Pioneers of Science Education #14 Peter Fensham 26/10/1927-23/8/2021: "Science for all"

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In this series we have been looking at the life and work of Pioneers of Science Education, from the end of the 18th century into the 21st century. Previous articles can be found in past issues of this journal, at www.chem-inaction.com and in PoSE #14 we look at the life and work of the late Peter Fensham, who initiated chemical education research in Australia and is well-known worldwide for his emphasis on 'Science for All', in a career in science education which lasted over 50 years.

Introduction

The international science education community was shocked in August 2021 to hear of the death of Peter Fensham, at the age of 93. Peter was the leading figure in science education in Australia and was known around the world through his publications, books and articles, and his conference talks. In 2004 he spoke at the SMEC Conference in DCU, Sept. 23/24, on "Engagement with Science: an international issue that goes beyond knowledge." (Figure 1) He moved from pure chemistry to science education and established science education as a respected discipline in Australia and was a pioneer of science education research (SER), making Monash University, Melbourne well-known worldwide as a centre for science education research. He is probably best known for his emphasis on 'science for all', and played an important part in curriculum development in Australia, and was active in international bodies like UNESCO and ICASE. Peter was recognised as a major figure in science education outside Australia, but in Australia he was a giant. In his interview with Peter Fensham, Liberato Cardellini (Cardellini, 2013) said: *"Perter Fensham is famous for his work on [science] education. He is one of the two scholars (the other was Alex Johnstone of Glasgow University) who made an impact in the way chemistry is taught and learned. Because of his new vision, Monash University became a magnet for many prestigious colleagues involved in [science] education around the world."*

Early life and education

Table 1 gives a brief chronology of Peter Fensham's life. Peter Fensham was born and educated in Australia. He went at the age of 17 to the University of Melbourne where he was awarded a BSc, and then an MSc, in Chemistry. He then received a scholarship to go to England and did a PhD in solid state chemistry at the University of Bristol. Following this, he took the traditional academic route ands went to the USA to do a postdoc at Princeton University.

Figure 1: Peter Fensham speaking at SMEC 2004 (Photo: Peter Childs)

It was there that he became interested in social psychology. In an unusual career move for a science academic, he took up another scholarship and went back to England to the University of Cambridge to do a PhD in social psychology. He now had two PhDs in very different areas

1927	Born 26/10/27 Melbourne, Australia
1945-1949	BSc and MSc in Chemistry, University of Melbourne
1949-1953	PhD in Solid State Chemistry, University of Bristol
1952-53	Postdoc at Princeton, USA
1953-55	PhD in Social Psychology, University of Cambridge
1955-1967	Taught chemistry at the University of Melbourne
1967-92	Professor of Science Education, Faculty of Education, Monash University, Melbourne
1982-89	Dean of Education, Monash University
1982	DipEd Monash University
1983	Nyholm Medal, Royal Society for Chemistry
1988	Distinguished Service Award, ICASE
1998	Distinguished Researcher Award, NARST
1992-	Emeritus Professor, Monash University
1992-	Adjunct Professor, Queensland University of Technology
2021	Died 23/8/2021

Table 1: A short chronology of Peter Fensham's life

and wanted to go back home. Failing to get an academic post in psychology, he returned to the University of Melbourne in 1957 to teach and research in chemistry. During the next ten years he dabbled in science education but in 1967 he was invited to become the first Professor of Science Education, in the Faculty of Education, at the new Monash University, also located in Melbourne. This was the first such post in Australia and a move from chemistry to education, although he continued to teach undergraduate courses. His brief was to develop a strong research school in science education at Monash. Table 1 shows some of the major events in Peter's life.

