A SYSTEMIC MODEL FOR EVALUATING ONLINE COURSE DESIGN: A CRITICAL REALIST APPROACH

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Abstract

At the Durban University of Technology (DUT), the fall-out from the recommendation by the Rapid Response Task Team to transition from the blended mode of teaching to pure online due to the lockdown caused by COVID-19 in 2020 is now being felt. The realisation is dawning that not all courses are created equally and, more damning, that some assessment practices are not as good as others. To remedy this deficit, DUT is currently running an "Assuring the Integrity of Assessment Practices Project", under the ambit of the Centre for Quality Promotion and Assurance (CQPA). The focus is on evaluating selected online courses. As a possible option for evaluation, this paper proposes a systemic model for evaluating online courses, whether delivered in mixed mode or completely online. The research approach used to develop the model is critical realist, based mainly on Roy Bhaskar's philosophy, but also includes Margaret Archer's morphogenetic theory, which shows how principles developed in previous temporal epochs are not always in phase with elements of present-day contexts. This is particularly relevant in the post-pandemic era, where it has been observed that student grades which were skewed upward during the COVID-19 period are now plateauing in line with the period before COVID-19. While it is obvious that certain key course elements are now no longer available to both staff and students, a systemic model of course design is needed which distinguishes between the givens and the variables, so that the most urgent course deficits are identified and remedied or replaced. It will be argued that the systemic model of course design discussed in this paper provides insight into the nature of hypermedia communication. It might assist educators to distinguish between Internet communication and written (i.e., hard print) communication by showing how the functions thought essential for learning to take place effectively are carried out in different ways and with different effects in the different media. The model in fact provides a course design principle outlining 'felicity conditions' for effective course delivery. However, while it suggests the prerequisites for effective course design, the ultimate assessment of effectiveness is left up to the participants – teacher and students - to decide. As the design principle used is descriptive rather than value-laden, and can thus be adapted to suit the specific local values operating in any given learning context, it is well-suited for use in multicultural educational contexts. However, it must be noted that the model is work-in-progress, and may still be refined further in both research and use.

Keywords: student engagement, assessment practices, learning space design, online course assessment, critical realism, systemic modelling.

1 INTRODUCTION

The Durban University staff were some of the earliest pioneers of online learning, introducing courses on WebCT, Blackboard and later, Moodle. In fact, the first team of dedicated eLearning enthusiasts volunteered for what was then termed the "Pioneers Programme" [1, 2]. Those were early days for both authors. However, as our skills progressed, Preggy's into LMS Management, and Dee's into exploring a multitude of learning interactions for which LMSs could be used, it became apparent that academics were not in fact *that* interested in adopting online learning. The reasons were clear. Experienced academics had accumulated strategies and resources which they had at their fingertips and could adapt to any live context and audience at a moments' notice. Online courses not only required a huge amount of preparation in advance*,* but also demanded some deep thinking into to how course delivery was going to be effectively carried out, instead of relying on good old "chalk 'n talk" with the occasional video thrown in. The latter approach did not require a great deal of thinking or effort. It also ignored the reality that learning occurs as part of an interaction: with self, with peers, with teachers, and with the world. Moreover, while chalk 'n talk *is* in fact one exemplar of a "learning interaction", it is not very interactive, nor is it likely to be any use for preparing students for the world of work, the alleged purpose of a vocational university. So, lip service only was given to online learning, with syllabuses being loaded onto the LMS as "proof" that academics were indeed using online learning (they were not, except for a dedicated few). In their defence, it must be noted that the university was not equipped with the necessary computer labs to make this option viable, particularly for large lecture groups.

