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Tacit knowledge and a mysterious code: articulating academic writing expectations in disciplinary grading criteria.

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Tacit Knowledge and a Mysterious Code: Articulating Academic Writing Expectations in Disciplinary Grading Criteria

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Abstract

Academic writing is integral to student achievement in higher education. Despite a move towards enhanced transparency in assessment, little is known about how writing is represented in the grading criteria of the various university disciplines. This qualitative study analyses criteria to uncover how writing expectations are presented within them. First, we reveal what facets of writing are included in the criteria. Second, we identify three issues: a mismatch between the level of challenge and the grade awarded; inconsistencies within criteria in terms of what is being graded; and ambiguities in terms of the language used. We interpret these findings through the conceptual lenses of non-formal learning and tacit knowledge and argue that professional development activities for lecturers need to be designed to render tacit knowledge of academic writing explicit. Our paper is a catalyst for university departmental discussion as to what constitutes quality writing for a specific assignment, and how those expectations might be better conveyed through rubrics.

Practitioner Notes

1. The representation of academic writing expectations in assessment rubrics are investigated.
2. Not all rubrics in our sample contained an academic writing criterion.
3. Problems with academic writing criteria included: a mismatch between the level of challenge and the grade awarded; inconsistencies within criteria in terms of what is being graded; and ambiguities.
4. Our findings can be interpreted through the lens of non-formal learning and tacit knowledge.
5. We propose a professional development activity to address issues identified.

Keywords

Academic writing, assessment, criteria, rubrics, tacit knowledge

Introduction

This article investigates university subject course assessment rubrics – the commonly used grids that distinguish between performance at different levels – and how academic writing expectations are represented within them. Academic writing is central to student attainment in that many assessments in higher education are written, and it is through writing that students convey ideas and arguments. According to the United Kingdom Office for Students (OfS), proficiency in writing is necessary whenever a discipline requires analysis, effective communication or an ability to engage with and convey complex arguments (OfS, 2021). Simply put, '[n]othing affects a student's academic prospects more than their ability to write well' (UCL Arena Centre for Research-Based Education, 2019, p. 1).

Lecturers who design written assessments therefore need to have an awareness of their writing expectations when it comes to the task they set and a metalanguage through which to communicate those expectations (McGrath et al., 2019). An important vehicle for this information is the assessment rubric. Theoretically, lecturers distil within assessment rubrics their expectations of students' assignments and how those assignments will be graded (Francis, 2018), and this extends to their expectations of writing quality. Rubrics therefore reveal what happens when disciplinary lecturers 'define and measure specific writing traits' (Dryer, 2013). In this sense, assessment tools are not neutral and can reveal 'specific beliefs and attitudes about writing' (Hartwell & Aull, 2022, p. 1). Ultimately, then, rubrics are important textual artifacts that contain institutionally sanctioned articulations of quality writing, written by those at the academic 'text face' (Tuck, 2018). However, to our knowledge, little attention has been given to the articulations of academic writing in assessment rubrics in the disciplines, nor to how clear these articulations are.

To contribute towards filling this gap, this paper investigates articulations of higher education lecturers' expectations of students' writing. Drawing on examples of assessment rubrics collated from a United Kingdom university, we ask the following straightforward research question: How is academic writing articulated in assessment rubrics across disciplines? We illuminate how lecturers represent their expectations of academic writing in rubrics and importantly, the complexities and inconsistencies therein. We argue that rather than making expectations about writing transparent, the rubrics perpetuate what Husain and Waterfield (2006) describe as the inaccessible 'mystery code':

> [Stundents] feel that the key to success lies not in producing a well-structured and well-written piece but in complying with some mysterious tacit code which they cannot access." (Husain & Waterfield 2006, p. 27).

We account for our observations through the prism of two interrelated concepts from the field of educational psychology: non-formal learning and tacit knowledge. We conclude by arguing that these concepts potentially provide academic developers with a road map to support lecturers in conveying their academic writing expectations through disciplinary assessment rubrics.

Literature

Describing Writing Expectations

The OfS (2021, p. 3) claims, somewhat reductively, that academic writing constitutes 'use of sentence and paragraph structure, syntax' as well as the more vague 'other features of language'.

