Book Review
Dakers, J.R. (2023). A Nomadic Pedagogy about Technology: Teaching the Ongoing Process of Becoming Ethnictechnologically Literate. Brill Academic Publishers

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Introduction

John Dakers always provides challenging and thought-provoking narratives on the field of technology education, and this book is no exception. Read this book and you might be caused to rethink your preconceived ideas about design and technology education, and its related subjects around the world! Before I go any further with reviewing the book, it might be useful to define a number of terms that are used, which might not be in many teachers', let alone academics', lexicon.

To begin with the title, Dakers introduces two terms that were new to me, and I imagine many other readers. The first is nomadic pedagogy, which emphasises flexibility, adaptability, and a willingness to explore and experiment with approaches to teaching and learning. This stands in contrast to signature pedagogies, which describe common approaches used across a discipline (Shulman, 2005). A nomadic approach contrasts with traditional and established pedagogies, which Dakers proposes can present rigid educational models. The aim of nomadic pedagogies being to foster independent thinking and creativity in students, as opposed to following more teacher led approaches where the design and technology outcomes are largely determined in advance.

Secondly, Dakers introduces the concept of *ethnotechnological literacy*, which goes beyond mere technological proficiency, with the standard approach of developing conceptual (knowing that) and procedural (knowing how) knowledge. An *ethnotechnological* approach involves understanding technology within its sociocultural context, recognising the impact that it has on society (and vice versa), and developing a critical perspective on its use. In times of environmental and societal change, Dakers argues that children and young people need to become more literate in technology as a fundamentally human activity. Furthermore, the traditional craft-based approach to technology is judged to be deficient in its ability to achieve these aims.

The book draws on the philosophies of thinkers like Deleuze, Guattari, and Simondon to build a framework for this new pedagogy. Dakers uses these philosophical insights to challenge readers to rethink the relationship between humans and technology.

Content

The book is organised into eight chapters, each building on the previous to develop a comprehensive argument for nomadic pedagogy and the rationale for ethnotechnological literacy. *Chapter 1* sets the stage by outlining the book's main themes and objectives, which are followed up in *Chapter 2* with an exploration of current definitions of technology, technique

and technological literacy, going back to the ideas of Aristote and the evolving interpretations and highlighting their limitations. In *Chapter 3*, Dakers delves further into the philosophical concepts that inform and underpin his approach, and in *Chapter 4* his examines the extent to which being human inherently involves being technological.

In the next chapters, his begins to outline the implications for education in *Chapter 5*, discussing how current educational systems around the world fail to adequately teach technological literacy. Developing on this, *Chapter 6* further defines the characteristics and benefits of nomadic pedagogy, with *Chapter 7* providing examples of how this approach can be implemented in educational settings. In conclusion, *Chapter 8* summarises Daker's arguments and calls for a shift towards this new educational paradigm.

Critique

Dakers' book is a compelling call to action for educators and policymakers. His critique of current educational practices is well-argued from theoretical perspectives, and his proposed solutions provide innovative and practical ways to address his perceived shortfalls in the current paradigms in technology education. The use of philosophical concepts to underpin his arguments adds depth and rigor to the discussion. However, the book is heavy on theoretical content and may be challenging for readers without a background in philosophy or education theory. Whilst Dakers provides some practical examples, more concrete case studies could help illustrate how this relatively untested nomadic pedagogy could be effectively implemented in diverse educational contexts. Furthermore, the idea that craft-based and ethnotechnological literacy technology education are mutually exclusive is open to question. No doubt, this mode of critiquing the role and impact of technology and society on each other is underrepresented in, if not wholly absence from, most technology education classrooms. But I would argue that there is a place for both approaches in a contemporary and pluralistic technology education curriculum.

As I read through the book, I found myself both fundamental agreeing AND fundamentally disagreeing with Daker's analysis of both the need for ethnotechnological literacy technology education and the current problems with craft-based technology education. Taking an ethnotechnological look at technology and society is something that has been long needed and hard to achieve in design and technology education. The fundamental human activities of technology and society are something that I have previously written about in McLain et al (2019a; 2019b). There were glimmers of the ideas in the reports written before the launch of the national curriculum in 1990 in England (cf. DES/WO, 1989). However, the legacy of craft-based technology and the dominance of making over designing in the D&T classroom in England has been handed down from generation to generation of teachers and attempts to remedy this issue – initial identified by Ofsted (e.g. 2002) and address in the National Strategies (e.g. DfES, 2004) have ultimately failed to turn the direction of curriculum practice. The most recent attempt to change this on a national scale was in the new GCSE launched in 2017 (DfE, 2015), but those who were unwilling to change found it easier to switch to vocational options or the Art and Design Textiles or 3D Design specifications, which provided more flexibility, easier wins in terms of grades, and less prescription.

Where I find myself disagreeing with Daker's analysis is in the proposition that craft-based technology education is unable to accommodate (or too broken to change) an

ethnotechnological literacy approach. Having watched the rise and fall of D&T over the last three decades, I have come to conclusion that no change happens in isolation, and sometimes with no direct intention. And the sudden switch from one form of technology education to another is likely to result in the same issues as have beset D&T in England (i.e. the power of legacy policies and practices). It might be that creating a parallel subject could be an option, like happened in Sweden with Teknologi (technology) being introduced alongside Sloyd (crafts). However, there remain tensions between the two and time will tell on the success of this approach. Moreover, we already have a curriculum on England that is bursting at the seams.