In a review of a book produced to mark Peter's contribution to science education (Cross, 2003), John Leach wrote:

"Peter Fensham enjoys a prominent and perhaps unique position amongst scholars in science education. Having begun his professional life as a research chemist, he moved into the field of science education and was appointed to the position of Professor of Science Education at Monash University, the first such position in Australia. Since publishing his first educational paper in the 1960s, his writing has addressed a range of themes, including the history and sociology of science education, the training of science teachers and researchers in science education, selecting, teaching and learning scientific content, gender and science education, and science curriculum policy." (Leach, 2004)

Figure 2: A Vision for Science Education (Cross, 2003)

Professional positions and awards

Peter was the first national President of the Australian Science Teachers Association (ASTA) and of the Australian Association for Environmental Education (AAEE), founder of the Australian Science Education Research Association (ASERA) and a Fellow of the Academy of Social Sciences Australia. He was also actively involved in the International Organisation for Science and Technology Education (IOSTE), ICASE and in UNESCO. He was a mmber of the teams for both TIMMS and PISA.

1970	Founder member of the Australian Science Education Research Association (ASERA)
1971	First elected President, Australian Science Teachers' Association (ASTA).
1973-74	Australian rep. at the UNESCO conference in Belgrade on Environmental Education.
1981	Founding President, Australian Association for Environmental Education (AAEE).
1983	Nyholm Medal, Royal Society for Chemistry
1988	Distinguished Service Award, ICASE
1989	AM Member of Order of Australia (Australia's highest award)
1999	NARST Distinguished Contribution Award

Publications

Peter Fensham produced or contributed to more than 20 books and 150 research papers. A list of many of Peter Fensham's publications can be found at Peter J. Fensham's 88 research works in Engineering and Biology (researchgate.net). Most of the books were co-authored or co-edited (Figure 3). Many of his articles can be accessed at https://ur.booksc.me/g/Fensham,%20Peter%20J.?order=bestmatch . There is no substitute, of course, to reading the articles or books for yourself.

Figure 3: Some books by or edited by Peter Fensham

Some personal comments

- **From Professor Liberato Cardellini, Italy**

It seems to me that Peter Fensham first sensed the need to make chemistry (and science) simpler and more motivating, in order to make it interesting for all students.

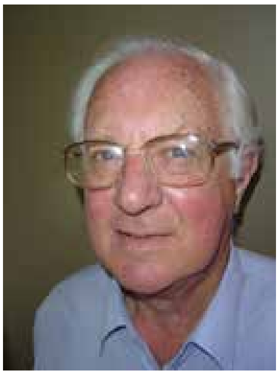

Figure 4: Professor Peter Fensham (Photo: Liberato Cardellini)

For the innovations proposed, he certainly was a giant, and together with his group, he made Monash University a pole of attraction for scholars interested in science education.

I think Fensham's greatest contribution is the suggestion of 'science for all'. The request for a curriculum that appeals to students, and that provides them with science training that

is useful for their after-school life is an important idea. Science for all anticipated the current need to motivate students to study chemistry. We can draw a useful conclusion from Fensham's proposal. If we want the number of chemistry students to increase, it is necessary to motivate and win them over, making the study of chemistry interesting.

For the internationally relevant work he has done at Monash University, I think Peter deserves a place among the Pioneers of Science Education.

- **From various colleagues**

Apart from the several obituaries that appeared after his death, two appreciations appeared earlier in Cross (2003) and Gunstone (2009).

"Peter is the most revered figure in Australian science education. There are several reasons for this: his intellectual depth and breath, his vibrant, friendly and infectious personality, his never-ending curiosity, his ability to frame new questions and reframe difficult issues, his absolute integrity – both personally and professionally, his commitment to those less well off (including taking refugees into his own home) and, perhaps most importantly, his quite extraordinary energy." Ian Mitchell (Quoted in Gunstone, 2009, p. 304)

"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 consequently able to pick out the positives in the things he is hearing and support or develop them." Robin Millar (quoted in Gunstone, 2009, p. 309)