However, we argue that what constitutes quality academic writing in disciplinary assessment is more difficult to pin down. This is partly due to the complexity (Good et al., 2012) and dialogicity of writing – text reception is contingent on the reader and their expectations of the genre (Negretti, 2017). For instance, in one of the few studies on lecturers' expectations of students' academic writing in assignments, Nesi and Gardner (2007, p. 113) found the following disciplinary differences:

> Economics tutors mentioned critical analysis and logical development, History tutors clarity of argument, taking the reader on 'a journey through conflicting ideas'. Tutors in Sociology and Medicine valued 'a clearly stated argument'. Engineering tutors liked succinct and well-structured writing, while Philosophy tutors liked clarity and clear signalling[…]

As well as some universality:

> Next to coherent structure, the most frequently stated desirable quality was originality or creativity […] 'understanding', 'insight', and 'application', as well as 'succinct expression' and 'adherence to academic conventions'.

Conceptualisations of 'good academic writing' therefore need to take into account potential disciplinary differences. Another layer of complexity arises from the range of assessment types that students need to engage with, such as dissertations, essays, reports, book reviews and so forth (see Nesi & Gardner, 2012). These assignment types – or genres - are conventionalised to a greater or lesser degree (Tardy, 2016); good academic writing through a genre lens can be seen as the extent to which students are able to convey their ideas within the confines of these frames, or indeed are able to adapt/subvert these frames and still successfully achieve their communicative purpose (Swales, 1990).

Finally, unlike assessment/criteria writers in fields such as TESOL or composition, disciplinary rubrics are most likely constructed by non-writing experts. Their own ability to write 'well' is often acquired non-formally, which can result in lecturers not being consciously aware of their own knowledge about academic writing and lacking the language to communicate their expectations. We deal with this issue in the next section.Tacit knowledge and non-formal learning

Eraut (2000) sets out the distinction between deliberative, formal learning and non-formal or implicit learning as follows: formal knowledge acquisition occurs as part of a taught course, workshop or other such pedagogic event. There is a designated teacher or trainer; there may be a qualification awarded; and an 'external specification of outcomes' (p. 114) such as a syllabus. While disciplinary lecturers have spent a good deal of time engaged in deliberative learning to enter their profession, the development of academic/disciplinary writing knowledge is often not part of that deliberative process. Instead, the discourse of their disciplines and associated writing conventions are learnt implicitly through socialisation processes (Duff, 2010) such as observation and participation in the activities of their disciplinary discourse communities over time (Swales, 1990). This type of non-formal learning is defined as 'the acquisition of knowledge independently of conscious attempts to learn and in the absence of explicit knowledge about what has been learned' (Reber, 1993 in Eraut, 2000, p. 115). In other words, this learning is not deliberate or intended, and the person learning is not aware that learning has taken place in that moment. The result of this implicit or non-formal learning is tacit knowledge.

Polanyi (1967) provides a seminal definition of tacit knowledge which encapsulates the problem this type of knowledge entails: we know it, but we cannot 'tell' it. Tacit knowledge is therefore problematic in two ways. First is the problem of awareness: when it comes to tacit knowledge the knower is not able to explain the process by which that specific knowledge was gained. For instance, a history lecturer may know how to synthesize and integrate literature sources into an argument but may not be sure how they came by this knowledge. The second problem is representation: how can tacit knowledge be made explicit to the knower and communicated? To continue the example, how can that history lecturer recall how they learnt to synthesize and integrate sources so that they can share that knowledge with their students? And how can they communicate this requirement to students taking their assessment via rubrics?

Assessment Rubrics

In recent years, higher education has moved towards enhanced transparency in assessment practices (Bloxham et al., 2016) with the ostensible aim of demystifying the tacit code that Husain and Waterfield (2006) observed. Simply put, lecturers are expected to be explicit about what they are looking for in assignments. A key component of this endeavour is the assessment rubric - a tool designed to increase fairness in marking and to convey to students the institutional expectations as to how assignments will be graded (Bearman & Ajjawi, 2021; Francis, 2018; Tuck, 2018). There has been a shift in thinking around the function or purpose of assessment rubrics in HE, moving from conceptualising rubrics merely as tools of measurement (Panadero & Jansson, 2013) to instructional tools which communicate the learning goals or expectations of a particular task (Andrade, 2023; Morton et al., 2021). Dawson (2017) points out that this later conceptualisation means that students should be able to use rubrics to interrogate the requirements of a task.

