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**Using Standards to Improve Quality: The Construction and Application
of Academic Standards**

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The world is going mad about standards! Increasingly we hear of standards being used as a policy instrument of economic rationalism to drive reform in industry as well as in education. Concepts of best practice, benchmarking, quality assurance, total quality management and identification of sub-standard performance, have become part of the jargon of industrial reform. Each relies on commonly accepted standards that may be used to make accurate judgments on individual and organisational performance.

This paper explores processes used in setting and implementing academic standards and suggests limitations on their use in quality assurance or as part of the market mechanism driving economic rationalism. It will describe research currently being undertaken on ways in which policy makers, curriculum writers, teachers and students make sense of academic standards.

Background

Standards are used in every field of human endeavour to define what is acceptable and what is not. They are used as rallying points, instruments for influencing the behaviour of individuals or institutions, as a means of communicating expectations and of providing quality assurance for consumers. In essence a standard is a 'tool for rendering appropriately precise the making of judgments and decisions in a context of shared meanings and values' (Sykes and Plaistrik, 1993).

The drive for standards-led reform coming from business and industry has spawned a standards industry in its own right. The International Standards Organisation (ISO) has defined a series of standards applicable to a wide range of service and production industries. A positivistic view of standards that sees as them as external to the users, forms the basis of such an approach. For those who view standards as being socially constructed such approaches are problematic. Standards are, at least in part, internal to the user, value-laden and contestable. We do not know enough about the construction of standards and yet the world is placing a lot of faith in them!

Similar trends are evident in education. Corporate managerialism has become central to the reform process in that it impels educators to

quantify outputs and outcomes as the basis for accountability and continuous improvement. Pascoe (1995) compares the 'standards movements' in American and Australian education and the linkage of standards with the accountability for the achievement of the national goals for schooling. The achievement of this standards-driven education reform must be dependent on the definition of commonly accepted standards. There is a tendency to talk about these standards as if they are fixed, absolute, value-free, held by all, and capable of being measured precisely.

The view of standards that transfers the absolute nature of a measure, such as the standard metre, to fields of human endeavour, such as service delivery, provides a high degree of comfort for many. Such standards are used in some fields where precise measurements are

possible and appropriate to achieving the desired effect. However, in many other fields the standards set are influenced by contextual factors such as cultural norms and community expectations, technological change and political forces. In such cases the desired effect from which the standards flow is value-laden and socially constructed. Problems arise because of the difficulties in achieving shared meanings and values and the lack of trust in an approach to measurement or assessment which is not perceived to be value-free.

Human service industries in general, and education in particular, are

becoming increasingly subjected to quality assurance measures that are based on positivistic views of standards. In these fields there is no readily identified or commonly agreed tool for making the precise judgements and decisions required in contested (or high-stakes) contexts. Acceptance of the view that standards applied in these fields are constructed, not discovered, may contribute to the review of measurement tools and the meanings attached to them by policy makers.

The recent development and piloting of a new approach to defining and communicating standards in post-compulsory courses by the Secondary Education Authority (SEA) in Western Australia affords an opportunity to increase understanding of the construction of standards and the impact that curriculum design has on the nature and use of academic standards. This development has been undertaken in response to a number of policy imperatives impacting on post-compulsory education.

The Common Assessment Framework (CAF) approach hinges on the definition of conceptual and process outcomes which form the focal point for a common assessment framework. The outcomes are elaborated through knowledge and skills components, performance criteria and recommended resources. The approach is based on the philosophy that standards for student performance are most effectively communicated if they are fully integrated throughout the teaching-learning program. In particular it is believed that this approach presents opportunities for improved performance by students through the clearer and more consistent application of course standards. However, there are challenges for teachers in constructing a common interpretation of those standards.

The new Year 11 Australian Studies course, in the Society and Environment curriculum area, is one of a large number of courses developed using this approach. In addition it represents a departure from traditional practice in that it is not based on a particular humanities discipline. It has been designed to cater for the rapidly growing number of post-compulsory students who aim to enter TAFE or employment after secondary school. Another contextual factor was the call from various sources for opportunities for students to develop and demonstrate a generic competency termed cultural understanding. Political pressure was also exerted to provide citizenship and legal education with a more practical orientation than the current highly theoretical, discipline-based courses which cater mainly for students who learn through symbolic representation.

Australian Studies provides a most useful case study for the analysis of the process of constructing academic standards. It was first implemented in the 1995 academic year. The author has been involved in the development of the curriculum and assessment framework, resource materials and quality assurance processes that comprise the instructional rubric. It is also linked with the use of learning outcomes, key competencies and a different view of assessment and pedagogy in post-compulsory schooling.

