SUMMARY  This paper looks at five focal terms in education—curriculum, environment, climate, quality and change—and the interrelationships and dynamics between and among them. It emphasizes the power and utility of the concept of climate as an operationalization or manifestation of the curriculum and the other three concepts. Ideas pertaining to the theory of climate and its measurement can provide a greater understanding of the medical curriculum. The learning environment is an important determinant of behaviour. Environment is perceived by students and it is perceptions of environment that are related to behaviour. The environment, as perceived, may be designated as climate. It is argued that the climate is the soul and spirit of the medical school environment and curriculum. Students' experiences of the climate of their medical education environment are related to their achievements, satisfaction and success. Measures of educational climate are reviewed and climate measures for medical education are discussed. These should take account of current trends in medical education and curricula. Measures of the climate may subdivide it into different components giving, for example, a separate assessment of so-called Faculty Press, Student Press, Administration Press and Physical or Material Environmental Press. Climate measures can be used in different modes with the same stakeholders. For example, students may be asked to report, first, their perceptions of the actual environment they have experienced and, second, to report on their ideal or preferred environment. The same climate index can be used with different stakeholders giving, for example, staff and student comparisons. In addition to the educational climate of the environment that students inhabit, it is important to consider the organizational climate of the work environment that staff inhabit. This organizational climate is very significant, not only for staff, but for their students, too. The medical school is a learning organization evolving and changing in the illuminative evaluation it makes of its environment and its curriculum through the action research studies of its climate. Considerations of climate in the medical school, along the lines of continuous quality improvement and innovation, are likely to further the medical school as a learning organization with the attendant benefits. Unless medical schools become such learning organizations, their quality of health and longevity may be threatened.

Aims and focus
This paper aims to assist and facilitate discourse on medical education between and among medical education administrators, medical teachers, medical students, medical education curriculum developers, assessors, researchers and, indeed, any other stakeholders in the medical education enterprise, including governments or other agencies that may supply the finances. This assistance and facilitation of discourse will, it is hoped, result in the achievement of some simplification and increased clarity in communication among all stakeholders, which, it is believed, can only serve to enhance the quality and effectiveness of the work of all participants in the medical education enterprise.

The simplification and clarification of educational discourse will involve a pentagonal or five-way perspective on medical education, with an associated consideration of meanings and connotations of five focal terms, namely Curriculum, Environment, Climate, Quality and Change, and the interrelationships and dynamics between and among these focal elements.

The paper will emphasize the power and utility of the concept of Climate, as the pivot around which the discussion of the other four concepts, of Curriculum, Environment, Quality and Change, will turn. Climate considerations, in the paper, become inextricably bound up with considerations of the other four focal concepts. Climate is shown to be an operationalization or manifestation of each of these other four focal concepts.

What is more, the now available high quality of Climate measurement means that, in some real sense, such Climate measures can serve as measures, too, of Curriculum, Environment, Quality and Change, to the extent that each of these four can be operationalized as Climate. Quite a number of qualitatively and quantitatively based workplace action-research studies of Climate itself, and its connections with Curriculum, Environment, Quality and Change, then become available, in medical education. A major purpose of the paper thus is to stimulate generation of research problems and hypotheses that not only are of theoretical interest, but may lead to valuable practical programmes in curriculum development in medical education, or to what, in topical parlance, is termed Best Evidence Medical Education (BEME) (Hart, 1999;
Broadly speaking, then, in overview, it is hoped that the paper exemplifies something of what Bligh & Parsell (1999) were noting, when they said that ‘the Social Sciences have provided frameworks that enable us to interpret students’ experiences as they undergo medical training’. Students’ experiences here will be, centrally, their experiences of the climate of their medical education environments, this focus being consistent with the proved connection between such climate and the obviously valuable outcomes of student achievement, satisfaction and success. The Social Sciences have, additionally, provided frameworks that enable us to measure and interpret the experiences of teaching staff. A notable aspect of this paper will be an interest in the organizational climates that medical teaching staff experience. The concern is for staff well-being, this concern being related to the obviously enormous significance of the part staff play in the lives, learning, development and well-being of their medical students.

