CREATING PRODEV – A PROGRAM TO FORMALIZE THE INFORMAL CURRICULUM

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BACKGROUND

One of the most intriguing aspects of becoming a physician is learning the skills that many educationists and experts club together in a rather unwieldy basket called the "hidden curriculum". The word intriguing is used deliberately in this context because many aspects of the nature and the acquisition of the hidden curriculum are indeed shrouded in intrigue. Anyone who examines the medical profession from a good objective distance is sure to be amazed that this profession spends an enormous amount of time in instructing its apprentices on the more capricious aspects of its trade, for instance the choice of therapy for Chronic Myeloid Leukemia which has changed at least twice in the last ten years[1] and little or no time at all in the skills that will probably remain unchanged for the rest of the learner's career for example communication with a patient. From a faculty perspective even more dangerous is the knowledge that "the hidden curriculum of rules, regulations, and routines is transmitted mostly by residents (rather than the faculty) in clinic hallways and the hospital, often late at night when residents and students are on call"[2,3]

For a major part of the last century, the acquisition of the hidden curriculum – which for the purpose of this article we will call professionalism (although this does include a number of skills that does not strictly fall into this category) was relegated to an ill defined osmotic process called "role modeling". Unfortunately as Stern elegantly points out, role modeling is in the eye of the beholder – the student and not the teacher. "Individuals who are seen as mentors may not realize that they are teaching professional values and those not seen as mentors may believe they are."

Since the 1970s many medical schools around the world have developed modules or content areas that teach as the least, medical ethics. National committees that design curricula have acknowledged the need to formalize the "informal curriculum." Several excellent examples of attempts by prominent medical schools, to create an environment of acquisition of, and the reflection on these "professional values" by medical students have been published. These innovative methods have in part been spurred on and sustained by a recognition by regulatory and licensing agencies in various nations (including the Medical Council of India[4]) that these skills must be an important part of the core curriculum.

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THE SRI RAMACHANDRA EXPERIENCE

The curricular innovation initiative can be traced back to the conduct of the "Status of Progress of Reforms in Undergraduate Curriculum and Education (SPRUCE)" a conference conducted by our university in the year 2000 with the support of the Medical Council of India. The conference highlighted that there was a common aspiration among the many stake holders of education in India in creating a more progressive patient centered problem based curriculum with clear emphasis on professional development. Following this Sri Ramachandra University (SRU) created a curriculum development initiative with a view to create a competency based curriculum by the year 2008.

The curriculum development group developed a unique process of working backwards –first identifying the knowledge, skills and attitudes that a physician needs to possess while he or she practices in a particular domain after graduation and then place them accordingly into the various phases and departments. The cross content areas were marked for vertical or horizontal integration. It was apparent during this process, that a large number of competencies that would in the past be left out in a grey zone to be acquired informally will now have to be formalized into the curriculum. As the curriculum development process proceeded, the group discovered that this basket was rapidly topping up and needed to be addressed in a fashion that will be complementary to the new curriculum. Further direction to the curriculum development process was given by the leadership of the Sri Ramachandra University which expressed a desire to see "students from Sri Ramachandra graduate with real life skills".

The curriculum group felt that this was an opportunity to develop a unique model to impart professional skills – and PRODEV was born.

DEVELOPING PRODEV

The first step in creating PRODEV was to establish a needs document (table 1). A faculty questionnaire was circulated that asked the respondents to indicate if they felt if formal instruction was desirable in seventeen areas of the informal curriculum. Except for "alternate medicine" for which there was minor disagreement, the overwhelming response for each of these questions was one of *strongly agree or agree*. Several focus groups were also held with various levels of students to ascertain their views.

Table 1. Steps in Developing PRODEV

	Step	Methodology
1.	Establish need	Faculty questionnaire, Student Focus groups
2.	Content identification	Literature review, Discussion with peers from other institutions, Validation by faculty questionnaire
3.	Structure development	Consensus by curriculum group to create a hybrid program (see text)
4.	Faculty development	Formal day long faculty development program
5.	Content development	Case writing, identification of key learning articles, identification of important learning sites on the world wide web
6.	Student assessment	Formative bimonthly assessment, MCQs Creative writing and Ethics and communications OSCE
7.	System assessment for CQI	Formal bimonthly feed back from faculty and students. Half yearly open house with faculty and students

Once the need was established, content areas were identified (table 2) and a debate initiated on who should teach these content areas. There are several reports on content areas in the literature, the most prominent of them being the Pond report[5] which suggested the identification of a group of experts to teach medical ethics. It was clear from the questionnaire submitted to the faculty that a majority of faculty professed no experience or comfort in teaching professionalism formally. However it was evident that faculty cutting across departmental and hierarchal lines were eager and willing to be part of the process (except one, all the respondents expressed willingness to be part of this process). It was fortuitous that the program chose interested novices than confine this to the hands of a small group of skilled experts as will be evident below.

Table 2. PRODEV content areas

1. What is expected of a doctor in the 21st century
2. Foundations of Medicine and the law
3. Foundations of Medical Ethics
4. Reasoning in Clinical Practice
5. Introduction to Clinical Research
6. Ethical Aspects of Human Research
7. Taking the bench to the bedside
8. Effective Communication
9. Connecting with Patients
10. Working in a Health Care Team
11. Etiquette for Doctors
12. Health Care Systems
13. Quality in Health Care
14. The Economics of Health Care
15. Alternate Health Care Systems
16. Personal Development for Professional Growth
17. Preparing for Lifelong Learning

From the outset, it was clear that the process to implement PRODEV needs to be longitudinal, spread across the five and a half years, must straddle departmental silos and must be taught by any faculty who are willing to teach. Departments willingly donated surplus time for the program. Three hours (one in the morning and two in the afternoon) once in two weeks were made available for PRODEV). Once the time was allocated it was decided to start the program with the students in the 8th semester progressively moving to lower phases each year depending on the success of the program.

