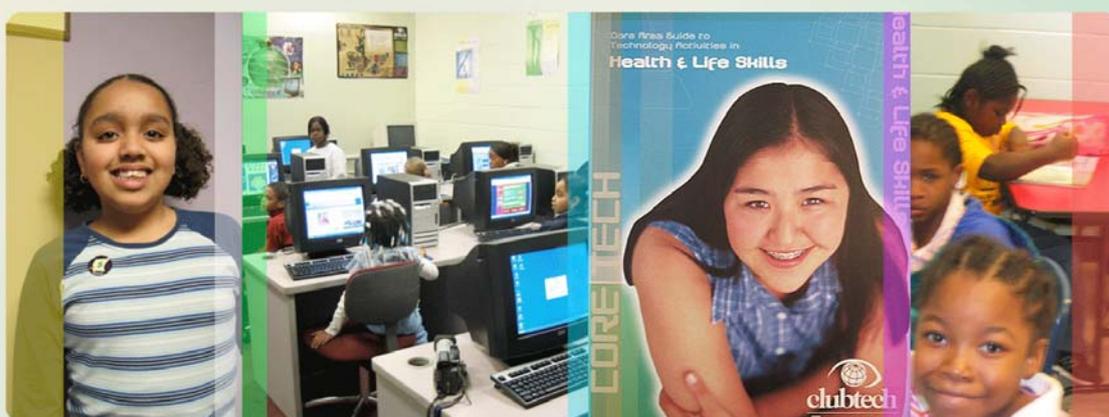


The Microsoft ClubTECH Project has partnered with SMARTlab UK to invent the next generation of creative technology tools, for roll out in the UK and the EMEA region from 2008-10.

Results of the SMARTlab review on the USA ClubTECH project (2000-5/6) have now been used as a catalyst for this exciting new textbook of value to all readers interested in community empowerment, education for at risk youth, and sustainable community models for the future.

Seeding Informatics & ICT Greenfields: Digital Inclusion Through New Models of Innovation, Education and Job Creation.



Akhtar Badshah, Lizbeth Goodman, Esther MacCallum-Stewart
with Linda Testa, Vicki Munsell & Kristina Nyzell

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Key Themes:

The book outlines the SMARTlab ethos of **Stealth Learning**, which we define within chapter 2 under a number of criteria. Essentially, stealth learning is the process of learning without using direct teaching methods, and incorporating learning objectives into e-learning projects without them becoming didactic or alienating the user. Stealth Learning recognises the issues with e-learning as an educational platform; namely that it is impossible to prove that it has an educative effect. Instead, we capitalise on this assertion by proving not a series of learning objectives but must be fulfilled, but a learning context in which learning practises can take place.

The projects detailed in this book do not necessarily follow traditional entrances to education – this is a deliberate movement by us to inject the potential for information gathering. ‘Stealth’ does not mean deceit, it simply means that e-learning is placed in unexpected circumstances, and that the users may subvert its content in positive ways. Indeed, to quantify these projects, with the ClubTECH program being core to this, as ‘e-learning’, is in some ways a negation of

the effect that our projects have. The emphasis on provision in real and virtual environments – for example through Microsoft's donations of hardware, software and learning packages, means that a plethora of responses can be achieved. The rounded nature of the project also means that there is 'pick-up' in many areas – programs work through practical techniques, gaming, back-up technology, and social networking. None of these are possible without a cohesive approach, but they also demonstrate the flexibility of stealth learning in action.

Chapter Synopsis

Chapter 1 – Introduction

This opening section of the book looks at the key areas of debate in terms of developments and ideas in the field. This chapter also discusses central terms at play in this area, and explains them in broader terms. It explains the central arguments at play in instigating projects. This chapter argues that projects need to be heteroglots – borrowing freely from other fields and debates, and that this freeform approach is a useful one. At the same time, overriding theory is avoided, since the hands-on nature of the projects, and practical ways forwards are methods which we wish to pursue.

