

Apart from the moral or ethical obligation to ensure that law is adhered to, there are significant practical considerations for doing so. In an era of increasing competition to provide undergraduate and postgraduate education to domestic and international students, product differentiation and marketing requirements assume greater importance. Commitment and adherence to, and development and application of, ethical and moral codes in respect of the business of education is only the first step in a continuous process of self-assessment.

## References

1. See generally Coady & Sampford, *Business, Ethics & the Law*, Federation Press, Sydney, 1993
2. Murphy, 'Creating Ethical Corporate Structures', (1989) 30 *Sloan Management Review*, No. 2
3. Sinclair, Improving Ethics through Organisational Culture, in *Business, Ethics & the Law*, op cit fn.1, p128
4. The following references may be useful in the area of consumer protection in general, and misleading and deceptive conduct in particular:  
Miller, *Annotated Trade Practices Act*, 14th edn, Law Book, 1991  
Goldring, Maher & McKeough, *Consumer Protection Law in Australia*, 4th edn, 1993  
Taperell, Vermeesch and Harland, *Trade Practices and Consumer Protection*, 3rd edn, 1983
5. *Trade Practices Act 1974* (Cth) ss.82(1) & 87
6. *Trade Practices Act 1974* (Cth) s.80(1)
7. *Trade Practices Act 1974* (Cth) ss.75B & 79
8. *Futuretronics International Pty Ltd v Gadzhis* [1992] 2 VR 217
9. See generally an unpublished paper by Goldring, Stoianoff & Considine, Honesty and Competitiveness in the Delivery of Education, National Conference on Higher Education & the Law, University of Wollongong, 7th May 1992
10. Although see generally Goldring, Stoianoff & Considine, *ibid*
11. *Petera Pty Ltd v EAJ Pty Ltd* (1984) 7 FCR 375
12. *Photo Production Ltd v Securicor Transport Ltd* [1980] AC 827
13. See generally, Goldring, Maher & McKeough, *Consumer Protection Law*, Federation Press, Sydney, 1993
14. eg *Fair Trading Act (NSW) 1987*, s.4(1)
15. See eg *University of Wollongong Act (NSW) 1989*, s.5
16. In NSW, for example, TPA s.52 corresponds with FTA s.43
17. *Parkdale Custom Furniture v Puxu P/L* (1981-82) 149 CLR 191
18. *Brown v Jam Factory Pty Ltd* (1981) 53 FLR 340 per Fox J at 348
19. *Stanley Laboratories v. Federal Trade Commission* (1943) 138 F.2d 388

20. TPA s.4(2)
21. *Global Sportsman Pty Ltd v Mirror Newspapers Ltd* (1984) 2 FCR 82
22. *Parkdale Custom Furniture v. Puxu P/L* op cit fn 10
23. *Given v CV Holland (Holdings) Pty Ltd* (1977) 29 FLR 212
24. *Henjo Investments Pty Ltd v Collins Marrickville Pty Ltd* (1988) 79 ALR 83
25. *Benlist Pty Ltd v Olivetti Australia Pty Ltd* (1990) ATPR 41-043
26. John Belcher, International Students Officer at Queen Mary College, London; quoted in D. Walker, 'Hard-sell Recruiting by British Universities Assailed' (1985) 30 *Chronicle of Higher Education* 39
27. D. Ingram, 'Establishing Support Services for Overseas Students: The Importance of After-Sales Service', in *Responsible Recruitment - Report of a Conference on Overseas Students* (1986)
28. TPA s.80
29. TPA s.87
30. TPA s.82
31. eg. FTA (NSW) s.68
32. TPA s.79
33. *Janssen-Cilag Pty Ltd v Pfizer Pty Ltd* (1992) ATPR 41-186
34. s.44 of the Fair Trading Act NSW
35. Penalties were doubled under the Trades Practices Legislation Amendment Act 1992, effective from the 21 January 1993
36. *Eva v Southern Motors Box Hill Pty Ltd* (1977) 30 FLR 213 at 215 per Smithers J
37. (1979) 38 FLR 126 at 133
38. (1977) 30 FLR 213 at 222
39. See particularly powers under TPA s.80 and s.80A
40. *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* (1985-86) 162 CLR 25
41. *ibid.*
42. *Ridge v Baldwin* [1964] AC 40
43. *R v District Council of Berri* (1982) 31 SASR 342
44. *R v Toohey* (1981) 151 CLR 170
45. *Associated Provincial Picture Houses Ltd v Wednesbury Corporation* [1948] 1 KB 223
46. *Minister for Immigration & Ethnic Affairs v Pochi* (1980) 31 ALR 666, and see generally *Allars Introduction to Australian Administrative Law*, Butterworths, Sydney, 1990
47. *Kioa v West* (1985) 159 CLR 550 at 584 per Mason J
48. PP Craig, *Administrative Law*, Sweet & Maxwell, London, 1983
49. Tyler, What is Procedural Justice? (1988) 22 *Law & Society Review* 103

