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Title	Improving quality and consistency of dissertation assessment
Authors	Pathirage, CP, Amaratunga, RDG and Haigh, RP
Type	Conference or Workshop Item
URL	This version is available at: http://usir.salford.ac.uk/id/eprint/9929/
Published Date	2005

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IMPROVING QUALITY AND CONSISTENCY OF DISSERTATION ASSESSMENT

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During the last decade, there has been increasing calls for Higher Education to improve standards, increase the quality of assessment, and for greater accountability of lecturers. It is recognised that consistency in assessment is even more important where assessment is through one large piece of work, such as a dissertation, and where the assessment outcome will have a significant impact on the final grade of students. In this context, this paper outlines the initial literature findings and results of an exercise associated with mechanism used in assessing undergraduate dissertations. This project aims to identify good practices for dissertation assessment, in an attempt to improve the quality and consistency of assessment. Several initiatives were undertaken to improve the quality and consistency of existing dissertation programme drawing from the outcomes of the study.

Keywords: Consistency, Dissertation Assessment, Good Practice.

INTRODUCTION

During the last decade, a period of considerable change within the Higher Education System, there have been increasing concerns regarding the quality of assessment practices within higher education institutions. This widespread concern has been mainly directed towards the increased accountability of lecturers, improved quality of assessment and greater consistency of standards (Brown and Glasner 1999). Consistency incorporates issues such as subjectivity for single assessors, uniformity of assessment between assessors for a single piece of work, and ensuring standards across work from different modules and different courses (Saunders and Davis 1998). The need to ensure consistency is further emphasised with modules where assessment is through one large piece of work such as a dissertation. Since such modules can account for up to 30 percent of marks awarded in a year, any inconsistencies will almost certainly be reflected in students' overall grade for the year and ultimately the final degree classification. Dissertation modules typically pose further problems in consistency of assessment due to the large number of students and the consequential need for large numbers of lecturers to participate in its assessment.

This paper outlines the initial outcomes of a research project that aimed to identify good practices for dissertation assessment in the built environment education sector. The research is being undertaken by the School of Construction & Property Management (SCPM), at the University of Salford, which attempts to improve quality and consistency of assessment by examining a range of assessment practices utilised by other disciplines and Universities including degree programmes of the SCPM.

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Accordingly, the paper is organised broadly into three main sections. Firstly, it sets out the literature findings on dissertation assessment practices in terms quality, consistency, and criteria of assessment whilst highlighting the increasing concerns in the UK Higher Education system. Secondly, the research methodology adopted for this research project is outlined whilst the findings of the research up to date will be the main focus in the final section of the paper. Outcomes from the analysis done on the existing practices of the dissertation assessment to highlight the various assessment practices followed by different schools and Universities, and the analysis of dissertation marks from a workshop, organised within the dissertation supervisory panel of a pilot study university, focusing particular upon the implications for consistency between lecturers, are presented as the findings of the research. The project will culminate in the publication of good practice guidelines, outlining good practices from other universities and disciplines, as well the results of pilot studies undertaken.

INCREASED CONCERNS IN STUDENT ASSESSMENTS

Concerns about the quality of teaching, learning and the rigour of assessment standards have grown with the rapid growth in higher education student numbers, class sizes and student– staff ratios, and with a concurrent increase in the proportion of students getting first and upper second class degrees (Chapman 1994). In the more centralised political culture of the UK there have been strong pressures, even in the context of the rapid expansion of higher education, to hold on to the principle of high academic standards (Lucas & Webster 1998). Consequently several reports have been published, addressing different aspects of assessment in higher education, including, The Reynolds Report (1985), The Harris Report (1996), and The Dearing Report (1997). The Harris Report's (HEFCE 1996) discussion on quality and standards in Higher Education highlighted the importance of assurance as to the methods used for assessment and the need for greater innovation in assessment techniques, although it was primarily concerned with postgraduate education. One vital aspect of the Dearing model (Dearing report 1997) was its emphasis on the need for university teachers to ensure effectiveness in assessing students and in giving feedback.

