

## **Principles and Theory Underpinning Proposed Restructuring of MB ChB Programme: Years 4 to 6**

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Socially responsive health care is the Faculty of Health Sciences' mission and socially responsive education, one of UCT's missions, is in alignment with National Health and Higher Education Policies and legislation promulgated in 1997; which is also a contemporary trend in both health professions and higher education internationally.

Curricula need to be *planned* to promote alignment (Biggs, 1999 a&b) with the FHS and UCT Missions of social responsiveness.

The planning process is necessary to ensure consistency and coherence across the entire programme/curriculum to avoid problems of a hidden curriculum (See Note 2 at end of document).

In terms of the FHS' interpretation of socially responsive health care as PHC-led education, service and research, the undergraduate programme/curriculum goal is to produce a generalist with the knowledge, skills and attitudes that is competent in a comprehensive approach to health care, with particular emphasis on the most common health and disease issues in South Africa.

The educational principles relevant to achieving the above undergraduate programme/curriculum goal are:

- Curriculum design needs to reflect an organization of knowledge that is integrated to achieve a comprehensive approach to health care: a key decision needs to be the extent of horizontal and vertical integration across the 6 years and whether integration will be multi- or inter-disciplinary (See Harden's article on 'Ladder of Integration' and Note 1 at end of document);
- Location of learning: in settings where students can observe generalists applying an integrated, comprehensive approach, can themselves practice it and receive feedback from experienced generalist practitioners of an integrated, comprehensive approach;
- Assessment of students' learning and competence: Assessment methods need to be aligned with the learning and practice activities of integrated, comprehensive care to minimize the hidden curriculum phenomenon.

The *planned curriculum design* and *significance of location of learning* are informed by Situated Learning Theory (See Note 3 at end of document). Key tenets are:

Authentic learning and assessment activities increase the meaningfulness of activities for learning and related motivation of learners.

A model of learning that embodies the principle of authenticity is that of *Apprenticeship* that enables coherent and meaningful participation. The emphasis is on participation (Jeanne Lave, 1991) because no matter how well planned the curriculum, it cannot fully anticipate the context-specific variability of practice settings. In this approach to apprenticeship, *newcomers* are 'legitimate peripheral participants' that through their learning and social interaction become 'central participants'/*old-timers*. "Legitimate peripheral participation offers a two-way bridge between the development of knowledgeable skill and identity – the production of persons – and the production and reproduction of communities of practice. Newcomers become old-timers through a social process of increasingly centripetal participation, which depends on legitimate access to ongoing community practice. Newcomers develop a changing understanding of practice overtime from improvised opportunities to participate peripherally in ongoing activities of the community. Knowledgeable skill is encompassed in the process of assuming an identity as a practitioner, of becoming a full participant, an old-timer" (Lave, 1991, p.68).

The philosophy of learning in which this model of apprenticeship is embedded is that of learning as a social practice, that is, "mind, culture, history and social world are interrelated processes that constitute each other" (Lave, 1991) and Vygotsky (1978): 'social interaction precedes development, consciousness and cognition emerge through socialization and social behaviour'.

An important implication of this philosophy is that if we want to develop a sense of agency and critical engagement in students with all aspects of the learning situation, that is, the types of knowledge being acquired, the social relations through which the knowledge is acquired and the institutional structures and organizations that embody these social relations and practices, then we need to role-model it and mediate it explicitly.

## REFERENCES

Biggs J (1999a) Constructing Learning by Aligning Teaching, in Biggs J, *Teaching for Quality Learning at University*. Buckingham: Open University Press. ***In this Chapter 2, the most immediately relevant pages are from page 25 onwards.***

Biggs J (1999b) 'What the Student Does: teaching for enhance learning', *Higher Education Research and Development*, Vol.18, No.1, pp.57-75. ***The most relevant section on alignment is pp.63-70.***

Braveman PA, Mora F (1987) 'Training Physicians for Community-Oriented Primary Care in Latin America: Model Programs in Mexico, Nicaragua and Costa Rica', *American Journal of Public Health*, Vol.77, No.4, pp.485-490.

Harden R (2000) 'The integration ladder: a tool for curriculum planning and evaluation', *Medical Education*, 34:551-557.

Hartman N (2009) *The Primary Health Care Approach and Restructuring of the MBChB Curriculum: A Case Study at the University of Cape Town Faculty of Health Sciences*. PhD Thesis, University of Cape Town.

Lave J and Wenger E (1991) *Situation Learning: Legitimate Peripheral Participation*. Cambridge University Press. **Note: the Foreword to this book by W.F. Hanks provides a valuable overview of their theory – the UCT library copy is out but I've requested it so that I can copy relevant chapters. Another very brief overview of their ideas to be found at <http://www.learning-theories.com/situated-learning-theory-lave.html>**

Otti, PN (1989) 'Medical Education and Primary Health Care in Tropical Africa: Evidence for Change', *East African Medical Journal*, Vol.6, No.4, pp.301-307.

Pomrehn PR, Davis MV, Chen DW, Barker W (2000) 'Prevention in the 21<sup>st</sup> Century: Setting the Context through Undergraduate Medical Education', *Academic Medicine*, Vol.75, No.7/July Supplement, S5-S13.

