# 科目名稱:教育學方法論

(說明:滿分100分,共計四題,每題佔分25%)

- 試詮釋博班學生為何需要思考教育研究之方法論課題?並說明教育研究方法 論主要是關注哪兩大類課題之探討?並分別從科學派典、詮釋派典及批判派典 說明各自賦予這兩大類課題之內容?同時據以評析自己碩士論文與適用派典 之契合程度(需有理由陳述)?
- 2. 質性研究的研究設計,常出現所謂的從「微觀到鉅觀」,而 Harry Wolcott (1994) 曾強調「質性研究真正迷人的地方不在於資料收集的過程,而在於資料分析的 過程」,請舉例說明上述二者之關係。
- 3. Simpson's paradox的實例:當研究者將數個小群資料合併成一組較大資料時,相關性可能會改變,甚至改變方向。請看以下某大學入學申請時,性別歧視之例子:



以文學院為例,女生之錄取率優於男生(1/3>1/10),而理學院女生之錄 取率亦優於男生(.90>.80)。但就全校而言,男生之錄取率卻優於女生 (.70>.56)。請根據此資料分析結果回答以下問題:

- (1)有無適當的統計方法,可以考驗男生與女生間具有性別歧視嗎?
- (2)**Simpson's paradox 的實例**是一種生態繆誤(ecological fallacy)或是一 種個體繆誤(individualistic fallacy)?
- 為何量化的研究報告最好除了報告P值(p-value)之外,尚須報告效果值 (effect size)?請列舉一量化研究結果說明之。

# 科目名稱:教育革新專題研究

(說明:滿分100分,共計四題,每題佔分25%)

- 1. 試說明 Michael Fullan 對教育深度變革的觀點,並據之論述十二年國教在推動過程中,還需注意那些實施要項,才可達到深度變革之理想。
- 台灣曾經透過課程綱要修訂,增設台灣文化相關系所,增設本土教育委員會, 編纂專書等措施,嘗試進行本土教育的課程改革,試評述之。
- 3. 教育部日前公布民國 103 年實施的國中教育會考,英文科將加考約 20 至 30 題 的英聽考題,且 103 年將不計入成績,104 年才正式採計。如果您是教育部長, 會如何推動這項政策?請說明其背後的理論並融入您個人觀點,論述之。
- 4.請就「教育革新」之學理觀點評論我國「國民中小學九年一貫課程改革」之利 弊得失,並據此提出對我國「十二年國民基本教育課程改革」之建議。

# 科目名稱:教育行政領導與決策專題研究

(說明:滿分100分,共計四題,每題佔分25%)

- 您認為、並條列舉出有哪些行政領導理論可以幫助您辦好一所學校?又扼要說 明該理論的內涵為何?並進一步闡述,以證明你所列舉的領導理論足以支持您 辦好一所學校。
- 2. 依照您所學的決策理論,請說明理性決策的歷程與步驟為何?從相關文獻、新 聞報導、與您過去的耳聞與經驗中,請列舉學校領導者任內做重大決策的事件 有哪些?身為一校之長,請針對您所述這些事件中,如何做一個明確、理性的 最佳化的決策。
- 3.1980年代以後的領導理論被稱為「新領導途徑」,請問:
  - (1) 在 1980 年代前後的領導理論有何不同? (5%)
  - (2)請就1980年代前後的領導理論,各列舉三種,並簡單介紹及評論之。 (10%)
  - (3)如果您是一位國中校長,您會用什麼領導方式經營您的學校,原因為何? (10%)
- 4.12 年國教即將實施,請問:
  - (1) 12 年國教的政策目的為何? (5%)
  - (2) 請利用三種政策分析模型, 簡要分析 12 年國教的政策歷程。(10%)
  - (3)如果您是一位教育政策的決策者,您會採用何種策略發展12年國教政 策,原因為何?(10%)

# 科目名稱:教學評鑑專題研究

(說明: 滿分100分, 共計四題, 每題佔分25%)