However, the University lockdown early in 2021 after the onset of the pandemic changed the situation almost overnight to staff and students having to adapt rapidly to emergency remote online teaching and learning (ERTL) [3]. The university was not prepared for this [4], nor were the staff and students. Close colleagues and family members of academic staff and students were passing away, leaving survivors grieving, traumatised and fearful. The lockdown caused great stress to academic staff as well as students, as lecturers were frantic with worry about what was happening to their students [3, 5]. Lack of "teacher presence" [6] heightened the angst for both staff and students, and the majority of our students in KwaZulu-Natal did not have the necessary resources for learning, in particular, quiet study space or Internet connectivity, to work at home [3]. Loadshedding meant that many students did not even have electricity, and had to work with pencil and paper by candlelight or solar torches. A look at some of the experiences of educators during the pandemic suggests that the term "completely online" is a misnomer and exists only in the confused minds of certain senior university managers [3]. The term "multi-modal teaching and learning" (South Africa, 2020) is also deceptive in suggesting that it might be advantageous to allow institutions to use any combination of delivery modes which could be seen to work. The reality is that most universities in Kwazulu-Natal do not have the expertise, experience or infrastructure (including funds) to provide such a veritable cornucopia of diverse options for students, let alone any way of deciding which combination/s of modes might work *in their specific context*. The reality as reflected in the literature both overseas and South Africa is that digital media offer prolific educational resources but are lacking in the immediacy given by the physical presence of participants [7]. The transition from the blended mode of course delivery to "ERTL" was a *real* emergency, in the sense that it had not been envisaged or properly prepared for by the University [8]. It became apparent that not all courses are created equally and, more damning in terms of both University reputation and actual degree throughput, that some assessment practices are not as good as others.

To address this problem and to remedy the deficit, DUT is currently running an "Assuring the Integrity of Assessment Practices Project", under the ambit of the Centre for Quality Promotion and Assurance (CQPA). The focus of the CQPA t is on evaluating selected online courses. However, the authors of this paper believe that our proposed assessment rubric integrated into Moodle courses is a better option than reviewing a few random samples in that it can provide extensive data to be used as evidence for online course evaluation. In order to show how the rubric was developed, the rest of this paper will describe the critical realist philosophy which informs the project, the systemic modelling process used to arrive at the course assessment principle, and the implications of some aspects of the modelling for hypermedia communication. The proposed rubric for online course assessment will then be discussed, before we conclude by suggesting the potential value of this project.

2   THE CRITICAL REALIST APPROACH

Assessment is paradigm-specific, also specific to nationality, university, faculty, discipline and even to individual staff members (particularly in the humanities). Different "assessment cultures" are found in different institutions [9]. These are in fact "sociological" paradigms which contain the beliefs, values and practices of particular groups [10]. The authors have adopted the critical realist paradigm, as a realist assessment model can accommodate different belief systems as part of the nature of the "real", and show them as powerful mechanisms both enabling and constraining learning. Critical realism is a philosophy, not a paradigm *per se*, and was developed primarily by Roy Bhaskar [11-15], whose most important contribution was in re-thematizing ontology. Bhaskar viewed ontology as a key issue in theories of being, whether the ontology involved was made explicit or remained tacit [16]. Margaret Archer [17-19] and Rom Harre [20, 21] were also contributors to the realist orientation, with Archer's [17] "morphogenetic approach" providing a substantive theory which explained social change, based on Bhaskar's concept of social structure.

Bhaskar's ontology contains three domains: the domain of real, the domain of actual and the domain of empirical:

> *The empirical domain includes that which we can observe – things that happen and exist according to our immediate experience. The actual domain is a broader one, and refers to that which transpires independently of the researcher or any other observer who might record it. Finally, the domain of the real includes those mechanisms that are productive of different events and other 'surface phenomena' [22].*

Stratification, or layering, is a common theme in critical realism, and occurs not only in the levels of Bhaskar's ontology, but can also apply to the research process, where, as the inquiry progresses, deeper layers of explanation are developed [23]. The notion of mechanisms operating at deep level distinguishes

critical realism from other traditions [22]. A shortcoming is that, while the critical realist philosophy offers a useful meta-theory for inquiry, it does not provide practical guidance on methodology in education or research [23]. However, critical realism is integral to the approach to supervisor feedback to students described here, as it is a philosophy which promotes the idea of social transformation by praxis. Social science, according to Bhaskar [13], "always consists in a *practical intervention* in social life".