Where there may be hope (in England at least) is in the current four-fold pedagogy that was initial proposed by the likes of Hildaruth Beaumont (formerly as David Barlex), and Alison Hardy and Sarah Davies at Nottingham Trent University. This is something that I have written about in Hardy (2021; 2022) and is illustrated in Figure 1. However, where I differ from other commentator is that I disagree that the fourth approach be called 'design and technology in society', favouring 'exploring technology and society' – avoiding putting the cart before the horse and putting technology and society side-by-side.

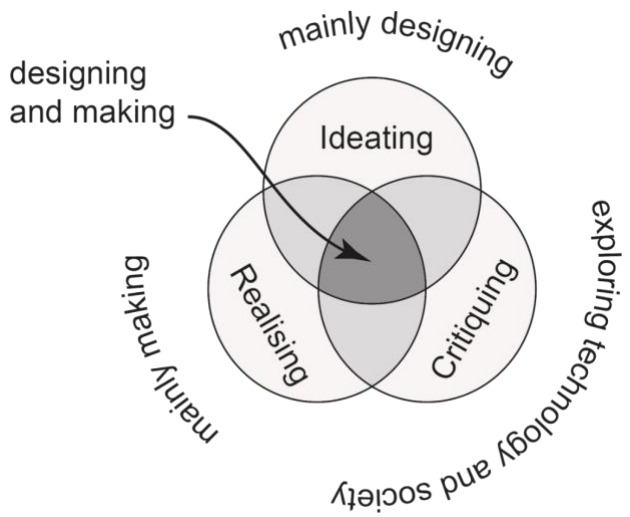

Figure 1 Four-fold Model of D&T Pedagogy Related to D&T Fundamental Activities (McLain, 2022)

Figure 1 shows how the four pedagogical approaches, developed and expanded from the previous model of the design and make assignment and focussed practical tasks, add activities called 'mainly designing' (recognising that designing does not stand alone from making, and vice versa) and 'exploring technology and society' (ETS). Both of these relatively new approaches are somewhat underdeveloped, but the ETS pedagogy is significantly less so and is ready for developing the more humanities informed approach expounded by Dakers as ethnotechnological literacy. My proposition is that to strengthen the broader approach encouraged by the four-fold model, the adoption an ethnotechnological inspired approach could lead to more sophisticated and authentic learning, without separating it from the body of D&T education.

Conclusion

In my view "A Nomadic Pedagogy About Technology" is an essential read for anyone interested in the future of technology education, particularly educators undertaking postgraduate study and research in the field, and those involved with curriculum policy at national and regional levels. However, it may prove to be a somewhat challenging and apparently irrelevant to the average classroom teacher working in isolation and without the opportunity to discuss difficult concepts with their peers. Dakers' vision of ethnotechnological literacy and nomadic pedagogy offers a promising path forward, encouraging educators to embrace flexibility, critical thinking, and a deeper understanding of technology's role in society. This, in my opinion, is an underdeveloped aspect of the design and technology curriculum, but there is a place for it within the 'broad church' of the subject, and this might be a spark to ignite a change in and evolution of the subject. At a time when a curriculum and assessment review, led by Professor Becky Francis, is taking a close look the national curriculum in England, Dakers brings an important perspective and approach that could (and should) be used to examine and question the way things are, and could be. This is a highly recommended read for all those developing D&T curriculum from the school to the national level, with a good philosophy dictionary to hand, such as Julian Baggini's 'The Philosopher's Toolbox' (2020).

References

Baggini, J. (2020). *The Philosopher's Toolkit: A Compendium of Philosophical Concepts and Methods* (3rd ed.). Wiley Blackwell.

DES/WO (1989). *Design and Technology for Ages 5 to 16: Proposals of the Secretary of State for Education and Science and the Secretary of State for Wales*. HMSO

DfE (2015). *Design and technology GCSE subject content*. (DFE-00283-2015). Retrieved from https://www.gov.uk/government/publications/gcse-design-and-technology [accessed 29/11/2025]

DfES (2004a). *Module 4: Teaching the subskills of designing.* (0971-2004 G). Retrieved from https://webarchive.nationalarchives.gov.uk/20081231051338/http://www.standards.dfes.gov.uk/secondary/keystage3/respub/design/downloads/ [accessed 29/11/2025]

McLain, M. (2022). What's so special about design and technology anyway? Exploring contemporary and future teaching using a signature pedagogies discursive framework. In A. Hardy (ed.), *Debates in Design and Technology Education* (2nd Edition). Routledge.

McLain, M. (2021). Key pedagogies in design and technology. In A. Hardy (Ed.), *Learning to teach design and technology in the secondary school: a companion to school experience* (4th Edition). Routledge.

McLain, M., Bell, D., Wooff, D. and Morrison-Love, D. (2019a). How technology makes us human: cultural and historical roots for design and technology education. *Curriculum Journal, 30*(4), 464-483. https://doi.org/10.1080/09585176.2019.1649163

McLain, M., Bell, D., Wooff, D. and Morrison-Love, D. (2019b). Humanising the design and technology curriculum: Why technology education makes us human. *Design and Technology Education: An International Journal, 24*(2), 8-19. Available at ojs.lboro.ac.uk/DATE/article/view/2610

Ofsted (2002). *Secondary Subject Reports 2000/01: Design and technology* [report]. HMSO.

Shulman, L.S. (2005). Signature Pedagogies in the Professions. *Daedalus, 134*(3), 52-59. https://doi.org/10.1162/0011526054622015