The paper culminates in consideration of the Medical School as a ‘Learning Organisation’ (Senge, 1990a, 1990b; Argyris, 1991), learning, changing, evolving, in the illuminative evaluations it makes of itself, its quality, its environments, its curricula, through the action research studies of its climate. This notion of the ‘Learning Medical School’ contributes notably to the achievement of a unification of the paper’s pentagonal perspective on medical education.

The curriculum: complexities, confusions, connotations, contexts

*Complexity, confusion and curriculum*

We might start here with a major adaptation of a notable utterance by Voltaire:

> When they who hear do not know what they who speak mean, and when they who speak do not know what they themselves mean—that is CURRICULUM. (Voltaire actually spoke of Philosophy)

Sockett (1976, p. 88) advises us: ‘Seek not for any definition of curriculum. There is no such elixir’. Certainly, there is here a big question, which will remain as a big and still puzzling and unanswered question for the rest of the lives of all professional educators and others, who, nevertheless, will frequently use the term, which could well be described as the most over-used, under-interpreted, vague, ambiguous, misleading and misunderstood term in the whole of education discourse. Discussions of curriculum in a recent notable, scholarly medical education treatise (Jolly & Rees, 1998) provide much help and guidance on matters that pertain to curriculum. However, the focus there, it seems, is more on matters of aims and design of curriculum, than on the more fundamental problems, just touched on here, of its conceptualization.

*Towards simplification and clarification*

Perhaps the problems of meaning and definition spring from the fact that curriculum is the most holistic, inclusive and comprehensive entity and notion in education. This aspect of holism and comprehensiveness is, in fact, captured in one definition, or at least a description, of curriculum, as ‘everything that is happening in the classroom, department, Faculty or School, or the University as a whole’ (adapted from Stenhouse, 1975, p. 2). There are many apparently more sophisticated and scholarly statements or definitions available than the rather simple and naïve one just mentioned, but discussions with curriculum specialists have attested to the utility and helpfulness of this simple and direct view of curriculum.

It has come as something of a surprise to some teachers and administrators in medical education to hear that curriculum comprises, in part, students chatting over lunch in the Medical Club, staff greeting students out of class, student union meetings, pictures on the walls, sculptures, landscaping, gardens, medical students’ reactions to the death of a patient, conversations of staff, students and patients at the Health Centre, and so on and so forth, almost *ad infinitum*, one could say.

Perhaps even more unusual is the view, to be extensively developed in this paper, that medical education is an experience for staff too, and that everything that is happening to them in their professional lives, as very significant stakeholders and very influential people in the institution or organization, is very much an aspect of the curriculum. Undue emphasis on curriculum as concerning solely the student experience can miss the subtlety, power and dynamics of the influence on students, arising from the staff activities in, and experiences of, the curriculum, curriculum implementation and change.

All this is not to say that appreciation of richness, holism, comprehensiveness and inclusiveness in the notion of curriculum was absent in the classical models of curriculum, stressing such elements as objectives, content, methods and evaluation (Tyler, 1949, p. 1). Nor was such appreciation absent in the pioneering, ubiquitous, useful and popular writings on the medical curriculum, by Harden *et al.* (1984), in their ‘SPICES’ model, and by Harden in his ‘Ten questions’ paper (1986). Nor is such appreciation of this holism, comprehensiveness and inclusiveness absent in recent exemplary medical curricula, such as that at the University of Dundee (Harden *et al.*, 1997). However, in virtually all curricula one meets, there is, it seems, a tendency to lose some of the richness, subtlety and diversity of the tapestry of the medical education experience, in the necessary and important concerns for curriculum design structures, models, diagrams and logistics.

*Curriculum conceptualized as environment*

Consistent with the discussion so far, it will now here be suggested that curriculum’s most significant manifestation and conceptualization will be as the environment, educational and organizational, which embraces ‘everything that is happening’ in the medical school.

