U OR NON U IN ICT?

An evaluation of student learning activities following introduction of horseshoe classroom arrangement and group hearing aid in Information Communication Technology lessons for hearing impaired pupils

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ABSTRACT

There is considerable evidence to suggest that hearing impaired (HI) pupils need an optimum acoustical environment in order to learn effectively. The current literature suggests that effective acoustic treatment of classrooms and an auditory training system (group aid), together with a horseshoe (U) configuration of desks can create the optimum environment for learning for hearing impaired pupils. This U-shaped classroom structure, however, is not currently present in many conventional Information Communication Technology (ICT) classrooms for hearing impaired pupils, where the computer stations face the wall.

This small scale research project utilised an across-methods triangulation approach using observation and interview techniques to undertake an evaluation of the influence of classroom structure on learning behaviours of a group of six Year 10 hearing impaired pupils studying ICT at a specialist school for the Deaf.

The results suggest that changing the structure in an ICT classroom to enable hearing impaired students to sit in a U-shape configuration and gain access to a group aid produces positive changes in the learning environment when compared to a conventional ICT classroom setting. The results indicate that the group aid enabled a more group orientated session and removed the requirement for repetition of instructions between the teacher and individual students. As a result, the teacher's time could be used much more effectively in the development of the students' level of knowledge and understanding, creating a more positive learning environment.

This small scale research project, therefore, provides some evidence to suggest that an optimum acoustic and learning environment can be created for hearing impaired pupils studying ICT, through a change in the positioning of the computer stations. However, the key to this innovation is the requirement to replace conventional desktop computers with laptop computers. This change has financial and technical implications which would require further evaluation.