- 1. 請論述教師評鑑、教學評鑑、學生評鑑教師教學三者之間的關係。
- 2. 教師教學評鑑,可包含教師自評、教學觀察以及教學檔案評鑑,請論述三者之間的連結及其使用時機以提升教師教學品質。
- 3. 根據 McLean (2001)的文章--- "Rewarding teaching excellence. Can we measure teaching 'excellence'?中指出:(請見附檔)

"Excellent teaching extends beyond *effective* teaching, i.e. knowledge of subject matter, availability of staff member, organization, clarity, encouragement of student discussion, feedback and appropriate assessment. It is about *quality learning outcomes*, e.g. student understanding, ethics, morality and attitudes." 請提出你對上述論點的評論。評論中請具體說明你的立場(贊成或不贊成), 並且論辯你的想法。您的論點中請引用<u>至少一至兩位</u>國內外學者的文獻或研 究,支持你的想法。(本題提供 McLean (2001)原文電子檔,該文章之資料和 內容,可以引用做為回答問題)

- 4.從評鑑的方式來觀察,國內高等教育系統中針對教師所進行的教學評鑑方式, 多以「同一份工具、固定的題目內容」之學生意見調查問卷,施於不同教師、 不同科目領域、不同學門和層級(大學部至碩博士班)。
  - (1)請評論採行此種方法之理由,並討論此種方式對於教學品質的貢獻與限制。
  - (2)請以「student ratings of instruction」之方式做為基礎,提出改進目前評鑑方式的可行模式或作法。



# Rewarding teaching excellence. Can we measure teaching 'excellence'? Who should be the judge?

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#### The medical teaching profession in perspective

The issue of rewarding 'teaching excellence' has long been contentious, despite teaching activities being the fundamental purpose of tertiary institutions (Finucane et al., 1992; Olmesdahl, 1997; Gray, 1999; Mennin, 1999). Most university mission statements boast that the institution prides itself in the quality of its teaching (e.g. University of Natal Medical Faculty—"It serves all sections of the communities . . . by the excellence in its teaching. . . . The quality of its teaching allows students from all backgrounds to realise their academic potential . . ."), yet most institutes have poorly defined criteria for recognising this 'teaching excellence'. In reality, more often than not, academics are employed for their research capabilities, based on their publications in accredited journals, rather than for the quality of their teaching (WFME, 1994; Gray, 1999). Similarly, promotion on the grounds of teaching ability is also generally poorly supported, although Harden (1999) believes the situation has improved in recent years. In Tuckman & Hageman's (1976) study, remuneration of some 3000 American academics depended on several factors, of which excellence in teaching was not a feature. Currently, while at eight South African medical schools the reward system for teaching ranges from none to a substantial financial incentive, the general perception of the criteria for these awards was that they were vague, unknown, restricted to certain levels of academics or were for didactic teaching, not giving full credit to course development or educational research (Olmesdahl, 1997). It is understandable then why many of the guidelines and recommendations from global organisations promoting medical education reform insist that the recognition of teaching and the development of teaching staff become integrated into the reform process (WHO, 1994a, 1996; WFME, 1994, 1998; Health Professions Council of South Africa, 1999). The WFME (1998), in attempting to implement minimal international standards in medical education, includes as one of its recommendations on the aims and content in medical education that "In medical schools, teaching skills of faculty staff should be given the same credit as research, and indicators of education competencies must be identified" (p. 551). In the South African context, the 1999 Health Professions Council of South Africa's document on undergraduate medical education and training also calls for rewarding of teaching excellence as health education moves towards providing a more holistic foundation for its graduates. In Mennin's (1999) view, however, most institutions have double standards: one for research and patient care and one for teaching, a situation that needs to be rectified urgently. Ayers' (1986)

comment that teaching is part of an ancient profession that is currently undervalued and misinterpreted should therefore not be surprising.