Considering the curriculum, Brady (1990, p. 21), basing his statements on writings of Sockett (1976), says that the transactions that take place between teachers and students are the important thing, and that teachers should constantly appraise and defend what they are doing, in terms of the learning context. There is no question of
disagreeing with these views, but a case could be made for considering all transactions in the medical school, not just those involving teachers and students, as significant curriculum connotations. Similarly, while not debating the centrality of the learning context, a case could be made for consideration of all the contexts in the medical school, and not just those embracing student learning, as significant curriculum connotations.

Interestingly, Parlett & Hamilton (1976), in their ‘illuminative model’ of curriculum evaluation discussed by Brady (1990, p. 180), almost echo Brady and Sockett when they say any new curriculum cannot be sensibly separated from its learning milieu, with the introduction of a new curriculum creating repercussions in the learning milieu, and these repercussions, in turn, affecting the new curriculum and moderating its impact. Again, there is no debate here on the centrality and significance of the learning milieu, but again reference would be made to the significance of the total milieu, in the fullest consideration of the curriculum.

Perhaps an Australian reference to curriculum as ‘an interactive process involving values and ideas, people and material resources, occurring in some sort of context’ (Johnston, 1992, p. 5), tersely emphasizes the centrality of context considerations, as well as the wide-scope notion of context being suggested in the discussion above.

The argument here then, so far, has been one that affirms that the study of curriculum is largely coincident with the study of environments that comprise, or that are linked with, the curriculum. The inference then would be that if we wish to describe, assess, or otherwise ‘get a handle on’ the curriculum in a medical school, we need to consider the environment, educational and organizational, associated with the curriculum and the medical school.

**Curriculum development as change of environment in the medical school**

The image might be that a curriculum generates and establishes environments.

When a curriculum is to change, or a curriculum development is to occur, one of the first steps is a ‘situational analysis’ (Skilbeck, 1976), which is tantamount to a study of the environment, educational and organizational, characterizing the existing curriculum. Changes that may be made to a curriculum are essentially changes in environments.

Boomer (1982, pp. 150–151) rather graphically reminds us that curriculum is more of a verb than a noun, when he says ‘it would be aesthetically offensive to coin the word ‘curriculuming’ but that is what I mean when I think of curriculum’. So, to use Boomer’s term, ‘curriculuming’, or curriculum development in medical education, would consist of changes in educational and organizational environments in the medical school.

In this view, the move towards massive curriculum development characterizing medical education, for example in the United Kingdom, and indeed worldwide, and stemming from the Edinburgh Declaration (World Federation for Medical Education, 1988), the World Summit on Medical Education (Walton, 1993), and the General Medical Council’s Tomorrow’s Doctors (1993), is equivalent to a suggestion or instruction, as the case may be, that environments, educational and organizational, are to be changed. The unprecedented changes to which the American Association of Medical Colleges (AAMC) says medical schools must respond (Medical School Objectives Writing Group, 1999), mean new medical education environments are necessary that embody, and make operational, essential and urgently needed new curricula. More specifically, the AAMC, through this MSOP (Medical School Objectives Project), has listed the objectives to be attained, if America’s physicians are to be more altruistic, skilful, knowledgeable and dutiful. This is tantamount to a call for the curricula and corresponding environments, where such objectives may be achieved or realized. The new medical education curriculum in Dundee, Scotland (Harden et al., 1997), was essentially a search for new environments. Australia achieved some celebrity, with its strikingly novel medical education at the University of Newcastle (Jolly & Rees, 1998), the novelty being in the new, corresponding, requisite environments. The move in Australia towards graduate entry for medical education (Leggett, 1997), is another indication of the same parallelism, between curriculum change and environmental change.

A final and topical summary word on this parallelism between curriculum and environment would be to suggest that the new and seemingly strong and significant Best Evidence Medical Education (BEME) theme (Hart, 1999; Harden et al., 1999; Petersen, 1999; Hart & Harden, 2000; Wood & Bligh, 2000), could be construed as a call to search for the Best Evidence Medical Education Environments (BEMEE).

