Curriculum or syllabus: which are we reforming?

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SUMMARY   *Although the concept of 'curriculum' is complex, a common understanding of the term by those involved in medical education is essential, given the current climate of medical curriculum development and reform. It has not previously been established that such a common frame of reference exists. We polled a sample of medical educators with a range of teaching experience and responsibility in an attempt to discover what they understood by 'curriculum' (and whether or not the concept could be articulated). A sample of medical students was similarly polled. In total, 85% of staff and 34.9% of the students responded. The responses obtained were subjected to a content analysis. The answers received were polythematic in 87.5% of cases, dominant themes including 'curriculum as a syllabus', 'curriculum as a meta-syllabus', and 'curriculum as a means to an end'. Our data show that the nature of curriculum is complex and does not lend itself to dictionary-style definitions. Moreover, the majority of those polled view 'curriculum' in two-dimensional terms, tending to equate it to 'syllabus'. This may have significant implications for curriculum reform.*

Introduction

The 1990s were characterized by an increasing interest in medical curriculum reform (Papa & Harasym, 1999). In the United Kingdom, this was largely fuelled by the publication of *Tomorrow's Doctors* by the General Medical Council in 1993 (General Medical Council, 1993). This document was prompted by the recognition that the traditional medical curriculum was factually overloaded and failing to prepare students for clinical practice in the twenty-first century (Godfrey, 1991; Jones, 1991; McManus, 1991; Taylor, 1993). In response, we have seen an overhaul of the *content* of the undergraduate medical curriculum. Given this climate of review, some medical educationists have also been inspired to re-examine the *processes* by which medical education is delivered. As a result, a variety of changes to the curriculum have been suggested (and in some cases adopted). Common themes include the move away from didactic, lecture-based teaching towards problem-based, student-centred learning and the introduction of core curricula with options or special study modules and the notion of the student as a lifelong learner (Newble & Entwhistle, 1986; McManus & Wakeford, 1989; Guze, 1995; Harden & Davis, 1995; Monekosso, 1998; Harden & Stamper, 1999).

To date, much of the debate has centred upon the practical issues of curriculum design and has assumed an implicit understanding of the nature of 'curriculum'. It could be argued that such an understanding is essential if sensible debate is to take place about curriculum reform, as the curriculum is the very foundation of any education system (Kelly, 1989). In other words, we should understand what curriculum *is* before we consider curriculum *change*.

In learning more about the nature of higher education we began to realize that the concept of curriculum was not only less concrete and more complex than we had anticipated, but also that it did not readily lend itself to a dictionary-style definition. This difficulty to arrive at, and articulate an understanding of, 'curriculum' was mirrored in the literature by the absence of an explicit treatment of the term (Guze, 1995; Jonas *et al.*, 1993). Consequently, we were faced with the question of whether the medical curriculum reforms to date have occurred without a common frame of reference. In this study, we have therefore undertaken to discover whether the implicit understandings of the term 'curriculum' amongst individuals involved in medical education were concurrent and could be articulated. Further, does the understanding of curriculum held by those involved in medical education correspond with the accepted interpretations common in the wider higher education literature?

Method

A sample of medical educators from across the University of Sheffield Medical School were asked what they understood by 'curriculum'. (We specifically asked for a definition of *curriculum* and not *medical curriculum*, as we do not believe that medical education is a 'special case' in this respect.) This question was distributed via email to 20 academics including lecturers, senior lecturers and professors with a range of teaching experience and responsibility for curriculum design and delivery. In addition, 43 third-year medical undergraduates were similarly polled. After a period of 3 weeks, a follow-up email was sent to both groups as a reminder to those who had not yet responded.

All reply emails were pasted into a separate document to preserve the anonymity of the participants. These anonymized responses were then evaluated using content analysis. The responses were considered in turn by both authors and sorted into groups by theme. These were derived by aggregating similar statements from within the responses (Pope *et al.*, 2000). Since this research is intended to test a new proposition it is explorative in nature and we have therefore employed a qualitative research