Despite striving for transparency, student feedback, professional experience and research tell us that rubrics can be problematic. Students struggle to interpret rubrics or fail to read them (Graham et al., 2021); criteria contained within rubrics can lack disciplinary specificity (Bloxham et al., 2016; Woolf, 2004) and be seen as restrictive or a simplification of the actual demands of an assignment (Tuck, 2018); some lecturers choose not to follow rubrics when assessing (Baume et al., 2024; Ecclestone, 2001; Smith & Coombe, 2006) or interpret criteria differently from other markers (Webster et al., 2000). Some researchers have even claimed that the basis for grading decisions cannot be encapsulated within a rubric (e.g., O'Donovan et al., 2008; Orr, 2007) and that grades are allocated based on intuition (Bloxham et al., 2011, 2016) rather than adherence to grading descriptors. Yet in the United Kingdom and other contexts, the use of assessment rubrics remains standard practice in universities, and the expectation is that these rubrics are shared with students as a means of demonstrating adherence to quality assurance and standards (Dawson, 2017) as well as a means of communicating assessment expectations to students (Andrade, 2023; Bearman & Ajjawi, 2021; Jonsson & Svingby, 2007).

In this paper, we apply the concepts of tacit knowledge and informal learning to account for the way in which academic writing expectations are represented in disciplinary grading criteria. In the next section, we briefly set out details of the study from which the data for this paper was drawn.

Method

In this paper, we draw on data collected at a United Kingdom university, where the curriculum is delivered via courses divided into 30 to 60 credit assessed modules.

Research Design and Sample

The data were rubrics (i.e., the grid or table which provides statements of the performance needed to achieve different bands (e.g., 50-59%, 60-69%)) 118 course leaders were approached by email. Some course leaders forwarded the email to module leaders on their team and some emailed documents directly to the authors. 50 assessment rubrics were received (see Table 1). Courses and departments are not named to ensure anonymity, but a range of courses are represented. Data were stored in a password protected folder in a password protected university drive, accessible only to the researchers.

Table 1
Number of responses

	Departments	Courses	Rubrics
Undergraduate	6	12	35
Postgraduate	5	7	15

We were interested in how academic writing expectations were communicated through the rubrics, and specifically, those rubrics with a distinct academic writing criterion contained within them. For the purposes of rigour and transparency in data categorisation, it was necessary to operationalise what we understand as an 'academic writing' criterion. To do this, we drew on the research base in Applied Linguistics, including university language (Biber, 2006), disciplinary discourse (Hyland, 2004), intertextuality (Shaw & Pecorari, 2013), genre (Tardy, 2009), and our own experience as teachers and researchers of academic writing. Through our reading, discussion and familiarisation with the data, we formulated the following working definition. A distinct academic writing criterion is a criterion that contains reference to one or more of the following: linguistic features (e.g., syntax, structure; vocabulary); rhetorical features (argumentation; adaptation to audience or purposes; adherence to genre conventions); prototypical features of academic writing and/or specific genre or disciplinary conventions (sources/references, register, formatting); and communication (clarity of meaning, coherence, cohesion, presentation, style etc.). In other words, we looked for criteria that foregrounded how subject matter *is conveyed* rather than the subject matter itself. Following this initial categorisation process, we excluded rubrics that contained only criteria pertaining to subject matter knowledge. Examples follow:

Table 2

Example criterion that does explicitly pertain to academic writing

4. Make effective use of academic conventions and meeting the needs of both academic and professional audiences.	Very limited use of accurate academic writing conventions, including APA referencing. Work did not communicate effectively, for example: lack of appropriate layout and presentation of your work.	Communicated with mainly accurate use of academic writing conventions, including APA referencing. Communicated effectively through, for example through the appropriate layout and presentation of your work.	Communicated with consistently accurate use of academic writing conventions, including APA referencing, with some engaging elements. Communicated effectively through the use of well-designed formats, for example through the clear presentation of your work.	Communicated with consistently accurate use of academic writing conventions, including APA referencing, and a highly engaging style. Communicated in a highly effective manner through the use of well-designed formats, for example through the clearly structured and consistent presentation of your work.