Returning to, and indeed compounding, Boomer’s aesthetic offence, earlier noted, the next stage is to say that, if curriculum can be thought of as ‘curriculuming’, then we can speak of ‘environmenting’, and, more specifically, of the equivalence or, at least, very close association, of ‘curriculuming’ and ‘environmenting’.

It is towards a consideration of environments in medical education, and their educational and psychological primacy, as operationalizations or manifestations of curriculum, and as determinants of behaviour, that we now turn.

**Environments, contexts, milieus, habitats, situations, settings in medical education**

_The environment in medical education discourse_

An increasingly recurrent word or phrase in medical education discourse is the term ‘environment’, or ‘educational environment’. The World Federation for Medical Education (WFME) singles out the ‘learning environment’ as one of the ‘targets’ for what it terms ‘the conduction of the evaluation of medical education programs’ (1998). Other recent papers concern, variously, a ‘friendly learning environment’ in a general practice attachment (Snadden & Yaphe, 1996), ‘the effect of curriculum change on student perceptions of the learning environment’ (Robins et al., 1996), the medical school curriculum and environment, as one area of a Medical School Concerns Scale (Stewart et al., 1997), the mapping of the ‘cognitive environment of a residency’ (Mitchell et al., 1999), and the testing of hypotheses concerning a possible mismatch between educational goals and the medical education environment.
(Rothman & Cleave-Hogg, 1990). These papers confirm or illustrate the linkage between curriculum and environment in medical education.

**Medical school as a habitat: complexity and components**

The medical school is a habitat, whose principal inhabitants are obviously its students, for whose education, training and welfare the institution exists, its very *raison d'être*. There is no doubt that this habitat is a big buzzing confusion, a complex, chaotic kind of situation, with countless components, myriad dynamics and interactions of inputs and processes, inevitable conflicts, and constantly in a state of flux. A discussion of what was there referred to as 'the medical education environment's unique and daunting complexity', was provided in an earlier paper (Genn & Harden, 1986). It can only be emphasized now that, 14 years since that discussion, complexity and daunting aspects are infinitely greater.

Just to list the components of the environment in a medical school is a daunting task. Ecological psychologists (Barker, 1968, 1978; Wicker, 1979) would map the medical school’s behaviour settings, an approach with considerable theoretical and practical appeal, and meriting consideration in future research and writing. More consistent with the particular thesis of this paper, the approach here will be to get a collection of what will be called ‘recurrent words and phrases’ in curriculum discourse that refer to ideational components or constituents or building blocks or ingredients or elements of curriculum, and to contemplate the particular medical education environments associated with particular components, elements or the like.

**Curriculum desiderata and the medical school environment**

In medical education today, in discussion and in the curriculum literature, documents and pronouncements, there is a relatively large number of recurrent words and phrases that emphasize change, modernity, topicality, novelty, innovation, relevance, efficiency and economy. The more or most modern or recent words and phrases are perhaps popularly describable as ‘buzz’ words and phrases. Virtually all modern medical education literature and discourse appears to reflect a medical education ‘Zeitgeist’, or spirit of the times, and critical commentators might even speak, or at least go close to speaking, of a kind of prevailing, if not controlling, ‘political correctness’, in current medical education discourse (Marinker, 1997).

These recurrent words and phrases often refer to students’ personal, professional and developmental needs, in their medical course and their lifelong professional work. Often highlighted are attributes and attitudes of independence, inter-dependence and cooperation. Recurrent words and phrases also highlight community, societal and economic needs, and their pertinence for the medical curriculum. Naturally, there are recurrent words and phrases that refer to new and creative teaching (including examining) styles, to a wide range of learning styles, to novel and powerful resources for teaching and learning. Among the recurrent words are ‘multidisciplinarity’ and ‘multi-professionalism’.

The detail of the current, whole medical curriculum resides in the attributes of all the components or constituents or elements, denoted by the recurrent words and phrases, such as have been already noted, and importantly, too, in the interactions between and among components or elements. Moreover, the whole curriculum consists in the operationalization, or translation, of those curriculum component or constituents or elements, and their interactions into corresponding environments or environmental elements of the medical school.

