University of Wollongong
Research Online

University of Wollongong in Dubai - Papers

University of Wollongong in Dubai

2008

Using marking criteria to improve learning: an evaluation of student perceptions

Swapna Koshy
University of Wollongong, swapna@uow.edu.au

Publication Details

Koshy, S. 2008, 'Using marking criteria to improve learning: an evaluation of student perceptions', in F. Malpica, A. Tremante & F. Welsch (eds), Proceedings of the 2nd International Multi-Conference on Society, Cybernetics and Informatics; IMSCI 2008, IMSCI, USA, pp. 194-198.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

Using Marking Criteria to Improve Learning: An Evaluation of Student Perceptions

Dr Swapna Koshy
College of Graduate Studies, University of Wollongong in Dubai
PO Box 20183,Dubai, United Arab Emirates

ABSTRACT

This paper is an exploratory study on the use of Marking Criteria in the offshore campus of an Australian University in the Middle East. The purpose of the study is to analyse student attitudes to the use of Marking Criteria with a view to maximizing its use. Most educators agree that assessment plays a key role in education and the use of Marking Criteria helps to streamline assessment. The study notes that most students were aware of the benefits of reviewing criteria before they worked on an assessment but few actually used it. The paper offers ways to help students internalise criteria to make learning effective. It also proposes the use of Marking Criteria as a tool that aids teachers in giving feedback in large classes.

Keywords: Assessment, Marking Criteria, Constructive alignment, Induction, Internalisation and Feedback

INTRODUCTION

The use of detailed Marking Criteria in assessments is a practice followed in many universities worldwide. This paper evaluates the use of Marking Criteria in a university in the Middle East. Though many teachers in the university are apprehensive about the effects of using Marking Criteria it is mandatory to provide broad criteria for all assignments in the Subject Outlines distributed to students at the beginning of the course. Teachers are trained on the benefits of using Marking criteria and on the methods of formulating criteria during professional development workshops and seminars. However, there have been no studies about student perceptions of the use of Marking Criteria. It is important to learn about student attitudes as the benefits to the student community from using Marking Criteria are many. Students need to be made aware of the benefits of reviewing criteria before they prepare for assessments as it will have a positive influence on the learning process and on their performance.

ASSESSMENT IN HIGHER EDUCATION

Assessments play a pivotal role in the process of education. In higher education assessments have increased importance as they are of interest not only to students and teachers but also to future employers and all stake holders in the process of education. Assessment practices have therefore been studied very closely. Paul Ramsden's [1] remark that "the assessment of students is a serious and often tragic enterprise" sums up the importance placed on assessments. Assessments have to be considered by both educators and students as a vital part of the process of education not as an appendage which is painstaking and laborious. Biggs [2] points out the need to change the erroneous perception of assignments as "a necessary evil, the bad news of teaching and learning, to be conducted at the end of all the good stuff." Assessments should not be viewed as a system that allows teachers to "define, select, classify, motivate and report on students.[3]" For most students assessments are the be all and end all of education. This is explained as the backwash effect "when the assessment determines student learning, rather than the official curriculum [4]." The surface learning that is promoted by this view is a deterrent to good education. It is imperative then that the methods used to teach and assess student work are aligned to the objectives set out for the course. Only when teaching and learning are constructively aligned will assessments be productive. As Biggs [5] explains "The effects of assessment on learning are usually deleterious. … Students second-guess the assessment and make that their syllabus … . In aligned teaching, on the other hand, the assessment reinforces learning. Assessment is the senior partner in learning and teaching. Get it wrong, and the rest collapses."

ASSESSMENT MODELS

The two popular assessment models are Norm - referenced and Criterion-referenced assessments. In Norm - referenced assessment students are not measured against defined criteria but their performance is compared. The grades are relative to the student body undertaking the assessment. Standards depend on the quality of the student cohort and each individual is graded according to a preconceived notion of how grades will be normally distributed. In Criterion-referenced assessment students are measured against defined criteria; their performance is matched with an objective. Criterion-referenced assessment measures students' competence objectively. It is designed to measure what, and how well, the students have learned.

MARKING SCHEMES

"If assessment defines the curriculum, so marking schemes define assessment" [6]. Marking schemes play an important role in criterion – referenced assessments and many institutions of learning insist on their use. They explicitly explain how a student is graded and every

mark is accounted for. This helps the students to recognize and match teachers' expectations and "encourages student autonomy" [7] there by promoting deep learning. Students are able to evaluate themselves and it also aids in peer evaluation. As teachers can account for every mark the student has gained or lost it builds student confidence in the assessor and assessment system. For institutions a major advantage of using Marking Criteria is that it helps to standardize grading. Different teachers assessing with the same marking criteria, it was found, grade students similarly [8]. Marking Criteria increases the validity and reliability of assessments [9]. The use of Marking Criteria also helps teachers to give feedback in large classes that are common in higher education today.