Critical realism views reality as external, and, while we cannot know all aspects of the "domain of real" [11] we can arrive at an approximate view of reality by means of transcendental argument [24] . This is in contrast to positivism's accumulative-sense-data realism, which involves statistical deductions or rule-of-thumb formulae of causal relations operating in closed systems, rather than in-depth explanation of the social forces involved, which include human agency. Modelling open-ended systems as they operate in real-world settings is a typical critical realist activity, with the intention of transcending human experience to comprehend the nature of the "real" operating in social structures. Critical realists would not agree that all models are necessarily ideologically-biased, and observing social processes is also not necessarily compromised when guided by theory. Sayer [25] refutes the notion that "observation which is theory-*laden* must be theory-*determined*". In fact some level of theory is thought to be necessary in advance, in order to make sense of the inchoate mass of confusing details observable in social practices [12]. The positing of an external reality where phenomena can be observed by viewers with very different belief and value systems explains how people can agree on the existence of various surface manifestations of social reality without necessarily agreeing on their interpretation or value. Critical realism does not agree with the constructivist view that reality is a social construct, as this is a position based on the notion that the world can be understood only in terms which have been communicated to us. From the perspective of critical realism, this notion is viewed as "the *epistemic fallacy*, the definition of being in terms of knowledge … or, in displacement of this, in terms of 'language or discourse', the *linguistic* fallacy" [15]. It must be emphasised that critical realist research cannot be evaluated (or validated) in terms of other orientations, although researchers working in different paradigms may agree on the surface manifestations or phenomena, as well as on which practical measures might be used to achieve whatever outcomes are desired.

In Bhaskar's terms [12], social structures are defined as being mechanisms with emergent qualities. However, the term "social structure" is somewhat problematic [26], as Bhaskar, in introducing the concept, used the term ambiguously, to refer not only to the abstract form but also to the material existence of such structures [12]. For the purposes of this paper, the term social structure means "configurations of causal mechanisms, rules, resources, powers, relations and practices" [22]. It is used to represent "a set of relationships between people and other entities which sets the context for human interactions and can be seen to motivate social activity" [27]. However, social structures can be observed only in instances of their influence on social interactions, and not directly, as entities.

Archer's [17, 28, 29] morphogenetic approach, based on Bhaskar's philosophy, provides a theory explaining how social structures transform or endure unchanged. We come into the world inhabiting the social structures which have already been set in place, sometimes eons ago, by the interactions of past generations, the "long dead" [28]; our own social interactions confirm - or transform - these structures for future generations. The processes involved in social continuance ("morphostasis") or change ("morphogenesis") are complex cycles, and occur in temporal phases. As structure and agency operate in different time frames [30], social change needs to be analysed in terms of how structure and agency interact over periods of time, a process which Archer terms "historicity" [28]. Archer emphasizes the point that: "people are not puppets of structures because they have their own emergent properties which mean they either reproduce or transform social structure, rather than creating" [17]. While morphogenetic theory explains much about the interplay of agency and social structure, Archer herself points out in later works [19] that it does not deal with "the human capacity to transcend instrumental rationality and to have 'ultimate concerns'", which are ends in themselves. These are, she says, part of who we are, and what we care about and value as human beings [31].

Education, like other social practices, is already established when we first come to it [31], and is maintained and/or transformed by means of human agency, as shown in Bhaskar's [15] "transformational model of social activity". As Judd explains:

> In other words, we not only produce social products, but we produce or reproduce the conditions of their production. Thus, the social relations that must exist to make particular social phenomena possible must be social relations of production. And in order to understand the essence of a particular social phenomenon, we must understand the social relations of production making that phenomenon possible [32, our emphasis].

3 SYSTEMIC MODELLING

The social structure of education, as social structures are "activity-dependent" [12]. Social structures by definition do not function in a random or ad hoc way, otherwise there would be no social constraints on our actions, and self-actualisation by means of human agency would not be possible. This is because we would have no 'knowledge of' the social genres available, or 'knowledge how to' engage in them. There are systemic elements in social structures which exist over and above local social mores or immediate context, for example, the existence of social genres or forms. One of the key problems facing any kind of assessment analysis of mixed mode or total Internet course delivery is the dearth of suitable functional models describing the nature of communication itself [33, 34], which means that it is difficult to see what principle(s) might underpin communication in different learning interactions. Earlier models [35] tended to describe what online courses *should* do, but these reflected value systems rather than systemic functional relations transferable across different educational media, and which might remain relevant in diverse socio-cultural contexts, especially multicultural contexts. The earlier models also reflected the postmodern tendency to represent reality as discursive [36], and learning - and literacy - as being so context-specific that generalisation is near-impossible [37, 38]. As the UNESCO Report [39] noted, this approach tends to diffuse definitions of literacy, and, more ominously, to "ghettoise" non-western ethnic groups and make it difficult for them to gain access to mainstream literacy practices. In multicultural educational settings, a perspective is needed which represents social communicative functions as universally human [31], so that their infinitely diverse manifestations can be accommodated no matter what culture or context is involved.

