

FEEDBACK GIVEN DURING MATHEMATICS TEST WHILE IN THE THINKING ZONE AND NOT AFTERWARDS?

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Abstract

As tertiary mathematics educators when we are grading papers, we expect to correct any mistakes in solutions and write comments and suggestions on how students could improve their mathematical understanding. This feedback is read by the student, perhaps a week or two later, often may be accompanied by comments such as “What was I thinking?” or “Why did I write that” or “Where did I think that train of thought was going?”. Could the feedback be made more effective if the timing of the feedback is changed? What if we could capture students in the moment when they are in the “mathematical thinking” zone. If so, students would be more aware of their motives behind the attempted solution rather than trying to recall a week or so later.

Here, students may gain more understanding of a specific concept while trying to produce a solution rather than leaving a blank space even when they have a sheet of notes available. Educators may gain an insight into students’ misconceptions which can lead to improvement of teaching methods for that topic. Rogers and Schnepf (2012) have tried a bartering system in online tests where a written hint is given on request. Curtin College, in Western Australia, has used the hint system in mathematics units to help students improve not just their grade but, perhaps, more importantly to elevate their confidence in their mathematical knowledge. Curtin College provides a pathway to undergraduate degree courses to Curtin University. Students receive verbal clues, whether face-to-face or online, which usually is a short conversation with students talking mainly. The ideas about feedback contained in *Visible Teaching* by Hattie will illustrate the reasoning behind this novel practice of the providing feedback during a test for an exchange of marks.

Keywords: *Feedback, thinking zone, teaching moment, hattie.*

References

- Hattie, J. (2009). *Visible learning*. London: Routledge.
- Rogers, C and Schnepf, J (2014) "Students Perceptions of an Alternative Testing Method: Hints as an Option for Exam Questions" *Proceedings of the 2014 American Society for Engineering Education Annual Conference & Exposition*
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