We acknowledge that the definition we set out can be contested; it has been argued that academic writing cannot be disentangled from other facets of disciplinary knowledge (Tardy, 2009); and that academic writing cannot be defined as a unitary construct in that there are distinct disciplinary differences (Hyland, 2004). Inevitably, all categorisation is a simplification. But the fact that our operationalisation enabled us to identify criteria pertaining to academic writing and could capture the examples above from Nesi and Gardner (2007), we suggest that our approach was reasonable for the purposes of the paper. Each criterion was agreed upon by the two authors. Our subsequent focus was those rubrics with a distinct writing criterion. Our qualitative sample is small. Nonetheless, given the aim of our study and conceptual framing, these examples demonstrate representational issues in the articulation of academic writing expectations in criteria, enabling us to illuminate the problem we wish to address.

Table 3

Example criterion that does not explicitly pertain to academic writing

3. Develop effective reflective skills and the ability to critically self-evaluate your level of development, to underpin further experiential learning in a real mentoring context focussed on learning.	Limited examination of key ideas of mentoring and the understanding of the needs of mentees in relation to your own mentoring practice and the educational context.	Critically examined the key ideas of mentoring learning and the needs of mentees in relation to your own mentoring practice and the educational context.	Explained how issues in mentoring learning and the needs of mentees have arisen in the educational context and examined these in the context of your own mentoring practice and how it has developed.	Demonstrated a perceptive and nuanced understanding of issues in mentoring learning and the needs of mentees, showing clearly how your thinking and practice has developed.
	Failed to outline any potential issues related to the educational context for mentoring and the needs of mentees and the development of your own mentoring practice.	Identified potential issues related to the educational context for mentoring and the needs of mentees and development of your own mentoring practice.	Explored ways of overcoming issues related to the educational context for mentoring and the needs of mentees and the development of your own mentoring practice.	Fully integrated an understanding and practical application of mentoring strategies and theories related to the educational context and the needs of mentees to further develop your own mentoring practice.

Analysis

We used reflexive thematic analysis (Braun & Clarke, 2022) to code the data. Throughout, we strove for reflexivity by discussing our expectations, interpretations and choices. In stage 1, we gained familiarisation with the data by re-reading the data set as described above. In stage 2, we conducted initial coding together, looking at a sample from the postgraduate rubrics. We discussed, assigned, changed and refined codes. Discussions helped us interpret the data and facilitated reflexivity. The sample coding resulted in a set of agreed codes which we then separately applied to the remaining data (see Table 4). Coding the entire data set generated more codes which we added and described separately. We then met to discuss the added codes and agreed a final list. Lastly, we organised the codes into themes which we present in the findings section.

Table 4

Codes and themes

Theme	Codes
Spelling, Punctuation, and Grammar	Spelling, punctuation, grammar
Structure, Organisation, Coherence and Concision	Clarity, coherence, communication, engagement, repetition, succinctness, organisation, structure, well written
Format	Formatting conventions, presentation, referencing, style, word count
Sources	Accuracy, quantity, currency, range/breadth, relevance/appropriacy, prescription, selection, criticality
Argumentation	Argument, description, synthesis, source integration

Ethical approval was gained prior to starting the study. Rubrics were anonymised so that courses/modules could not be identified while ensuring no loss of meaning. In our roles as writing scholars with teaching and learning leadership positions, we are cognisant of the power relations inherent in this study; it is not our purpose here to broadcast what we deem poor practice in drafting criteria. Indeed, we recognise some of the findings in criteria we have ourselves written or used. Rather, our goal is to illuminate the challenges that grading criterion pertaining to academic writing present and to reveal how rather than conveying expectations of academic writing for students, they can often perpetuate the 'mysterious code'.

