

A Critical Review Of The Impact And Use Of Specialist Apps To Improve Learning For Deaf Children.

This action research project has trialled specific apps in the computing curriculum. The mixed methods approach was used with 35 deaf learners. The quiz app showed a trend of outstanding results over the three-month period and learners sustained motivation and enthusiasm to achieve this result. There was evidence of improved memory recall and retained acquisition of key vocabulary and subject-specific definitions. The coding apps elicited computational thinking skills, creative thinking skills and mathematical thinking skills, as defined within the literature review. Whilst learning to code, they needed to look for patterns, which required the mathematical powers of 'specialising and generalising'. They needed to reason, which included 'conjecturing and convincing'. They needed to understand key words, including unique definitions, and used powers of 'imagining and expressing' when tasked to design their own game at the end. There was evidence that the inherent structure and functionality within these apps provide a set of psychological tools to enable cognitive development in deaf learners, which embraces their culture and strengthens their self-esteem. The project demonstrates a solution to the pressing need for a digitally literate UK workforce. Moreover, creative and innovative thinkers are prioritised on the agenda for educational change. The introduction of a framework to nurture creativity and innovation cross curricular is presented, with emphasis on deepening the learning experience and enriching the statutory curriculum. This framework can enable deaf children to flourish as empowered learners.