In addition, several educational committees and agencies have been established due to this widespread interest in higher education. The Institute for Learning and Teaching in Higher Education (ILTHE, now the Higher Education Academy) was established as a response to the requirements highlighted in the Dearing report. As a consequence of criticisms raised by academics on the Teaching Quality Assessment (TQA) process for being expensive and intrusive, a new Quality Assurance Agency (QAA) for Higher Education was established, which sought to deliver and maintain high standards, particularly through focusing on student assessment and also by promoting transparency. Section 6 of code of practice "Assessment of Students" (May 2000), published by QAA, has stipulated a number of requirements and expectations in assessing students which are to be followed by higher education institutions, further emphasising the necessity for increased accountability of lecturers, improved quality of assessment and greater consistency of standards.

Particularly important at undergraduate level are assessments that contribute to degree classification, and which thereby present to employers, as well as postgraduate admissions tutors, staff judgements of the standard of student work. Having identified the increased concerns placed for student assessments in Higher Education, the

following section examines the assessment of undergraduate dissertation which has a large bearing towards the ultimate degree classification of the students.

DISSERTATION ASSESSMENT

The necessity to ensure quality, consistency and improved criteria of assessment is greatly emphasised with modules where assessment is through one large piece of work such as a dissertation. It is widely acknowledged that the undergraduate dissertation is special both to teachers and to students. From the students' point of view, the dissertation is the single most substantial, and independently worked upon, piece of work they will undertake while at the university (Webster et al 2000). From the assessors' perspective, the assessment of a dissertation is also significant since such modules can account for up to 30 percent of marks awarded in a year. Therefore any inconsistencies in assessment will almost certainly be reflected in students' overall grade for the year and ultimately the final degree classification (Saunders and Davis 1998). Dissertation modules typically pose further problems in consistency of assessment due to the large number of students and the consequential need for large numbers of lecturers to participate in its assessment. As the size of the team expands so the difficulties associated with achieving and maintaining consistency of assessment between lecturers becomes more apparent. However, in spite of the dissertation's status within degree courses and its perceived educational value and challenges, the assessment of the dissertation appears to be relatively under-explored within the published research literature in the UK (Todd et al 2004). Three major areas were highlighted in the literature in relation with dissertation assessment i.e. Quality, Consistency and Criteria of assessment. The succeeding sections outline the literature findings on these major areas.

Quality and Consistency in Assessment

The literature survey revealed the increased concern in terms of quality of the assessment practices which emphasised the maintenance of the 'gold standard' of current assessment practices by individuals, departments and institutions involved with Higher Education (Webster et al 2000; Saunders and Davis 1998). This is further highlighted by the HEQC:

Student assessment is clearly central to standards. If the work of students is not assessed by valid and reliable methods, standards cannot be rigorous. (Higher Education Quality Council 1997: 8, cited in Webster et al 2000)

As previously mentioned, the QAA code of practice (Section 6) on assessment of students can be perceived as a means of regularising the assessment of undergraduate students, which is directly applicable for undergraduate dissertation assessment as well. The following list outlines some of the requirements stipulated within this code of practice.

- The principles, procedures and process of all assessment to be explicit
- Publication of clear rules and regulations governing the conduct of assessment
- Publication & implementation of consistently clear criteria for the marking and grading of assessment
- Appropriate feedback to students on assessed work
- Competent staff to undertake roles and responsibilities in assessment work

It is questionable how far Higher Education institutions adhere and follow these stipulated requirements of QAA, at least when it comes to the assessment of dissertation, which has a large bearing towards the ultimate degree classification of the students.

Recent concern in Higher Education has also focused on the need for greater accountability of lecturers and on ensuring consistency of standards (Aper et al 1990; Brown et al 1995; Norton 1990). Consistency of standards in assessment is important for all assessed work, as it incorporates issues such as the subjectivity of the individual lecturer, uniformity between lecturers for a single piece of work and ensuring the same standards across pieces of work from similar modules for different courses (Saunders and Davis 1998). However, the literature reveals several important factors which directly contribute on the consistency of dissertation assessment.

