

Trends in educational development*

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Preamble

The education of the health professions is changing rapidly. The driving forces stem from three major sources.

- Exponential growth in knowledge and technology.
- Dissatisfaction with current educational programs.
- Developments in education.

Growth leading to fragmentation

The rapid increase in scientific knowledge has led to a high level of specialisation. In order to cope with the rising complexity, specialists know more and more about less and less. This is necessary to ensure adequate depth of expertise. As a result new disciplines are being created and existing disciplines split into more specialised areas. The undesirable by-product of this phenomena is fragmentation of knowledge and practice. It is becoming increasingly difficult to coordinate the contribution of all the disciplines. Departments often operate as if they were independent of each other. The drawing of boundaries around departmental structures often trigger parochial attitudes. Departments tend to set their own agenda and protect their own space, resources, influence and value systems. Whilst competition between the different groups may promote excellence in individual units it makes it difficult to achieve corporate goals. The advancement of information technology has a potential to improve communication across different groups but in the

absence of incentives for cooperation, units tend to operate within their zone of autonomy rather than as a corporate entity.

Health professions educators working within departmental boundaries recognise that their courses are often not adequately integrated. Education delivered by departments working in isolation from each other fails to link theory and practice and to provide a meaningful context for learning around practical experience and professional practice. Most public health issues require multidisciplinary approaches.

The implications for educational institutions are clear. The different parts of the course need to be integrated around meaningful issues, reflecting practice and enabling application of knowledge and skills. There is a need to improve exchange of information, sharing of values and beliefs and improving capacity for negotiation among the different disciplines. Appropriate forums are required for working together in an atmosphere of trust and cooperation.

Furthermore, negotiation among the stakeholders must eventually lead to determination of priorities. It is not possible to “cover” everything. The educational program must be based on careful analysis of what the graduates need to know. To avoid overcrowding of the program it is necessary to formulate realistic learning objectives and activities. Students need to learn how to retrieve and use information and how to study independently.

Dissatisfaction with the existing educational programs

The following issues are often raised as expressions of dissatisfaction of the current educational programs.

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- It is argued that educational programs often:
 - * do not reflect health priorities - epidemiological distribution of disease and population health perspective.
 - * do not emphasize health promotion and disease prevention.
 - * do not encourage assessment of cost effectiveness.
 - * do little to deal with poor rural distribution of doctors.
 - * do not equip graduates to deal with social concerns of patients.
- Patients complain that doctors are disease oriented and impersonal.
- Teachers and students complain about:
 - * the lack of integration
 - * too much content
 - * delay before clinical learning begins
 - * lack of focus on the needs of the graduates
- Health authorities complain about lack of social accountability.

Relevance of Education

Interchange between 'practice' and 'education' is commonly recognised as an essential process in attaining relevance in workforce development. Relevance in education and training is vital to ensure students are adequately prepared for practice. Educational institutions have an obligation to pursue relevance given that in most instances the majority of their operating budget is derived from public sources. Socio-political concerns such as equity of access according to need, quality of care, consumer satisfaction, efficient use of resources, individual versus community rights, environmental determinants of health, technology assessment and cost must be considered by educational institutions if they aim to meet this obligation.

The recent Forty-Eighth World Health Assembly, with particular reference to medical 'education' and 'practice', urged Member States to collaborate with all bodies concerned with education, to promote and support research concerned with enhancing the relevance of 'practice', and to support educational reform.

The need to improve relevance in public health

education has also been, made explicit in the first tenet on which the Asia Pacific Academic Consortium for Public Health (APACPH) was founded. Member institutions are expected to "[r]aise the quality and relevance of professional education in public health". One of the ways in which APACPH is seeking to enhance the relevance of education is through the development and wide dissemination of competencies for the public health workforce.

Development and Education

Major developments in education, which have evolved over the past two decades, are increasingly applied in health professions education. Better understanding of the learning process has led to greater emphasis on active learning and rejection of passive "spoon feeding". Much greater emphasis is put on the design of learning activities. Students learn by practicing skills and applying knowledge. Teachers design appropriate learning activities and create supportive conditions for learning. The role of the teacher in transmitting information is diminishing in importance. Students are expected to access information through many sources. Their capacity to access and manage information is regarded as a core competency required to sustain and update knowledge throughout their career.

Hence, advanced educational programs focus on the development of learning skills which equip the students for life long self directed learning. Activities are designed to help students to learn how to learn, how to solve problems, how to use information and how to use their experience and practice as a source of new learning. They are given opportunities to observe and to practice. Students are expected to reflect on their experiences, to explore meanings and to test new ideas. They are assessed on their ability to apply knowledge and solve problems rather than merely on their ability to recall facts and bits of information.

In response to dissatisfaction with aspects of the graduates performance, greater emphasis is put on communication skills and interpersonal relations. It is recognised that personnel maturity and competence in managing oneself are important. This includes management of time, avoiding excessive stress and maintaining self well being. Understanding and being able to apply ethical consideration also gains importance. With the increasing complexity of technology, the requirement to ration health services and the dynamic interrelations of social, cultural, economical and

professional issues, health professions are required to make difficult decisions based on sound ethical and professional considerations.

Efforts to improve access to education for people in the workforce and people in remote areas has led to an increased use of distance modes of education. With the amount of information technology widely available, many programs are offered on-line via the internet and sophisticated electronic learning environments.

The social setting for learning has also gained much attention in recent years. It is increasingly recognised that the quality of the learning environment has major impact on the quality of the learning achieved. The learning environment is portrayed in terms of the conditions it offers, the opportunities for practice and exposure it provides and the appropriateness of the learning activities and resources it offers. Hence, the increasing emphasis on community setting for learning is associated with the belief that the community provides a better exposure and opportunity to practice relevant skills not afforded in highly specialised hospital departments.

All these developments require a much more systematic approach to educational planning. Systematic planning focuses on analysis of what the graduates need to learn and the attributes they need to possess to succeed in their professional careers. This information is used to formulate educational objectives, learning activities and assessment procedures which focus on the required learning.

The planning process incorporates also a careful analysis of required resources, organisational

arrangements, and learning environments. Many institutions have recognised the need to restructure their organisation to remove boundaries between departments and enable integration across disciplines. The content which is included in the curriculum is more likely to be selected and organised around key issues (cases, problems or scenarios) that the graduate will need to address. The concepts and information are presented in the context of and in association with the case problems addressed. It is agreed that this approach enables deeper and more sustainable learning because it offers meaning and an immediate opportunity for practice and application.

Conclusion

In my brief presentation, I highlighted some major developments in education of the health professions. I have noted that we need to address and indeed take advantage of scientific and technological advancements. We can no longer expect to teach students everything they may need to know. Rather we should prepare them for life long learning by cultivating their cognitive skills. This is achieved though active learning provided in a meaningful context of practice and education.

The shifts in educational approach has major implications for the role of teachers in the way we organise our institutions and programs and in the kind of resources we use.

The trends identified are gaining momentum and are quite universal. Public health educators need to review these developments and undertake restructuring of their programs in earnest.

保健医療従事者の教育は、高度な専門性を目指す技術・知識の進歩、また、疫学や公衆衛生上の優先順位や対費用効果、従事者の配置、患者の意向を十分反映していない現行の教育プログラムへの不満、および学習過程を重視する教育の進歩などから急速に変化しつつある。このため必要とされる全てを教え込むというのではなく、生涯にわたって学び続ける技術を身につけさせるよう保健医療教育プログラムを改善発展させることが望まれる。