The purpose of the study is to explore the nature of standards and the ways in which they are used in the reform process to achieve

improvement in the quality of teaching and learning. In the enthusiasm for reform there is a tendency to view standards as absolute and unproblematic. The intent of this study is not to challenge the importance of standards in the reform process but to highlight their

complexity and problematic nature. These attributes have significant implications for the ways in which we construct standards and make decisions based upon them.

It is contended that conventional wisdom about education standards in the high stakes environment of post-compulsory education is no longer appropriate for the changing student population. This wisdom asserts that standards are rigorous and therefore acceptable if they are seen to be fixed, absolute, discipline-based, content-driven and measurable using technical strategies (particularly norm-referenced measurement strategies based on external, written examinations). Competition between students for limited opportunities is seen as the purpose of curriculum and assessment. A 'zero-sum' philosophy prevails. It assumes that for every successful student there must be an unsuccessful one, otherwise the curriculum standards are questioned as not being rigorous enough. Assessment is viewed as something imposed on students at the end of the course, or a section of it, in order to sort them out in a kind of gate-keeping exercise. Unless there is an acceptable level of failure then standards are perceived to be slipping. This mind-set has tended to restrict access and success in post-compulsory

schooling for a significant proportion of the age cohort. It is no longer appropriate because changes in the social, economic and political environments of schooling have changed the function of the post-compulsory years. That function can no longer be the 'weeding out' of non-academic students. The values upon which we base our view of educational standards need to be refined so that the goal of providing a meaningful general and vocational education for the whole of the student cohort may be fulfilled.

The research question is therefore:

What is the nature of an academic standard as applied to a post-compulsory course in Western Australia and how does a social constructivist approach to setting and using standards assist in the improvement of the quality of student performance?

Theoretical Framework

The social constructivist perspective views standards as social symbols. "Accounts of the world take place within a shared system of intelligibility - usually a spoken or written language.

These accounts are not viewed as the external expression of the speaker's internal processes (such as a cognition, intention) but as an expression of relationships among persons" (Gergen and Gergen, 1991, 78). The collective generation of meaning is shaped by social processes "by which the world is understood"...through "social

artifacts, products of historically situated interchanges among people"
(Gergen, 1985,267).

The social constructivist framework shapes the view of teaching, learning and academic standards that underpins this research. Learning is the construction of meaning by the learner. Cognition is adaptive and serves in the organisation of experiences rather than the discovery of transmitted knowledge. Knowledge is not passively received but is actively built by the learner. Rather than transmitting information the effective teacher facilitates challenging learning situations and the encouragement of reflection. Assessment is not just about making judgements about substantive learning but also about the process through which students construct knowledge. Standards are built in a context and are limited in their utility by the language used, as well as the multiple realities and agendas of those involved.

The recognition of the significance of context of educational change signifies an organic rather than a mechanistic view of the way things happen in the real world. Capra (1983) presents a powerful rationale for the holistic view of the world which must transcend the

reductionist, mechanistic view which has dominated the industrial era and has resulted in a series of crises for the planet. The sociopolitical perspective must transcend the technological perspective. "We live in a globally interconnected world in which

biological, psychological, social and environmental phenomena are all interdependent" (p229). Recognition of this, Capra argues, represents a paradigm shift at a critical turning point for humankind, which will result in a new consciousness and a transformation of unprecedented dimensions.

The context of the development of academic standards is therefore not restricted to the classroom or to the school. Systemic and national contexts are particularly important and they may be seen as nesting into the higher order global systems. It is necessary to recognise the interconnectedness of all systems and structures operating in society in order to unravel the nature of standards. An holistic view enables links to be drawn between education and other fields of human endeavour. It becomes apparent that trends in educational change including the use of standards have much in common with trends in areas such as commerce and industry and health services. Increasingly standards in all of these areas of human endeavour are being driven at an international level.

In this sense there are broader structural processes that determine the context for developing academic constructs such as literacy and citizenship (see Gee, Hull and Lankshear, 1996). Ultimately, standards are constructed within a social totality. They aren't neutral or value-free. Bessant (1988) also illustrates this point by linking the peaks in the public debate about academic standards with periods of economic restructuring in the 1890s, 1930s and 1970s. Gusfield (1984,

6) argues that an observable phenomenon such as auto fatalities - becomes 'real' through "a selective process from among a multiplicity of possible and potential realities". Through the "prevailing rhetoric and dramatic ritual we are locked into a consciousness" of a public problem or phenomena "which narrowly shuts out alternative conceptualisations and solutions".

