Developing an Effective Format for Introducing

3D Computer Animation to Adult Learners

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**Abstract**

By 2030, the workforce in Singapore will be required to transition towards Industry 4.0, which will necessitate individuals within the force with proficiency in 3D modeling as one of the critical skills to acquire (Skillsfuture, 2022). The purpose of this research is to engage with the current workforce to develop a format for teaching basic and intermediate 3D modeling skills within the 3D computer animation context. The research will consider the unique challenges faced by adult learners in this field, such as a lack of prior experience or technical knowledge. The SkillsFuture learning platform will be used to deliver this course as it provides accessible and substidized learning to Singaporean residents. In addtions, the software Blender will be utilized to teach high-end computer animation, a powerful 3D creation software that is free and open source, making it an effective tool for adult learners. The development of three SkillsFuture courses for high-end computer animation was completed and released during the 2021/2022 period, and a total of 11 courses were run. The format used was in-person and small size classes which allowed personalized support and to alter the pace of the class according to the learners needs. Furthermore, microlearning (Boring & Tomei, 2022), project-based learning (Pusztai, 2021), and storytelling (Bonds, 2016) andragogy were implemented. The courses were well-received by adult learners from a wide range of ages and professional backgrounds and the feedback collected was overwhelmingly positive, confirming they were able to absorb and apply the knowledge imparted. The success of the courses suggests that this format can be used effectively to teach adult learners 3D modelling within the broader context of 3D computer animation. This could lead to the development of more specialized courses for learners who have already completed the introductory courses, providing them with advanced knowledge in the field.

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**Keywords**

Andragogy, Industry 4.0, 3D Computer Animation, Mcrolearning, Project-Based, Storytelling.