Scepticism of the lecturer's on their own decision is believed to be a major contributor for the inconsistency in dissertation assessment (Rowntree 1987). The following comments made by few assessors will itself speak on this issue.

'Real evidence of awareness of the various perspectives', mark awarded 46%: 'results section unclear', mark awarded 57%: 'this is a clear, well presented [dissertation]... which fulfils its specific aims', mark awarded 49% (cited in Webster et al 2000)

In addition, time spent on assessment, relative experience of the lecturer, lecturer's attitude/ values and ownership of the criteria were considered to be the other leading determinants of the consistency in dissertation assessment. It was apparent that, in general terms, the longer a lecturer had spent assessing a dissertation, the lower the grade it received. As such it is argued that a lecturer should not revisit a piece of work that has already been rigorously assessed against the criteria.

Relative levels of experience of assessing dissertations were also felt to have been an important contributory factor. As Balla and Boyle's (1994) and Brown et al's (1995) contend, lecturers need to be involved in the development of criteria so as to create the ownership of the criteria used for the dissertation assessment. As such, criteria designed carefully and used with clear procedures can reduce inconsistency in assessment and joint development of criteria by those assessing the work provides a useful start for ensuring that each lecturer understands them in the same way. This enable lecturers to be more certain as they are following the same process and judging each piece of work against the same criteria, thereby assessing each student in the same way. Having discussed about the factors affecting quality and consistency of dissertation assessment, the following section outlines the literature pertaining to assessment criteria.

Criteria in Assessment

Assessment criteria are widely used in the education system when student's work is being marked. It is good practice to publish, explain and clarify on what base students are assessed, treating each student similarly, fairly and with consistency (as stipulated in QAA code of practice). Two different types or extremes of assessment criteria practiced in dissertation assessment were unearthed, namely impressionistic/ holistic and analytic (weighting method). The grade or the final marks for the dissertation was arrived on the basis of impression made in the holistic method where as in analytic method marks were given against each category based on a predetermined mark (Harris and Bell 1994). It is argued that students' awareness about the relative

importance attributed by markers to each criterion used is of immense importance for the students to get the maximum out of the assessment. Yet, a holistic framework, using criteria to rationalise an overall mark has the considerable advantage of maximising flexibility from the assessors' point of view.

Adding to this dilemma, much concern is expressed in the literature against considering the assessment criteria as a "Straight-Jacket" (Balla and Boyle 1994) which hinders the students' creativity and individuality. It is argued that by having an analytic or weighted method of criteria, the process of assessment is much more standardised than having an impressionistic based criteria. As contended by Webster et al (2000), if the dissertation is a very individual piece of work presented by students', surely it is the last piece of work which anyone would want to standardise by insisting the same or similar criteria and approaches. However, this has already been manifested in the scholarly literature those who argue for professional autonomy, and those who emphasise the need for public accountability; between those who see a need for explicit criteria and performance standards in assessment, and those who regard assessment as akin to wine tasting (De Vries 1996; Wright 1996).

Furthermore, Hands and Clewes (2000), whilst acknowledging the value of criterion referencing, have pointed out that too many criteria, specifically to the marking of dissertations, could diminish the importance of tutors' judgments and lead to an increase in 'marking fatigue' which itself is a cause of much variability found in assessment quality. Nevertheless, assessment criteria can be seen as an important tool for giving new assessors confidence to take part in the assessment process. This is important as many academics report feelings of discomfort and fear when participating in exam boards or when double-marking work (Hand and Clewes 2000). Partington (1994) has gone so far as to suggest that explicit assessment criteria that are freely available to staff and students should negate the need for double-marking.