# Australian higher education, constructivism and the relevance of the transmission view: A reply to Coady and Miller

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In a recent article in the Australian Universities' Review, Coady and Miller (1993) argue that the functions of Australian universities are ill-defined, and that debate concerning theory of tertiary education suffers from a lack of theoretical precision. They promote a modern conception of the university based on a re-examination of John Henry Newman's seminal work. Specifically, Coady and Miller argue that the liberal purposes of a university as the pursuit of new knowledge and the cultivation of students' intellects, and a utilitarian purpose as the fostering of personal skills and competencies contributing to economic growth, are not incompatible (as Newman himself acknowledged).

Coady and Miller's main point is well taken; Newman's consideration that "the true and adequate end of ... a university ... is thought or reason exercised upon knowledge" (cited in Tolley, 1975, p.25) does not disclaim the utility of such an end, especially with regard to economic productivity. It is suggested that the 'exercise of reason', or commonly, critical thinking, is the capacity to make confident logical judgements which are based on a breadth of knowledge but tempered by an awareness of ignorance; relative to a particular field, it is a discriminating breadth of vision (cf. Tolley, 1975), and perhaps is the most potent quality that business, professional and trades people alike can possess.

However, Coady and Miller's suggestion that the transmission of so-called liberal knowledge by academics cultivates students' intellects and intellectual virtues (e.g. logical thinking and balanced judgement) is highly questionable. Liberal knowledge is "knowledge informed by reason" and "particular facts that have been related to one another" (p.41). In Coady and Miller's view, a goal of a university is to transmit liberal knowledge, and students must acquire or absorb this knowledge, just as their teachers before them did "through years of training" (p.41). Students only acquire intellectual virtues "after a great deal of disciplined work under the guidance of appropriately trained teachers" (p.42).

Coady and Miller's explicitly stated transmission view of teaching and learning appears to be based, in turn, on objectivism (e.g., Duffy & Jonassen, 1992; Jonassen, 1991); in this view, knowledge exists externally as a real entity. People can have valid knowledge insofar as they can have a correct representation or copy of entity knowledge, and valid knowledge, in turn, can be 're-presented' externally as a real entity. Objectivism leads to a conceit of knowledge, in that, it is assumed that certain people can aspire to become privileged holders of valid representations of real entity knowledge, or authorities compared to less experienced students, and can capably organise re-presented objective knowledge and map efficiently, or impose, the latter onto learners. In teaching based on objectivism, although students' interpretations sometimes are tolerated, learners rarely are encouraged to express their ideas; rather, as Jonassen (1991) argues, "it is the role of the teacher ... to interpret events for students). Learners are told about the world and are expected to replicate its content and structure in their thinking (p.10). Consistent with this view, Coady and Miller imply that tertiary students must become 'disciplined' in accepting or absorbing 'facts' which have been suitably structured by thoroughly trained academics.

Objectivism contrasts primarily with constructivism. Two fundamental principles of constructivist philosophy are that knowledge exists in people's minds only, and that new knowledge is created from within in interrelation with things in the world (Hendry, submitted). Constructivism is seen to be useful notably in Science and Mathematics education (e.g., Wheatley, 1991) and, more recently, Tertiary education (King, 1993; Koch, 1992). Research on the use of constructivist teaching strategies at different academic levels shows that these strategies are effective in promoting students' procreation of acceptable ideas and procedures. In particular, in Mathematics education, compared to traditional teaching methods, constructivist methods result in students' development of higher levels of thinking as measured by standard and non-standard tests both (Koch, 1992; Cobb et al. 1991). Students enjoy learning in a constructivist classroom (Hand, 1988; Hand, Lovejoy & Balaam, 1991), and perceptions and attitudes toward the subject concerned (Cobb et al. 1991; Hand, 1988; Hand et al.1991; Koch, 1992; Stanbridge, 1990).

Constructivist teaching consists fundamentally of providing opportunities for students to explain and evaluate their ideas in discussion (e.g., Cobb et al. 1991; Yackel, Cobb & Wood, 1992; Driver & Oldham, 1986). Recently advocated cooperative learning strategies (King, 1993), whereby, for example, students participate in small-group discussion to achieve a consensus with respect to a specific issue (Johnson & Johnson, 1985), are consistent with constructivism and constructivist teaching methods. Significantly, Newman's view is that a university must be a place where, "by familiar intercourse and for the sake of intellectual peace ... (people can) adjust together the claims and relations of their respective subjects of investigation. They learn to respect, to consult, to aid each other" (cited in De Lacey & Moens, 1990, p.3) (emphasis added). Newman's original vision agrees with an emphasis by modern constructivists on students' learning or sense-making and collaboration during discussion and problem-solving (e.g., Cobb et al. 1991; Yackel, Cobb & Wood, 1992), and receives support indirectly from related research.