Although there are those who believe mechanisms do exist at universities to determine staff efficiency and effectiveness in teaching (Centra, 1994; Ramsden, 1991; Thurlow, 1993; Gray, 1999; Thompson Bowles, 2000), these criteria are often vague and difficult to implement (Olmesdahl, 1997). In the University of Natal Medical Faculty's Plan for Implementing the University's Mission Statement (18 July 1990), the Faculty "seeks to achieve excellence in teaching by recruiting the best staff, rewarding excellence in teaching and establishing vigorous programmes for staff development" (p. 8). How it actually goes about implementing this is, however, not documented. The Faculty believes that "a necessary preliminary to 'understanding excellence in teaching' is the identification of those characteristics which are considered desirable and of methods of assessment in terms of these" (p. 8), offering no clue as to what is considered desirable and what these methods of assessment should be.

# The changing role: from teacher to educator . . . and more . . .

Characterising and identifying teaching excellence in any discipline is difficult and will depend on several factors including course of study, type of student, level of student (undergraduate vs. post-graduate) and type of curriculum, to mention a few (Das et al., 1996). In Medicine, the task is made even more difficult with the universal call for reform and more appropriate curricula (more student-centred) in order to meet the demands of health service delivery in the 21st century. Thus, the requirements of the medical educator in an institution practising problem-based learning (PBL) are considerably different from those of a lecturer/teacher at a traditional medical school, just as the requirements for a medical science educator are different from those of the clinical teacher. As the global demand for medical education reform gains momentum, most medical schools are in the process of re-evaluating their curricula and adopting more appropriate teaching and learning strategies, such as PBL or community-based learning, in order to train doctors to deliver an effective health care service (WHO, 1994b;

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WFME, 1994). This paradigm shift in medical education therefore requires that teachers and lecturers become educators who will have to become responsible not only for providing students with the skills to access information, but also to engender in them the correct attitudes, ethics and life skills. It is also imperative that academic staff members in institutions undergoing curriculum development become involved in the reform process, which, for some, may challenge their epistemological beliefs and conceptions of teaching and learning (Ramsden, 1992). Those who have 'practised' thus far as teachers without any pedagogical beliefs will have to reflect on their role in such a new curriculum. Many academics will not be sufficiently skilled to cope with these new curricula and will undoubtedly require training and development (Harden, 1999). The WFME (1998) and the Health Professions Council of South Africa (1999) both allude to this in their recommendations: "Teachers in medical education must have reasonable levels of teaching skills . . . As well as to function as mentors" (WFME, 1998, p. 551) and "Lecturers should also receive academic support with regard to innovative educational approaches, strategies and teaching methods and techniques" (Health Professions Council of South Africa, 1999, p. 10). Medical educators in new curricula will also be expected to expand their knowledge base and teaching skills: "Teachers' knowledge of other disciplines must be increased in order to assure an integrated curriculum" (WFME, 1998, p. 551) and "Lecturers should be experts in training and teaching too, not only masters in their subjects" (Health Professions Council of South Africa, 1999, p. 10).

Apart from teachers broadening their expertise, there are additional, less obvious academic roles that educators will have to assume which will have considerable impact on student learning and the final product, the community doctor. Reference is rarely, if ever, made by international medical education bodies to these subtle but no less important roles. Many societies today are multicultural, in part as a result of historical colonisation, but also because of the ease with which individuals obtain new citizenships (WFME, 1998; Ludvigsson, 1999). Students and medical graduates are no exception, frequently articulating between institutions around the globe. With reference to this, the WFME (1998), in recognising the importance of the doctorpatient relationship in health care delivery, recommends the establishment of minimal international standards in medical education, even suggesting a "global core curriculum" to cope with this migration and multicultural societies (p. 552). If, in the training of doctors, there is a need for graduates to have a "respect for patients and colleagues, without prejudice with regard to background, race, culture, gender, way of life, etc. . . ." (Health Professions Council of South Africa, 1999, p. 8), then surely the responsibility for engendering this tolerance of diversity rests with educators? Furthermore, if, as Kai et al. (1999) believe, in developing cultural tolerance and diversity awareness, learners become aware of their own attitudes and prejudices, avoiding stereotyping and responding to patients as individuals, then educators need to become role-models for students. In institutions where staff may feel disenfranchised and themselves the subjects of discrimination, this may be a tall order (Gwele, 1998). Referring specifically to tertiary institutions where redress is necessary following a history of repression (such as in South Africa), Goduka (1998) has advocated a more proactive role for educators in this redress: that of cultural healers and awakeners. Educators must be able to remedy "mental, affective and spiritual malaise and ailments" of students (p. 55). The question then arises as to *how* one measures or assesses these more subtle roles that must surely contribute to a definition of 'teaching excellence'.