To get some idea of the kinds of environments or sub-environments or environmental elements that represent the curriculum, and characterize the medical school, it is useful to try to categorize, into broad groups or families, the constituents or ingredients of the curriculum, or the curriculum components or elements, or the recurrent words and phrases that describe these components and the like. (Curriculum elements variously denoted, heretofore, as components, constituents, ingredients, or the like, will henceforth, in this paper, be called desiderata. This term, singular form desideratum, while otherwise somewhat arcane, exotic and esoteric, appears to be strong, helpful and economical, in its emphasis on the idea of something that is sought, aimed for, wanted, desired. Use of the term desideratum, for a curriculum component or element, merely implies that some, and not necessarily all, interested in the medical curriculum would subscribe to the desirability of that component or element. Note, too, that while desideratum generally refers to the presence of a curriculum component or element, a desideratum might be the absence or opposite of a particular component or element).

There are literally hundreds, if not more, of these curriculum desiderata, denoted by the recurrent words and phrases, including the ‘buzz’ words and phrases. Only a relatively small selection of apparently very salient or otherwise notable curriculum desiderata will be made at this time.

Because of its undisputed salience, it is useful to start with the GMC curriculum writings in *Tomorrow’s Doctors* (1993) as a most significant source or listing of what are here being called curriculum desiderata. The interest here is in noting that, linked to the GMC curriculum desiderata, in that all-powerful document, there were associated medical education environments that either needed to come into existence or needed to be enhanced. It is interesting to note, in Rosenthal & Ogden (1998), that medical students at that time not only enthusiastically endorsed the significance and relevance of the GMC’s desiderata but prioritized them as well. The students wanted the environments that the GMC recommendations implied.

More generally, brief reference will now be made to the necessary association or parallelism between curriculum desiderata, on the one hand and, on the other, the linked learning environments and their characteristics, physical, social, psychological, pedagogical and technological (Fraser, 1998a). (‘Pedagogical’ will here subsume the Knowles [1990] ‘andragogical’ emphasis.)

Obviously linked to specific medical education environments, or environmental elements, are curriculum desiderata that concern the physical or social setting, be it hospital, university or community, or ‘small group teaching’ or ‘working in teams’, or ‘multidisciplinary’ or
Climate: focal and unifying concept in medical education

‘multi-professional’ structures. This obvious linkage to environment also exists when curriculum desiderata are described as ‘individualization’ or ‘mentoring’ or ‘special study modules’, or, for that matter, as ‘graduate entry’ or ‘concern for ethnic or gender considerations’.

Then there are very substantial, noteworthy and influential curriculum desiderata, broadly describable as pervasive educational stances. All of these stances are linked to parallel, associated environments or environmental elements. Some of these are pedagogical stances, for example one concerning subject matter, namely the ‘avoidance of overburdening factual load’, and one concerning teaching method, namely ‘student-centredness, rather than a transmission model’. Pedagogical stances, probably widely viewed as of great significance and value as curriculum desiderata, would include ‘collegiate, cooperative staff–student relations’, and ‘staff openness to and encouragement of student evaluations of teaching, courses and curricula’. Other noteworthy pedagogical stances or curriculum desiderata emphasize aims, for example in terms of outcomes-based, or competency-based or objectives-based education. In the context of the present discussion, note the comment of Harden et al. (1999), that educational environment is ‘determined’, in an outcomes-based education. There are other pervasive educational stances or curriculum desiderata describable, rather, as psychological, social and philosophical. Such desiderata are, for example, ‘liberal and humanistic versus behaviourist and traditional’, ‘human rights’, ‘ethical considerations’, ‘emphasis on students’ personal development’, ‘pastoral care’, ‘emphasis on students’ learning styles’, on ‘constructivism’ (Saquarrah, 1999), and indeed on the ‘behavioural sciences’, themselves.