Specifically, Koch (1992) evaluated the effectiveness of constructivist teaching strategies in teaching a remedial tertiary arithmetic course. Participants were 89 undergraduate students; 25 and 64 students, matched on a pre-test of mathematical skills, comprised the experimental and control groups respectively. Students in the experimental group participated in small-group and staff-led class discussions to solve mathematical problems. Students in the control group received lectures on mathematic skills only and students' questions were answered by staff. On tests of mathematics anxiety and students' attitudes toward themselves as mathematics learners, students in the experimental group showed less anxiety and more positive self-perceptions than those in the control group. Students in the experimental group "out performed (those in) the control group in mathematical skills" (p.16); results of t-tests performed on post-test means between control group classes and the experimental group were significant at the 0.001 level. Burron, Lynn

James and Ambrosio (1993) found that trainee teachers' participation in a cooperative learning technique, called Learning Together, in physics and chemistry laboratory sessions, increased students' competency in listening and oral communication, problem-solving, group effectiveness and leadership, compared to students taught by traditional methods. Proficiency in these areas, in turn, apparently is valued by North American employers (Burrton, et al. 1993) and, no doubt, by their Australian counterparts.

By implicitly maligning constructivist views, Coady and Miller do the purpose of their article a disservice; increased levels of logical thinking and more effective communication skills displayed by students in the studies above precisely are those 'intellectual virtues' which Coady and Miller argue are "necessary ingredients for the bringing into existence of the much vaunted 'clever country'" (p.42). They claim (in the same sentence) that students' ability "to absorb new knowledge speedily" (p.42) also is a necessary 'ingredient'. However, as constructivist research (above) and an expansive literature on secondary and tertiary students' ideas about natural phenomena (e.g., West, 1987) suggests, far from promoting students' 'cleverness', encouraging students' to absorb new knowledge obediently and speedily results in dysfunctional learning (Hendry & King, in press). Perhaps what is more important is that such encouragement leads students to believe that there are things called 'facts' and that some interpretations are infallible and never need to be challenged.

On this point, although Coady and Miller say they accept that knowledge can never be certain, they contradict themselves by rejecting the view that there are no facts, and that "truth is endlessly deferred" (p.41). In contrast, the constructivist position is that we can never determine that we know the world as it is, because we cannot 'step outside' our knowledge constructed from within to compare it with the world (e.g., Larochelle & Desautels, 1991); we cannot even "imagine the possibility or the meaning of such a comparison" (Einstein & Infeld, 1938, p.31). Knowledge is 'factual' or 'valid' only to the extent that it is useful, or works and remains constant relatively, rather than because it has become a veridical 'representation' of the world absolutely. For example, in science, Newton's seemingly immutable law of gravitation and Coulomb's law are not valid absolutely; when applied to massive and charged bodies each law is more and less useful respectively (Niaz, 1993). In mathematics, knowledge can never be certain because assumptions or axioms on which proofs are based "continue to be open to re-examination" (Lampert, 1990, p.30). There are no singular, absolute 'right' or 'wrong' answers or ideas, only more and less useful ones. Coady and Miller's claims that truth can be acquired, or even is "hard to attain" (p.41), cannot be justified.

## Conclusion

Transmission teaching is summarised aptly by the old adage, 'tell them what you are going to tell them, then tell them, then tell them what you told them' (Good & Brophy, 1990, p.201). However, knowledge and interpretations cannot be given to students, and students do not accept knowledge from outside because it was never there in the first place (e.g., Bell & Freyberg, 1985; Yackel, Cobb, Wood, Wheatley & Merkel, 1990). Learning and education are processes of inquiry and creation, rather than acquisition, and transmission teaching based on objectivism just doesn't work; worse, when transmission teaching is over-used in primary, secondary and tertiary education, it only hastens the slide toward a stupid country.

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## Reviews

### An unconvincing document

*Achieving Quality, Higher Education Council, National Board of Employment, Education and Training (1993, reprint) ISBN 0 644 25195 6 Australian Government Publishing Service, Canberra unpriced, 189pp.*

In June 1991, the Minister for Higher Education and Employment Services wrote to the Australian National Board of Employment, Education and Training "asking the Higher Education Council to report on the quality of the higher education system". This volume, which first appeared in 1992, is the report produced by the Council.

More recently, in March 1994, the Government has accepted the first set of recommendations emerging from the newly-formed Committee for Quality Assurance, established in the wake of the Report. As a result of these recommendations, based on the Committee's judgements of Universities' quality assurance systems and the quality of their outcomes, the Government has made differential allocations to universities to maintain or enhance the quality of their higher education provision (1).