Results

In this section, we present our findings. We begin by reporting the facets of academic writing found in the rubrics. Then, we present three 'focal' rubrics to illustrate how criteria pertaining to academic writing in disciplinary rubrics can potentially mystify rather than clarify expectations. We begin by noting that around half of the rubrics (only 11 out of 35 rubrics at the undergraduate level (UG) and 8 out of 15 at the postgraduate level (PG)) contained a discrete writing criterion according to our definition. Research has found that assessors are influenced by writing quality (Rezaiei & Lovorn, 2010; Heathman et al., 2020) and therefore omitting a criterion pertinent to writing could run counter to the doctrine of transparency (see e.g., Bearman & Ajjawi, 2019; Crusan, 2015). We also note that in most cases we could not ascertain the discipline or genre of the assignment through reading the criteria, possibly a missed opportunity to raise awareness of the disciplinary discursive traditions of the discipline or genre conventions of the specific assignment. Some criteria reference the genre of the assignment, such as 'report' or 'essay'. However, these names are often used as a generic term for different assignment types (Nesi & Gardner, 2012) and tell us little about actual genre expectations. In terms of discipline, the only two examples we found were references to following the norms of mathematical writing and ethnographic writing (we note that ethnography as methodology is of course used in multiple

disciplines, so this is tenuous). In sum, the criteria we collected do not all contain an academic writing criterion and do not seem to be particularly adapted to discipline or genre (see Good et al., 2012).

Space in assessment rubrics is at a premium; usually there are a maximum of 5 or 6 criteria, and only one or two are allocated to academic writing expectations. We were therefore interested in which facets of academic writing were selected for inclusion. Lecturers in Nesi and Gardner's (2007) study cited inter alia coherent structure, originality, creativity, understanding, insight, succinctness and adherence to academic conventions when asked about what they looked for in academic writing. In our data, we identified the following facets: sources; argumentation; structure, organisation, coherence and concision; spelling, punctuation and grammar; formatting. Table 5 provides examples of each.

Table 5
Facets of academic writing and examples from the data

Sources	Made critical use of a wide range of literature to synthesise new or deeper interpretations or understandings. Engaged in depth with the literature and practice debates and used them to develop your own conceptualisation(s) of the project topic (70)
	Made a reasoned attempt to develop your own conceptualisation of the [discipline] context, reconciling some significant contradictory and/or ambiguous aspects of the literature and practice (60-69)
Argumentation	Excellent command of the material. Coherent piece and appropriate use of essay format. Sophisticated argumentation. Excellent presentation and written style. (80-100)
	Some attempt to organise and some attempt at essay format. Some attempt at developing an argument. Occasional errors re. spelling and written style. (50-60)
Structure, Organisation, Coherence and Concision	Clear and concise, related to the presented material, succinctly written. (60)
	All relevant information has been communicated highly professionally, in a succinct, systematic and timely manner, using appropriate terminology' (70+)
Spelling, Punctuation and Grammar	No errors in grammar or spelling. (80+)
	Some attempt to organise and some attempt at report format. Some attempt at developing an argument. Occasional errors re. spelling and written style (50-59)
Formatting	Referencing impeccable using appropriate conventions. (80+) Incomplete list of sources. (40-49)

During the coding process, three potential issues with the criteria emerged: first, we observed a mismatch in terms of level of difficulty and the grades awarded across the bands. In other words, in some rubrics, less cognitively demanding writing skills are required for the upper grade

echelons than the lower ones, and a more sophisticated use of language is rewarded with a lower mark. Here we recall McNamara and colleagues (2010) who found that assignments demonstrating more sophistication or textual difficulty score more highly in the actual marking process – but in our case, that is not necessarily reflected in the criteria. In some cases, a criterion disappears in some bands and often higher band descriptors seem easier to achieve than lower band descriptors. We also noticed a shift in what is being assessed with the criterion across bands. This seems unhelpful for markers and students wanting to understand how the bands are distinguished and how a grade is arrived at.

Second, in several criteria there seems to be an illogical allocation of marks in relation to the level of writing expertise required. For example, particularly striking in our data set was the high premium placed on accuracy in reference lists. In some cases, an entire criterion is devoted to referencing and up to a fifth of marks are awarded if reference formatting styles (e.g., APA, Harvard) are strictly adhered to. This allocation of marks seems inconsistent with the level of difficulty of the task, particularly given the wide availability of referencing software. In some cases, equal marks are awarded for simply adhering to word counts and using APA referencing as for more cognitively demanding tasks such as constructing an argument.