There are pervasive educational stances or themes or curriculum desiderata, of great significance, that specifically highlight ‘learning’ and that, again, are linked to environments or environmental elements, parallel to, or correlated with, the particular themes, stances, curriculum desiderata. Among such desiderata are ‘self-directed learning’, ‘student-centred learning’, ‘autonomous learning’, lifelong learning’, ‘adult learning’ (Knowles, 1990), ‘active/passive learning’, ‘surface/depth learning’ (Coles, 1998), ‘evidence-based learning’ (Eitel & Steiner, 1999), ‘portfolio learning’ (Snadden & Thomas, 1998), ‘experiential learning’ (Dunn & Chaput de Saintonge, 1997), ‘task-based learning’ (TBL) (Harden et al., 1996) and, probably the most emphatic of all, ‘problem-based learning’ (PBL) (Harden & Davis, 1998; Davis & Harden, 1999). There is a vast literature on this latter. Meriting emphasis, in this context, is Hadgraft’s observation, in Abu-Zedan (1997), that PBL is a vital step towards a new work environment. Two other curriculum stances or desiderata pertaining to learning are ‘computer-based (or -assisted) learning’ (CBL or CAL), and ‘distance learning’. These curriculum desiderata will be briefly mentioned again, below, in the consideration of the pervasive educational stance towards information technology.

Rather closely linked to these pervasive educational themes or desiderata that concern ‘learning’ is a set of pervasive stances or themes, and the like, that concern what are principally cognitive or intellective abilities, sometimes overlaid with social, emotional and motivational aspects. Some of these abilities are critical thinking, diagnostic thinking, curiosity, problem solving, communication skills, research abilities, and the rather subtle and esoteric metacognition and metacompetence (Maudsley & Strivens, 2000). Emphasized here is the fact that any of these ‘abilities’ implies an associated or parallel educational environment or environmental element.

While talking of learning and abilities here, it is important to note pervasive educational stances towards assessment and evaluation of learning, that furnish quite a number of curriculum desiderata and implied, associated environments. Two recent helpful sources, in this regard are a general overview by Newble (1998), and a paper by Collins & Harden (1998), focusing on clinical examinations.

One of the strongest pervasive educational stances characterizing medical education is the information technology (IT) stance, proclaiming that the Information Age is here, whether described as the linkage of multimedia technology and the computer (Harden, 1998b), or the convergence of the computer and communications (Carlile, 1999).

For our purposes here it is appropriate to view the IT desiderata that may become part of, or contribute to, the whole medical curriculum, as being IT applications or IT products. These applications or products are legion, and constitute a continuum of complexity and sophistication. ‘Computer-based learning’ (CBL) can comprise students using hand-held computers in community health centres (Alderson & Oswald, 1999), or using interactive hypermedia in state-of-the-art study guides (Smyth & Harden, 1995; Finley et al., 1998). CBL can also occur in ‘virtual environments’ (Sampedro et al., 1999), essentially in ‘medical schools without walls or teachers’ (Kent, 1997), and at a distance, globally and internationally (Scott, 1999, pp. 188, 193), from the ‘real’ medical school at which the student is enrolled. Email is a striking IT product, very versatile, which can, for example, give rise to international collaborative medical education (Jones et al., 2000), or increased contact between medical teachers and their students (Asgari-Jirhandeh & Haywood, 1997). Telemedicine and video-conferencing (Gul et al., 1999), and interactive lecturing (Steinert & Snell, 1999), are among the desiderata of modern medical curricula. The IT list of desiderata is long and increasing, making a very obvious, marked and sometimes staggering contribution to, or change and enhancement of, both the medical education curriculum and the medical education environment. For a useful review of IT in medical education, see Murphy et al. (1998), where relationships of IT to curricula and environments are underlined.

Insofar as the ‘new library’ (a traditional library, plus what is being sometimes now termed a ‘cybrary’) is the essence of information transfer and information technology, it is important to note here that the ‘new library’ itself is a curriculum desideratum, and that the associated environment of the ‘new library’ is of great significance.