"He is a scholar who has messages that mean something. His contribution is not so much by presenting new empirical evidence, but rather by integrating research, and by having a value-based overview over the entire field. He is also able to place our often narrow science-oriented research in a much wider perspectives. This is something I do miss in a lot of current science education research. There is lot of research that simply is of no real importance for people's lives….Peter's great strength is that he provides us with this larger social, cultural and political perspective. He simply urges people to think carefully about what they do and why they do it. And for whom they do it." Svein Sjøberg (quoted in Gunstone, 2009, p. 311)

"What would become typical of Peter's work in the new and emerging field of science education research was the marrying of a strong sense of a democratic and collaborative approach to the solution of the difficulties science teachers found in their own classrooms and a grand vision for how people around the world might benefit from learning science at school." Roger Cross (Cross, 2003, Preface, p. xvii)

"Here is a man who has lead a remarkably active life, a life that from the outside looks obsessive in its drive, and compulsive in its search for a better and fairer way ahead for all societies – a search for social justice." Roger Cross (Cross, 2003, p. 3)

"As far as his work in science education is concerned he is wholly responsible for establishing science education as a legitimate field of research in Australia." Roger Cross (Cross, 2003, p. 7)

Citation for the 1999 NARST award:

"[He] has provided outstanding leadership and direction in science education research. The remarkable and distinctive feature of his research contributions has been his capacity to discern and synthesize key issues in science education.." (Cross, 2003, p. 9)

His promotion of 'Science for all' in the 1980s came out of some work in 1970 on *Rights and Inequalities in Australian Education.* He was concerned about social justice arising from his left-leaning politics and his Christian faith. Cross comments (Cross, 2003, p. 10):

"a person's value system and vision of an ethical life, and even morality, are all to eb found in a life's work."

What's wrong with school science education?

In an important essay on 'Science for all' in 1985, Peter Fensham outlined what school science was like at the time (Fensham, 1985) and the reasons why the curricular reforms of the 1960s and 70s largely failed to reach the majority of students. He criticised the science curriculum because:

a) *It involves the rote recall of a large number of facts, concepts and algorithms that are not obviously social useful;*

b) *It involves too little familiarity with many of the concepts to enable their scientific usefulness to be experienced;*

c) *It involves concepts that have been defined at high levels of generality among scientists without their level of abstraction being adequately acknowledged in the school context, and hence their consequential limitations in real situations is not adequately indicated;*

d) *It involves an essentially abstract system of scientific knowledge, using examples of objects and events to illustrate how the system is, rather than those aspects of science of factual phenomena that enables some use or control of them to occur;*

e) *It involves life experiences and social applications only as exemplary rather than as the essence of the science learning;*

f) *The role of practical activity in its pedagogy is associated with the belief that this activity enhances the conceptual learning rather than being a source for the learning of essential skills;*

g) *Its content gives high priority, even in biology, to the quantitative, and in chemistry this priority is probably greater than it is for many practising chemists;*

h) *It leaves to the continued study of these disciplines at the tertiary level the balance, meaning, and significance that is lacking in a) to g).*

Peter thought that most science school courses were designed for the elite, those who might go on to be professional scientists, rather than for the majority who needed to develop basic scientific literacy. The courses were abstract, fact heavy, theory laden, had high conceptual demand but were too superficial to be useful, had little relevance to everyday life, were too quantitative and used practical work mainly to support theory rather than develop useful skills.

He criticised the excessive influence of academic scientists on school curricula, acting as gatekeepers for their subjects, aided by elite science teachers, so that the courses served the needs of the discipline rather than that of the students. This was a situation that went back to the late 19th century, when universities set the examinations (see as matriculation exams) and determined the syllabus. The idea of 'science for all' goes back to the early 19th century (see PoSE #1 and #2) but it failed and elite science for the elite became the norm (see Layton, 1973 for reasons why this early movement failed.)