This paper offers a tentative solution to the problem identified above with reference to research into the system of functions involved in human communication, which, it is hoped, will throw light on to the functional architecture of hypermedia communication and provide a useful template for evaluating mixed mode on totally online course design. It puts the case that online learning delivery offers an infinite range of possibilities [40]. The theory supporting this position is the output of research into the nature of communication in written mode, carried out within a critical realist orientation which posits an external reality arrived at by logical inference. In the research Franck's [41] social science modelling process, involving a type of reverse engineering, was used to arrive at the probable system of functions involved in human communication. The resulting system or "architecture of functions" Franck [42] went some way towards explaining why communication in written mode takes its idiosyncratic form: the various modes and genre options could then be viewed as result of different input into the system of communicative functions.

Franck's [41] modelling process resulted in formulating a theoretical model which was a primary system comprising a "functional architecture" [41] representing felicity conditions for communication, consisting of the *contextual, ideational, interactive, social* and *reflexive* functions [43]. For a communicative interaction to take place successfully, the following essential prerequisites were found to apply:

- The communicative interaction has to be *contextualised*, that is set in a context;
- Some kind of *ideational* content must be generated;
- There must be an *interactive* element;
- The message must have a *social* [1]loading;
- The *reflexive* function needs to be carried out [43, adapted].

The value of systemic modelling of composing was that it enabled educators to identify the commonalities (systemic) and variables (extra-systemic) in composing in order to give students feedback on the givens and negotiables in thesis writing. The form taken by communication in written mode is a temporally and spatially distanced interaction by proxy mediated by verbal text and usually occurring in a complex series of stages. The system of five functions "without which" communication cannot occur (at least, not successfully) suggested that the terms asynchronous/synchronous as applied to speech and writing give rise to a misleading dichotomy, and that the concept of distancing (not only temporal, but also spatial and social), combined with a consideration of the material mode of production, provides more insight into the characteristics of different instances of communication. It is therefore misleading to speak of writing as an "asynchronous mode": asynchronous communication using recorded spoken or graphic texts does not share identical characteristics with writing.

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[1] The terms "social" here refers to the conventions, rules and mores applying to different social interactions, and not to "socialising".

4 IMPLICATIONS OF DISTANCING FOR HYPERMEDIA COMMUNICATION CONCLUSION

The issue of synchronicity/asynchronicity has important consequences for the performance of the communicative functions: for example, asynchronicity hinders the performance of the reflexive function, and hence, with the maintenance of the interaction. But then again, so do other forms of distancing, such as spatial, and to categorise speech as "synchronous" and writing as "asynchronous" is considered to set in place a misleading dichotomy [44] which does not do justice to the range of genres available. For example, speech can be distanced and/or asynchronous, and writing can be immediate and synchronous - or distanced and synchronous, with none of these instances being a particularly special case. The reality is that the levels of complexity involved go beyond a linear continuum. The synchronous/asynchronous dichotomy also obscures some of the distance issues impacting on hypermedia communication, for example, the difficulties speakers experience presenting in discussion rooms at virtual conferences, which is technically "synchronous communication", but can be in reality an uncomfortable and isolating experience for presenters. An application of the system of functions to various instances of communication suggests that it is *the degree and type of separation which is involved which affects the operation of the functions* rather than mere synchronicity or asynchronicity. This may account for the anomalies provided by very formal speech or very casual writing, which cannot be fitted into stock generalisations about orality and literacy and contribute to the difficulty of establishing an oral/literate continuum [44, 45]. At least three types of distancing can be seen to have impact on the way in which the communicative functions are carried out: temporal, spatial and valence distancing. The term "valence" signifies the expected value of work outcomes [46], and has reference to the value-loading of communicative outcomes, for example, on religious or formal occasions, or situations which are considered crucial turning points in life, such as marriage proposals or job interviews. This adds its own kind of distancing to interactions, and usually stimulates heightened rehearsal and review in the form of mental interactions-by-proxy before and after the critical moment.