Two marking strategies which need to be avoided are also highlighted within the literature, namely the Defensive marking strategy and Game theory. In defensive marking strategy the assessors avoid giving very high or low marks for the students making them unnoticeable to stakeholders (colleagues, external examiners). Game theory suggests that staff may try to anticipate the reaction of other stakeholders in the process, thereby marking dissertation to have marks close to the average with a very narrow range of marks. It was observed that assessors' deploy these strategies especially when double marking is followed.

Thereby, this on-going research project aims to identify good practices for undergraduate dissertation assessment, by addressing the quality, consistency and criteria of assessment as discussed above. The following section outlines the research methodology adopted for this research.

RESEARCH METHODOLOGY

The research was carried out as four Work Packages, as Figure 1 illustrates. The Work Package one (WP1) reviews the literature and existing practices pertaining to undergraduate dissertation assessment. Outcomes and the understanding obtained from the literature review stage (WP1) is fed into the next pilot study phase (WP2), in which a series of workshops are organised. These workshops are used to pilot a range of assessment approaches and criteria in an attempt to measure and ultimately improve assessment consistency within the School's dissertation module on undergraduate programmes. Further, a sample of students – that includes graduates from previous

years and current final year undergraduates – will be interviewed to ascertain student understanding of dissertation requirements and assessment criteria. The project will culminate in the publication of good practice guidelines (WP3), outlining good practices from other Universities and disciplines, as well the results of pilot studies undertaken as part of the research. Finally, the project’s findings will be disseminated (WP4) to inform the teaching and research community, both internally and externally.

