

## **Reflection: Inquiry-based maths lesson**

There was one math lesson in particular for which I did a focussed observation where the teacher used the classes interest in football to engage them in learning about data types, the mean, median and mode and graphical representation of data.

Their task was to play the role of coach and determine who in his team would be going to the state team, but analysing their scores over the course of a season. The key here is the teacher didn't introduce the concept of 'average' until after they had figured out their own methods to come up with an answer. The class had a discussion, sharing who they thought should go and why. Only then did the teacher introduce 'average' as a robust way to figure out who the best was based on who scored the most per game, consistently. Rather than just 'John scored the most' (did he just have one really good game? Is it possible that that score is an error? Should we even include it? What about Rob, he started off the season with a sprained ankle, but he scored the most per game over-all). The students then got to work, individually and in small groups working out how to best solve the problem.

Importantly, the teacher used the last 5 minutes of the lesson as reflection time, where the students shared with the rest of the groups what they learnt. I enjoyed the way this lesson stimulated the kids thinking in something they were likely to use in their every-day lives and also encouraged them to work together. This was an early lesson in the lesson sequence, and further lessons during the week built on this solid foundation, scaffolding their understanding to more difficult examples of data as well as how to display data. I struggled at the beginning of the placement in not 'giving away the answer' and allowing them to take time and make mistakes in getting to the right answer. Allowing them to come up with their own methods however moves us away from 'teacher fills students with knowledge' and towards 'students and teachers work together to create understanding'.

In summary this was a good demonstration of an inquiry-based and dialogic pedagogy, using multimodal texts (Ipads, outside, smartboard and class-discussion) and designing a curriculum around the interests of the students.