

Changing the Timing of Feedback to Create Better Learning and Teaching Moments in Class

Anne D'Arcy- Warmington

Curtin College. Western Australia

Abstract

The phrase, often uttered in sport, “this player or team is in the zone”, can equally apply to students when relating to “mathematical thinking” in any testing environment. In any assessment, whether formative or summative, the educator is trying to assess whether mathematical knowledge is present. Assessments in mathematics are predominately timed written tests relying mainly on recognition and interpretation of questions. At college or university level where there is the compulsory mathematics unit to complete for many disciplines, students, for whatever reason, leave blank spaces on test papers. Could we utilise this “mathematical zone feeling” by providing feedback in this moment, that is during the test rather than few days later? A trial of exchanging hints for marks has been conducted for the last few trimesters at Curtin College, with the hope that this process may help students progress further in questions and thereby, show mathematical knowledge that would not have been evident in blank spaces on test paper. Blank spaces are not all equal in mathematical knowledge base only the marks allocated for the question on the test. Using The ‘Learning Zone’ Model by Tom Senninger (which is a further progression on Lev Vygotsky Zone of Proximal Development), this consists of three zones named: Comfort, Learning (Growth) and Panic. It is hoped that this simple action may make it possible for students to move from the Panic zone to the Learning zone whilst in the “Mathematical Thinking” zone. The eventual hope is that whatever the topic, students may find themselves resting in the Comfort zone for this topic. This paper will discuss the procedure and benefits to educators and students of this exchange of marks for mathematical hints.

Keywords: Assessment; Feedback; Learning; Mathematical-thinking; Zone