

## The Development of Life Transition Skills in Inter-Life: A Novel, 3-dimensional Virtual Learning Environment

Alison M. Devlin, Vic Lally, The Interdisciplinary Science, Education, Technologies and Learning Research Group, School of Education, University of Glasgow, UK,

Email: Alison.Devlin@Glasgow.ac.uk; Victor.Lally@Glasgow.ac.uk

Madeleine Sclater, SOLSTICE, Edge Hill University, Ormskirk, UK, madeleine.sclater@edgehill.ac.uk

Karla Parussel, Department of Mathematics and Computing Science, University of Stirling, UK, kmp@cs.stir.ac.uk

**Abstract:** Inter-Life is a novel multi-modal, immersive virtual learning environment for the development of life transition skills in young people. Current policy highlights the role of technology in collaborative learning in a social and interactive manner. This article illustrates how Inter-Life is appropriated by a group of Looked After and Accommodated Children (LAAC) to help shape their own learning. Such a learner centred approach resonates with the current policy debate on the role of technology in education.

### Introduction

The potential of immersive, 3-dimensional virtual worlds for the social construction of knowledge and deep learning is now being investigated (Bronack, Riedl & Tashner, 2006; Dalgarno & Lee, 2010). However, relatively little work has been done on the impact of such technology on learning with young people who are in the care of government local authorities, known as Looked After and Accommodated Children (LAAC) (Connelly & Chakrabarti, 2007). Inter-Life is an interdisciplinary research project that aims to provide a safe online space for young people to work together on activities that contribute to the development of life transition skills such as: self-confidence, negotiation and mediation skills, empathy, team work and problem solving skills. Inter-Life Island-2 (ILI-2) is a safe and secure virtual island environment where young people can collaborate and, *through the processes of participation in authentic learning activities*, develop skills to help them navigate a range of real-world transitions. IL-12 is an extensively modified virtual, 3-dimensional immersive environment based on the Second Life™ platform.

There is current discourse in the literature about the paradigmatic shift in education from a traditional instructional model to a more personalised, learner-centred model in which life skills are a prerequisite for navigating both social and educational transitions in the knowledge age against a framework of lifelong learning (Robertson, 2005; Ahier & Moore, 1999). Another theme within educational policy is that of inclusion and capturing the ‘voice of the child’ but work involving technology has been limited in this area since young people in care are often considered “hard to reach.” Technology enhanced learning environments may represent a novel tool that resonates with their ‘digital’ culture more readily than traditional approaches.

### Aim

The aim of the present study was to determine if young people, who are presently in care, would experience the context of Inter-Life as a safe space to address their real life transition challenges and whether this changed as a result of participating in authentic learning activities in Inter-Life. The Inter-Life project is set within a social constructivist learning framework in which knowledge is built in an interactive environment and meaning is anchored in a situated context and so virtual immersive environments represent an attractive tool for deep and meaningful learning with implications for real-life. The project also draws on Lave and Wenger’s community of practice theoretical framework (Lave & Wenger, 1991).

### Methods

A series of twelve, ‘blended’ Inter-Life workshops was run between March 2010–June 2010 in which a group of young people (age range, 13-17 years) participated in a mixture of open-ended and structured educational activities, both face to face and ‘in-world’ in Inter-Life. This paper draws on data from the Inter-Life workshop observations and the workshop chat logs (n=12) collected automatically through the integrated data gathering tools. In addition, semi-structured research interviews were conducted with a sample of young people and their parents/carers. These methodologies are in keeping with social learning theory which favours “multi-voicedness” and “rich descriptions” from learners of their experiences. All data was imported into NVivo 8 and analysed in an inductive, iterative fashion using a social constructivist analytical lens in order to answer the research questions, and analysis was conducted across multiple data sources in order to triangulate the research findings (Erickson, 1986; Miles & Huberman, 1994).

## Results

Data analysis indicated the development of life transition skills in the young people through participation in the open-ended and structured Inter-Life learning activities. For example, at one workshop there was evidence of fluid leadership and one young person reflected on trying to support a peripheral participant by helping and encouraging this new member to become part of the learning community:

You know how we had all started off and everybody was doing their own thing but then John and that were then brought in ....and everybody was ahead...whereas John was..... *I was trying to help him....* but he was getting frustrated because of ..... *You are all ahead, how am I supposed to build my house?*  
(Research interview, Young Person A)

The same young person, upon reflection, indicated how Inter-Life had helped with the development of their self-confidence:

I wasn't as confident, I don't think.....*until I came to Inter-Life....*  
(Research interview: Young Person A)

Data analysis also indicated the development *over time* of negotiation skills, as well as empathy, self-awareness, team-work and problem-solving skills. The young peoples' confidence developed such that they were able to undertake planning and leadership tasks to solve emergent problems. For example, two young people worked together to establish rules for 'turn-taking' when asking questions 'in-world' since the synchronous nature of the interactive chat was causing some tension within the group. Another young person was capable of leading a group activity about countries of the world and their cultures, thereby demonstrating leadership and mentoring skills, as illustrated in the chat log:

Can everyone please come to me and tell me which country they would like to do, for example Mexico?  
(Workshop chat log 12: Young Person B)

## Conclusions

The present study provides evidence to suggest that young people can appropriate Inter-Life as a new ecology for learning in a meaningful participatory manner and work in a collaborative fashion in order to develop life transition skills. Furthermore, this is one of the first studies in which Looked After and Accommodated Children (LAAC) have worked together in a 3-dimensional virtual learning environment in an inclusive fashion.

At a time when there is a paradigmatic shift in models of learning (Robertson, 2005), this paper has shown how Inter-Life can support situated learning in a personalised fashion and contribute to meaningful learning. In conclusion, the present study provides some new empirical evidence of learning in authentic settings which is in alignment with the current debate on the role of technology as an essential tool to facilitate social learning and which resonates with current educational policy initiatives.

## References

- Ahier, J. & Moore, R., (1999). Post-16 education, semi-dependent youth and the privatisation of inter-age transfers: re-theorising youth transition. *British Journal of Sociology of Education*, 20, 515-530.
- Bronack, S., Riedl, R. & Tashner, J., (2006). Learning in the Zone: A social constructivist framework for distance education in a 3-dimensional virtual world. *Interactive Learning Environments*, 14(3), 219-232.
- Connelly, G. & Chakrabarti, M., (2007). Improving the educational experience of children and young people in public care: A Scottish perspective. *International Journal of Inclusive Education*, iFirst Article, 1-15.
- Dalgarno, B. & Lee, M., (2010). What are the learning affordances of 3-D virtual environments? *British Journal of Educational Technology*, 41(1), 10-32.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 119-161). New York: MacMillan Press.
- Lave, J. & Wenger, E., (1991). *Situated Learning: legitimate peripheral participation*. Cambridge: Cambridge University press.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Robertson, S.L. (2005). Re-imagining and rescripting the future of education: global knowledge economy discourses and the challenge to education systems. *Comparative Education*, 41(2), (151-170).

## Acknowledgments

Inter-Life is funded by EPSRC/ESRC (UK) RES-139-25-0402.