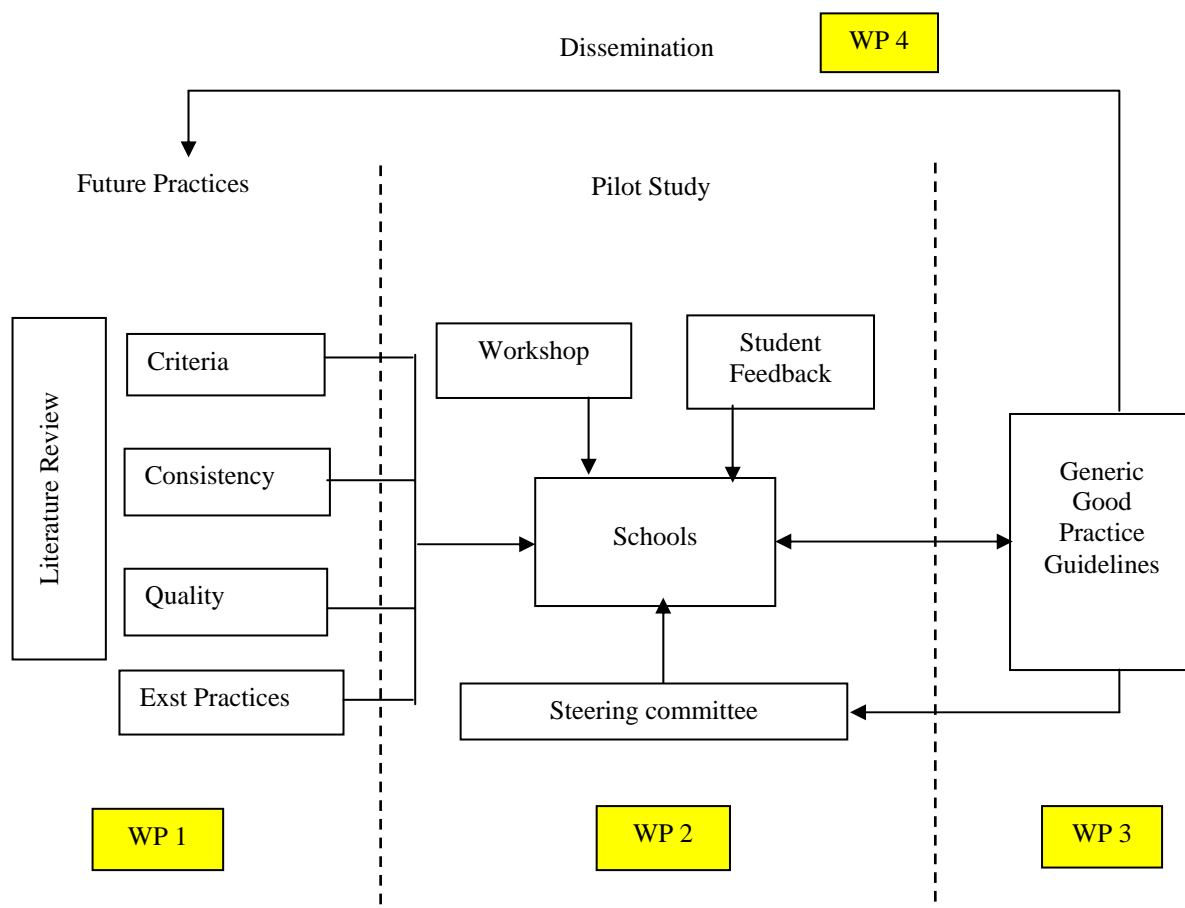


Figure 1: The project’s research methodology

WP1 – Literature review

WP2 – Pilot studies

WP3 – Development of generic good practice guidelines

WP4 – Research Dissemination

FINDINGS OF THE RESEARCH

This paper reports the outcomes of the Work Package one (WP1) which reviewed the literature and existing practices pertaining to undergraduate dissertation assessment and the findings from the analysis of dissertation marks from a workshop (WP2), organised among the dissertation supervisory panel of a pilot study university, in which lecturers assessed the same undergraduate dissertation copy, focusing particular upon the implications for consistency between lecturers. Succeeding sections presents the findings from these two work packages.

Analysis of Existing Assessment Practices

The selection of the dissertation practices were done to reflect the procedures adhered by different countries, different universities and by different disciplines. Accordingly, 30 dissertation practices were scrutinised, based on the dissertation module handbooks obtained online, including those from England, Australia, United States and Sri Lanka. In addition to the courses offered (Built Environment) by the School of Construction and Property Management, University of Salford, practices followed by disciplines like Social work studies, Business and Management, Geography, Languages, Economics, Environmental & life Science, History and Art & Design were chosen for analysis. Table 1 provides an overlook of existing dissertation practices, scrutinised according to the country and the discipline. The most commonly covered areas within the practices were the assessment procedure, guidelines/instructions for dissertation production and the assessment criteria.

Table 1: An overlook of existing practices scrutinised

Country	Discipline Engineering Science	Business, Management & Economics	Social Science, Languages & Environmental Studies	History, Art and Design	Total
England	7	6	4	2	19
Australia	1	3	1	1	6
United States	1	3	-	-	4
Sri Lanka	1	-	-	-	1
Total	10	12	5	3	30

Assessment Criteria

Approximately 70% of the analysed practices had explicit criteria, out of which, two thirds represented holistic or impressionistic methods of assessment (refer Criteria in Assessment section for explanation). As such 30% of the practices had provided just a style manual, which did not specify any assessment criteria for the student. This clearly contradicts with the requirement of “Publication & implementation of consistently clear criteria for the marking and grading of assessment”, stipulated in the QAA code of practices as mentioned elsewhere. It was observed that impressionistic method as the most common method of assessment which negates the argument of considering the assessment criteria as a Straight-Jacket.

The number of categories within the criteria varied from four to ten with an average of six. Being parallel to the argument put forward by Hands and Clewes (2000) on too many criteria (refer criteria in assessment), Laming (2003) offered some interesting evidence from his comparison of findings on judgment in psychophysical experiments to highlight that human markers find it difficult to reliably distinguish between more than five discrete categories. As such it is questionable to have too many categories as revealed in actual practice. The most frequently found categories within the dissertation assessment criteria together with their relative importance placed by the courses are depicted in Table 2.