CREATING A STRUCTURE FOR PRODEV (Fig. 1)

A hybrid method of instruction was evolved – the discussion would revolve around a case introduced to a small group by a facilitator; the group would identify learning objectives and do self study and reflect for two weeks. An anchoring lecture would then be delivered by "an expert" on the morning of the discussion. The patient problem would be discussed by the small group in the afternoon and the case resolved.

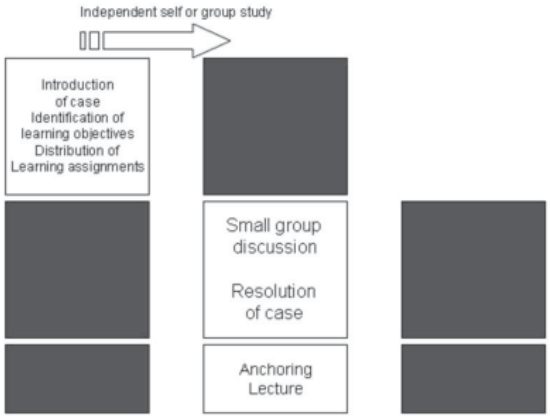

Figure 1. Structure of Prodev

After the completion of several blocks of cases – an assessment would be conducted both formative based on a standard form developed by the curriculum group as part of the curriculum development initiative as well as a summative test that consisted of 1) a morning written session consisting of MCQ s and a creative writing essay and 2) an afternoon session with an ethics or a communication OSCE.

IMPLEMENTING PRODEV

In January 2005 the first faculty development for PRODEV was held for sixty faculty members. Three faculty members were assigned to each group to be facilitators. The expectation was that the faculty will not only help these groups with PRODEV but also evolve into mentors for the

students. The program was started with the incoming 8th semester students and extended to the sixth semester students in July 2005. The first PRODEV case was provocatively called "How to buy a kidney". Two batches of medical students have completed PRODEV.

OUTCOMES

PRODEV has been a gratifying experience for its creators, facilitators and students. An analysis of student and faculty feedback reveals that PRODEV has realized most of its intended outcomes; in addition realized several unintended but desirable outcomes. These are summarized in table3.

Table 3. Benefits from PRODEV – based on responses obtained in written feedback

For the Students

1. "Learnt how to talk to patients"
2. "Learnt to face real life situations"
3. "Were able to interact with faculty in an informal atmosphere"
4. "Were able to learn from our colleagues"

For the faculty

1. "Widened our horizons"
2. "Learnt about topics we were not too comfortable with"
3. "Were able to work with colleagues from other departments"

For the Curriculum process

1. A preview of the integrative curriculum
2. A situation were faculty were able work across silos
3. A test for seeing how students use reflection and introspection
4. A test of collaborative and group learning

For the curriculum group, PRODEV was an interesting test run of the new curriculum – a testing laboratory to find out what will be the consequences of introducing a hybrid program, how faculty work across departmental silos, how students migrate from an environment of emphasis on rote knowledge to an environment where a larger part of the learning responsibility will rest on them. The results emboldened the curriculum development group to roll out the preclinical integrated curriculum a year ahead of schedule.

Student and faculty involvement have been the key to the success of the program and the intensity of their involvement has carried the program forward. It is too premature to ascertain the long term gains in the career and professional lives of students but a random survey of the first batch of students who are currently in their CRRI year reveals that they feel better equipped to handle "every day medicine".

CHALLENGES THAT REMAIN

While PRODEV has unfettered acceptance in the institution – it still faces the challenge of not being an integral "core of the curriculum". A decision was made to not extend PRODEV into the 9th semester as students and some faculty perceived that this would be a distraction in a semester that student attention must be focused on their final examination. Unless the content areas championed by PRODEV are an integral part of this examination the attitude towards professional development sessions will remain, and be an issue that will need to be addressed as we gain more experience and more support from regulatory agencies like the Medical Council of India.

CONCLUSION

PRODEV has been a successful attempt at introducing a longitudinal multidisciplinary professional development program for MBBS students. Its success has paved the path for the implementation of an integrated competency based patient centered curriculum in the university.

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REFERENCES:

1. Goldman JM, Melo JV. Chronic Myeloid Leukemia – Advances in Biology and New Approaches to Treatment. N Engl J Med. 2003; 349: 1451 - 64

2. Stern DT. Practicing what we preach? An analysis of the curriculum of values in medical education. Am J Med 1998; 104"569 -75

3. Stern DT. In search of the informal curriculum: when and where are professional values taught? Acad Med 1998; 73 Suppl 10 S28 –S30.

4. Medical Education: The Developing physician – Becoming a professional Ster D.t., Papadakis M. N Engl J Med 2006;355:1794-1799,Oct 26, 2006.

5. Rules and regulations of the Medical Council of India. Accessed January 2007

6. Report of a working party on the teaching of medical ethics. British Institute of Medicine. 1987; London: The Institute