



Peter Fensham—Remarkable Colleague and Friend for 49 Years

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Accepted: 4 November 2022 / Published online: 23 November 2022
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Keywords Fensham’s values · Actions · Achievements

The Values that Permeated Peter Fensham’s Life

One of Peter’s many remarkable attributes was that he held strongly to some core values that permeated all the wide spectrum of his life’s work (which, for all his global influence in science education, also went far beyond this). The best illustration of this in the context of science education comes from Peter’s own words.

Given that Peter was initially a chemistry academic, some of the research and development for which he was widely known was in chemistry education. Consequently, in 2013, the *Journal of Chemical Education* published an interview with Peter as the eminent Chemistry Education researcher he was (Cardellini, 2013). The interviewer’s final question to Peter was a more personal one, and reflected Peter’s well-known religious perspectives on life:

Interviewer: Has your religious upbringing and outlook affected your efforts and subsequent great achievements in education?

Peter’s reply speaks loudly to his commitment to his central life values:

Peter: Social justice is central to my religious understanding. Education systems in almost all countries are renowned for being inequitable, and this, to me, is something that is contrary to my understanding of the religious intention for society. This widespread inequity is the big field of my endeavours in education. More specifically, scientific knowledge is a major source of human empowerment, and this empowerment has too often been confined to a few and not shared more widely in society.

Peter’s values, which I would summarise as “seeking equity and social justice, and unwavering commitments to humanity and compassion”, give important context by which one can see much more clearly why Peter was so articulate about and committed to the

This appreciation of Peter Fensham is an elaborated version of one eulogy given at the “Celebration of a Life” Memorial Service for Peter at The Avenue Church, Blackburn, Victoria, 23rd December 2021

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ideas and achievements for which he is best known. The most obvious example of this is his advocacy for almost 40 years for access to science for all students, with that science to have particular significant characteristics. It should have useful meaning for the large majority of students and should build in students a lifelong interest in and appreciation for science. It is this advocacy, so well represented by his own iconic name for this, for which he is best known around the globe—“Science for All” (Fensham, 1985).

And, in passing, there is something about the context of the interview quoted above that also represents much of Peter’s very international and diverse life. The journal is produced by the US Division of Chemical Education of the American Chemical Society, the interviewer was a researcher in Italy in his home country as he conducted the interview via Zoom, and Peter was in Melbourne.

More importantly, the transcript of this interview, which forms part of the cited article, is one of the few sources in which Peter gives some account of his specific research focus during his first career as a researcher in chemistry.

An Outline of Peter’s Early Careers

Peter’s professional life began in the way then common for the very small group of really high achievers who entered university in Melbourne in 1945: a succession of scholarships to enable a science degree, a research Masters of Science thesis, then, since this was a time essentially before any Australian universities took doctoral students, a PhD in solid-state chemistry at Bristol University, then a year as a post-doctoral researcher in Chemistry at Princeton. At Princeton, Peter also took a class in social psychology as he sought to expand his interests. The next year, he was back in England, doing a second doctorate (again via scholarship), this time in social psychology. This thesis (Fensham, 1956) explored the impacts on factory workers of technological change in that factory—clearly he was three or more decades ahead of almost all of us in these concerns. The thesis was soon published in book form, with his supervisor as second author, by Tavistock Press. It was reissued by Routledge in 2014 as part of the “International Behavioural and Social Sciences Library: Classics from the Tavistock Press” (Fensham & Hooper, 1956/2014).

After this second doctorate, Peter came back to Melbourne, already married to Christine whom he had met at Bristol University. He returned to an academic position in the Department of Chemistry at Melbourne University, where he continued his solid-state chemistry research and also studied some aspects of teaching and assessment and participation in universities. If not for two cases of institutional inertia at two other universities, Peter would likely have become a Professor in Chemistry beyond Australia in the mid-1960s. Instead, in September 1967, Monash University appointed him to be the first Professor of Science Education in Australia (and some exploration leads me to believe the first such appointment anywhere outside the USA).

As well as developing a strong group in science education research and development (something for which I am clearly prejudiced in suggesting he was very successful), Peter also had a clear brief to develop research and higher degrees across the whole Education Faculty at Monash. This was a daring development at the time (the latter 1960s), as research degree students were then very rare across all faculties of Education in Australia and the only post-initial teacher education programs taught were post-graduate Bachelors of Education—the world was very different over 50 years ago. This was again a development in which Peter was very successful, but that is another story for another time.

The core values that marked so many of Peter's wide range of pursuits and passions in life—equity and social justice, humanity and compassion—were particularly central to his academic work as he launched into this new career as an education researcher, and many of Peter's major achievements in education reflect this. I relate just two here, both from 1970; one had profound impact on Australian public education policies and actions within just a few years, and the other is at the heart of the existence of this journal, *Research in Science Education*.