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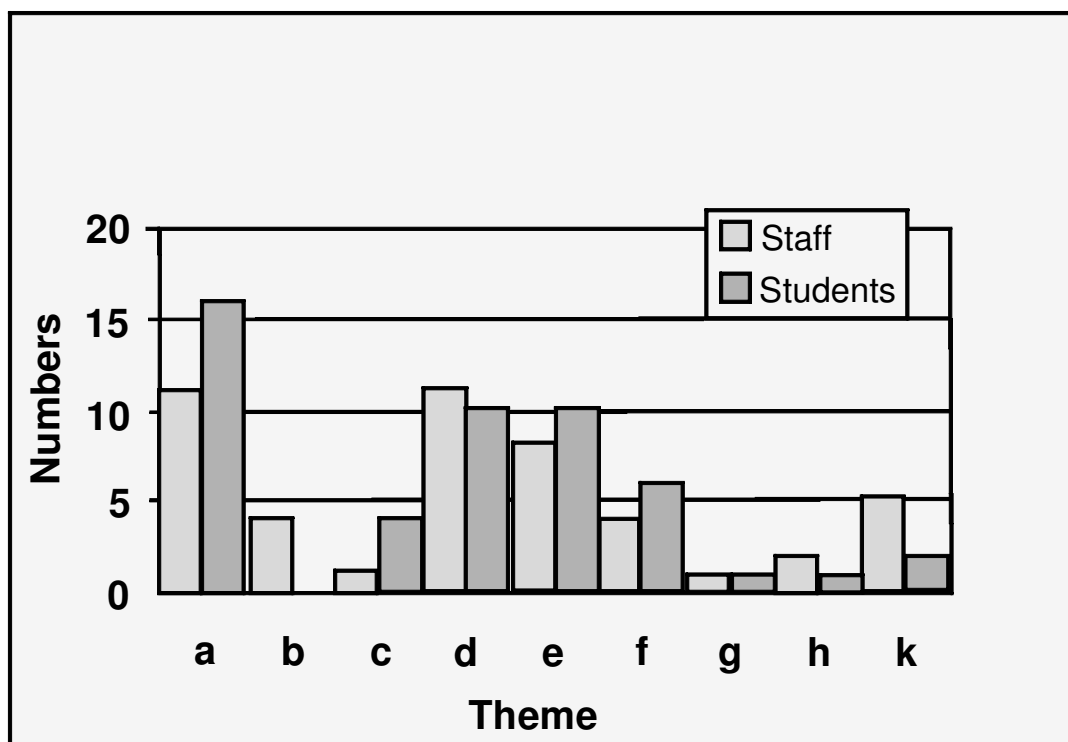
Figure 1. Incidence of themes within the staff and student email responses. The themes a–k are described in detail in the text.

method and the sample is not intended to be either comprehensive or representative.

Results

Of the 20 academic staff who were polled, 12 (60.0%) responded to the original email and a further 5 (25.0%) responded to the reminder (including one academic who replied stating that s/he did not wish to participate in the study). Of the 43 students polled, nine (20.9%) responded to the original email and a further six (14.0%) responded to the reminder. Thus the overall staff response rate was 85%, and the student response rate 34.9%. The responses received ranged from the succinct (two words) to the expansive (147 words); interestingly both the longest and shortest replies were submitted by staff members. Similarly, the responses ranged from the insightful to the literal ('A curriculum is, or rather was, a racing chariot. From it is derived the word curricle meaning a light two-wheeled carriage usually drawn by two horses abreast …')

Content analysis

The majority of the responses (87.5%) were found to be complex, and contain multiple themes. The range of staff and student thematic responses is illustrated in Figure 1.

Theme a. By far the most prevalent theme found in our email responses was the notion of lists, or scope, of teaching material (e.g. 'what should be covered throughout a period of study'). We have termed this theme *syllabus*. Included in this category are those responses that have

explicitly equated 'curriculum' with 'syllabus' (e.g. 'I feel that it may be synonymous with the term syllabus').

Theme b. There is also a category of responses that defines curriculum simply as 'a course…' or 'programme of study …'.

Theme c. Another distinct theme in the data was a group of responses that either said directly, or implied, that they were unsure about the definition (e.g. 'I don't understand the term curriculum well enough to define it concisely …').

Theme d. A number of the participants defined curriculum in terms of its possible purposes, either in the short term (e.g. 'the basis of summative assessment …'), or the longer term (e.g. 'to give a fine balance between background scientific theory and practical "hands on" learning, ready for the clinical scenario for which we are essentially being trained …'). These often include notions of professional standards. In other words, these responses suggest the idea of the curriculum being in place so that students know what to study in order to pass their exams, and also, more broadly, to become good doctors. Some of these responses deal with purpose implicitly, depicting curriculum as a means of defining scope (e.g. 'a measure of the depth to which the student needs to study the subject …' or 'a basis on which you can then expand and read around the core knowledge needed …').