Example 1

The following postgraduate criterion focuses on the selection and use of sources in the writing.

Table 6

Example 1 (20% of the final grade)

70+	Made critical use of a wide range of literature to synthesise new or deeper interpretations or understandings. Engaged in depth with the literature and practice debates and used them to develop your own conceptualisation(s) of the project topic.
60-69	Made a reasoned attempt to develop your own conceptualisation of the [discipline] context, reconciling some significant contradictory and/or ambiguous aspects of the literature and practice.
50-59	Critically analysed a range of relevant literature sources with respect to your [discipline] context including some at the forefront of current thinking, recognising some contradictory and ambiguous aspects.
40-49	Limited analysis of relevant literature sources with respect to your area of special interest and lack of discussion of contradictory and ambiguous aspects.

Finally, the data are characterised by ambiguity resulting in an overall lack of transparency in terms of what is required of students. As set out in our introduction, recent discourse in higher education has stressed (Bloxham, den Outer, Hudson & Price, 2016) – and problematised (Bearman & Ajjawi, 2019) – transparency in assessment. Yet many of the rubrics in our sample are characterised by ambiguity. A particularly problematic source of ambiguity is the use of adjectives and adverbials to differentiate performance. In the highest boundaries, this can result in hyperbole (e.g., 'excellent argument that is the highest academic quality' and 'outstanding

analysis […] to a high degree of excellence') or distinctions that are difficult to ascertain (e.g. the difference between outstanding, excellent and very good). In particular, we found examples where language seemed inadequate to convey the distinctions between grade boundaries. For instance, we found descriptions pertaining to structure moving from 'logical and coherent' to 'clear and appropriate' and 'sufficient' to 'inadequately structured and written, hard to follow, no logical structure'. These fine-grained differences are prominent in the data and strike us as problematic for an assessor: What is the difference between 'logical and coherent' and 'clear and appropriate? There were also instances where we felt a considerable amount of shared knowledge or knowledge outside of the students' experience was required, such as references to appropriacy or even 'professional standards'. There were also instances where we felt a considerable amount of shared knowledge was assumed (such as references to "appropriacy" or knowledge that perhaps resides outside of the students' university experience was required, such as references to 'professional standards' (although we acknowledge that these may have been taught on the module). In the remainder of this section, we will exemplify the problems described above by providing commentary on three illustrative examples of rubrics from the data set.

Rubrics are intended to show gradations in achievement with marks awarded accordingly. However, in this case, for a distinction, students use the literature to 'develop or deepen interpretations, understanding and conceptualisation'. In the lower 60-69 band, we find an additional facet: 'reconciling significant contradictory and/or ambiguous aspects of literature'. This is surprising given that reconciliation is likely more difficult than the higher band which has the vaguer 'engaging in depth with literature'. Like the 70+ band (but missing from 60-69), the 50-59 band asks for criticality but adds yet another aspect – currency. At this band and the lowest 0-49 band, the criteria no longer expect sources to be used to develop or deepen understanding. Instead, the focus shifts to analysis of literature. There is some gradation between the bands; for example, the 50-59 band does not require a 'reconciliation of contradictory and ambiguous aspects' (60-69), and critical analysis is required for 50-59, contrasted with 'limited analysis' in the 0-49 band.

Example 2

In this example, students are marked on the ability to present ideas and use sources to support them in the development of an argument.

Table 7

Example 2 (25% of the marks)

70+	Different perspectives and sources of evidence and ideas are synthesised into well-structured and consistent lines of argument
60-69	Important ideas, realisations and implications emerging from enquiry approaches and literatures are synthesised.
50-59	Ideas are presented clearly, accurately and concisely selecting sources and themes to pursue judiciously.

