

## Review

# Researching Design Learning: Issues and findings from two decades of research and development.

<b>Title:</b>	Researching Design Learning: Issues and findings from two decades of research and development.
<b>Authors:</b>	Prof Richard Kimbell, Prof Kay Stables
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I am very fortunate to live in a semi-rural part of Cheshire and like many people I adopt the very British trait of keeping oneself to oneself and although I do feel a strong sense of community, I can't profess to knowing my neighbours particularly well. We do however, always say hello, wave when driving past and we even have names for our neighbours, such as the 'man with the white dogs' and the 'garden woman' as we haven't quite got around to asking names – we wouldn't want to appear presumptuous – after all we have only lived where we live for 18 years.

Not so long ago, as part of a national health screening programme, I was invited for a medical as it was contributing to a national longitudinal database of health trends. So I went along, by myself, as my wife couldn't make it. When I walked into the reception I had one of those strange episodes when the brain goes into a moment of paralysis as the enormity of what you are seeing can't quite be comprehended. There in the reception was every one of my neighbours – the man with white dogs (without the dogs but with his wife), the garden women – but not in her garden. Every neighbour from my road was there – all getting a medical at the same time. Added to this, the way the system worked meant that you would walk out of one test and sit next to a different neighbour than you had been sat next to previously.

It was all incredibly strange (apart from not knowing anyone's real name and avoiding using the fictitious names we had created) as not only do people look a lot different when you see them up close and out of context but also our conversations were rich in the events of the last 18 years. Suddenly I felt more informed and had an even greater sense of community.

Why am I telling you this? Well this is exactly the way I felt when reading Professor Richard Kimbell's and Professor Kay Stables (who I will now call Richard and Kay – hope they don't mind) book. Flicking through the book I knew something about most of the projects but like with my neighbours after reading the book I felt a greater sense of connection and better understanding of the research that Richard and Kay have undertaken in the last 20 years.

This was particularly true of part two of the book which provides accounts of 20 projects, all together for the first time in one place (just like my neighbours). Starting with recounting the establishment of TERU (Technology Education Research Unit) at Goldsmiths University and the influential early development of the APU (Assessment of Performance Unit) the book provides a clear reflection both on the philosophical and methodological underpinnings to their work. Chapter one, in particular, is rich in clarifying Richard and Kay's philosophical approach to the subject starting with the identification of learner *capability* – 'the power to produce an effect' – as essential to their work. Central to this is imaging and modelling and the famous 'Christmas tree' representation of the interaction of mind and hand. Particularly interesting in this chapter is the potential tension that is highlighted between the concepts of *capability* and the emergent term *Technological Literacy*. To get to grips with this argument, from a different perspective, I would recommend the excellent book by John Dakers (Dakers, 2006) on the subject as the boundaries of distinctions are far from clear.

If there is a trade off in Richard and Kay's book, which is acknowledged, it is that in sometimes going for breadth some of the depth has had to be sacrificed. So the early

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chapters on learning, assessment and research are dealt with in only 30 pages and whilst useful, merely provide a vignette of these incredibly complex and continually evolving areas. Surprisingly there is also only the one reference to Richard's book (Kimbell, 1997) *Assessing Technology* which is still a fantastic book and was always the top of my reading lists for students. So here's my plugging of the book in case it has passed you by as it provides the best account of the evolution of Design and Technology through the lens of assessment and any student of the subject must read it (even if it is now a little dated). I digress.

As previously mentioned part two provides an overview of 20 projects across twenty years starting with the early APU materials (still worth reading) right up to the recent assessing innovation project and the current e-scape developments. This is however more than recounting the many projects that Richard and Kay have undertaken and as always readers will take something deferent from this section depending upon their background in the subject. My particular favourite is the *e-scape* project which although already discussed in detail elsewhere (e.g. Kimbell, 2007), provides a good overview of what has been, and continues to be, a significant development for both assessment in general and assessment in Design and Technology. In particular the use of *comparative judgement* utilising new technologies is the clincher for me as it provides a sense of democracy to the assessment process and offers so many more opportunities than perhaps was originally conceived.