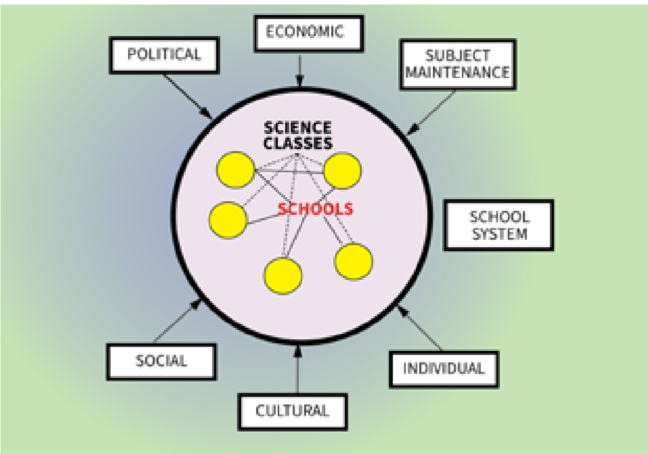

Figure 5: A model of competing demands on school science education (Fensham, 2016, 169)

Figure 5 has appeared in a number of Fensham's papers about the school science curriculum, and the need for it to be broadened or altered to move from being discipline focused (the top three demands) and designed for future scientists, and to include the bottom three demands, with a focus on the scientifically literate citizen and science for all.

What should the science curriculum look like?

Peter Fensham was by training a chemist and so he was especially concerned with how chemistry should be taught (see for example, Fensham, 1994). Existing courses were (and still are) designed for the 20% who will go in chemistry in some form.

"It will, I believe, be evident that content for learning that is chosen and organized in the ways that emerge from these analyses have the following characteristics: (i) It is predominantly related to the theoretical knowledge of chemistry. (ii) It involves a sequential demand for conceptual learning without an obvious focus or terminal that has chemical reality. (iii) It expects the learner to be motivated to the theoretical knowledge of the discipline of chemistry or by the fact that chemistry is a required subject for his/ vocational goals. (iv) It is preparatory for still more complex aspects in a later year of school, or in some course (such as university studies) that could follow schooling. Such characteristics require a persistence of interest and intellectual achievement in learners that many are not likely to maintain. Courses of this type are, however, likely to fulfil the three upper social functions in Figure 1 that involve selection, preparation and a high status for academic or theoretical knowledge." (Fensham, 1984, p. 206)

As well as identifying what was wrong with the existing science curricula, Fensham also outlined what 'Chemistry for all' should look like (Table 2). This would be a course designed for the future chemist but also for the 80% who will not touch chemistry again.

GOALS OF CHEMISTRY FOR ALL	
EVERY STUDENT SHOULD BE ABLE	
1.	TO EXPLAIN A CHEMICALLY-BASED APPLICATION
2.	TO EXPLAIN HOW THE SUBSTANCES OF EVERYDAY LIFE CAN BE REGARDED AS CHEMICALS
3.	TO STATE (WITH RELEVANT DETAILS) THE SORTS OF PEOPLE WHO FIND EMPLOYMENT IN THE FIELD OF CHEMISTRY
EVERY STUDENT SHOULD HAVE	
4.	PRACTICE IN THE APPLICATION OF CHEMISTRY TO REAL (DOMESTIC LEISURE. COMMUNITY. ETC) PROBLEMS
5.	MEANINGFUL EXPERIENCES OF EACH O F THE MAJOR ACTIVITIES OF CHEMISTS
6.	EXPERIENCE, WITH JOY AND EXCITEMENT. OF PHENOMENA THAT ATTRACT PEOPLE TO CHEMISTRY
7.	SOME EXPERIENCE OF THE POWER OF CHEMICAL KNOWLEDGE

Table 2: Some outcomes and experiences for more effective chemical education (Fensham, 1984, p. 209)

An alternative approach to cater as well for the other 80% might look like this.