Table 2: The range of relative importance apportioned to criteria across disciplines

Category	Relative Importance
Introduction (<i>Abstract, Objectives, Background, Context</i>)	10-25%
Knowledge in relevant Discipline (<i>Sources, Use & Analysis of Lit, Theories</i>)	20-30%
Methodology (<i>Experimental methods, Research design, Ethical dilemmas</i>)	10-25%
Analysis & Discussion of result (<i>Presentation, Clarity, Logical arguments</i>)	20-40%
Conclusion & Recommendations	5-10%
Presentation & Communication (<i>Structure, Organisation, Referencing, Language</i>)	10%
Others (<i>Relevance, Originality, Contribution, Future work, Scope & Difficulty</i>)	10-20%

Assessment Process

Several different approaches for dissertation assessment were revealed from the analysis. In summary, the dissertation assessment process comprised of four different forms or methods of evaluation i.e. Research/ Dissertation Proposal, Written Dissertation, Performance of the Student and an Oral Presentation. All courses, either purely or substantially, based their assessment of the dissertation module on the written outcome i.e. dissertation. Interestingly some practices assessed the performance of the student when deriving the marks for the dissertation module. The criteria for the assessment performance of the student included categories like enthusiasm & self motivation, time management, communication, record keeping etc. This inclusion may justify the argument to say that, it is the process through which the student has gone through should be reflected in dissertation module assessment and not only the final outcome of the student. Table 3 indicates the relative importance placed on different forms of assessment.

Table 3: The range of relative importance apportioned to forms of assessment across disciplines

Form of Assessment	Relative Importance
Research/ Dissertation Proposal	10%-25%
Written Dissertation	60%-100%
Performance of the Student	20%-35%
Oral Presentation	20%-30%

As a written dissertation was found to be the only common form of assessment for all the courses, this will be analysed to highlight the range of assessment processes adhered across disciplines and schools. Even though most of the schools appointed one supervisor for a dissertation student, noticeably dissertations that involved more than one discipline required two supervisors. Also some schools, as a matter of policy, operate this double supervisory mechanism even within same discipline. In a majority of courses, the written dissertation was double marked i.e. assessed by the supervisor and at least by one other staff member, and moderated by members of the supervisory group. Although, Partington (1994) argued that explicit assessment criteria when freely available to staff and students should negate the need for double-marking, in practice the double marking mechanism was found to be very common. Some practices further extended this double marking system by deploying two blind markers

to eradicate the biasness of the supervisor. When disagreements occur between two markers, these are generally resolved between the two assessors of staff and where this is not possible they are referred either to a third examiner within the staff or to an external examiner. Interestingly some used the viva mechanism to resolve the disagreement within the two markers instead of referring it to a third examiner. These different procedures followed in written dissertation assessment process are depicted in Figure 2.