The implications of different kinds of distancing for hypermedia communication are that use of the Internet in education, commonly perceived as a "distance" option, may in fact - paradoxically - be more "immediate" than the on-campus education taking place in large institutions. This is because massed student numbers also cause a type of distancing (an addition to the three identified above). Before the advent of web-based learning, most educational institutions were in fact using distanced communication modes by use of textbooks, notes and written examinations. These were not used merely because of the spatial and temporal distancing of those communicating, but because it was not feasible for teachers to handle large numbers of students in an immediate capacity. "Massification", then, can also be seen to act as a distancing factor because it delays interactions and extends them past the time when all participants could still reasonably be present. Large numbers also add the distancing effect of formality (i.e., valence distance), as in mass lecture situations. An online classroom with discussion forum or email for students in a large group can create a sense of intimacy and immediacy and offer far more opportunities for one-on-one communication than a "live" mass lecture. Moreover, online quizzes and self-tests can give individual students far more personal attention in the form of detailed feedback to answers than a teacher is capable of in a "live" classroom. The rubric for course assessment proposed in this paper is considered not only to be of value not only for gathering course evaluation data, but also for giving students a personal say in what *they* thought of the course, as well as the option to suggest improvements.

5 PROPOSED RUBRIC FOR ONLINE COURSE ASSESSMENT

The course design principle suggested by the system of communicative functions is as follows [47]:

- **Contextual:** This function relates to the social context in which knowledge is constructed, and requires the course designer to decide how learning is to be contextualised.

- **Ideational:** This function relates to the source of the knowledge to be constructed, or the process whereby knowledge actually comes into being (it also raises the question of course content).

- **Interactive:** As knowledge is constructed in learning interactions (including interactions with resources), the course designer needs to anticipate how participants will interact in constructing knowledge.

- **Social:** The social parameters, conventions or constraints operating in a given learning situation need to be identified and made explicit to learners, particularly in respect of local assessment criteria.

- **Reflexive:** This relates to how participants will reflect on and assess their performance in constructing knowledge, and includes the issue of formal assessment (if any) and how it will be carried out, as well as course assessment [47].

Table 1 shows how the functions have been applied to both course design and the assessment of online courses.

Table 1. The proposed online course assessment model

Essential functions	As applied to course design	As applied to assessment of online courses
Contextual	This function relates to the social context in which knowledge is constructed, and requires the course designer to decide how learning is to be contextualised.	Was the way in which the course was contextualised likely to achieve the desired outcomes? [2] *What WERE the course outcomes?*
Ideational	This function relates to the source of the knowledge to be constructed, or the process whereby knowledge actually comes into being (it also raises the question of course content).	Are the ways in which knowledge was constructed likely to achieve the desired outcomes? *What WAS course content and how was it intended to be acquired or learned?*
Interactive	As knowledge is constructed in learning interactions (including interactions with resources), the course designer needs to anticipate how participants will interact in constructing knowledge.	What learning interactions were set in place? *Did they ASSIST with achieving the desired course outcomes, and how/ how not?*
Social	The social parameters, conventions or constraints operating in a given learning situation need to be identified and made explicit to learners, particularly in respect of local assessment criteria.	What were the institutional/disciplinary conventions/constraints and how were they communicated to students? *Did students FOLLOW these "rules" successfully?*
Reflexive	This relates to how participants will reflect on and assess their performance in constructing knowledge, and includes the issue of formal assessment (if any) and how it will be carried out, as well as course assessment.	What forms of student assessment were used and were they suited to the desired outcomes? *Did student scores REFLECT their expertise as indicated by their course interaction?*
	Course Evaluation Students and instructors should also be asked to give feedback on course evaluation x	Kindly rate the effectiveness of the course in terms of achieving the course outcomes. Your comments could include some suggestions for improving the effectiveness of the course.

Many of the above elements were echoed in the early literature on online learning. For example, Jonassen [48] uses the terms "active", "constructive", "collaborative", "contextual" and "reflective", but these were not until much later identified as the functions necessary for constructing knowledge. The advantage of using such a generalised system to analyse mixed mode courses is that it does not place value judgements on how knowledge should be constructed, which means that it can be applied to courses operating within any paradigm or orientation, even when some (or all) of the above choices are left up to the students. In the project proposed by the authors, the rubric is to be drawn up using the course design principle model as a template, and fitted into each Moodle course, for students and staff to give feedback on the effectiveness of each course in terms of achieving the desired outcomes.