However, one of the major objections to the use of Marking Criteria is that it makes academics vulnerable as students find it easier to challenge grading decisions [10]. Criterion referenced assessment in general is criticised as being reductionist or aiding in spoon feeding students, simplifying 'complex professional judgements to … lower-order tasks[11]. Developing good criteria where students will learn the curriculum while preparing for the assessments is therefore essential. As Biggs [12] explains "learning for the test is bad learning only if the test is bad."

A MIDDLE EASTERN EXPERIENCE

This study is based on the perceptions of the use of Marking Criteria of students in the offshore campus of an Australian university located in the UAE. The student body comprises students from over 80 different nationalities and diverse educational cultures. Students' perceptions of assessments are equally diverse and the use of Marking Criteria is essential to align student and teacher expectations and objectives. Teachers are required to publish Marking Criteria in Subject Outlines made available to students at the beginning of the session. However, there is no method in place to ensure that students actually review the criteria before they submit assignments. Having realized the importance of the use of criteria for teachers and students I have ensured that detailed criteria are available for all assignments for the subjects that I teach. In spite of this the failure rate in assignments was consistently over 20 % and it was pertinent to review the use of criteria by students. In all subjects that I teach students are given an opportunity to review the criteria in class and clarify doubts if any. In first session subjects when students are new to the assessment system in the university the criteria are explained in detail before students submit their draft work. In the draft review workshops organized for all major assignments students are encouraged to peer-evaluate assignments using the criteria. This further familiarizes them with the criteria. However many students did not seem to be utilizing the criteria provided when they worked on the assignments. Hence it was deemed necessary to study their attitudes to the use of criteria with the aim of highlighting its importance and using it as an educational tool.

METHOD

Both qualitative and quantitative data was used for the study. The sample consisted of 60 second semester students of mixed ability. All the students had submitted over 10 assignments all of which were provided with Marking Criteria. They had also peer evaluated assignments using Marking Criteria. In short, the cohort of students was made aware of the utility of marking schemes and was expected to have a positive attitude towards its use. A questionnaire consisting of close and open ended questions was used. Students had to indicate their views on a five point Likert scale. Survey questions covered the themes of utility and ease of use of marking criteria provided at the university, peer marking using marking criteria and review of criteria before work on assignments. The survey was completed anonymously and was not compulsory. Qualitative data was collected through student interviews with high achievers, hard workers and low performers.

Data Analysis

Questionnaires:A questionnaire with 10 questions was used to receive feedback from students about their perceptions on the use of Marking Criteria. A summary of the results of this questionnaire is displayed in the table below.

Analysis of questionnaire

Student perceptions about the use of Marking Criteria for assignments		Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1	Marking Criteria should be provided for all assignments	50%	40%	8.3%	1.7%	0
2	I review the marking criteria provided before I start work on an assignment	20%	46.7%	21.7%	11.7%	0

3	Reviewing the marking criteria before starting work on an assignment is useful	36.7%	50%	10%	3.3%	0
4	The marking criteria provided at the university are easy to follow	11.7%	48.3%	21.7%	18.3%	0
5	If marking criteria are used there is no need for feedback from the teacher	1.7%	16.7%	25%	4%	16.7%
6	Detailed criteria are not necessary broad descriptions are enough	5%	35%	25%	30%	5%
7	Peer marking using criteria is useful	5%	46.7%	40%	6.7%	0
8	The instructor must review the criteria with students before an assignment	35%	50%	13.3%	1.7%	0
9	Marking criteria help me to compare my marks with that of other students easily	18.3%	57.7%	20%	10%	0
10	The purpose of a marking criteria is to ensure		Fairness	Accuracy	Feedback to students	Easy marking for teachers
		First choice	11.7%	23.3%	21.7%	13.3%
		Second choice	16.7%	16.7%	16.7%	18.3%
		Third choice	15%	21.7%	10	16.7%
		Others - please specify Reference while working; Students know what is expected of them; Waste of time				

It is very encouraging to note that 90% of the students agreed that Marking Criteria should be provided for all assignments and it was proof of their awareness of the utility of using marking criteria for assignments. However, when asked if they reviewed the criteria before starting work on an assignment the numbers fell to 67% in spite of 87% of students surveyed believing that it was useful to review criteria before starting work on assignments. Disappointingly 40% of students were of the opinion that the criteria provided at the university were not easy to follow. This could explain why they did not review it though they thought it was useful. Over 46% students who responded opined that marking criteria could not be substituted for feedback from teachers and this may be linked to the fact that criteria were not easy to follow. 35% of students surveyed believed that detailed criteria were not necessary. The majority was aware of the benefits of peer marking using criteria as they had used it before. 85% believed that the instructor must review the criteria and this could be because the criteria were not easy to follow. In general students believed that it was not only necessary to have Marking Criteria but also to review it.