"One set of alternative characteristics for the content of the chemistry to be learnt could be: (i) It should have as its foci aspects of chemistry other than the theoretical concepts. (ii) It should have goals for learning that are obvious to (and in some cases determined by) the everyday lives of learners. (iii) It should draw its motivation from the interests of the learners, that is, from chemistry's prospects of enhancing their mastery of the personal and social processes of living. (iv) It should include knowledge content that contributes to the terminal learning goals and is not simply preparatory to some future learning in the subject. (v) It should be capable of being learned in some sense by the majority of learners."

(Fensham, 1984, 206-207)

A broader view of science content

In proposing 'science for all', one of Peter Fensham's continuing themes in his pursuit of educational equity, he wanted to redefine and broaden the content that would be taught in science beyond a narrow focus on knowledge. This is what he thought the content should look like:

"When the word content is used here it means the totality of the intended learning in science that makes up a course of study at some level of science education. The content for science education can be made up of a number of different types of learning. Some of these are:

(i) Knowledge: facts, concepts and principles used in science (thus knowledge content becomes a component of the total content, etc.).

(ii) Applications of knowledge: the direct and less direct

use of the concepts and principles of science in real or idealized situations.

(iii) *Skills: the intellectual skills like classifying, control of variables, use of models, prediction from data, etc., that are commonly used in science.*

(iv) *Practical skills: certain psychomotor operations involving various sorts of equipment and instruments, and common ways scientists investigate the natural world.*

(v) *Problem-solving: the combination of scientific knowledge and intellectual skills to solve theoretically presented problems. If practical skills are added, the solution may actually be carried out by the learner.*

(vi) *Science traits and attitudes: the pursuit and process of science has often been associated with traits like honesty of observation and reporting, open-mindedness regarding explanation and phenomena, sharing of results etc., and these combined are one sort of science attitude. Another set of attitudes are those that relate the learner to scientists and what science represents in the society locally, nationally and globally. There are also the attitudes to science as a subject for study, for pursuit in leisure, and as a potential source of employment.*

(vii) *Applications of science and technology: an application of science or an example of technology involves scientific knowledge that often comes from a number of science disciplines. The performance of a socially required task is the reason for the application of technology. In practice, there will also be a number of social implications in these performances that extend beyond the initiating task.*

(viii) *Personal and social needs: in all societies there is an existing set of personal and social operations that involve scientific knowledge, and there is a great potential for sharing and harnessing this knowledge so that these needs are met better and more equitably.*

(ix) *The evolution of scientific knowledge: science is a human invention which is expanding and changing. Some appreciation of the way this occurs can be obtained in a number of ways that could involve the history of science, especially developed sets of experience, expository accounts, etc.*

(x) *Boundaries and limitations of science: science and its applications can be helpful but sometimes it has been harmful. In critically appreciating science it is important to reiterate that popular knowledge and traditional views are also powerful and important. Science can only contribute in limited ways to many modern problems."* (Fensham, 1985, pp. 426-427)

Some quotes by Peter Fensham

- **On the influence of science academics on school curricula**

"The sources of academic influence to which reference is being made here are academic scientists in universities and academic science teachers. By academic science teachers I am referring to those science teachers who have been so socialized by their own scientific studies in higher education that their conceptions of their subject for schooling conform to the knowledge content they were taught and learned in university or college." (Fensham, 1993, p. 54)

"In the 1980s and 1990s freshman studies in physics and chemistry in particular have only changed slightly from the 1960s despite the major changes in these sciences as a whole in this period. The concerns of academic scientists about school science curricular are presently to prevent them deviating from the smooth continuity their now traditional content provides. Their anxiety is not now with the content or knowledge of worth of school science but that not enough students study this content and are prepared to continue into science studies at university.

Layton (1984) has described this academic attitude and influence on school curriculum as one of 'subject maintenance'. The definition of the subject content to be maintained is provided by undergraduate science courses. The research questions that excite academic scientists about their subject, and the new knowledge and contemporary experiences of it that they use in their discourse together, are not part of this definition and so have no place in the essential knowledge for school courses.

