# What value assessment rubrics in shaping students' engagement in asynchronous online discussions?

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In recognition of the power of a rubric as an assessment tool, a range of rubrics for assessing asynchronous online discussions have emerged in the literature over recent years. The assessment criteria used may have as their basis an underlying conceptual model of online discourse, or they may have emerged more pragmatically. Irrespective, one intention of the rubrics is to make explicit and transparent the sorts of engagement expected of students in discussions, in the hope that students will take on board the advice and act accordingly. This paper explores the purported value of rubrics in the light of research into factors that influence students' engagement in online discussions, in particular students' conceptions of the place of discussions in their learning. Value would seem to be there, but that value is qualified by considerations of fundamental course design.

Keywords: assessment rubrics, asynchronous discussions, discussions design

## Introduction

A plethora of rubrics for assessing students' contributions to asynchronous online discussions, as well as the overall effectiveness of online discussions, have emerged over recent years. Two recent studies have attempted to make some sense of the range of assessment criteria used by the proponents of these rubrics. Penny and Murphy (2009) reviewed 50 such rubrics and distilled from the somewhat bewildering array of criteria and performance ratings four core categories of performance criteria—'cognitive' (around levels of thinking), 'mechanical' (around writing), 'procedural/management' (around participation), and 'interactive' (around interactive behaviour). Elliot (2010), in his study of 20 rubrics, derived somewhat more categories of criteria; ten in all. However, he found that the five most common criteria related to participation, academic discourse, etiquette, learning objectives and critical thinking, so there is clear overlap with the categories derived in the first study. The criteria themselves may be based on underlying conceptual models of online discourse. Many for example stem from critical thinking and cognitive engagement models (e.g. Garrison et al, 2004, Duncan-Howell, 2008), dialogic models (e.g. Swann, 2010), and models of social presence (e.g. Rourke et al, 1999). The rubric criteria may also reflect particular learning contexts such as the workplace. For example, law students on placement are expected to reflect on professional practice and write postings appropriate to the genre of the profession (McNamara and Brown, 2008). In a review of the literature, Nandi, Chang and Balbo (2009) derived a rubric and underlying conceptual model for assessing the quality of online discussions based on synthesis of much of what they had found.

Irrespective of the nature of the criteria and performance standards specified, discussion rubrics have three main purposes:

1.   As a tool to judge the value of individual students' contributions to discussion

2. As a framework to evaluate the overall effectiveness of discussions, such as levels of cognitive engagement achieved and balance of contributions across these levels
3. As a means to make explicit and transparent to students the expectations of their engagement in discussions, and thereby shape that engagement.

It is this last purpose that I explore further. Underlying the use of rubrics is the recognition that assessment is a powerful driver and motivational force for learning, and that giving online discussion as assessment weighting flags the importance and value attached to the activity in the overall course.

## Rubrics as a tool to shape engagement

But what do these rubrics really show students? As Elliot (2010) points out, the rubrics he reviewed all contain a mix of 'input' , or process criteria such as those relating to level of participation, which Sadler (2009a, b) classifies as 'non-achievement' criteria, and 'output' or achievement criteria related to demonstrable attained understandings and skills. Tellingly, Elliot states:

> The criteria often relate to engagement, interaction and collaboration, which, while undoubtedly linked to learning effectiveness, are proxies for this, and are rarely stated as learning objectives. They exhibit low fidelity, as defined by Sadler.

> 'Fidelity' is the extent to which elements that contribute to a course grade are correctly identified as academic achievement, and not something else, such as learning process or strategy (Sadler, 2009a, b).

In essence, many of the criteria relate to *how* to engage in discussions, with little to inform students as to *why* they should engage in those discussions, other than to harvest marks towards their final subject grade. Making the link between discussion processes and attainment of learning outcomes/objectives would therefore seem to be an imperative in convincing students of the value of full engagement.

## Students' approaches to discussions

The factors that shape and determine the level of students' engagement in asynchronous online discussions are many and well canvassed in the literature; see, for example, Kay, 2006, Hew et al, 2009, Gerbic, 2006, Dennen, 2005. It is well recognized that distance education students in particular often take a strategic approach to their studies, assessing on a (time) cost/benefit basis in relation to assessment 'pay-off' whether to engage in particular activities, and the level of that engagement, as they balance work, personal/family lives and study. A preference to work alone is not uncommon, particularly amongst adult distance education students (Dixon et al, 2007). Two of the seven main factors leading to poor participation in online discussions identified by Hew et al (2009) include not seeing the need for online discussion, and not knowing what to contribute. Whilst issuing and discussing rubrics is no doubt one effective way to address the latter, the former remains an issue, particularly if learner preferences are for solo work.