In 1970, a book edited by Peter was published. The name of the book describes it well: *Rights and Inequality in Australian Education* (Fensham, 1970). This work took on a quite seminal urgency in 1973 when the first Whitlam Australian government, elected late in 1972, embarked on major reforms (including in resource provision) of the school education systems across the country. These reforms were initiated and shaped, at least in significant part, as a direct consequence of the Fensham book and the set of preceding seminars organised by Peter that became the book. The reforms had as an explicit central driving issue the addressing of inequality across both school systems and individual schools.

Also in 1970, Peter initiated the Australian (for many years now Australasian) Science Education Research Association (ASERA). It is this body that in 1971 began the journal you are reading at this very moment, *Research in Science Education*, and who remains responsible for it.

ASERA

In 1970 Peter, with the help of three then-graduate students, two of whom soon became major figures in ASERA, contacted all those in Australia who they knew to have some interest in the emerging field of science education research and invited them to a meeting at Monash in May to share their interests. At this meeting, ASERA was formed, and the 1970 meeting became seen as the first annual conference of ASERA. Thus, ASERA is the second oldest professional body of science education researchers on the planet (after NARST) and is also the oldest continuing Australian body of researchers of education (this first meeting was held several months before the first meeting of the Australian Association for Research in Education). From 1971, ASERA has produced a journal; from 1974, the journal has been named *Research in Science Education*.

In ASERA, Peter created a most unusually egalitarian and collaborative academic organisation. It seems more than odd today, but the organisation actually had no constitution until into the decade of the 1990s. After 52 years, the annual ASERA conferences today remain just as egalitarian and collaborative and unique as Peter envisaged from the very beginning of the organisation:

There still has never been a single keynote or invited presentation at an ASERA conference (all participants come with the same rights and opportunities to present their ideas),

All presentations are allocated 40 minutes, with increased numbers of multiple parallel sessions still seen as far better than reducing this time,

All presentations are to devote only half the allocated 40 minutes to presentation, with the remaining 20 min to be for discussion of the ideas presented.

ASERA today remains a body in vigorous good health, and its annual conferences retain all of the above forms and nature.¹

Some Concluding Thoughts

This same fostering of an egalitarian sharing and support and encouragement that characterises ASERA was also the hallmark of the group of science education researchers that Peter recruited and developed at Monash. And these wonderful attributes remain in this group today; the personnel have almost totally changed but the legacy of the ethos Peter developed certainly remains.

In looking back at Peter's contributions to our field of science education, two books seem to me to be particularly important for any attempt to gain a "big picture" sense of his contributions. The first is rather in the form of a book version of a *festschrift*; Cross (2003) gives the perspectives of a range of science education scholars on the many aspects of Peter's research and development across a wide spectrum of significant aspects of and influences on science education. The second, Fensham (2004), considers the remarkable growth of science education research, roughly over its first four decades, with intent to develop evidence-based responses to a fundamental question: "in what senses is science education a field of research?" (Fensham, 2004, p. 1). Peter approaches this question via careful analyses and interpretations of extensive conversations he sought with many science education researchers around the world, and through this writes a personal (and profound) account of the growth of our field and the multiple forms of growth of individual researchers.

There are many other dimensions to Peter that relate to his remarkable professional life. These include a wide range of involvements with UNESCO over many years (in fields including science and technology curriculum, education and human rights, Environmental Education, Teacher Education), his important role in the 1970s in both establishing Environmental Education in Australia and in the early development of Environmental Education around the globe, and his genuinely life-long commitments to better understandings of the interactions of science and society, and of the social responsibility of science/scientists. In all of these endeavours beyond science education, the same core values of equity and social justice, humanity, and compassion are clearly critical drivers of all Peter did and, most importantly, how he undertook all this activity.

As part of the set of papers about ASERA published in 2009 (see footnote 1), many science educators from around the globe were invited to contribute thoughts about Peter as a science education researcher (Gunstone, 2009). Parts of three responses, reproduced below, speak once more to Peter's humility and humanity, as well as his global linkages (the first is from Germany, the second from the UK, the third from Canada).

- 1) Peter is a colleague who cares for people. There is nothing of academic arrogance at all—just intensive engagement for helping colleagues.
- 2) It is impossible not to be impressed by his energy and genuine interest in almost everything. He seems almost totally unthreatened by anyone else's ideas or views, and is

¹ An issue of the journal *Cultural Studies of Science Education* devoted a significant part of one issue in 2009 to accounts of the nature and evolution of ASERA, and to articles about each of four major ASERA figures, including Peter of course (see in particular Gunstone, 2009; Ritchie, 2009; White et al., 2009).

consequently able to pick out the positives in the things he is hearing and support or develop them.

- 3) The hallmark of his professional work can be summed up in four phrases: no-nonsense appreciation of situations, brilliantly clear analysis, courageous speaking of truth to give power, and enduring optimism about the nature and significance of our field of inquiry and practice.

It has been my most remarkable good fortune to have had Peter as such an important figure in my life—professional and social—as all of mentor and colleague and friend.

Declarations

Conflict of Interests The author declares no competing interests.

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