

Promoting multidisciplinary research and practice partnerships in TEL within an evidence based approach

Karen Guldberg, Helen Pain and Wendy Keay-Bright, for the ECHOES project

Within the TEL/TLRP ECHOES project, we are developing a technology enhanced multi-modal learning environment that supports children in developing social communication. We are taking a participatory approach to designing our TEL environment, the learning activities and model of the child user, and in assessing the impact of ECHOES on children's learning. We are proposing a research design that involves practitioners from the outset, thereby giving the research ecological validity.

This approach makes use of participatory design workshops, focus groups, formative evaluation and summative intervention studies. The formation of a Specialist Advisory Group for Echoes (SAGE) is central to this work. This comprises experienced practitioners in the autism field from a range of backgrounds. It will be run at key points throughout the project, with the first taking place in Birmingham in December 2009.

The Specialist Advisory Group will advise us about contextual issues through outlining scenarios in which ECHOES could be used, and by contributing to the design of ECHOES and the child model by creating learner profiles. Through SAGE participants, we also hope to feed in to policy and practice, and to promote greater synergy between practice and research. For example, we plan to undertake educational evaluation studies of ECHOES in a way that enables us to work in partnership with schools, grounding ECHOES in practice and through this work, clarifying its contribution to practice. SAGE participants will also advise on the selection of schools we will work with. We hope that this work with practitioners will help shape their evidence based practice and also support them in developing skills needed to implement this. We will offer training to those schools that choose to participate as partners. By promoting research and practice partnerships throughout the lifetime of the project, we also hope to extend the impact of the research beyond the life of the project.

We are investigating the use of the SCERTS (Social Communication, Emotional Regulation and Transactional Support) approach, to provide a framework for the design of our learning activities and education intervention studies. SCERTS is a curriculum framework that outlines the foundations for social communication development in typically developing children and addresses the areas of development that are likely to be problematic for children with autism, covering the development of children from birth to ten years of age. SCERTS provides not only a developmental but also a multidisciplinary perspective, without being tied to any one theoretical approach.

By embedding ECHOES within the SCERTS approach, ECHOES can be grounded in a framework that is founded on research and evidence based practice in the field of autism. It is a model that recognises the importance of learning contexts and transactional support to children's learning. The child's communication is not viewed in isolation, but is understood in the context of how other people communicate and enable the child to communicate. It suggests that practitioners should select goals from the curriculum based upon the needs of the individual child, and it provides a clear assessment framework for identifying such needs. SCERTS also provides a clear model for working in a multidisciplinary way through guiding teams to conduct multi disciplinary assessment of a child. This means that assessment and evaluation of how ECHOES impacts on children's learning can be conducted in a way which enables practitioners to collect and analyse data and thus be a central part of the research process itself.

In an expanded version of this document, we will consider the relationship between the SCERTS approach, the use of a Specialist Advisory Group, developing educational technology in interdisciplinary contexts, and the broader implications for TEL more generally. We will argue that TEL can better contribute to and support practitioners in enabling children's learning when embedded in a context in which practitioners are focusing on the development of related learning activities, in this case, social communication. When embedded in everyday practice, the impact of a technology enhanced learning may be greater than if TEL is presented in isolation.