One observation I have to add here after reading this section, which is merely a personal reflection and not a criticism, is that this work is perhaps too cutting edge or perhaps more accurately, the rest of the community has not sufficiently kept up with these developments. It's a bit like the analogy that if the development of cars had had a similar rapid evolution to that of computing then we would all be driving around in cars at ten thousand miles an hour, but where you have to switch it off twice, reboot it, press Ctl + Alt + delete before you can get out of it (perhaps I have improvised the ending of this analogy a little). But my point is that whilst the work in assessment has developed significantly, it is cutting edge and world leading, equally important work in areas such as gender, creativity, group work, teacher development, communication, as well as some of the bigger philosophical and fundamental questions, haven't developed in the subject at the same pace. This is due to

a whole variety of reasons, and this is where I see the weakness – not in Richard and Kay's work but in the overall development of the subject. We have a *Kluge* of a subject, where we have the emergence of a particularly strong form of research, which has now been well documented, but which may be constrained and ultimately only be as good as those areas that form part of the whole.

Wouldn't it be fantastic, as in some other subjects, to have hotspots of design and technology research of a similar breadth and depth across the country all dealing in equally rich developments coming together to form a powerful whole? The reasons for the lack of such a research momentum are many. Sometimes the subject simply lacks a critical mass, sometimes it may be the small amount of apathy that exists within our community. One clear reason which Richard and Kay allude to is the political dimension. Whilst the Design Council was strong and politically design and technology was on the up there were those interested parties willing to put money forward to answer questions through research. However, now is a very different picture and the amount of funded research into the subject is almost insignificant when compared to other areas of education research. Enough of my bleating.

And so to the final section, part three, which offers an increasing insight and reflection on the discussions in part one and two. This gave me what I was most looking for, which was the more informed complex decision making that has been part of the research developments. It also reveals the paradox of how diverse and multifaceted research is and how tightly focused good research also has to be. Richard and Kay's work provides an insight into the relentless pursuit of answers and this is the book's strength. It illustrates that the researcher cannot do everything, that you have to be disciplined – possibly ruthless, you have to be able to reflect on your dispositions and starting points and you have draw upon a wide range of influences when searching for answers – a career long battle. Not everyone will agree with the methodologies chosen or the theoretical influences however the discipline, rigour and focus of the collection is clearly the strength of the work.

In the final chapter Richard and Kay discuss using the 'So what?' question as a means to probing the effectiveness of some of their work and you can read their own

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so *what* review in chapter 15. It would therefore seem appropriate to also use the 'So what' tool as a summary for this review.

Researching Design and Learning by Kimbell and Stables - So what? Well, the strength of the publication may also be its limitation as it documents and celebrates a very personal journey that both Richard and Kay have had over the last 20 years. It doesn't pretend to attempt to cover an A-Z of methodologies, philosophical enquiries or political interference. It is a highly focused, UK orientated, a real life journey which deals with the realities of research. This is what makes it so interesting.

So what? Well, I cannot recall another book like this as it links practice with research and is written in a very personal and engaging way. It is not dry and it is not overly academic – even though it is clearly academic and grounded in research. It is not stuffy!

So what? Well, I strongly recommend the book and I will add it to my reading lists for all students. The cost is however prohibitive and the clear trade off with low volume research focused academic books is the high production costs. Therefore, in my opinion, it is essentially a library book except perhaps for a Masters or PhD students who are going to be using the book as a basis for their work in which case the book could prove invaluable.

So what? Well, we are going through an interesting period in publishing in Design and Technology research and perhaps this is a sign of increasing maturity of what is still a young research subject. Howard Middleton (Middleton, 2007), Mark de Vries (de Vries et al., 2007, de Vries, 2005) and John Dakers (Dakers, 2006) have all produced the type of books that can only be of benefit to the Design and Technology research community and Richard and Kay's contribution compliments this list. We are very fortunate to have people like Richard and Kay, two excellent professors, who are committed to the subject and whose book is a valuable record and contribution to the research community.

## References

- DAKERS, J. (2006) *Defining Technological Literacy: Towards an Epistemological Framework*, New York., Palgrave MacMillan.
- DE VRIES, M. (2005) *International Handbook Of Technology Education: The State of the Art* Sense Publishing.
- DE VRIES, M., CUSTER, R., DAKERS, J. & MARTIN, J. (2007) *Analysing Best Practices In Technology Education*, Sense Publishing.
- KIMBELL, R. (1997) *ASSESSING TECHNOLOGY: International Trends in Curriculum and Assessment* UK, USA, Germany, Taiwan, Australia, Open University Press.
- KIMBELL, R. (2007) e-assessment in project e-scape. *Design and Technology Education: An International Journal*, 12, 66-76.
- MIDDLETON, H. (2007) *Researching Technology Education*, Sense Publishing.