# Student vs. faculty perceptions of 'teaching excellence': who should be the judge?

In a recent survey of University of Natal medical student perceptions of a 'good' educator (McLean, 1999), personal attributes of an educator that allowed them to interact with the teacher (e.g. was able to motivate students and was sensitive to their needs) were valued over more technical aspects (e.g. punctual; organised lectures). Presumably then, a conducive teacher-learner relationship, which would impact positively on the attitudes and approaches they adopted to learning, was important for these students. Many educators would agree with these students, placing the teacher-learner relationship at the heart of the learning experience (Andrews et al., 1996; Hounsell, 1997; Morgan & Beaty, 1997; Ramsden, 1988, 1997). Students also saw their need to interact with the teacher, resulting in a two-way sharing experience. This raises another important question: in identifying "teaching excellence", does faculty attach the same value to the attributes that these students identified as important?

An appropriate example to demonstrate that student and faculty views of good teachers may not be congruent is provided by Das et al. (1996). In a classroom setting, while both faculty and students identified from a 36 item list, 'willingness to help' as overwhelmingly important, faculty generally held a narrower, less evolved profile of an 'ideal' teacher than did the students. For students, personal attributes were rated highly, like the University of Natal medical students. In the Das et al. (1996) study, faculty, however, placed more emphasis on the technical issues (perhaps because they are easier to measure) over an individual with emotions and attributes which would foster a teacher-student relationship. In this regard, an educator who interacts with students was supported by only 2% of faculty, whilst presenting material in a logical sequence was well supported (86%). In that faculty's opinion, an ideal teacher was a good communicator, an expert, presenting essentials to students (with little general knowledge!) in a logical sequence. Some traits, such as helping students to build skills for self-learning, which many authors consider to be important for good teachers (Ramsden, 1992, 1997), were surprisingly poorly rated. For students, however, while being an expert who presents material logically was important, more personal attributes such as being just, ethical and having an understanding of student difficulties were more highly valued than technical aspects (Das et al., 1996). Clearly, faculty and students were at odds with regard to what constitutes a 'good' educator.

In Riley's (1993) survey of what had hindered and helped medical teachers when they were undergraduate students, the sentiments expressed were not dissimilar to some of those expressed by my students. Aside from difficulties such as volume overload and lack of clarity with respect to objectives, many highlighted *personal attributes* of their educators as having a positive or negative impact on their learning experiences. Teachers who listened to student ideas and were approachable and enthusiastic had had a positive influence, while uncommitted teachers who lacked professionalism had negatively impacted on their learning. Several students in that study indicated that a sense of not belonging, being picked on, a lack of confidence and humiliation were some of their negative experiences (Riley, 1993). In another study, Snadden & Yaphe (1996) found that students identified *enthusiastic* teachers as one of the factors contributing to a successful attachment experience. *How do we measure these personal attributes objectively? Whose opinions should we count—the students' or faculty's?* 

Collectively, these attributes recognised by different groups of students could be referred to as 'interpersonal skills', which are necessary if a teacher and a student are to have an understanding or a relationship and hence ensure successful student learning (Thompson Bowles, 2000). Parsell & Bligh (1998) are of the opinion that students enter shared learning situations with preconceived ideas about their role, the role of other professionals and the relationships between themselves and professionals. It is therefore important to recognise that learning starts with the individual student in terms of expectations, attitudes, knowledge level and skills from the student perspective and not from the point at which the educator assumes the student to be. This then requires that an educator is aware of the conceptions held by individual students, and if he/she is to bring about more transformative conceptions, then personal involvement with each student is necessary. In attempting to engender more transformative conceptions of learning in students, surely then we are talking about the role of the educator in influencing the outcomes of individual student's education? The question arises again: how can we ascribe a value to these roles?

