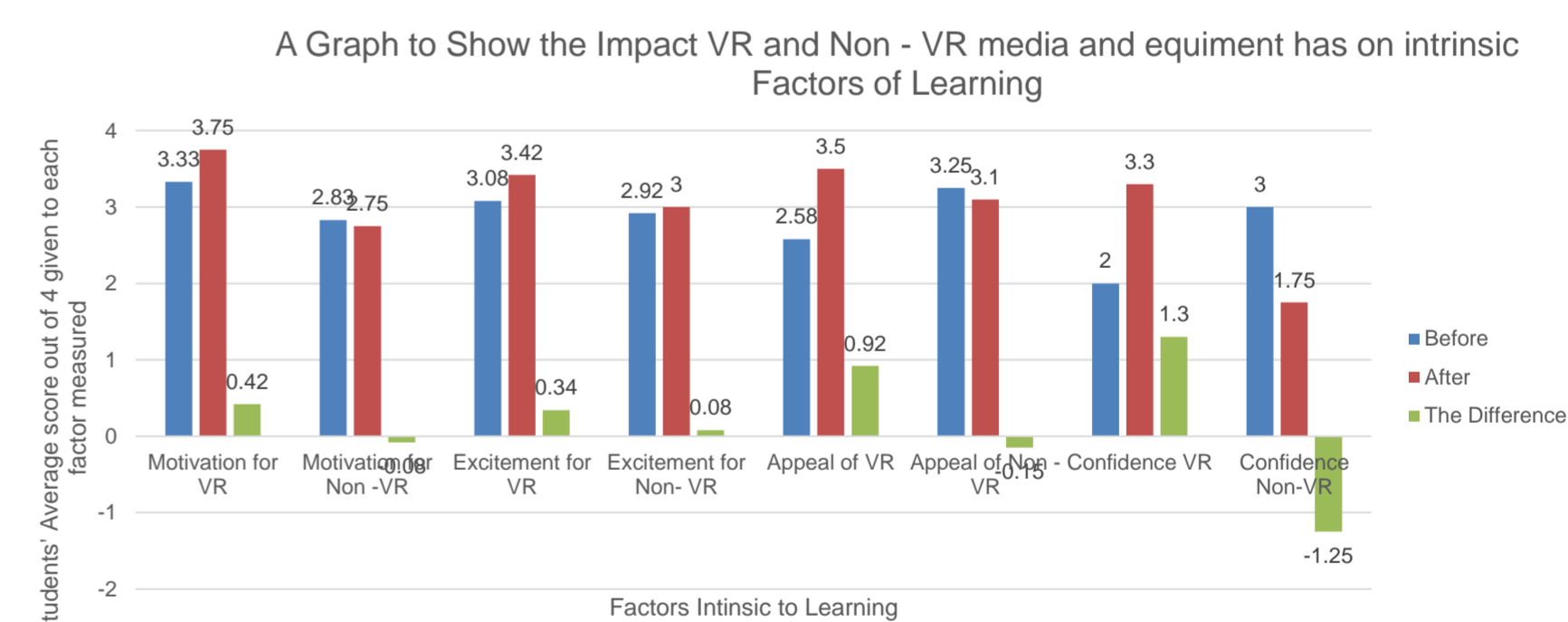


Image 3. A graph to show the impact VR and Non- VR media and equipment has on intrinsic factors of learning. (2018)

What Next?

There is much scope for further research to be conducted on the impact of Virtual Reality technology in Art and Design education.

This could include exposing more students from other Art and Design courses such as levels 1, 2 and Foundational Degrees to VR. There is also the potential to study what effect Virtual Reality Media can have in relation to benefitting students who may respond well to some sort of art therapy.