What makes an idea be worth sharing...or maybe recycling...or maybe shredding? What do we want learners to 'take home'?

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Writing a 'reflections' piece for this journal is an interesting challenge to be given. In working out what to write about, I have been mindful of the 'footprints' I am treading in, of the topics of the reflections that have come before and equally important of the spirit and tone of these reflections. The provenance of this reflections slot is the editorials written by Richard Kimbell from 1996-2005 in this journal and its predecessor (The Journal of Design and Technology Education) all of which have been collected together in the delightful Design and Technology Association publication 'Footprints in shifting sands' (Kimbell, 2006). In these pieces Richard has mused in a wry, provocative and stimulating way about what he terms 'hot issues' for the professional community of D&T Educators. And there is a linked provenance that not all might have been aware of - a parallel set of editorials in a compatriot journal in the USA – the Journal of Technology Education where a similarly enjoyable discussion of 'hot issues' have been presented in the editorials of James LaPorte. While Richard has engaged in discussions around, for example, digital portfolios by reflecting on his Club Med ski holidays (Kimbell, 2005 & 2006), Jim has, for example, pondered on the place of knowledge in a technology activity through sharing with the reader his trials and tribulations of fitting new storm doors under the watchful eyes of his neighbours (La Porte, 2004). Both highly readable. Both pertinent. Both make you stop and think. So, with the self-conscious awareness of the 'masters' of reflection sitting on my shoulder, I set about the task and hope that I come some way near to providing a pause for thought on what I see as a 'hot issue'.

The original idea for my topic fell neatly at my feet shortly after the D&T Association's 2010 annual conference theme – 'Ideas worth Sharing' – was announced. At pretty much the same time the theme for the next Handheld Learning conference was also announced – 'Ideas worth Shredding'! At the mere mention a few old chestnuts jumped straight to mind – the steady hand game, cam toy, pencil case, smiley pizza. But after my initial amusement at the theme and my knee jerk response to it, I got to wondering what makes an idea worth sharing as opposed to shredding? What gives an idea currency?

Now, anyone who has been a classroom teacher will know that one important factor is the extent to which learners are motivated by the ideas they are presented with. Some might add something about the value of having 'something to take home'. There is truth in both, but it seems to me that there is more to it than that.

Whatever ideas we have that might be taken into classrooms, first we need to remember that anything we

engage young people in should provide opportunities for them to learn, to develop their capabilities and to become more confident and competent in the ways in which they lead their lives and contribute to their communities. In the context of D&T education, I think this is strongly linked to the importance of encouraging 'future-thinking', a need for a bigger picture into which the idea can fit, a vision for how the idea supports the learner, a philosophical stance about how to choreograph the presentation of the idea and the pedagogical approach that will support the learner's engagement with it. Fundamental to all of this is the importance of the values embedded within the idea, the related activities and the expectations of the teachers. An idea that meets this tall order is definitely worth sharing.

So what makes an idea worth shredding? The corollary of the above would suggest that it is an idea devoid of vision, philosophical stance, values or a future-thinking context. At the recent 'Ideas worth Sharing' conference, we were lucky to have excellent presentations that helped us see what a 'future-thinking' context for D&T education might be like. Amongst the Keynote speakers there was fascinating resonance (some may say zeitgeist) of big ideas of a broader view of D&T, more integrated and multidisciplinary in the way ideas were developed; of a greater sense of purpose in the activities that young people become engaged in; of a more critical stance being taken and of the importance of developing the human capability of designing and modeling in a way that would support future thinking about ways of addressing the major challenges of humanity such as the fair use of resources, climate change etc. These ideas were exemplified from within schools' design projects (for example by Ilsa Parry of Rethinkthings and Mat Hunter of the Design Council), from examples of the way designers are increasingly operating in professional contexts in multidisciplinary teams to address world issues such as dignity in health or terrorism (again from Mat Hunter) and by reflecting on critical approaches taken in other creative and cultural contexts (from Sheffield Hallam's Peter Grover). What, for me, all of the presentations had in common, was that they were full of good ideas worth sharing with the profession that could contribute to a stepchange in what goes on in D&T classrooms and workshops.