Student interviews: Three students were interviewed and their comments recorded and transcribed. The first student was a consistent high achiever; the second student was a hard worker who struggled to cope because of his limited skills in language but achieved good grades and the third was a low achieving student.

The comments of Student 1 on her perceptions of the use of marking criteria included:

> [Using marketing Criteria is good because] you know what you are targeting; the objective of what you are doing is clear. Marking criteria provided at the university are not difficult to use. We need extra feed back from the teacher … not just the marked criteria sheet… we need more qualitative feedback than a number. Only those who want to score high marks use it others don't bother.
> [It is] necessary to get all students to use it ... [but] if students don't care you really can't do much. There should be marking criteria for sure.

The perceptions of Student 2 are recorded below:

> Marking Criteria are very good… beginning of each assignment I check … you know, when you want to start writing… that is why I take long time to complete work…every paragraph I want to be careful. When there is Marking Criteria you know what you want to write. Most of the students don't look [at Marking Criteria] …after [receiving assignments back] they look for loss of mark. I am not good at English but I am checking so I get good marks I ask others[about the assignments] they don't know what to do so here it helps me.. More parts in the criteria better, more than what we have [referring to a 12 item criteria] lot of parts help me to write better I don't know what the meaning of all [items on the criteria] is… [the teacher has to] explain again for 5-6 minutes more… like I didn't know the meaning of coherent [in the criteria] so I leave it out… Marking criteria are good for all subjects.

The observations of Student 3 were:

> No I haven't used the criteria; I think it is useful… it show us what did we do and how… helps in adapting with instruction. It is easy to use but [I had] no time to care about it…

Students irrespective of their skill and performance were aware of the benefits of using criteria but the low achiever did not take the time to review criteria. The interviews complemented the results of the questionnaires and it was easy to identify problem areas. Providing students with Making Criteria was not sufficient, measures had to be taken to make sure they reviewed and understood what the items meant. Criteria had to be formulated clearly and its use as a tool for giving feedback could be further explored.

The findings cited above are similar to the conclusions drawn by Andrade and Du [13] in their study 'Student perspectives on rubric-referenced assessment.' They write "Students' comments regarding rubric use were consistently positive. They liked the fact that rubrics let them know "what's expected," and contrasted it with the "guessing game" they felt they had to play when teachers did not provide a rubric or some sort of guidelines for an assignment. In fact, the most commonly cited purpose of rubrics was to communicate the teacher's expectations and thereby provide "direction." Students also noted that rubrics help identify strengths and weaknesses in their work when used to give feedback, and that knowing "what counts" made grades seem fair."

SOLUTIONS

Induction to Marking Criteria

The analysis of the questionnaires and interviews shows that it is important to make criteria that are easy to follow. Teachers have to provide clear and easy to follow criteria and also explain the items on the criteria as well as the scoring standards or scales used. Dunn et al [14] suggests ways to demystify Marking Criteria by providing students with a copy of the Marking Criteria and asking them to prepare questions for clarification before they attempt the task. Guesswork will lead to misunderstandings about the set objectives. McDowell & Sambell [15] also echo this view, "briefings and handbooks of information are useful but students often need a more substantial induction particularly to help them to understand assessment criteria." Dunn et al [16] recommends the distribution of a glossary of assessment terms to students with the Marking Criteria.

Internalising criteria

It is not enough for the teacher to explain the criteria; students have to work with it to internalize it. McDowell & Sambell [17] emphasising the importance of internalizing criteria write "in depth understanding of assessment criteria really means that the ways of judging what is good, bad or acceptable within the subject discipline or professional area, have been internalized and understood by students." A good way out is to use criteria for peer/self evaluation. I have tried this with major assessments like research outlines and essays and found it to be very beneficial. Gibbs [18] describes the benefits of peer evaluation, "because students learnt how to assess other's problems, they learnt how to assess, and improve, their own, before they submitted them."

Qualitative feedback through criteria

Learning and teaching both depend on feedback for improvement. Chickering and Gamson [19] listing the even principles for Good practice in Under-graduate Education write "good practice gives prompt feedback and the keyword here is 'Prompt'". The first student who was interviewed commented that she wanted more than a number by way of feedback pointing to qualitative feedback and not just a grade on the criteria. In the survey too majority of the students pointed out that they required feedback from the teacher not just a score on the marking criteria. In large classes providing individual feed back could prove challenging. Teachers could use the Marking Criteria for written comments. The Marking Criteria could be formatted to "allow space for individual comments at relevant places" [20]. Dunn et al in the same study discuss "some practices to make life easier" including "prepare marking schemes that can be used as attachment sheets to be completed and returned with marked work; prepare a numbered bank of frequently

used feedback comments to which you can refer students."