Andrews and colleagues (1996) have perhaps come closest to defining 'teaching excellence' from a broad pedagogical perspective, involving both the learner and the educator. Among the features associated with excellence in teaching were strong and respectful teacher-student relations (which included clarifying roles and responsibilities), encouraging student interaction and being available for consultation. Many of these comments are reminiscent of student sentiments I have experienced during interviews. Excellence in teaching therefore embraces more than an adequate content, expertise and technical performance (which may not be difficult to measure). For both Ramsden (1992) and Andrews et al (1996), 'excellent teaching' extends beyond effective teaching, i.e. knowledge of subject matter, availability of staff member, organisation, clarity, encouragement of student discussion, feedback and appropriate assessment. It is about quality learning outcomes, e.g. student understanding (Ramsden, 1992), ethics, morality and attitudes. In Andrews et al.'s (1996) view, it is about ensuring that teaching and learning approaches and activities are congruent with these outcomes. In Medicine, perhaps more than in any other profession, the quality of learning outcomes (knowledge, skills and attitude) is of paramount importance (Hamilton, 1999). A doctor is firstly a social healer and then a scientific healer, interacting with patients as members of a family and as part of the community. The attitude of the medical practitioner towards his/her patients will have a considerable impact on the relationship that he/she fosters with members of the community and hence the quality of health care delivery (Monekosso, 1998; Kai et al., 1999). Callahan (1998) speaks of the "wide-angle lens perception of the human and social context of illness and disease" that is required by the new breed of doctor. Medical education therefore goes beyond the 'knowledge' component. It also extends beyond the confines of the university grounds. According to Boelen and co-workers (1992), the university's ultimate educational goal is "preparing people to function properly in society" (p. 2), which presumably encompasses all aspects-social, economic and environmental. Education is about engendering desirable values and attitudes that cannot be learnt from textbooks, or more appropriately in this age of technology, from the Internet. Referring to medical education specifically, the Health Professions Council of South Africa (1999) recommends that one of the missions of undergraduate schools should be to provide educational training which will enable graduates to render a service across a wide front in Medicine. Within this context, one of the premises that must apply is that "Medical education and training institutions are responsible for the development in future graduates of a high standard of ethical principles and a healthy outlook on life" (p. 9). Shor (1986) expresses more philosophical sentiments which convey a similar message-"Teaching should offer an illumination of reality which helps all of us in grasping the social limits that constrain us" (p. 422).

Hamilton (1999) believes that we need to move into the real world to find the full scope of outcomes necessary for optimising health care delivery and fulfil the expectations of patients and the community. That author also refers to one of the outcomes being the personal development of the individual, which should be a deep inner journey that deals with motivation, morale, personal value and integrity, amongst other desirable qualities. In this way, the graduate can be expected to enjoy a fulfilling and effective professional life. In essence, "the task of the future is to ensure that we address outcomes that widen the scope of role and responsibility, are long in their time line and deep in their relevance to professional development" (Hamilton, 1999, p. 126). The goals of medical education are thus long-term. In the words of Parsell & Bligh (1995, p. 398), "Medical education may be viewed as a learning continuum that only ceases at the end of the doctors' professional lives".

## Teaching and learning: two sides of the same coin

Noddings (1986), in considering educational reform and the role of the teacher in a broad context, writes about an "ethic of caring" on the part of the educator, which that author believes should move from the periphery to the centre of the educational process. When teachers act as models of caring, they might also model other desirable attributes such as meticulous preparation, critical thinking, genuine curiosity and appreciative listening, to mention a few-"an ethic of caring gives us an anchor to throw out when we are in danger of drifting away from persons and individuals" (Noddings, 1986, p. 503). In the important doctor-patient relationship, 'caring' is perhaps one of the most valuable qualities which a medical practitioner can bring to his/her practice. The educator thus becomes a role-model for students (Bligh, 1999a), which Killen & Martin (1992) believe to be the first function of a teacher, irrespective of

discipline—"... a teacher's willingness and ability to model and mentor being a competent learner as much, or more than, an expert learner" (p. 137).