This review is being written both at a distance from Australian higher education and at some elapse of time since the Report appeared and the subsequent new arrangements were brought on stream. In what follows, therefore, I shall concentrate principally on raising some general issues out of the report which have, I believe, applicability internationally. After all, many countries across the Western world are reviewing and developing their arrangements for quality assessment.

The striking aspect of the Report is that it is a curate's egg, having two distinct components. On the one hand, it reviews possible new arrangements and comes to a set of firm recommendations by which quality in higher education might be assessed at the national level in Australia. On the other hand, it contains a review of the literature in relation to a number of quality matters, and offers a range of observations and implied recommendations as to how institutions might maintain and develop the quality of their programs. On the face of things, this dual agenda is a curiosity; and it has the makings of an inconsistency, if not a contradiction. I shall return to this point.

As an essay of quality, it has a number of problematic points. In its grappling with the concept of quality, we receive the now customary allegiance to the view that "no single workable 'definition' of quality is possible" and that "the starting point must be an explication of what is trying to be achieved by a system, institution or course". The possible incompatibilities between each of these three system levels is not seriously explored. There is some attempt to deal with the tension between a national system and diverse institutions but the possible tension between institutional mission and heterogeneous courses is not admitted.

In relation to the system-institution tension, we are told that "notwithstanding the need for diversity, there are characteristics which all higher education institutions share". This attempt to run together diversity with uniformity is understandable in terms of the dilemma faced by the modern state in projecting public services onto the market and in wanting to exert ever-increasing control; but the tension here has the character of a circle not so easily squared as the Report implies.

Also, the Report falls in with current orthodoxy in suggesting that purposes and goals have point in terms of different "stakeholders", that is those groups with "legitimate perspectives on what constitutes a quality outcome from our universities". Who is to count as having a legitimate perspective is not addressed. How differences between those constituencies are to be resolved is not explained.

It is asserted, conveniently, that "there is little doubt that the view of employers, professional bodies, students and staff of the universities all converge when it comes to describing the desirable characteristics of graduates". Much of the "evidence" offered is that of a survey of chief executives in both business and higher education, which turns on a number of generic skills. Even if it were the case that academics who typically define themselves in relation to disciplines were prepared to grant a place to generic skills equal to their Vice-Chancellors, substantial questions would still remain: do the two communities - the academic world and the world of work - have the same understanding of generic skills (for instance, of communication skills)? And do they hold similar views as to the way in which such skills are to be introduced into the curriculum and over the relationship with more discipline-specific skills?

That section on transferable skills moves on to a consideration of competencies, admittedly mainly in relation to professional education. The Report acknowledges that higher education is a process not to be determined "solely by the tasks to be performed in the workplace". Accordingly, "The real challenge for the universities is to explore how outcomes which are distinctively higher education in their character can be enhanced by utilising aspects of competency-based approaches" (Report's emphases). This exhortation includes, we can note, the assumption that outcomes can be enhanced through competency-based approaches.

A chapter on "Factors Affecting the Quality of Higher Education" turns out to be a relatively familiar summary of some forms of contemporary wisdom on maintaining teaching quality. Clear aims and objectives, appropriate assessment patterns, policies for staff development and the collection of consumer views (both staff and employers) are all ingredients of quality provision. Missing from all this are two things: first, that all such ideas are - and ought to be - inherently controversial in higher education; and secondly, any acknowledgment of the view that university staff are professionals who are self-motivated and that the worth of what they do resides, at least partly, in the ownership of their work and their ideas. Consequently, also missing is any serious examination of the idea that improvement has to be based on ways in which staff collectively come to be self-critical and mutually self-informing.

A section on resources notes that the system has produced successive efficiency gains and that the reducing unit of resource is tending "to drive institutions towards teaching, not learning". The Report comments that "It seems reasonable to conclude that higher education is paying its way in efficiency terms". This section, in fact, is a tacit admission that quality is deteriorating across the system as a consequence of government policy making; but the point is not made explicitly. In short, the onus for maintaining and improving quality rests with institutions rather than being in any way a responsibility of government.

In the final section, the Report moves to its substantive recommendations for establishing quality mechanisms at the national level. "Some kind of national structure" for quality assurance should be established. For this purpose, "a committee of the Higher Education Council should be established under the National Board with membership appointed by the Minister". The Committee would invite universities to participate in a regular review and audit of their mechanisms for monitoring and improving the quality of their outcomes. The basis of the evidence would lie in institutional documentation, audit visits and national data.

On the basis of the resulting evaluations, recommendations would be made to the Minister(s) "on the allocation of specially designated funds to universities". So as to offer a quality enhancement function, the Committee should produce a summary of the important characteristics that led to the location of institutions in particular bands, while keeping confidential the details of the relationship between individual institutions.