Theme e. Perhaps the most complex theme detected was the idea that a curriculum is a combination or a series of syllabuses or the sum of a syllabus and some other feature

(e.g. 'entire package of learning opportunities presented to a student during their defined period of study …' and 'the timetable and the knowledge (skills and attitudinal included) content …'). One staff member expresses this concept (of a *meta-syllabus*), stating that 'a written down curriculum is not necessarily "all you need to know" …'.

Theme f. Another aspect of curriculum that was emphasized by the respondents was its planned and formal nature. Specifically, they described it as '[a] planned programme …' or 'formal criteria …'.

Theme g. A couple of the participants refer to the curriculum as something that is imposed by (unspecified) others. This included one staff member who felt that curriculum was 'planned by a committee far from the front line …' implying the idea of hierarchy and a split between design and delivery.

Theme h. Another minor theme in the data was that of whether the definition of curriculum would change depending on who was being consulted. Thus one student distinguished between the perspective of a student and a teacher, whilst one staff member stated explicitly that the nature of curriculum was dependent neither on the discipline delivered nor the level at which it was aimed.

Theme k. Another aspect of curriculum commented on was the process by which teaching and learning opportunities are presented to students. Examples of this minor theme included 'how the delivery of the information will be organized …' and 'the way in which it [the course content] is given to students, whether in the form of lectures, tutorials, seminars, etc …'.

Discussion

'Despite the fact that the practice of Medicine is changing radically, the teaching of medical students has changed little over the past several decades' (Guze, 1995). Such concerns over the success of medical curricular reform are not new. Three decades ago Nishiyama & Oberman (1970) for example, talking about the standardization of medical curricula between medical schools, asked 'to what extent these so-called reforms…have actually resulted in an improvement of the medical curriculum …'. Kelly (1989) would support the endeavours of the medical education community to reform their curricula, stating that 'the curriculum is the very foundation of any education system, and no amount of tinkering with the structure of the system … will have more than a peripheral effect unless accompanied by a rethinking of the real substance of education—the curriculum itself'. We suggest that this recurrent theme of what Bloom (1988) calls 'reform without change' may in part be due to the lack of a common understanding of the nature of curriculum to underpin the debate. In his 1998 paper, Hafferty both supports Kelly's assertion and at the same time highlights what we see to be a crucial problem in the debate. He suggests that 'medical education had failed to change because only the curriculum has been changed rather than the overall learning environment'. A closer reading of the

piece reveals that the sentiment behind this statement does in fact clearly echo Kelly's concerns although his terminology does not. We believe that Hafferty's use of the expression 'overall learning environment' coincides with Kelly's understanding of the term 'curriculum'.

It could be argued that a definition and detailed discussion of the term curriculum in every paper focusing on the medical education debate is unnecessary. Indeed, this is the case *provided* that a common definition is understood and implicit within the debate. We therefore undertook this study in an attempt to discover whether or not such an understanding is shared by those involved in medical education. While the differences between the themes we identified may seem subtle, it is hard to know whether this is the result of differences in understanding or difficulties in articulation. In either case, this could be significant in the curriculum development process.

The dictionary defines the curriculum as 'a course of study at a school, university etc.; the subjects making up such a course' and distinguishes it from a syllabus (namely 'a statement or outline of the subjects covered by a course of teaching; a programme of study. Also, a statement of the requirements for a particular examination'; OED, 1993). Taken at face value, in everyday English usage, these definitions appear to have very similar meanings. It is therefore perhaps unsurprising that the most prevalent theme (*theme a*) amongst our data included all the responses which either implicitly (used the definition of syllabus as an explanation) or explicitly (actually mentioned it) used the term 'syllabus' as synonymous with 'curriculum'. The polythematic nature of the data gathered here however in itself suggests that whilst 'syllabus' may indeed be an element of 'curriculum', to equate these terms is an oversimplification. Perhaps due to the ephemeral nature of the term 'curriculum', this kind of mistake is a common one. This can have serious implications for practice as 'many people still equate a curriculum with a syllabus and thus limit their planning to a consideration of the content or the body of knowledge they wish to transmit or a list of the subjects to be taught or both' (Kelly, 1999). Interestingly, whilst *theme b* ('a course') mirrors the dictionary definition given above, it is also an example of a limited understanding of the term.