In developing a worldview of education, Killen & Martin (1992) believe that learning takes place when students engage in 'genuine conversation'. It is only when one explores a subject with oneself and with others in a wider social context that learning can take place. This conversation, those authors believe, challenges students not only to know more, but also to realise that life is uncertain and full of ambiguity. In their view, "thinking independently and critically takes personal courage. The rewards to students for this courage is that all of life will open to them and that they will not be alone" (Killen & Martin, 1992, p. 147). For Ayers (1986), who uses the analogy of a teacher with that of a midwife, in that no two births are identical, just as no two students are the same, sees this liberation and freedom as empowerment of students. That author believes that "a teacher who empowers is likewise empowered. He or she becomes an actor and an interactor" (p. 50).

In the light of the multiple (both obvious and subtle) tasks and responsibilities which educators must face in the educational reform, and since "teaching is an activity that assumes an understanding of learning" (Ramsden, 1988, p. 13), it is difficult to reconcile that some educators are educational amateurs, unable to articulate a philosophy of learning. Knapper (1995) finds it ironic that much of the university teaching is carried out by professors who, although they excelled as learners, base their approach to teaching by uncritically adopting the model used by their professors. Since change has become a constant in the life of educators (Bligh, 1999b), Murray (1991) believes that it is essential that educators understand the process of teaching (this includes goals, planning and decision-making) and that they have a theory about why certain teaching behaviours affect students in different ways. For Andrews and colleagues (1996), it is only when one has a holistic appreciation of process and outcome that one can claim to be an excellent teacher. Those authors have no doubt that teaching must be the first priority regarding university responsibilities. It is not surprising therefore that The Regional Consultation (Africa) document on Medical Education (WHO, 1994b) has called for a mechanism of evaluation of teachers to ensure continuous compliance with the behavioural objectives for training a doctor for the 21st century.

Transpiring from this discussion of the various roles (some measurable and others perhaps not) of the educator, it is clear that we, as educators (both basic medical science and clinical), have to shoulder the responsibility of not only preparing students with the knowledge and skills to enable them to conduct their profession, but we must also ensure that they do it effectively, as individuals with ethical values and appropriate attitudes. As educators, we may even have to heal certain cultural malaises in the process (Goduka, 1998) and provide students with skills that will allow them to cope with whatever challenge confronts them. In Hamilton's (1999) view, "we plan for unplanned outcomes" (p. 126)—we can't guarantee what might take place, but we need to develop mechanisms that allow our students to deal with these unknowns.

## Are we any closer to defining 'teaching excellence'?

From this discussion one can understand why few or no established or standardised measures exist against which 'excellent teaching' can be assessed. Each institution will therefore have to clarify its own standards by which to measure 'teaching excellence', based on variables such as student dynamics, the curriculum in practise and the reform that might be underway, to mention a few. This does not, however, resolve the question as to who decides on the quality or excellence of the individual educator and how one measures the imparting of these ethical values, attitudes and life skills. Students, by their very nature, cannot be relied upon for a consistent assessment, particularly if the curriculum is new and represents a paradigm shift, with responsibility for learning devolving to them. There is a further complication. In a student-centred learning paradigm (as opposed to a teacher-centred paradigm), the traditional hierarchical roles of teacher and student become somewhat blurred, with learners having a stake in the educational experience and the processes (teaching and learning strategies) and teachers becoming learners (Killen & Martin, 1992).

At the best of times, faculty perceptions of rewarding 'teaching excellence' are outdated or non-existent, and are inevitably slow to react to the paradigm shifts in pedagogical methodologies that may be taking place. Appropriate reward or promotion systems thus do not develop at the same pace as curriculum reform, despite the increasing need to recognise the role of educators in student learning in innovative curricula. A case in point would be Maastrict University, which after more than 20 years of PBL, has only recently developed a plan for rewarding teaching, which it now recognises as being as important as research activities (Wolfhagen *et al.*, 2000).