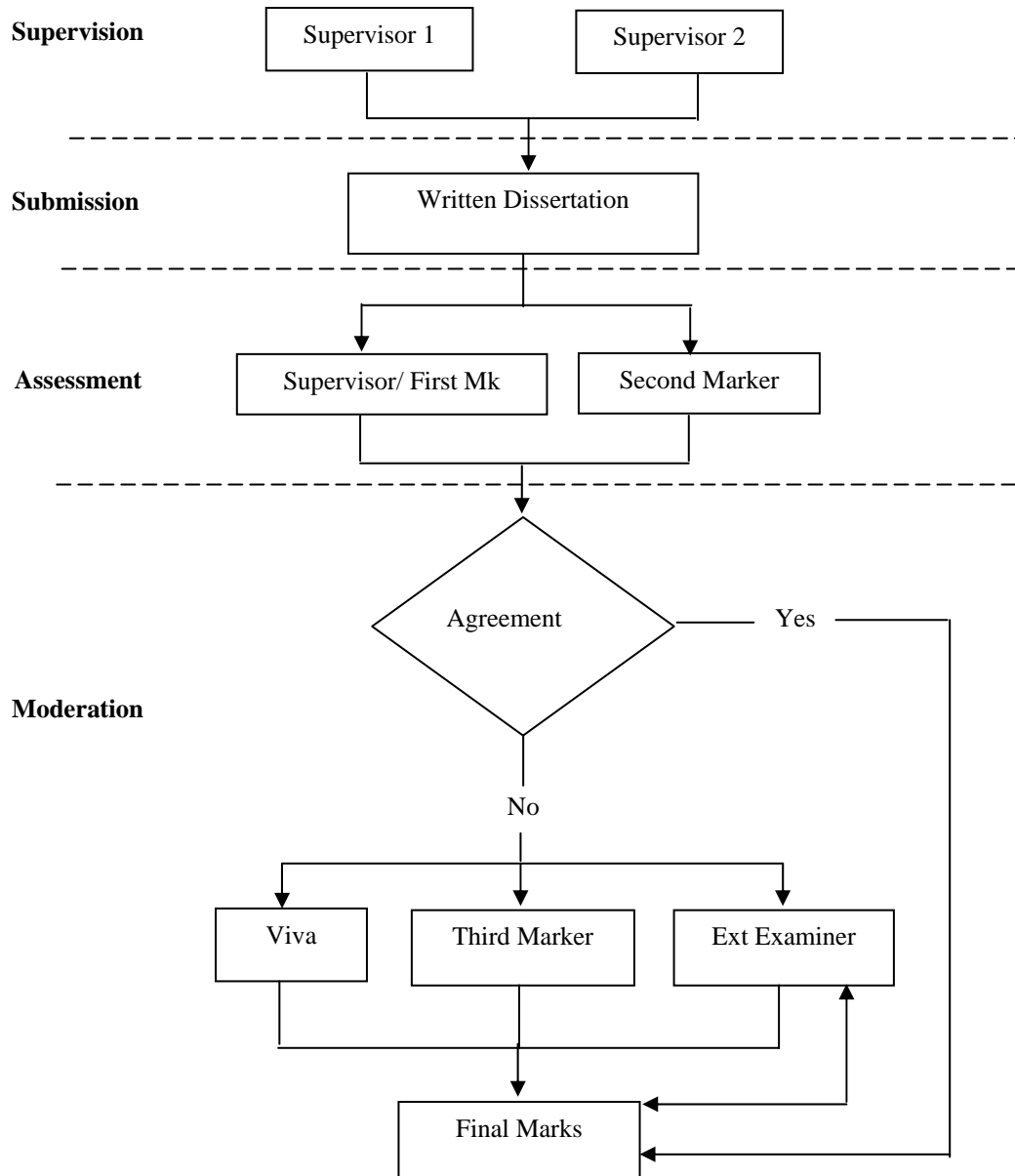


Figure 2: A flow chart, based on the survey of existing practices that illustrates the range of written dissertation assessment processes across disciplines and schools

Analysis of Dissertation marks from the workshop

A workshop was organised within the dissertation supervisory panel of a pilot study university, to primarily find out the implications for consistency of dissertation marks given by the lecturers and to generate a discussion on the appropriateness of the

existing dissertation criterion used by the school. Prior to the workshop, lecturers (involved with supervision and assessment of dissertation) were given a complete unmarked unknown copy of a dissertation drawn from a general subject area (without being subject specific) to be assessed. It was expected to eradicate the assessment biasness of knowledge of student's previous performance by using an unknown dissertation copy. Copies of the assessment criterion and a pro forma/ marking sheet for recording comments, together with assessment guidelines were distributed with the dissertation copy. Prior to the workshop completed marking pro forma's were collected and analysed. In total, 26 dissertation copies were distributed and 18 (70 percent) assessed sheets were received back, which were analysed with their break down of marks. A workshop was organised to disseminate the results of the exercise and to identify necessary actions to improve dissertation assessment practice, which was attended by 19 dissertation supervisors.

Summary of Outcomes

The existing School's grade descriptors for dissertations marking (Criterion) contained 8 categories (as shown in the Table 4) and a specific number of marks were requested for each of these assessment areas, but the weighting of marks between the categories was at the lecturer's discretion. Further, spaces were allocated to insert comments for each category to justify/ explain the marks awarded. Both marks and comments were analysed. Further, overall marks & comments given for the dissertation and marks & comments made for each and every category were analysed separately. The summary of the analysis is illustrated in Table 4 below.