It is important to recognise that constructivism is not without its critics. In particular it is criticised for its lack of critical purchase. All accounts of reality are equally good or bad, true or false. Reality exists only in people's minds, implying that there are as many realities as there are people (solopsism). "I hope that the pilots on my flight aren't constructivists" quip the cynics!

Hendry (1996,) argues that "solopsism can be avoided simply by specifying that knowledge is constructed in interrelation with the world... Constructivism represents a synthesis of idealism ... and realism". The continuity of social and physical reality is explored by Searle (1995) who argues that social constructions are based on reality. 'Institutional facts' (eg. that piece of paper represents money which has a particular function ascribed through collective intentionality) exist on a continuum with 'brute facts' (eg. Mt Everest has snow and ice at its summit). The distinctive feature of institutional facts is symbolisation, the basic capacity underlying language and all other forms of institutional reality. "Money, property, marriage, governments and universities all exist by forms of

human agreement that essentially involve the capacity to symbolise" (p228). Truth is determined by correspondence with fact. The cultural world comprises institutional facts which are epistemologically objective and ontologically subjective. Through his philosophical analysis Searle establishes a rationale that sees social constructivism founded on physical reality, not in competition with it, as some would argue.

A number of competing positions exist within the constructivist epistemology. Phillips (1995) describes these as sects within the

constructivist 'religion'. He argues that the strength of this epistemology is the attention it draws to the active involvement of the learner in the production of knowledge. The weakness is the tendency to relativism and the claim that all knowledge is consensus-based.

Phillips provides a framework of three continua which may be used to analyse the competing positions.

The first is the unit of analysis - either individual psychology or public discipline. In the middle of this continuum are those constructivists who have an interest in "how individuals build up bodies of knowledge and how human communities have constructed the public bodies of knowledge known as the various disciplines" (p7).

That position best describes the theoretical position taken in this research.

The second dimension is characterised by Phillips as "humans the creators versus nature the instructor". Is knowledge made in isolation from nature or is it discovered in nature? The position taken in this research is that developed by Searle and captured by Popper in the view "man proposes, nature disposes" (cited in Phillips, p9).

The third dimension refers to who is involved in the active process. At one end of this continuum are those like Piaget who focus on the individual as the active constructor and at the other are those who contend that knowledge construction is a socio-political process. This process is rational in that "it proceeds deliberately according to methodological rules and criteria that are consciously held within a sociocultural group" (Phillips, 9). That is the position taken in this research. Individual teachers and students are involved in making standards but these standards will always be validated in the sociocultural group. The knower is situated in an historical and sociocultural setting.

In summary, social constructivism provides the theoretical framework for this research. Phenomena such as the academic performance of students may be observed using artefacts such as academic standards. The latter are socially constructed symbols which exist independent of the observer and which provide reference points that imprecisely measure academic performance. These symbols are constructed through a socio-political process and as such are contestable and subject to

interpretation.

Significance of the Study

This study may make a contribution to improving quality of performance in both education and industry through unpacking the nature of standards and the ways in which they are constructed and used. The perception of standards as being absolute and unproblematic may have negative implications for the achievement of reform. What are the implications for industry reform in general, and education reform in particular, if reform is based on an inappropriate perception of the nature of standards?

It is also intended that the study may make some contribution to understanding the difficulties faced by policy-makers in achieving educational change. Because of the contentious nature of such change and the reality that policies alone do not guarantee change in the classroom there is a degree of cynicism about the value of educational reform and the leverage of educational policies. Focussing on the interactive process which applies to the negotiation of new academic standards may provide valuable insights into the conditions contributing to effective educational change.

Constructing academic standards is a critical but complex process. An understanding of that process may contribute to increased understanding of what works for teachers and students. It may also provide insights

into the impact on student performance of making transparent the standards expected of them. Indeed there may be some transference to the management of performance of people in schools and other organisations.

The construction of standards for the Australian Studies course has taken place in a dynamic policy-making environment. The emerging standards frameworks of learning outcomes and key competencies have influenced the shape of the course. Consensus on the precise definition of the particular Key Competency of cultural understanding had proved elusive at the time of development of the course.

Therefore, it has not been possible to achieve consensus about the standard to be used to make judgements about the degree to which students demonstrate cultural understanding. It was acknowledged by policy makers, however, that Australian Studies could and should make a significant contribution to this type of construct.