In comparison to the 70+ band, the 60-69 band retains synthesis of literature but replaces 'different perspectives and sources of evidence and ideas' with 'important ideas, realisations and implications emerging from literatures' (sic). The difficulty in distinguishing the difference between

these two descriptors is exacerbated by the fact that the 60-69 demands disciplinary specific evaluation of the material, asking for 'important ideas' while the higher band asks only for 'different perspectives' which we sense demands less criticality. The pass band (50-59) is again different: 'Ideas are presented clearly, accurately and concisely selecting sources and themes to pursue judiciously'. The failure band makes no mention of sources.

Example 3

The criterion in Example 3 targets source selection and (in one band only) how those sources are used in the assignment.

Table 8

Example 3 (worth 20% of the marks)

80+	Outstanding selection that makes a substantial contribution to academic debate.
70-79	Outstanding selection from a wide relevant and innovative range of perspectives and sources.
60-69	Selection from a wide and relevant range of perspectives and sources that draws upon contemporary academic debate.
50-59	Relevant selection from a range of perspectives and sources. Sources are mostly integrated into the overall argument.
40-49	Narrow selection, minimal use of sources, to support the argument.
30-39	Some / minimal relevant sources and limited topic coverage.

In this final example, most of the grade boundaries are differentiated by adjectives, adverbs or by verb choice; however, there is some repetition across the boundaries. Both distinction levels require an 'outstanding' performance. The 80 + requirement that a literature selection make a substantial contribution to academic debate seems onerous at the master's level as this would presumably require constructing a novel disciplinary argument. The 70-79 band loses this requirement, instead requiring the writer to make an 'outstanding selection' from a 'wide relevant and innovative range'. This raises two issues: the addition of a wide and relevant range seems to add more difficulty, and it is unclear how a range of literature can be innovative or a selection 'outstanding'. The 60-69 requires a wide and relevant (not innovative) range which this time 'draws on' rather than 'contributes to' academic debate. The 50-59 band modifies selection with 'relevant' which raises the question of whether selection at the higher bands should be relevant too. There are two fail bands. The 40-49 band features a narrow selection and minimal use of sources, but these are juxtaposed with the new requirement that the selection of sources support an argument. The lowest band also has a contradictory requirement – 'minimal relevant sources' but this may be a typographical mistake (minimal instead of minimally). Ultimately, from 60 upwards – namely the higher grades - students are assessed solely on their selection of literature, whereas the lowest pass mark requires integration of that literature to develop and argument – a more cognitively demanding writing skill.

The aim of this section was to provide the reader with a sense of how academic writing is presented in the rubrics in our data set, and some of the issues therein. In the next section, we

discuss the implications of our findings and offer concrete suggestions as to how academic writing criterion might be more usefully constructed.

Discussion

Our analysis showed that in the rubrics in our sample, academic writing criteria are not always included; if they are, they are limited to one or two criteria; they are not consistent across grade boundaries; they do not always logically progress in terms of grades awarded and level of performance; and ultimately, they do not appear to be transparent. Our findings may in part explain why some assessors pay little attention to criteria (Bloxham et al., 2011; 2016). Nonetheless, it is important to acknowledge at this point that grading criteria do not operate within a vacuum; assessors will mostly likely engage in some form of standardisation and moderation processes. And good practice would expect grading criteria to be contextualised or explicated somewhat through teaching on the module (e.g., McGrath et al., 2023).

What causes these issues? Constructing meaningful criteria is undoubtedly difficult (Banerjee et al., 2015; Yu & Lee, 2024) and the lecturers in our sample are operating under constraints specific to rubric writing. All the rubrics in our sample followed the same format: 5 or 6 criteria that are divided according to degree class percentages for undergraduates (i.e., 40 to 50 is pass, 50 to 60 is a 2:2) or distinction, merit, pass for postgraduate, presented in a grid. This banded format forces assessment writers to make fine distinctions in writing between mark boundaries which may well be artificial and forced (see particularly Example 3). It is perhaps time to revisit this format and explore alternative ways of presenting expectations for students.