The curriculum reformers of the 1980s and 1990s are saying, on the other hand, that unless school science is radically redefined it will not attract the students the academics wish were studying it. It needs, they argue, to be more explicitly human, more socially relevant, more exciting in its discoveries and applications, more technological in its language, and more honest about its strengths and weaknesses as a human and social endeavour. As these emphases are included in the content of school science, there will be discontinuities between school science and the scientific studies that lie beyond. Students at school will not study less science. Indeed, many more could study just as much science, but it would be science content that is defined in different ways from those which now prevail because of the worth or value that Australian academe confers on it."

(Fensham, 1993, p.62)

- **On primary science.**

"The most important aspect of these processes to include in the early years of schooling is the opportunity to enjoy, be fascinated by, and engage with an ever-widening array of natural wonders and 'technological problems.'

The aim is to increase a child's ability and confidence to ask questions, and wonder whether and how they might be investigated. These early years are not the time to superimpose on a child's view of these phenomena the scientific conceptual way of thinking. There will be time later to begin to do this and it will be the more welcomed if more students are eager about natural things, are confident in asking questions, and have begun to see that there are a variety of ways to answer their own questions, some of which will be by simple investigations involving scientific processes." (Cardellini., 2013)

- **On implementing science for all**

"The experiences in every country have confirmed the generalization that the successful implementation of curricular innovations depends very greatly on the support that is given to the teachers in the classrooms. There can be no doubt that any developments of Science for All will mean that teachers, on whom we must rely for implementation, will need to be assisted with resources, and with in-service education." (Fensham, 1985, p. 433)

".. we had to create a form of science [education] that was attractive in ways, which were very different to the way it had been attractive to me and to most people in the science education field, because we were the exceptions. For some reason we had stuck with science where most of our peers had rejected science at school as being boring, too difficult or totally irrelevant." (Quoted ch. 1 Cross, 2004, p. 11)

"If it is the 80% with whom we are concerned, an emphasis on chemicals will need

also to shift its focus, at least for a good deal of the time, from chemist's chemicals

to the chemicals of everyday life." (Fensham, 1984, p. 211)

- **On alternative conceptions**

"Sufficient has, however, been done on older secondary students, undergraduates, chemistry students, graduate teachers, and adults more generally, to support the claim that these [alternative] conceptions are held by significant proportions of the respondents and are not a function of a particular age group. Indeed, they persist among substantial numbers of students and graduates who have studied chemistry extensively. Traditional teaching, testing and examining in chemistry often does not challenge these conceptions and students can hold them and still be quite successful in the usual tests and examinations." (Fensham, 1994, p. 18)

Active to the end

Peter kept active well after retirement (in 1992!) and his last paper was published in 2020. In 2016 he wrote an interesting paper on 'The future curriculum for school science' (Fensham, 2016). In it he made some concluding assertions about the future of science in the mainstream school curriculum, which are summarised here (pp. 181-182).

Significant change will only occur if its educational intentions are supported by authentic assessment that uses appropriate modes at the different levels of schooling and are supported by the educational authority.

If the intentions of new direction in the science curriculum are to be successfully implemented, substantial professional development of teachers must occur.

Innovations are more likely to become mainstream if they can be included as new features of science teaching and learning rather than as more total revisions of the curriculum.

Futures that involve a particular science subject or a discrete level of schooling that do not challenge the strongholds of the disciplinary axiom, the science disciplinary subjects, can succeed if well supported by evidence and a coherent support group.

New directions that involve new understandings of science, beyond those included in standard undergraduate science degrees, will be very difficult to establish in the science curriculum.

He makes important points about the need to support teachers in curriculum reform in relation to new emphases like NOS and to ensure that assessment matches the aims of the curriculum, something that is not always the case.

"Two things are urgently needed to overcome teacher difficulties and hence give these new curriculum requirements a greater future in teachers' teaching and students' learning. The first is to provide direct support to teachers in the form of examples of good practice of teaching these new NOS components in classrooms so that the teachers can observe what is intended, and how it can be done in practice. The second is to provide means of assessing in valid and reliable ways the staged acquisition of these procedures by students." (Fensham, 2016, p. 181)

He comments on a new science curriculum in Australia and failures in its implementation and his remarks ring true for the Irish situation.