Also at this time the demand for increased comparability of assessment with simultaneous increase in flexibility for school delivery of post-compulsory curriculum provided a challenge for course developers and policy makers alike. The use of outcomes, a common assessment framework emphasising performance assessment and performance criteria, represent the strategy constructed to address these issues. It is envisaged that this case study may make a contribution to testing the

usefulness of this strategy.

More generally, the course was developed at a time when the usefulness of a course-based approach to defining upper secondary curriculum was being questioned. Such an approach, it has been argued, narrows the curriculum and restricts the potential for student achievement of outcomes defined for eight learning areas. School and system level measurement, evaluation and decision-making will be based on a learning area framework. The increased level of academic specialisation required in the post-compulsory years poses particular difficulties for the implementation of a standards framework based solely on learning areas. It is envisaged that this research may make a contribution to the understanding of the value of a course-based approach to the achievement of quality in post-compulsory education.

The research is also timely because of the recent formation of the Curriculum Council in Western Australia with the legislative brief of implementing an outcomes-based, K-12 Curriculum Framework. The outcomes-based common assessment framework approach has focussed attention for course developers on the relationship between student achievements in the compulsory years of education and those in the post-compulsory years. Similarly, issues related to the linkages between the latter and post-secondary education and training have also been more sharply focussed.

The move to a competency-based assessment approach in the vocational

education and training sector has raised a number of significant issues. What is the relationship between course outcomes and competencies? What is the relationship between generic competencies and course outcomes? What is the relationship between specific knowledge and skills objectives and outcomes? Is it appropriate to view standards-referenced assessment, and normative assessment as being mutually exclusive? Is it possible to have norm-referenced and criterion-referenced standards?

This research is also situated in a context of increasing pressure on education authorities to release 'league tables' of data on school performance. Measures of school effectiveness have been simplified through the use of economic rationalist metaphors such as 'value added'. The appropriateness of such standards for highly complex phenomena is hotly disputed. Should the community accept that only some dimensions of educational performance can be measured in the

quantitative paradigm? Should educators respond to the community's rightful demands for feedback on school performance by constructing a manageable qualitative approach?

There may also be a linkage between emerging academic standards and those that are increasingly being used in business and industry. How may an understanding of the construction of academic standards transfer to the standards movement in business and industry, particularly in

measuring the quality of human service provision? Does the debate about educational standards and the way they are used to improve the quality of student performance offer any insights into the highly problematic area of human resource performance management?

It is not expected that the research outlined in this proposal will provide a definitive answer to each of these questions. However, it is considered that they are interrelated with the research problem and may provide useful avenues for further research.

Methodology

As befits the constructivist meta-theoretical position adopted for the study and described earlier qualitative methodology has been used to conduct this research. An ethnographic approach has been used in that there will be strong emphasis on exploring a social phenomenon rather than setting out to test a hypothesis. Primarily this has involved working with unstructured data which is not coded at the point of data collection.

An instrumental case-study approach (Yin, 1989) has been employed as the basis of data collection and as a way of organising and presenting data. This has allowed the researcher to analyse the context and the experiences of the individuals involved in each of the cases selected for research. The case for study is the Year 11 Australian Studies course accredited by the SEA for implementation in 1995. Study of its

implementation has been conducted at two school sites.

Analysis was also made of observations of the researcher as a participant in the process of developing the curriculum design of the CAF approach. This process occurred from 1993 to 1994. Documents and records of meetings prepared in this period will provide the data for analysis. In addition, other individuals involved in the process were interviewed.

Reports related to the Key Competencies Project will also be analysed. The CAF model and the Australian Studies courses form a part of this project which was conducted from 1994 to 1996. The CAF Evaluation report also forms a valuable source of data.

Documents describing the standards of the Year 11 course have also been analysed. Writers and SEA committee members have been interviewed.

A journal kept by the researcher in the process of developing student resource materials for the Year 11 course (1994-1995) will be analysed to identify and describe issues confronting the writers in translating the course standards. Approaches used to address these issues will also be analysed. Others involved in the writing team have commented on the observations made.

The researcher also had the opportunity to participate in teacher meetings before the first year of course implementation and in a

consensus meeting to achieve comparability in the application of assessment standards. Observation notes from these meetings have been analysed in this research.

Observations were classrooms of two teachers who are currently teaching the course. Unstructured interviews with teachers and students in

those classrooms were used to develop an insight into the ways in which the standards are developed, communicated and applied in the classroom.