Vygotsky L (1978) *Mind in Society: The development of higher mental processes*. Cambridge, MA: Harvard University Press. [Translators Cole M and John-Steiner V] **Note: This book is available at UCT library. A very brief overview of Vygotsky's theory at <http://www.learning-theories.com/vygotskys-social-learning-theory.html#more-4>**

## NOTES

### **Note 1: Relevant levels of integration from Harden's Ladder of Integration used in Hartman's (2009) thesis:**

In the African context, Otti (1989) argues the case for teaching the principles of PHC in each of the disciplines, thereby promoting the breakdown of division between Community or Public Health and clinical disciplines. This extent of integration was explicitly articulated by 16/18 doctor interviewees. Braveman and Mora (1987) describe similar curricular initiatives in the Latin American context under the rubric of Community-oriented Primary Care.

In educational design terms, Pomrehn et al and Otti are making a case for the nested or infusion mode of integration, the purpose of which is to provide experiential learning opportunities that approximate the ideal or normative practice. Nesting is the fourth step in the ladder of Harden's continuum of integration (Harden, 2000). The Community-Oriented Primary Care methodology for implementing PHC in the Latin American context, described by Braveman and Mora (1987) or as developed at Beersheva in Israel, calls for multidisciplinary or interdisciplinary approaches, the ninth and tenth steps in Harden's ladder of integration. For example, students need to combine individual patient care in a PHC clinic with conducting a community diagnosis, using this information to develop an intervention plan and evaluate it, all of which are done in consultation with the community involved. This approach would require the presence of a number of subject areas or disciplines, combined into a single course that has dedicated timetable space. And students would draw from those disciplines that are relevant for addressing both individual and community health issues. At times the learning may be through the lens of the discipline (multi-disciplinarity), while at other times, the perspective of the discipline may not be evident in the learning situation (inter-disciplinarity).

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**Note 2:** Most of the literature refers to school level or is very theoretical, so I've selected the Snyder title because it refers to Higher Education and included the endorsements which signify the **concept of hidden curriculum**:

Snyder, B. (1973) *The Hidden Curriculum*. The MIT Press. Cambridge.

In a penetrating analysis of student unrest, the Dean for Institute Relations at M.I.T (and former chief of the psychiatric services both there and at Wellesley College) isolates a major cause of campus conflict: the overwhelming, nonproductive mass of unstated academic and social norms that divert the student from creative intellectual effort and from the attempt to define and reach his goals as independently as he is able.

### **Endorsements**

*The Hidden Curriculum* "will gain recognition as one of the more cogent 'college unrest' books. Its main contention is simple. There exist, Snyder explains, two curriculums governing the university degree. In addition to mastering the substantive one (say, physics or history), a student must cope with its tactical complement, the academic game whereby his appropriate responses to institutional prejudices will best ensure a high letter-grade transcript.... [A] most provocative thesis."

—*Saturday Review*

"...the formal requirements for courses or for success in higher education are often in sharp contrast to what it really takes for a student to complete a course successfully or to be acceptable to peers, faculty, and others.... The central task in studying the 'hidden curriculum' is to learn which patterns of behavior are tribally and/or institutionally sanctioned, and to learn to practice 'selective negligence,' that is, to identify the relevant and simplify the complex. The author calls for a searching dialogue on the disillusionment and gamesmanship that hide behind the specifics of the curriculum."

—*Library Journal*

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**Note 3: Situated Learning (J. Lave)** <http://tip.psychology.org/lave.html>

Lave argues that learning as it normally occurs is a function of the activity, context and culture in which it occurs (i.e., it is situated). This contrasts with most classroom learning activities which involve knowledge which is abstract and out of context. Social interaction is a critical component of situated learning -- learners become involved in a "community of practice" which embodies certain beliefs and behaviors to be acquired. As the beginner or newcomer moves from the periphery of this community to its center, they become more active and engaged within the culture and hence assume the role of expert or old-timer. Furthermore, situated learning is usually unintentional rather than deliberate. These ideas are what Lave & Wenger (1991) call the process of "legitimate peripheral participation."

Other researchers have further developed the theory of situated learning. Brown, Collins & Duguid (1989) emphasize the idea of cognitive apprenticeship: "Cognitive apprenticeship supports learning in a domain by enabling students to acquire, develop and use cognitive tools in authentic domain activity. Learning, both outside and inside school, advances through collaborative social interaction and the social construction of knowledge." Brown et al. also emphasize the need for a new epistemology for learning -- one that emphasizes active perception over concepts and representation. Suchman (1988) explores the situated learning framework in the context of artificial intelligence.

Situated learning has antecedents in the work of [Gibson](#) (theory of affordances) and [Vygotsky](#) (social learning). In addition, the theory of [Schoenfeld](#) on mathematical problem solving embodies some of the critical elements of situated learning framework.

**Principles:**

1. Knowledge needs to be presented in an authentic context, i.e., settings and applications that would normally involve that knowledge.
2. Learning requires social interaction and collaboration.

**References:**

- Brown, J.S., Collins, A. & Duguid, S. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32-42.
- Cognition & Technology Group at Vanderbilt (March 1993). Anchored instruction and situated cognition revisited. *Educational Technology*, 33(3), 52-70.
- Lave, J. (1988). *Cognition in Practice: Mind, mathematics, and culture in everyday life*. Cambridge, UK: Cambridge University Press.

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Suchman, L. (1988). *Plans and Situated Actions: The Problem of Human/Machine Communication*. Cambridge, UK: Cambridge University Press.