"A new science curriculum for Australia, with its content and inquiry strands based on the Vision 2 axiom, would have required a variety of modes of assessment, new supporting materials, and considerable professional development of science teachers. None of these essential supporting conditions was part of the brief of the Australian Curriculum and Reporting Authority (ACARA). ***Such a disconnection between curriculum development, the assessment of its learning, and the teachers' professional development is a prescription for failure for any future direction for science education.****" (my emphasis)*

(Fensham, 2016, p. 177)

The person

"Peter was a self-effacing, modest individual, with exceptional warmth. Like so many high achievers, his curiosity and drive had its roots in childhood. Throughout his career he was preoccupied by the question; why was he the only one out of the fifty students in his primary school who decided to study and practice chemistry? Why could his contemporaries not see the vast possibilities that science offered? Peter realized the current structure of science education needed a drastic shake-up. Young minds ached for real-world challenges; they needed to be able to apply their knowledge in order to understand the discipline's relevance. His Christian faith and Methodist upbringing also greatly influenced his beliefs, namely that science should be used as a tool for social justice and that education was about enabling everyone to reach their fullest potential as moral, intelligent beings who can contribute to the well-being of society." (Vale Emeritus Professor Peter Fensham - Vale (monash.edu))

There were several obituaries published after Peter's death. One of his sons and two of his colleagues wrote an appreciation (Fensham *et al.,* 2021).

"Peter was always on the hunt for connections between ideas and people. His colleagues also spoke of his humility, recalling that he would treat everyone as his equal no matter their station in life.

....

A big man in the best sense, he soared above the petty, the self-centred and the misguided.

He cared deeply about people, and his engagement was reflected in the power of his prodigious memory which could often recall a precise (and presumably accurate) conversation from decades ago.

He had a deep sense of morality, but his curiosity and hope for the best in people guided him away from being judgmental, particularly as he got older. He was open to personal growth and change until the end. We are profoundly inspired by Peter to find fascination with the world, but also a place that demands our attention for patient improvement."

Conclusion

Jonathan Osborne commented in 2003 (Cross, 2003, p. 37): *"Peter Fensham's life and work has been characterised by two features: an enduring sense of inner commitment to the notion that science education matters; and a grave dissatisfaction with existing provision. In the international arena, his is one name that has been strongly associated with the drive for systemic reform in science education and to offer a science education that would genuinely be for all."*

His main achievements:

1. He established science education research as a valued and recognised discipline in Australia and worldwide.
2. He promoted the idea of 'science for all' and equity in education in all its aspects.
3. He recognised the importance of taking account of gender issues in teaching science.
4. He championed the cause of STS to broaden the science curriculum and relate it social and technological issues.
5. He supported the place of Environmental Education in schools.
6. He emphasised the importance of scientific literacy for all future citizens.

In 2010 the Royal Australian Chemical Institute (RACI) instituted the Fensham Medal and the first recipient was Bob Bucat. The medal citation: *"Recognising outstanding contributions to the teaching of chemistry and science in general over an extended period, the Fensham Medal is the most senior award for education in the RACI."* Monash has a PhD scholarship in memory of Peter.

A special issue of *Research in Science Education* will be published in Sept/Oct 2022 to honour Peter Fensham and his work. (CALL FOR CONTRIBUTIONS – Special Issue of RISE - ASERA)

Figure 6: The Peter Fensham medal of the RACI

As far as I can remember I only met Peter once at the 2004 SMEC conference in DCU, although I imagine I have must have crossed paths with him over the years in chemical or science education conferences. His influence will continue to be felt through his publications, through the legacy he left in Monash University, and for his example to his many ex-students and colleagues in Australia and around the world.

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