Sampling of school sites and teachers has been based on the opportunity to learn, rather than the opportunity to predict frequencies. Opportunity to learn includes the seeking out of cases which may provide disconfirming evidence. Through this sampling procedure it is expected that the story of the experiences of these teachers will unfold, as learnings are constructed and embedded in contexts. Spiro et al (cited in Stake, 1993, 241) describe this as cognitive flexibility. Such openness to new interpretations is achieved through "case-based presentations that treat a content domain as a landscape that is explored through 'criss-crossing' it in many directions, by reexamining each case 'site' in the varying contexts of neighbouring cases, and by using a variety of abstract dimensions for comparing cases".

Students at both of the selected schools were also interviewed.

Classroom observation and interviews with teachers and students in the case-study schools provided the opportunity to look for the ways in which teachers interpret the course standards and the ways in which these are communicated to and translated by students. The constructivist theoretical framework views the teachers and students as standard-makers rather than standards-takers. Analysis of student work samples and the process used to provide feedback to students were also observed. Particular attention was given to recording the dialogue between teacher and student in order to understand the process by which a standard is constructed.

Preliminary Findings

The economic rationalist perspective of standards does not sit comfortably with the observations made of the ways teachers and students used the standards for Australian Studies in the case study schools.

Both teachers have been positive about the foundation provided by the new course structure. They have also enjoyed the flexibility offered in selecting content and learning strategies that interest their students. It is also evident that the teachers have constructed their understanding of the standards in their interaction with the students. They each have a general concept of the types of behaviours they expect. The performance criteria don't clearly tell them that. In fact the words seem to get in the way. The words intended by the

course writers to communicate the course standards are useful in providing the scaffold for teachers to build their assessment practice and to justify the decisions they make. Both refer to their own experience as a reference point for knowing the standards. They also plead for more opportunities to interact with other teachers, because it is in those situations that they share ideas, gain validation for their own practice. As Longino (1993, 112) argues, knowledge is actively "constructed not by individuals but by interactive, dialogic communities". Teachers make meaning of the words on paper as part of a community of practice.

The contexts for both of the classes are significantly different.

In one case the teacher is firmly in control, has access to considerable resources. She tells the students "your parents have sent you here because they expect high standards". And in a friendly manner she uses the standards as a device to remind the students that she is watching their performance at all times. She has a warm but business-like manner with the students in their classroom interaction. She acts as the facilitator using a constructivist approach to learning. But the more process-oriented approach represented by the CAF approach suits her desire for teacher control of the learning

process. "I tell them that in their project work I'm watching what they do and how they are applying the research skills, I like that

aspect of this new approach although it is really time-consuming."

One student comments in describing how she knew she had performed well on the exam "I knew I had written a reasonably long answer and I had given the teacher what she wants".

In the other case the teacher is relatively inexperienced. She is seeking confirmation whether she is doing "the right thing". She grows in confidence through the year. She believes that the basis of her work lies in developing a good rapport with the students. "It's a struggle because there are high rates of absenteeism, some students start work but complete little." She confides that she feels that the more experienced teachers in her school "have a problem with her less disciplinarian approach". At one stage her students smuggle a pizza she has bought for them into class. She has used the course to develop understandings of the 'racism' debate. She talks of the constant battle with some students who see that she is trying to push her own views about Reconciliation onto them. There is a strong representation of Aboriginal students in the school population, although there are none in her class. At the end of the year some of her students comment that the one thing they have gained from the course is that they have changed their opinion on Pauline Hanson. Before they read her speech they supported the Hanson stance. But when they had the opportunity to read the speech in class they changed their opinion.

The broader national context about Hanson, Wik and Dr Kemp's drive for higher literacy standards through funding controls provide the broader

canvas on which these comments may be placed.

Drawn from these data and those gathered in other contexts, such as the teacher consensus meetings, the social basis of academic standards in this case study course becomes evident. The standards are used to build layers of meaning. They are based upon a physical reality of students engaging with tasks set for them and demonstrating in the process some general behaviours that teachers are looking for.

Teachers and education policy-makers use standards to achieve conformity of students and credibility for an essentially uncertain and contested enterprise - the preparation and selection of the young for future predicted realities. There is a tension in the use of standards between their use as a device for improvement and as device for control or for proving conformity. As such education standards are prone to be used, at various levels of social interaction, as symbols of authority and to provide an image of certainty. Those who gain control of these symbols are able to shape the way in which a social phenomenon is constructed as a public problem about which something must be done.

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