The ideas being presented through the Keynotes were not those regularly found in D&T classrooms. But there is no reason why they couldn't be. For example, Mat Hunter presented the Design Council's Water Design Challenge for Secondary schools that involved schools calculating how much water their school used and then,

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in conjunction with professional designers, design ways to reduce water wastage. The winning design was a travelling exhibition – in a portaloo!

In truth, developing new ideas for classroom projects that are worth sharing is a challenging task. The creation of a design brief that is engaging, challenging, provocative, encourages risk taking and collaboration and at the same time is manageable is in itself a major task. But a welldeveloped brief and the resources that support it are paramount in supporting our next generation of designerly future-thinkers. Consequently we see developing the ability to do this as critical in our fledgling D&T teachers at Goldsmiths. With students studying for a BAEd in D&T education, we set them challenges to develop design projects and the related curriculum support materials that have to be based on something they have never witnessed in a D&T classroom - either as a learner or as a student teacher. To provide some structure to this, we encourage them to focus on the English D&T curriculum and in particular the 'Key Concepts' (Designing and Making; Cultural Understanding; Creativity; and Critical Evaluation). We also ask them to justify the educational rationale behind their curriculum ideas - to present their philosophical stance. For student teachers this is a challenge indeed – but for those who succeed, brilliant ideas, definitely worth sharing, emerge. An example from this year's crop illustrates the creative thinking that can result from this process. The project was developed by a first year student and was inspired by the Young Foresight programme. It involved learners being fast-forwarded to 2020 and presented with an entirely new, moldable material 'Zilch' that has zero gravity and that hovers up to a metre above a surface, depending on the concentration of the material and any weights attached. The learners' brief was to respond to a commission from a Brazilian Hotel chain to design hotel furniture for internal or external use that exploited the properties of 'Zilch'. The thoughts, ideas, challenges and learning potentially provoked by the project are immense.

Not every project the students conceive is entirely original. But what does emerge are a good number of 'recycled' or, perhaps more accurately, 'upcycled' projects. Scratch the surface and the inkling of an already existing project can be detected, but re-working it has given the project greater currency. The idea of upcycling a project is not new — and is a good way of avoiding chucking the proverbial baby out with the bathwater. Martin and Riggs in making a case for 'reclaiming contexts' illustrate how, at a very simple level this can be done.

"For example, consider a design and make activity on the theme of *Carrying* where the teacher intends pupils to develop a carrier from textile materials. The task could be presented in one of two ways:

- 1. Design and make a carrying device to hold a range of foodstuffs.
- 2. Address the issue of an elderly shopper who needs the means of carrying his/her shopping back home from the precinct.

Both design activities may result in exactly the same solution but the second activity presents a much richer situation for pupils to explore and discuss a range of issues." (Martin & Riggs, 1999, pp 155-156)

So, what have Martin and Riggs done here? Looked at a simple design task and identified the fundamentals that are missing and optimised the task by adding them in. In much the same way many of the student teachers have optimised design briefs by exploiting opportunities to develop aspects of the four 'Key Concepts' identified earlier. This 'upcycling' has created many ideas worth sharing, for example:

- designing 'Tribal Identity' accessories for young Londoners to share and reflect their identity for an 'I am London' festival – so many more opportunities than 'design and make a broach for someone special';
- creating a 'Design House' and working as a team to design a World War 2 memorial exhibition that also promotes sustainable design (e.g. 'make do and mend') – so many more opportunities than recycling tee-shirts;
- a 'seed to plate' food project, designing with seasonal produce, and creating a school allotment to support the project – so many more opportunities than designing a new convenience food;
- a 'breakfast in bed' kit to make your parents feel appreciated – so many more opportunities than designing a chocolate mold.

So, can all ideas that might be shredded be given new life? My response would be first to ask what the learning purposes are — and the extent to which they fit the inspirational views of the way D&T education can develop future-thinkers who have a broader view of how design can contribute to the development of communities and society and who have the capability to bring ideas to reality. Linked to this, my second question would be about the values embedded. Will engaging with the idea develop the criticality and sensibility to support thoughtful designing? And something to take home? If an idea has all of the above, whether or not there is a tangible 'product' at the end, just think about what D&T is giving the learner to 'take home'. This would indeed be an idea to share. And if not, then let it be confined to the shredder!

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