In a number of seminal studies into students' conceptions of, and approaches to both online and face-to-face discussions in a number of different disciplines, Ellis and his colleagues (summarized in Ellis et al, 2007) found four levels of conceptions of learning through discussions (i.e. what students see as the purposes of discussions), and four corresponding approaches (i.e. the strategies used and the intentions behind them), from 'surface' to 'deep'. The four-level hierarchy has strong parallels with a number of conceptual models of online discussions engagement that serve as frameworks for many of the more cognitive-based rubrics in the literature. As an example, Table 1 maps Ellis et al's work onto Garrison's four-stage model of cognitive presence in online discussions (Garrison et al, 2004), a model that has strongly influenced other frameworks in the literature, such as Duncan-Howell's (Duncan-Howell, 2008).

**Table 1: Mapping of conceptions, approaches and cognitive engagement**

| | Conceptions of online discussion (Ellis, Goodyear, O'Hara et al, 2007) | Approaches to online discussion (Ellis, Goodyear, O'Hara et al, 2007) | Garrison's 4-stage model of cognitive presence |
|---|---|---|---|
| **Level/stage 1** *'Surface'* | Discussion as a way of checking your ideas are right; meeting extrinsic requirements | Engaging in online discussion to read postings to avoid repetition and/or identify problems with the content of postings | *Triggering event* – problem recognition, asking questions |
| **Level/stage 2** | Discussion as a way of collecting ideas | Engaging in online discussion to use postings to add to ideas | *Exploration* – information exchange, brainstorming, presenting ideas |
| **Level/stage 3** | Discussion as a way of challenging and improving your ideas | Engaging in online discussion to evaluate postings to challenge ideas, to integrate feedback on the topic to improve understanding | *Integration* – converging understandings, making connections,, synthesis, positing solutions |
| **Level/stage 4** *'Deep'* | Discussions as a way of challenging ideas and beliefs in order to arrive at more complex understandings | Engaging in online discussion to receive and provide feedback on the topic to improve collective understanding; to evaluate postings to reflect on key ideas | *Resolution* – applying new ideas/solutions to the real world, testing and/or defending solutions |

*From Jackson and Lawrence, 2008*

Constructed rubrics that align with these conceptions and approaches ought therefore on face value have utility in addressing students' expectations and understandings of online engagement in discussions and explaining the benefits that engagement can engender, and thereby shape engagement in more deep, meaningful and purposeful ways. In other words, they should help in answering the question in students' minds – why engage in online discussions? But we still need more evidence that the issuing of rubrics and/or other guidelines does indeed lead to better, desired engagement. Studies such as that of Bai (2009) go some way to assuring us that the effort is worthwhile.

However, can we provide evidence to students that full engagement in discussions as outlined in the rubrics will indeed 'pay-off' in terms of improved grade results? A number of studies have shown a strong positive correlation between levels of engagement in online discussions and grade results (Palmer et al, 2008 in relation to an engineering management course, Bliuc et al, 2010 in relation to a political science subject). Further hard evidence of the benefits of engagement in online discussions would seem to be an imperative if we are to engage the otherwise unwilling. Use of rubrics is clearly but one strategy in a range of interventions needed to ensure that online discussions have fidelity and validity in relation to attainment of stated learning outcomes or objectives, and grade performance. The bedrock is sound task design. Online discussions need to be meaningfully embedded in the curriculum, linked transparently to stated learning objectives, interactivity designed with those objectives fully in frame, and with the assessment of those discussions aligned with these elements. Developing rubrics for online discussions needs to be placed in this wider context. Good advice on designing asynchronous online discussions abounds – for example, Jackson and Lawrence (2009), Kanuka et al (2009), Dennen (2005), Strijbos et al (2004), Salmon (2002). In terms of rubric design, readers may find Elliot's four-stage development model a useful guide (Elliot, 2010).

## Conclusion

It would seem that assessment rubrics can indeed shape student's engagement in online discussions. They can serve to flag learning strategies and approaches most likely to lead to better learning outcomes for both the student as participant, and all participants, and make the nexus between the 'how' and 'why' of discussions transparent. However, we need to ensure that our intentions and discussions assessment criteria are aligned with stated course objectives and learning outcomes, that students' involvement in discussions has clear pay-off in terms of their final grade results, and that this linkage is made evident to them.

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