TRUTHFULNESS, OPEN-MINDEDNESS AND EVIDENCE: SEEKING THE INTELLECTUAL VIRTUES IN SCHOOL MATHEMATICS

Steve Thornton
Virginia Kinnear
David Moltow
Australian Academy of Science
Flinders University
University of Tasmania

Short description of the workshop: aims and underlying ideas

The intellectual virtues have been described by Sockett (2012) as including aspects such as truthfulness, open-mindedness and evidence. Building on the ideas of Aristotle and MacIntyre (2007), who called for a rediscovery of Aristotelian ethics in contemporary society, Sockett claims that these virtues are the mark of an educated human being and should form a central goal of education. However, neither Sockett nor others with an interest in education and philosophy have specifically identified how such virtues can be developed through the core disciplines such as mathematics. In this Discussion Group we propose to:

a) Introduce and discuss key concepts of virtue ethics, specifically the intellectual virtues;

b) Examine how the intellectual virtues might inform mathematics education, specifically mathematics curriculum;

c) Examine how mathematics education might contribute to broader goals of education, specifically the fostering of intellectual virtues; and

d) Commence an ongoing discussion of intellectual virtues in mathematics education, leading to the presentation and publication of papers in mathematics education and educational philosophy conferences and journals.

Planned structure:

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<tr>
<th>Planned timeline</th>
<th>Topic</th>
<th>Material / Working format / presenter</th>
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<tr>
<td>Session 1: Introduction and exemplification</td>
<td>What are the intellectual virtues? Are there specific intellectual virtues that are particularly pertinent in mathematics education?</td>
<td>An outline of virtue ethics and the intellectual virtues (Moltow)</td>
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<td>Are there specific examples of how the intellectual virtues are</td>
<td>Open discussion of with specific reference to mathematics education</td>
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<td>An example of the intellectual virtues: massively</td>
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realized in and through mathematics and mathematics education? | collaborative research in mathematics (Thornton)  
Open discussion, with request for examples from participants

| Session 2: Realization and action | How are the intellectual virtues described in curriculum documents? What is the relationship between the specific goals of school mathematics and the broader goals of virtue ethics? | An examination of the intellectual virtues in a curriculum documents (Thornton)  
Open discussion of curriculum documents from participants’ contexts

| | How might the development of intellectual virtues in mathematics education be realized at different levels of schooling? Are there specific pedagogies, such as inquiry approaches to mathematics, that promote the development of the intellectual virtues in mathematics? | Presentation and discussion of classroom resources at two levels of schooling (Kinnear, Thornton)

| | How might we shape a future research agenda for mathematics education and the intellectual virtues? | Open discussion: How might we shape a future research agenda for mathematics education and the intellectual virtues

**References**