A brief review here of this consideration of the medical school environment, curriculum discourse and curriculum desiderata, would be to say that all of these desiderata may contribute to the whole curriculum, and may imply the
need for new, corresponding and parallel environments or sub-environments or environmental elements of the medical school, and medical education.

Medical teachers and the medical school environment

Throughout this paper the stress necessarily is on the educational environment of learning and teaching, for the medical student. There is also, however, an accompanying and related strong interest in the significance of the environment, in this paper termed the organizational environment, in which the medical teachers work. This need to pay attention to the situation or environment in which staff find themselves, as a consequence of implementation of new curricular initiatives, is a recurrent, important theme of this paper, if for no other reason than that the working or organizational environment of medical teachers is inextricably bound up with the educational environment of students, and a strong determinant of that educational environment. Unfortunately, much of the literature indicates that the significance of the organizational environment for medical teachers is not always appreciated, and the provision or creation of a desirable, appropriate environment for teachers is not given appropriate attention, particularly in times of great and rapid curriculum development and change, as nowadays.

In this paper there has been substantial discussion of the way in which what have been termed curriculum desiderata are linked to parallel and corresponding environments for medical students. In like manner, there are curriculum desiderata that are linked to parallel and corresponding organizational environments or environmental elements for medical teachers. ‘Giving staff opportunity to express their agreement or otherwise with planned curricular changes’ (Watson et al., 1998, p. 953), is one such curriculum desideratum that has correlates in the organizational environment for teachers. So too is ‘involving those teaching at the grass roots’ (Fuller, 1997, p. 148), ‘Enabling staff to contribute at all stages in the process of curriculum development’, and ‘valuing and respecting staff and their contribution to curriculum and curriculum development’, to avoid staff being equivalent to what Millard (1999, p. 223) calls ‘buried treasure’, are other curriculum desiderata that would have clear correlates in the organizational environment of the medical school. ‘Enhancement of staff well being’ and ‘diminution of staff stress’ are further desiderata of curriculum or curriculum development that have obvious correlates in the medical school’s organizational environment for its teachers (Boohan & McHugh, 1996; Harden, 1999).

The organizational environment inhabited by medical teachers has been stressed already as deriving its significance, not only in its own right but pre-eminently in its correlates in the educational environment for the students. Fullan (1992, p. 109; 1991, p. 327) underlines the general significance of the connection between organizational and educational environments. For one specific medical education example, see Hargie et al. (1998). Joyce (1990), quoted in Scott (1999, p. 78), underlines the obvious, one might say, in stating that ‘it makes good sense to try to create productive environments for teachers’.

The medical school environment: its primacy as a determinant of behaviour of medical students and teachers

The environment of the medical school is notable, not only because it derives from and is a manifestation of the curriculum, but because the environment is a determinant, of pre-eminent, salient significance, of the behaviour of the medical school’s students and teachers. Lewin’s (1936) celebrated conceptualization of Behaviour (B) as a function of the Person (P) and the Environment (E), B = f(P,E) (Stern, 1964), highlighted the significance of the so-called personalistic (P) variables and the situational or environmental (E) variables, in explaining and predicting behaviour. The medical student’s behaviour, for example, is determined by his or her personality and other personal characteristics and attributes, and also by the characteristics of the medical school environment. Not just in medical education, but also more generally, there has been a relative neglect of the significance of the situation or the environment, as a determinant of behaviour, despite the fact of the importance of both E and P, in predicting and explaining B (Pace, 1963).

But how does the environment of the medical school determine the medical student’s or teacher’s behaviour? This paper will indicate that environment is perceived by students and teachers and that it is perceptions of the environment that are related to behaviour. The environment, as perceived, may be designated as climate. In this paper, environment is conceptualized and manifested as climate.

The next section of this paper will be concerned with the educational and organizational climate of medical schools, as conceptualizations or operationalizations or manifestations of environment, these environments, of course, having already been viewed as manifestations or operationalizations or conceptualizations of curriculum.

Part 2 of this Guide will be published in the next issue of Medical Teacher.

Notes on contributor

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