Returning to the research question, we asked how academic writing is articulated in assessment rubrics across disciplines. Our findings revealed an omission of an academic writing criterion from rubrics; a focus on source use but with multiple inconsistencies; high marks awarded for superficial skills such as APA referencing and very little specific reference to disciplinary or genre conventions. Here we propose that non-formal learning and tacit knowledge (Eraut, 2000) have some explanatory potential. Difficulties may arise in drafting criteria pertaining to academic writing as this requires lecturers to verbalise what is essentially tacit knowledge. Most lecturers are not language experts (McGrath et al., 2023) and may have learned to write via non-formal learning, through a process of disciplinary acculturation (Good et al., 2012). This creates both problems of awareness: what are my expectations when it comes to students' writing at the different levels of performance? And representation: how do I communicate those expectations within the confines of a rubric grid? (Polanyi, 1967).

A tacit/formal knowledge lens provides a possible way forward. Eraut (2000) argues that tacit knowledge needs to be made more explicit if the goal is to communicate that knowledge. In his article, he suggests working with prompts to help knowers, in this case the writers of assessment rubrics, to understand better what they know. One such example is McGrath and colleagues' (2019) metacognitive scaffold designed to elicit university lecturers' hidden expectations of their students' assignments. Eraut and colleagues' (1998, cited in Eraut, 2000) research on learning in the workplace also found that 'the capability to tell was linked to people's prior experiences of talking about what they knew' and that this talking was more explicit in the presence of a) a mediating object which colleagues were used to discussing; b) regular meetings encouraging participants to articulate what they know; c) a crisis, review or considerable shift in their practice which resulted in an exchange of opinions and experiences.

The challenge for academic developers in higher education is to translate these findings into concrete staff development activities (for papers that deal with tools to support the drafting of criteria, see Allen & Tanner, 2017; Morton et al., 2021). One such example is as follows: course teams source an example assignment which has been previously given a good mark and is deemed to be well written. The team reads this assignment, without the writing assessment criterion (if there is one), and try, individually and then together, to articulate and then write a description of what is good about the writing. They then compare this description with the original assessment criterion which pertains to writing (if there is one). The team then reflects on their expectations about writing and how they communicate this to students. They discuss how this activity and reflection might impact on / change their future practice. Other example development activities could include discussing writing expectations in standardisation and moderation meetings and critiquing rubric criteria pertaining to writing.

Conclusion

We have argued that academic writing is integral to assessment in higher education, and yet the representation of academic writing in disciplinary criteria constitutes a mysterious code that is unlikely to make assignment expectations transparent to students. This is a missed opportunity: making the conventions of academic writing explicit and ensuring they are understood by learners could have a significant impact on demystifying assessment practice for all students, but particularly those students from marginalized communities who tend to be most at risk of poor attainment or dropout. Lack of clarity in assessment communications disproportionately disadvantages 'non-traditional' groups of students e.g. first generation in higher education, mature, racially minoritised, those from lower socio-economic backgrounds or those whose first language is not English, as students from these groups are often less conversant with academic language and university cultures and traditions, particularly assessment (Baloo et al., 2018; Witkowsky et al., 2016). Making academic writing expectations transparent may therefore alleviate entrenched inequities in achievement. We acknowledge that our study draws on a small data set from one university. To gain greater insight into assessment criteria pertaining to academic writing, future research should interview the people who wrote them, the assessors who are using them and the students who are reading them; and to expand the data to set to include examples from more than one institution, and course assessment packages more broadly.

Interpreting our findings through the prism of non-formal learning and tacit knowledge (Eraut, 2000), we have called for the design of professional development tasks to render lecturers' tacit knowledge of disciplinary writing more explicit to them, and to provide them with a metalanguage for communicating what constitutes effective writing for a given assignment. This entails higher education scholars drawing on the body of literature on developing writing rubrics for different genres (e.g., Chan et al., 2015; Rakedzon & Baram-Tsabari, 2017; Webster et al., 2000). Our hope is that more constructive representations of academic writing will result. These professional development tasks (such as the one we suggest in this paper) need to be designed and trialled empirically – another avenue for future research and evaluation projects for those interested in assessment. If these tasks prove to be limited in terms of their impact, debate is needed on whether the standard format of rubrics as seen in this paper is optimal or even adequate to convey academic writing expectations, or whether criteria in their current form should be rethought. But for now, our paper is a call to action to research how academic writing expectations in university

disciplinary assessment can be made more explicit both for the lecturer writing the criteria and the students reading them.

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