The 'means to an end' interpretation evidenced in *theme d* is perhaps inevitable in the current climate of service-level agreements and performance indicators, which are characteristic of the increasing managerialism of higher education. Increased scrutiny and regulation of educational processes, by both the professions they serve (in this case represented by the GMC) and society in general (as exemplified by the aims of the Institute of Learning and Teaching and its plans for higher education in the United Kingdom) was a feature of the latter part of the twentieth century. Equally, it could simply reflect the particular relevance of this issue to the individuals who have been consulted in this study, as each of them is currently engaged in the provision or consumption of a number of study modules. However, this emphasis does almost exactly correlate with one of the definitions of *syllabus* shown above from the *Oxford English Dictionary* (1993).

Ironically, in saying that they are unsure about, or are unable to articulate, the meaning of 'curriculum', those statements that have been collected under *theme c* perfectly

illustrate the complex and elusive nature of 'curriculum'. The idea of complexity is also evident in *theme e*. These statements range from those that characterize curriculum as a series of syllabuses to those that allude to some kind of extra element or synergy. *Theme k* statements are often found adjacent to *theme a* statements, implying that curriculum means syllabus plus its process of delivery. These could therefore be seen as a specific subset of *theme e*. *Theme e* was the category of responses which most closely corresponds to the way in which the concept of curriculum is dealt with in the educational literature. It includes, for example, the notion of hidden curriculum. 'Implicit in any set of arrangements are the attitudes and values of those who create them, and these will be communicated to pupils in this accidental and perhaps even sinister way' (Kelly, 1999:4). Hafferty (1998) describes the 'hidden curriculum' as 'a set of influences that function at the level of organisational structure and culture.'

Theme h picks up on an interesting issue that is demonstrated clearly by a number of the responses included in other themes. What Barnett (1994) terms the 'curriculum experience' is perhaps inextricably linked with the respondents' current roles. This highlights the possible disparity between the curriculum which the tutor intends to deliver and that which is perceived by the student (Kelly, 1999). It also raises the question of whether the nature of curriculum will vary from faculty to faculty. The education literature would suggest that there is a core of issues that are universally applicable.

Themes *f* and *g* are closely linked. They characterize curriculum as a strategic issue in that it is formally planned and devised. There is also the suggestion that those concerned with curriculum design may not necessarily be those involved with its implementation. This echoes the debate in the management literature about modernist conceptions of organization, which have divorced design and control aspects of work from their execution (Morgan, 1986).

Conclusion

In summary then, this pilot study has revealed that the term 'curriculum' has a number of different meanings. This is true both in the sense that it can mean very different things to different people and also that it can have a range of meanings for any given person. We have characterized the themes that we found in the responses as: Curriculum as syllabus; Curriculum as a course; Don't know/unsure; Curriculum defined in terms of its purpose; Curriculum as meta-syllabus; Curriculum as planned and formal; Curriculum as something separate from teaching delivery; and Curriculum as varying by perspective.

Whilst none of the responses included *all* of these eight themes, it could certainly be said that when taken as a whole they begin to achieve the depth of meaning implied when the term is used in the wider education literature (see for example: Hafferty, 1998; Kelly, 1999). The concepts that are most noticeable by their absence are those of the 'informal' and 'hidden' curriculum. This is perhaps not surprising given that most of us go through our careers as students in higher education without noticing these aspects

of curriculum, given that they are both informal and hidden! This is further exacerbated by the custom of putting new lecturers into the classroom without requiring them to possess any educational qualifications save their own experience. Nowhere then are we formally introduced to the tenets of education. In other words, not all educators are, or have been, students of education.

In this respect, the way in which the English language defines the terms 'curriculum' and 'syllabus' as equivalent is not helpful in signalling any differentiation. This perhaps accounts for the high incidence of *theme a* responses. If we aggregate these with some of the other simple definitions such as themes *b* and *d*, we see that around 60% of the statements identified through the process of content analysis use definitions that are at best limited and at worst dangerously two-dimensional.

