

## How Engaging with the Discipline of Noticing Impacted my Practice – One Mathematics Lecturer's Journey

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### THEME 4: HE Practice

In 2010, four colleagues and I from different third-level institutions in Ireland set out on a professional development project with the aim of reflecting on, and improving, our teaching practice, by engaging with John Mason's (2002) *Discipline of Noticing*. As a first step, each of us wrote brief-but-vivid accounts of incidents related to our teaching, and shared and discussed these accounts with others in the group. Mason describes brief-but-vivid accounts as "accounts-of" a situation that "describe as objectively as possible by minimizing emotive terms, evaluation, judgements and explanation" (p. 40). Engaging in the Discipline of Noticing involves not only keeping brief-but accounts, but also using them to identify threads or recurring themes within one's practice. This can have the effect of sensitizing the practitioner to notice an incident or event unfolding in-the-moment, and through reflection or discussion with others, have alternative strategies come to mind in order to act in a fresh way to the event.

For three years, from 2011-12 to 2013-14, I wrote approximately ninety brief-but-vivid accounts relating to a large, first year mathematics course I teach to non-mathematics majors. In this talk I give an overview of how engaging in this project resulted in changes to my practice over three offerings of this course.

I will first present an analysis of the brief-but-vivid accounts written during the offering of the module in 2011-12, and discuss three main (related) threads that predominate these accounts – firstly, students' lack of engagement in the course; secondly, students' mathematical thinking on tasks during lectures; and thirdly, my frustration as an educator of teaching mathematics within a large group setting. I will present evidence from some accounts towards the end of the semester that I had become sensitized to notice incidents relating to the above threads as they arose "in-the-moment" in lectures, yet how, in most of these cases, I acted in a well-practiced manner when these moments arose.

Secondly, I will discuss alternative strategies that I adopted when teaching the module in 2012-13, and describe how the threads identified the previous year, underpinned the changes in my practice. Specifically I will describe my rationale for producing a series of short online videos to *complement* the live-lectures. In 2013-14 I made the decision to extend this idea and produce an entire suite of online videos – 67 in total - that students could *choose* to use as a substitute for, or a complement to, the large lecture.

To finish, I will contrast the accounts written in 2013-14 with those written three years earlier in order to examine how/if the changed practice, specifically the introduction of the online videos, had impacted students' engagement in the course; the nature of the mathematical thinking demonstrated during tasks in lectures; and my feelings in relation to large group teaching.

Mason, J. (2002). *Researching Your Own Practice: the Discipline of Noticing*. London: Routledge-Farmer.