In evaluating 'teaching excellence' there is a further consideration. Most academic staff members in schools of Medicine have little or no teaching qualifications ["educational amateurs" (Knapper, 1995)] and so would not be in any position to judge or assess 'teaching excellence' in their colleagues as they might hold primitive epistemological beliefs about the teaching-learning process. Obtaining the opinion of the communities where the medical graduates serve is cumbersome and reflects the sum of the learning experiences of the students, contributed by all the teachers involved in the process rather than individuals. It is therefore also not surprising to find that in applying for promotion on teaching grounds (e.g. at the University of Natal), an individual needs a portfolio incorporating educational contributions, student and peer evaluation of 'teaching', personal development in terms of courses completed and publications emanating from educational research, to mention a few, which requires considerable time and effort to collate. For the research route for promotion, a list of articles published in accredited or peerreviewed journals is, however, usually sufficient.

The criteria for rewarding educators therefore do not and are unlikely to conform to any international standards as each institution has its own peculiarities in terms of curriculum and staff and student profiles. While it is possible for the *practical* contribution (lectures, tutorials, course development, committee representation, etc.) each educator makes to curriculum development and planning to be assessed by an institute, it is much more difficult to evaluate his/her commitment to student learning, the effect he/she has on the lives of individual students and the attitudes these students develop during the learning experience as a result of the interaction with the educator. Assuming that some definitive criteria can be identified, several other questions need to be answered. Who should decide on whether an educator is an 'excellent' teacher-faculty, the students, colleagues or the final 'consumer' of the product of the institution (the community)? Who is sufficiently qualified to decide on the criteria against which 'excellence' is to be measured? As Mennin (1999) points out, peer review is well established for research and patient care, but few institutions have rigorous peer review in education. Evaluation of teaching amongst peers is often personalised and does not form part of professional and scholarly activity (Mennin, 1999).

#### Finally, medical education is necessary research

If, as Bligh (1999b) points out, change is a part of an educator's life, it should be the duty of an educator to research new methods of assessment or evaluate new courses or innovations. The results of this research can then be published (and recognised) in the same way that scientific research is. It then becomes possible to equate the two for promotional purposes. This may not be a simple task, however, as the political power in most medical schools is based on scientific research and patient care, with education and teaching in the shadows (Mennin, 1999; Thompson Bowles, 2000). Cognisance must be taken of Gray's (1999) warning of teaching becoming a "Cinderella activity" (p. 497) with the emphasis on academic staff in medical institutions to publish their academic or clinical results rather than commit themselves to teaching. As academics, our primary role is reputedly one of teaching and if we failed to 'research' the outcomes of these activities, then surely we would be neglecting our raison d'être? Bligh & Parsell (1999) believe that the time has come for research into educational methodologies and if reform is to provide quality outcomes, then this research must assume its rightful place in the university and the appropriate rewards be in place. According to those authors, research in medical education is the vehicle by which new facts, concepts or ideas which impact on how students learn, how they are taught, selected, assessed and how their courses should be structured are obtained. Research in medical education therefore matters, because ultimately, medical education is about improving health care delivery (Bligh & Parsell, 1999).

#### Conclusion

In most tertiary institutions, recognition of 'teaching excellence' is either non-existent or the criteria are vague, despite teaching being the fundamental function of the university. Medical faculties are no different, with patients and research taking priority over undergraduate education. Standard criteria for judging 'teaching excellence' are difficult for several reasons (e.g. level of course, type of curriculum, and discrepancies between faculty and student perceptions of the attributes of an 'excellent' teacher). Pressure for medical curriculum reform, however, places new demands on the educator, which may require training. The profile of the 21st century doctor requires that a university education be about knowledge, skills and attitudes. Educators thus need to assume roles, (e.g. becoming role models) which may be difficult to assess. Each institution will have to critically evaluate the importance it attaches to teaching and ensure that the appropriate rewards are in place since teaching should be regarded as no less important than research and clinical duties.

#### Notes on contributor

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