Chapter 2 – Education in E-Learning Contexts

This second foundation chapter outlines the ways in which digital technology and ICT4D can be used in educational projects. Our focus here is to express the importance of international learning objectives through levelling the digital playing field. The chapter examines the history of edutainment, digital divide learning objectives and serious gaming, whilst also beginning to use examples of how these have been instigated on the ground. This chapter also presents the key arguments against using games within the e-learning field, as they seldom have recordable outcomes. Serious gaming encounters a real problem in terms of learning outcomes, as they are often not quantifiable in traditional terms. To counteract this pressure, we introduce an aspect of learning which we term 'stealth learning'. This encompasses the problems of discerning learned objectives by looking to the other ways that users learn through such projects. This might include increased communication skills, time management and language learning – all achieved as a result of e-learning, but not stemming directly from the more obvious messages that might be taught within it. Stealth Learning also recognises that games should remain entertaining, and not slip into didactic; at which point they cease being games and become instead toys or simulations, arguably losing any inherent content they may have wished to project.

Chapter 3 – Innovation

This section contains a selection of case studies from the field, documenting how they were implemented and the debates that often surround them. Our emphasis here is on a broad range of projects, all of which demonstrate the potential to implement technology through digital greenfields, as well as projects which contain elements suitable for adaptation within this area. In particular, we highlight the potential variety of approaches and audiences, as well as research which targets specific groups or provides specific tools for use. Overall, this chapter gives a variety of tools, all of which can be used in flexible ways to further knowledge learning in a digital context.

Chapter 4 – Implementation

Chapter 4 develops the ideas presented previously through contextualisation in a large scale project carried out from 2001 and still active in several forms today. Our theme here is a large case study of the ClubTECH project by Microsoft Community and SMARTlab, the University of East London. The project brought IT use, training, software and hardware to over 3000 children's clubs which already has a basis within disenfranchised communities; namely the Boys & Girls Club of America. It was one of the largest and most ambitious projects of its kind when

IT was still being treated with scepticism by many educationalists. The programme intended to level the virtual playing field in a specific area – children who had limited or no use of computers at home, and who often had to compete for ‘screen space’ when they were within schools, due to the low provision of IT and technology. The project used \$100 million of Microsoft funding and technology from 2000-5, and reached over 4.3 million of users; all this at a time when the internet revolution was still in its early stages. The project anticipated the development of interactive technology, recognising that it was becoming an essential part of daily use, and also that certain communities were rapidly falling behind in their acquisition and understanding of this technology.

The chapter details the aspects of the project, as well as responses by users and facilitators. It argues strongly for a practical extrapolation of our earlier thesis – that of Stealth Learning. Children were originally meant to learn (amongst other things) about internet safety, good computer usage, practical maintenance and how to develop their own ideas through software packages specifically designed for the ClubTECH program. The results were far more wide-reaching than this; resulting in National digital arts festivals, learning across national and international boundaries, a huge increase in the worth of the learning experience across the BGCA curriculum, and less tangible results such as improved confidence in users, the ability to follow vocational career paths with more experience, and the shared cooperation and learning gained through implementing a scheme where all members of the BGCA, not simply the children, were counted as learners, thus encouraging peer related education as well as social development skills.

Chapter 5 – Jobs and Social Empowerment

This chapter examines in-depth interviews with ClubTECH graduates and charts their employment successes and stories of personal development. A further study of the impact planned for the UK and EMEA regions with the new ClubTECH for Europe roll out project is then included, with sections on additional tools to be integrated for the UK phase: the MAGICBOX technology toolkit, aspects of the Lego Serious Play toolkit, Moviestorm and a range of other innovative new open source tools that make young people employable while building respect for individuals and communities of dedicated creative learners. This new expanded toolkit further establishes the link between development of play experiences in childhood and their influence on the future choices made by adults in their business careers.

Conclusions and The Way Forwards

Finally, we argue for the ways in which all of these projects can be continued in new places or in new formats. The ClubTECH programme in particular was intended to be a blueprint for future usage – a project which intentionally aimed to pioneer techniques but then search for ways in which they could be expanded or developed. Sustainable projects are also of key importance here – how do we move forwards, how should future projects aim to develop, and what lessons can we learn from the past? The conclusion takes its starting point as the positive reception received from the ClubTECH project at SIGGRAPH in 2004, which clearly showed the need for further projects of this nature. This section also looks at lessons learned through ClubTECH and the other projects detailed here.

Siggraph 2004 also coincided with the external launch of the YouthNet online package: discussed by its creator Vicki Munsell in detail in this chapter, with notes on further extensions of the YOUTHNET method planned for EMEA roll out.



The SMARTlab site: for more information on this book and the MIT Emergenc(i)es series, contact <http://www.SMARTlab.uk.com>