CONCLUSION

I have used Marking Criteria for all assessments including oral presentations, essays, outlines, reports and the final examination. In addition to the many benefits to students and teachers discussed above criteria also helps to minimize complaints about grading. Though as every mark is accounted for and there is little room for flexibility students evaluate the teacher as a 'strict' grader. The same views are shared by Palmer [21] "Grade complaints are virtually nonexistent … . A drawback to using rubrics is that I routinely get the label of being a 'harsh grader.'" Criteria should be used for all assessments and teachers and institutions should devise methods to make sure that students are familiar with them and use them effectively.

REFERENCES

[1] P. Ramsden, **Learning to Teach in Higher Education,** London: Routledge , 2000,p 181.

[2] J. Biggs, **Teaching for Quality Learning at University**, USA:SRHE and Open University Press, 2000,p160.

[3] P. Ramsden, **Learning to Teach in Higher Education,** London: Routledge , 2000,p 183.

[4] J. Biggs, **Teaching for Quality Learning at University**, USA: SRHE and Open University Press, 2000,p141.

[5] J. Biggs, **Teaching for Quality Learning at University**, USA: SRHE and Open University Press, 2000,p160.

[6]L.Dunn, C.Morgan, M. O'Reilly, S.Parry,The Student Assessment Handbook,New York, Routledge Falmer,2004.p229.

[7] P. Ramsden, **Learning to Teach in Higher Education,** London: Routledge , 2000,p 196.

[8] A. Brew, "Towards Autonomous Assessment: Using Self-Assessment and Peer Assessment", **Assessment Matters in Higher Education:Choosing and Using Diverse Approaches**,Ed. S. Brown, A.Glasner, Buckingham:SRHE and Open University Press, 2003,p161.

[9] L.Dunn, C.Morgan, M. O'Reilly, S.Parry,**The Student Assessment Handbook**,New York, Routledge Falmer,2004.p17.

[10] L.Dunn, C.Morgan, M. O'Reilly, S.Parry,**The Student Assessment Handbook**,New York, Routledge Falmer,2004.p237.

[11] L.Dunn, C.Morgan, M. O'Reilly, S.Parry,**The Student Assessment Handbook**,New York, Routledge Falmer,2004.p230.

[12] J. Biggs, **Teaching for Quality Learning at University**, USA: SRHE and Open University Press, 2000,p141

[13] H.Andrade, Y.Du, "Student Perspectives on Rubric-referenced Assessment", **Practical Assessment and Research Evaluation,** Vol.10, No.3, 2005, http://pareonline.net/pdf/v10n3.pdf.

[14] L.Dunn, C.Morgan, M. O'Reilly, S.Parry,**The Student Assessment Handbook**,New York, Routledge Falmer,2004.p242.

[15] L.McDowell, K.Sambell, "The Experience of Innovative Assessment: Student Perspectives", **Assessment Matters in Higher Education:Choosing and Using Diverse Approaches**, Ed. S. Brown, A.Glasner, Buckingham:SRHE and Open University Press, 2003,p74.

[16] L.Dunn, C.Morgan, M. O'Reilly, S.Parry,**The Student Assessment Handbook**,New York, Routledge Falmer,2004.p242.

[17] L.McDowell, K.Sambell, "The Experience of Innovative Assessment: Student Perspectives", **Assessment Matters in Higher Education:Choosing and Using Diverse Approaches**, Ed. S. Brown, A.Glasner, Buckingham:SRHE and Open University Press, 2003,p74.

[18] G.Gibbs, "Using Assessment Strategically to Change the Way Students Learn", **Assessment Matters in Higher Education:Choosing and Using Diverse Approaches**, Ed. S. Brown, A.Glasner, Buckingham:SRHE and Open University Press, 2003,p47.

[19]A.W. Chickering, Z. F. Gamson, "Seven Principles for Good Practice in Undergraduate Education", **The American Association for Higher Education Bulletin**, 1987,http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/7princip.htm

[20] L.Dunn, C.Morgan, M. O'Reilly, S.Parry,**The Student Assessment Handbook,**New York, Routledge Falmer,2004.p242.

[21]J.S.Palmer, **"Classroom Use of Criteria/Rubrics",** 7th Annual Assessment Conference**,** 2007 http://assessment.tamu.edu/seminars/072707_rubrics_classroom_use.pdf