Table 4: Summary of outcomes of dissertation marks for each category

Category	Descriptors	Central Tendency		Dispersion	
		Mean	Median	Range	Standard Deviation
Knowledge of Subject Area		58.93	56	40	9.88
Development of aims and objectives		49.93	50	45	10.97
Data analysis and arguments		48.80	49	28	6.78
Critical evaluation		48.73	49	23	6.26
Presentation and writing		52.13	50	45	12.39
Creativity and originality		50.87	53	38	10.11
Referencing		47.87	40	55	14.47
Independence and initiative		51.00	50	27	10.21
Grade (Final Mark)		52.19	51.5	29	7.85

In terms of final mark, the dissertation received a mean mark of 52.19 percent with a standard deviation of 7.85 and a range of 29 marks. Moreover, the overall grade given for the dissertation varied from a failure to a second upper (2:1) pass with highest number of marks aggregating between 50-54 marks range. Overall comments made for the dissertation seemed to be consistent except comments made among dissertation copies which have received above 60 marks.

In terms of marks and comments pertaining to categories of the criterion, the greatest variations were recorded for the Referencing (Standard deviation of 14.47), Presentation & writing (Standard deviation of 12.39) and Development of aims & objectives (Standard deviation of 10.97) in terms of both standard deviation and range.

Referencing showed the most significant difference in marks ranging from a maximum of 90 marks to a minimum of 35 marks (range of 55 marks). Comments made for this category varied from 'thorough and consistent' to 'very poor referencing'.

Overall, the exercise results revealed some inconsistencies in dissertation assessment in the chosen school. Therefore, during the workshop the existing dissertation assessment criterion was revisited and other possible reasons for the differences in assessment were debated among the dissertation supervisors with the view of identifying future actions. Discussion covered all categories of the assessment criterion although more time was devoted to categories which depicted greater variations. Most of the lecturers commented on the difficulty of interpreting and understanding the precise meaning of the grade descriptors used in the categories of the assessment criterion and pointed out the necessity for them to be clearer. Also they highlighted the need to ensure more consistent and common understanding and interpretation of the criterion. Succeeding section outlines the future actions identified to enhance the dissertation assessment practice of the school.

Action Plan

Several initiatives were identified by the participants to improve the consistency and the quality of the dissertation assessment practice within the pilot study. Steps identified included followings;

- To interview dissertation assessors who's marks falls in extreme ends in terms of overall and individual category assessments. Thereby to find out any reasons behind giving such marks and to understand their individual interpretation of terms used within each category.
- To have a general discussion among all the dissertation supervisors for each an every category of the dissertation assessment criteria to generate a common understanding among all dissertation assessors.
- To devise separate special task groups for each and every category of the assessment criteria from the dissertation supervisory panel. Task groups are required to find out the best practices in the academia and to devise a most appropriate criterion to reflect the best practices.
- To benchmark the results by organising a similar workshop in some other school to find out the outcomes.
- To facilitate a meeting among the first and the second dissertation markers, prior to the assessment of dissertation, in order to have a proper understanding of the dissertation student's performance throughout the process.
- To organise a similar workshop among the same dissertation supervisory panel just before the commencement of dissertation assessment to generate a common understanding about the dissertation assessment criterion.

WAY FORWARD

This paper is based on the interim findings of a research project that is attempting to identify good practices for dissertation practices on undergraduate programmes. It summarises the literature pertaining to dissertation assessment across a range of disciplines and Universities, and the results of a workshop organised in a chosen pilot

study university. By doing so, this highlights the many challenges that a Programme Leader faces, when devising an assessment strategy for a dissertation module. The project's future work includes a series of workshops, within the same school and in a different school, and obtaining student feedback as discussed in the research methodology section. The project will culminate in the publication of good practice guidelines to disseminate the project's findings.

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