The Mathematics Enthusiast

Manuscript 1664

David Tall: Some Personal Reflections

Matthew Inglis

David Tall: Some Personal Reflections

Matthew Inglis*
Centre for Mathematical Cognition, Loughborough University

Abstract: Matthew Inglis's memories of David Tall

Keywords: David Tall

Colleagues from across the world will be aware of David Tall's significant academic contributions. He was a central figure in the group who developed undergraduate mathematics education as a field, but his approach was distinctive. He insisted on the importance of theorising mathematics learning across the whole developmental spectrum. He thought about young children meeting mathematical ideas for the first time, as well as research mathematicians publishing novel mathematics. Although his work was influential and important, the thing that I admired most about David was his deep commitment to supporting early career researchers.

David would spend an enormous amount of time discussing ideas with his students, but also anyone who wanted to talk to him. I first encountered David soon after I started my PhD at the University of Warwick: by this point he had already retired on ill health grounds, and his work at Warwick was restricted to writing and supervising research. During the preceding year, when I had been completing a masters degree, David had been abroad visiting colleagues, so I hadn't had the chance to meet him. Unbeknownst to me, Adrian Simpson, my MSc supervisor, had submitted an essay I had written for the course which criticised David's Three Worlds of Mathematics theory to *For the Learning of Mathematics* (subsequently published as Inglis, 2003). David didn't find out until the manuscript appeared in the journal. Some senior professors would react to such impertinence with anger and annoyance. But not David. He cared deeply about ideas, and if anyone paid him the respect of studying his ideas and thinking about them (even if, in his view, they were thinking about them mistakenly), he would repay the compliment. Of course, he enthusiastically

* M.J.Inglis@lboro.ac.uk

The Mathematics Enthusiast, **ISSN 1551-3440, vol. 22, no. 3**, pp. 279-282.

and forcefully explained to me why my criticisms were wrongheaded, but he combined this with a care to explain how pleased he was that I had made them.

I wasn't one of David's PhD students, but that didn't mean he was unwilling to get to know me and learn about my work. He would spend many hours talking to me, and others. The mathematics education group at Warwick in those days had a ramshackle seating area outside the staff offices where the academics and research students would meet for lunch (a great model, which contributed much to the culture of the group: we consciously emulated the setup when, many years later, there was a building refurbishment project for the mathematics and mathematics education departments at Loughborough). Several hours after the other academics had returned to their offices after lunch, David would still be there talking to the research students about his current thoughts and how they linked to the students' projects.

At one point during my PhD studies, the student group decided to publish an edited volume of working papers, reporting our work in progress. I emailed David asking whether he might consider writing an introduction to the volume. Within an hour he had replied, not only agreeing, but already having written a lovely and encouraging piece. In it he wrote "it is clear that all the students' work represented here is not the building of a specific theoretical dynasty, but of the generation of individual thinkers who share ideas and use each other's strengths to support their own individual direction of development." This sums up David's approach to mentoring. He didn't demand that junior colleagues slavishly followed his own approach, but rather supported us to develop our own ways of thinking.

One of my most striking memories of David comes from my PhD graduation. David had been my internal examiner, and he felt it important that he attend my graduation in person, join the academic procession, and meet my parents. As with much of what he did, his mischievous character pervaded the day. David had two PhDs – one in mathematics from Oxford, and one in mathematics education from Warwick. Rightly, he was very proud of this. As a result, when attending graduations David would insist that the University hire him the full ceremonial academic dress of both institutions from which he'd graduated. He would then discard the Oxford hat (which he felt was inferior to Warwick's) and the Warwick gown (inferior to Oxford's). This allowed him to enthusiastically

explain to colleagues how he regarded expertise in both mathematics and education as crucial to researching mathematics education when they asked him why he had the mismatching outfit. And David was committed to this view: when he converted from mathematics research to mathematics education, he spent a year of study leave teaching in a local primary school, to develop his understanding of education.

In those days, the Warwick ceremony was very hierarchical. All PhD graduands sat in the front row, and the academic procession came in in reverse order of seniority. So David, as the most senior professor in attendance, processed in just before the Vice Chancellor and Chancellor. I was in the front row. David was extremely excited by the whole event – Michael Nyman, the composer, was the honorary graduate and had composed some new music for the occasion (David loved classical music: at one point he was the conductor of the Leamington Spa Opera). As he approached the row of PhD graduands he giggled at me like a lunatic. Then he decided to playfully pretend to punch me in the stomach. Unfortunately, his hand-eye coordination wasn't as impressive as it had been in his youth, and he actually punched me in the stomach, really quite hard. As I doubled over, winded by the shock of it, the Vice Chancellor's face clouded over with fury, and David processed onwards laughing away and enjoying Michael Nyman's new composition.

Since I've started attending my own students' graduation ceremonies, I've enjoyed imagining how Loughborough's senior staff would react if I wore a mismatching gown and then punched a student. But of course, I don't have David's chutzpah. This memory brings together various aspects of David's character that sum the man up. He took seriously the links between mathematics and education, and the importance of a deep understanding of both fields. He got a genuine, almost childlike, joy from seeing students making progress and contributing their ideas to the field. He had a twinkly-eyed mischievous approach to formal situations, a deep disrespect for authority, and a love of music.

David will be greatly missed.

References

Inglis, M. (2003). Three worlds and the imaginary sphere. *For the Learning of Mathematics, 23*(3), 24-27.