

Evaluation of the implementation of criterion-referenced assessment in a school of zoology

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Student cohorts are becoming increasingly diverse in both their composition and their backgrounds. This diversity sees teachers needing to devise strategies to facilitate the learning of students with a broad range of abilities and experiences. One way in which teachers can improve students' learning and clarify expectations is through the provision of constructive feedback and increased transparency in the assessment process. The implementation of criterion-referenced assessment (CRA) in the School of Zoology at the University of Tasmania provided this opportunity, and is outlined in this poster. The use of assessment rubrics is now being evaluated in all our undergraduate units. Students' perceptions of the effects of CRA rubrics on the clarification of the assessment process are being measured through unit evaluation responses. Staff are also being surveyed at the conclusion of each unit about their use of CRA rubrics as both assessment and feedback tools. Early results show that third-year students perceive the use of CRA more positively than first-year students. The author suggests that management of student expectations during this implementation phase will greatly influence student perceptions of the value of CRA.

Keywords: criterion-referenced; student perceptions; zoology

Theme: assessment for sustainable learning within and beyond the course

Introduction

Student cohorts are becoming increasingly diverse with respect to both their composition and the background experiences individuals bring to their studies. This diversity sees teachers needing to accommodate and devise strategies to maximise the learning outcomes of students with a broad range of abilities and prior experiences. One way in which teachers can improve learning experiences for students and clarify expectations is through the provision of constructive feedback and increased transparency of the assessment process. It has been well established that methods used to assess students have a strong impact on their learning (Ramsden, 1992). Students are more engaged with their learning and perform better if they know what is or will be expected of them (Huba and Freed, 2000). One strategy that addresses these issues is the use of criterion-referenced assessment (CRA) (Sadler, 2009). Marking rubrics commonly associated with CRA seek to make assessment criteria explicit to students (Walvoord, 2004, p. 19)

Background

In 2007, the University of Tasmania (UTAS) created an Assessment Working Group to review assessment practices across the university. The outcome of this project was a recommendation to adopt three key principles of assessment, underpinned by an institution-wide change to standards-based CRA (UTAS Working Group, 2007). The principles adopted by UTAS focus on the purpose of assessment, using assessment as an integral part of the teaching and learning cycle, and ensuring that the assessment process is transparent and fair (UTAS Assessment Policy TLP 2.1, 2009). The use of standards-based CRA to achieve these goals was mandated by the UTAS Senate in 2009, to be implemented across all undergraduate teaching units by Semester One, 2011, with four perceived outcomes for students:

- 1 clearer understanding of what is expected of students
- 2 increased control over students' own learning
- 3 increased satisfaction by students about assessment practices
- 4 increased consistency within and across faculties (CALT, 2010).

For staff, expected benefits include opportunities to:

- 1 improve assessment practices and evaluate units
- 2 share good teaching practice with colleagues
- 3 streamline the feedback process (CALT, 2010).

The project

The implementation of the use of CRA in the School of Zoology at UTAS provided these opportunities to both teaching staff and students. In 2010, School of Zoology staff undertook to develop and use assessment rubrics for at least the major (non-exam) assessment item in each unit; this is currently being evaluated, particularly with regard to the perceived benefits both for and by students. In 2010, these assessment tasks commonly included formats such as scientific reports, essays, discussion papers and critiques on practical and field research and theoretical topics.

Student perceptions of the effect of CRA rubrics on clarification of assessment and satisfaction with the assessment process are being measured via student evaluation responses (using a Likert scale and open questions) comparing 2009 results prior to the overt use of CRA rubrics with 2010 responses after initial implementation. Staff are being surveyed at the conclusion of each unit (Semesters One and Two, 2010) about their use of CRA rubrics as both assessment and feedback tools to evaluate the effectiveness of the transition, and whether modifications for 2011 might ameliorate any concerns. Morgan et al. (2004, p. 26) suggest that “individuals and groups of tertiary teachers, when faced with challenges to long-held values and assumptions, are not usually quick to act”, so this study will evaluate compliance with the CRA mandate, and staff feelings about time taken to generate new assessment rubrics.

Results

Early results suggest that third-year students perceive the use of CRA in the School of Zoology more positively than first-year students do, which may be a consequence of students' prior experience (or lack thereof) of the process of assessment at university. I suggest that management of student expectations during this implementation phase will greatly influence student perceptions of the value of CRA. Further data collection in this ongoing study will explore perceptions, particularly from staff and students about the use of CRA in the School. The staff emphasis will be not only on views about the impact of CRA rubrics on their provision of feedback, but also the 'top-down' nature of the implementation and the implications for workload. The student perspective will be a broader one, comparing zoology students' evaluations of assessment and feedback with similar data for the rest of the Faculty of Science, Engineering and Technology (Walvoord 2004 p. 61) as a way of evaluating the success of the implementation of CRA in the School of Zoology.

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