In Table 1, the "essential functions" refer to those functions necessary for learning to take place successfully, that is, in terms of achieving the desired outcomes, which will differ amongst institutions, faculties, departments, disciplines, and even instructors. The general questions are those which need to be asked overall, as they relate to learning in general, and are not paradigm-specific. Specific questions will need to be added by universities, faculties and/or departments. The answers, will, of course, be different in different university contexts, and they will need to be input by course designers (or LMS Managers) so that students and instructors answering the questions will know what parameters were set in place and why. Note that students and instructors *could* also be asked to suggest better

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[2] Note the term "outcomes" is not specific to outcome-based education (OBE), but is intended to refer to objectives, aims, purposes or whatever words appear on the syllabus.

options, particularly if the options provided by the university were seen not to work, when they answered the questions branching out from these middle-order questions.

Specimen questions might be as follows (replace "you" with "students" for instructor input):

[**Contextual**]

    1   Did you achieve the course outcomes?

    2   Were the course outcomes relevant to your intended career/profession?

[**Ideational**]

    3   Was it easy to find out what you needed to know to pass the course?

[**Interactive**]

How easy was it to get in touch with the following?

    4   Course content (notes/books/web resources)?

    5   Fellow students?

    6   Instructors?

[**Social**]

    7   Were the course rules clearly communicated to you?

    8   Were the university rules (faculty, departmental, subject) clearly communicated to you?

[**Reflexive**]

    9   Were assessment methods and deadlines clearly communicated to you?

    10 Did you have any difficulty performing the methods or meeting the deadlines?

Participants would input all answers by check box on a 5-point Likert scale, with an optional entry for "Comment" under each question (or section). Submission would not be allowed until all 5-point questions had been answered. There might be a case for correction of answers before submission, but this would need to be tested out for feasibility (with perhaps, rather, a second chance to redo the whole assessment). Table 1 also shows an option for overall Course Evaluation for students and instructors, in case they have general comments which cannot be accommodated "in little boxes" or were issues not thought of when the questions were input. This might go first, but it was thought better to let respondents focus on the finer details first before coming to a general conclusion. There are also some general questions for students and instructors which might be based on the general features of online learning, for example: "Was there any option for face-to-face interaction with peers or instructors?" or "Was online learning the most suitable/workable option for instruction in this course?" However, the questions to be asked will be adjusted pending testing out by various participants. It is thought that this course assessment rubric will give students a "voice" in terms of expressing learner satisfaction (or not), and course instructors the chance to gauge the impact the courses are having on their students, as well becoming aware of areas of excellence or concern. The student and staff feedback data can then be made available to CQPA auditors as evidence for their assessment of Moodle courses, giving them quick access to overall trends, and identification of excellence as well as specific or general problem areas. Course designers should also have access to the feedback data, as they may be able to explain why certain course provisions were made in the light of constraints caused by changes in contextual factors (e.g., lockdown under the pandemic). We propose that the assessment module is released to students at the end of each course and is not made compulsory, but that students (and staff) completing and submitting the course assessment are given a banner. It is essential that the feedback is anonymous for both staff and students, and that this is made clear to participants at the outset.

The systemic model of course design proposed for the assessment rubric has already been used for both course design and assessment of diverse types of courses, including the following:

- Secondary school and undergraduate integrated scenarios and project work (actual, not virtual) [49];

- Undergraduate mixed mode academic courses [2, 50-52];

- Research courses (mixed mode and totally online) at BTech (Hons), masters and doctoral level [53];

- Staff induction (offline and mixed mode) [49].

6 CONCLUSION

The use of an assessment rubric "fitted in" to Moodle courses is thought to have the following advantages. In immediate terms, it can provide auditors with more reliable and authentic evidence for course assessment than random sampling. Next, it shows course assessment as being relevant to *all* participants, and not just something imposed by outside auditors, who often do not understand the "vibe" of the course *or* the "trends" in the students attending the courses. Speaking of trends, it has now become a universal practice, accelerated by online purchasing during the pandemic, to ask all customers to evaluate the service of the providers of any goods or service, so students should by now be aware that feedback is something that is valued by providers. At a more general level, the assessment rubric is it based on the principle that there are generic aspects of course design which have probably been in operation for epochs: it is the *delivery mechanisms* which have changed, and are still changing exponentially in response to contextual issues. If not only academic staff, but also students, realise this sometimes inconvenient truth, they will be better equipped to face future teaching/learning interactions in whatever context these may occur. They will also be better equipped to question - and avoid - dubious course providers and to appreciate those who provide exemplary service.

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