The nature of the curriculum as discussed in the education literature is a difficult, contested and central concept. What only very few of the responses gathered here allude to is the political and ideological aspect of the term. Perhaps the member of staff who declined to take part in the study best understands this facet. Certainly those that have been categorized in *theme c* would best characterize the response of the authors. Although some engagement with the education literature has brought us to a point where we feel that we no longer underestimate the complexity of the term, we have equally reached a point where we feel unable to fully articulate its meaning. However, we understand it to include: what is taught (syllabus) and why; where, when and in what form teaching and learning take place; how learning is assessed; how teaching is assessed; who is teaching; the preconceptions of those being taught; the selection of teachers and learners; and, in addition, all the hidden meanings and values derived from the learning experience.

If our results represent the kind of understanding of 'curriculum' amongst medical educators then they raise the question of whether we are reforming curriculum or syllabus. In order to facilitate debate about curriculum reform, we believe that it is necessary to step back from the proposed models of change and establish a common framework of understanding that will allow us to go beyond a superficial tinkering with issues of syllabus.

Editor's note

Copies of the emails to staff and students referred to on page 187 were removed in order to save space. They can be seen on the new *Medical Teacher* website: http://www.medicalteacher.org

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References

BARNETT, R. (1994) *The Limits of Competence: Knowledge, Higher Education and Society* (Buckingham, Society for Research into Higher Education and the Open University Press).

BLOOM, S. (1988) Structure and ideology in medical education: an analysis of resistance to change. *Journal of Health and Social Behavior*, 29, pp. 294–306.

GENERAL MEDICAL COUNCIL (1993) *Tomorrow's Doctors* (London, Kiek & Read).

GODFREY, R. (1991) Designing a doctor: all change?, *Lancet I,* 338, pp. 297–299.

GUZE, P.A. (1995) Cultivating curricular reform, *Academic Medicine*, 70, pp. 971–973.

HAFFERTY, F.W. (1998) Beyond curriculum reform: confronting medicine's hidden curriculum, *Academic Medicine*, 73, pp. 403–407.

HARDEN, R.M. & DAVIS, M. (1995) AMEE Education Guide No. 5: the core curriculum with options or special study modules, *Medical Teacher*, 17, pp. 125–148.

HARDEN, R.M. & STAMPER, N. (1999) What is a spiral curriculum?, *Medical Teacher*, 21, pp. 141–143.

JONAS, H.S., ETZEL, S.I. & BARZANSKY, B. (1993) Educational programs in US medical schools, *Journal of the American Medical Association*, 270, pp. 1061–1068.

JONES, R. (1991) The core curriculum, *Lancet*, 338, p. 1274.

KELLY, A.V. (1989) Curriculum planning and development—an overview, in: Anon. *The Curriculum: Theory and Practice*, 3rd edn, pp. 1–25 (London, Paul Chapman).

KELLY, A.V. (1999) *The Curriculum: Theory and Practice*, 4th edn. (London, Paul Chapman).

MCMANUS, I.C. (1991) How will medical education change?, *Lancet*, 337, pp. 1519–1521.

MCMANUS, I.C. & WAKEFORD, R.E. (1989) A core medical curriculum, *British Medical Journal*, 298, p. 1051.

MONEKOSSO, G.L. (1998) Essential medical studies: introducing a core curriculum based on the doctor–patient encounter as a catalyst for medical education reform, *Medical Teacher*, 20, pp. 536–543.

MORGAN, G. (1986) *Images of Organization* (London, Sage).

NEWBLE, D.I. & ENTWHISTLE, N.J. (1986) Learning styles and approaches: implications for medical education, *Medical Education*, 20, pp. 162–175.

NISHIYAMA, R.H. & OBERMAN, H.A. (1970) Curricular change changeless, *New England Journal of Medicine*, 282, pp. 1158–1159.

OXFORD ENGLISH DICTIONARY (1993) *Oxford English Dictionary* (Oxford, Clarendon Press).

PAPA, F.J. & HARASYM, P.H. (1999) Medical curriculum reform in North America, 1765 to the present: a cognitive science perspective, *Academic Medicine*, 74, pp. 154–164.

POPE, C., ZEIBLAND, S. & MAYS, V. (2000) Qualitative research in health care: analysing qualitative data, *British Medical Journal*, 320, pp. 114–116.

TAYLOR, I. (1993) Changing clinical teaching of British medical students, *British Medial Journal*, 341, pp. 1284–1285.