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Training healthcare professionals for the future: Internationalism and effective inclusion of global health training

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Abstract

There has been a continuing rise in recent years of the number of medical schools in the developed world offering 'global health' teaching to its students. Yet, the term itself is used in a number of contexts and as yet no clear consensus on what constitutes an appropriate or successful global health education programme has been reached. Approaches to sustainable internationalisation of medical curricula include the expansion of not only opportunities for training in specific global health topics, but also the development of broader generic graduate attributes including global citizenship and ethical, cultural and social responsibility. Key components for successful implementation of such an educational framework includes a breadth of educational approach to effect truly integrated and effective curricular internationalisation. That such programmes can offer benefits is appreciated by both faculty and students alike, but there is also a burgeoning concern about potential negative effects of socially and culturally insensitive programmes. We explore three potential pedagogic approaches to the subject; Model A: an 'additive' or contributory model of global health content (the commonest current approach), Model B: an 'integrated' approach and Model C: the more challenging 'transformative' approach requiring institutional as well as programme flexibility.

Background

Globalisation as a concept is both emotive and complex, but broadly understood to encompass the creation of world relationships based on the operation of free markets. Economics drives ever increasing international trade, currency dealing and the interdependence of stock markets. However, as perceived in the late twentieth/early twenty-first century, this is not confined solely to trade. Globalisation and internationalisation are often considered to be two sides of the same coin, and whilst not synonymous, share common characteristics. Internationalisation in the context of higher education constitutes the institutions' strategic responses to globalisation (Maringe & Foskett 2010). This necessitates greater understanding around fundamental political, ideological, cultural and social differences around the world.

The concept of 'International Health', the specific role of the WHO and how health relates to globalisation (Walt 1998) has resulted in the term 'International Health' being increasingly replaced by that of 'Global Health' (Brown et al. 2006), although there is no agreement on the definition of this latter term and can mean different things depending on country and context (Koplan et al. 2009). However, the issues of equity, access to healthcare, public health and the burden of disease are common to most concepts of a global health agenda with a growing understanding that it is not simply tropical medicine in another guise, or confined to medicine in poorer countries. Rather it may be seen as a 'harmonisation of international and domestic-health concerns' (Donaldson & Banatvala 2007).

Practice points

- Developing globally competent healthcare graduates requires careful consideration of the appropriate curricular approach
- Attributes of global citizenship as well as specific global health content should be included
- Challenges including staff development and institutional approach and policy need to be addressed for effective internationalisation of medical programmes

The understanding of access to healthcare in a global health environment is the aim we would aspire to, when introducing 'global health' into the undergraduate curriculum. Additionally, within this article, the term 'internationalisation' has been utilised when discussing the institutional approach to developing graduates fit for practise in the global workplace, and with competencies in a wide range of generic graduate attributes, including those of global citizenship (The National Graduate Attributes Project 2009).

Global health issues are pertinent to the practice of medicine in many, if not all, developed countries. Economic factors also drive international migration, which, added to increasing intercontinental tourism means that one country's endemic diseases can quickly become another's. Local populations are increasingly diverse; for example, in the UK data, derived from the 2001 Census, show that the standardised

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illness rates in Indians, Pakistanis, Bangladeshis and black Caribbean's (immigrant and UK born) are up to 50% greater than in white people (Census 2001; www.statistics.gov.uk/census2001). As the UK becomes more popular for ethnic minorities, with an estimate that the current 7% that they contribute to the population will increase to 20% by 2051 (Wohland et al. 2010), there is need for healthcare professionals to be well versed in why these health disparities exist and how best to support those who are affected. This can be considered 'local' global health.

This, together with increasing mobility of doctors themselves, contributes to the rise in the number of medical schools in the developed world addressing the fundamental need for global health teaching for its students (Frenk et al. 1997; Bazemore & Diller 2009). Medical students are increasingly aware of the relevance of international health and there is a demand for its greater inclusion in the curriculum (Dotchin et al. 2010; Medsin Global Health 2010; http://www.medsin.org/; Merridew & Wilkinson 2010). Medical schools incorporate global health learning and teaching in many ways; some as a core elements of their curriculum, some offering an option that some students may choose to pursue, and others offer opportunities to extend their studies (Yudkin et al. 2003; International Health and Medical Education Centre at University College, London, UK; Leeds Nuffield Institute for Health, University of Leeds, UK).

In many medical schools, students may have an 'elective'; these are periods of curricular time during which a student can choose to work in another institution, anywhere in the world to broaden their experience. Whilst this provides an opportunity to experience medicine in other countries, typically, it is not quality assured by the parent university and forms no part of their summative assessments. Such international health electives are considered to be of educational benefit by many (Thompson et al. 2003; GMC 2009) and indeed an industry has grown up around them (Steiner et al. 2010). The appropriateness of comparatively rich western students engaging in what might be seen by some as a form of medical tourism, and in particular the impact of their presence on the local health economy, the standing of local health practitioners and students' traditional tendency to carry out procedures they would not be allowed to carry out at home, has led us (and others, Banatvala & Doyal 1998) to re-evaluate the learning outcomes and supervision of the medical student elective. The potential negative impact on a vulnerable health economy by 'western-based' students undertaking electives in such countries is usually not explored, although the potential physical risks to students have been recognised (Thompson et al. 2003; Medical Electives by Medics Away 2010; www.medicsaway.co.uk/).

It is of particular note that developing countries have not joined the trend to introduce 'global health' into their curriculum and lack the resources to offer their students an overseas elective – it is still largely one way traffic. One might consider that the concept of global health as an entity is being conceptualised as applicable only to developed western (wealthier) countries. However, educational environments are enriched by interchange between participants from rich and varied backgrounds, teacher and student alike. A potential consideration would be for funding from the students' parent university be released to accompany the student overseas to their host institution. Another alternative aspiration might be for a *quid pro quo* student exchange between institutions, with the costs to the student from the low-income country being met as recompense for the exchange. This might acknowledge that benefits of experiences of study in different healthcare settings are of value potentially to all, and not only to the students involved. A transfer of resources from rich to poor country may begin to redress the balance and address the ethical issues that surround students from rich countries getting valuable but free experience in less wealthy countries, at a net saving to the rich country.

The educational and institutional challenge

Facilitating students to acquire broader international perspectives involves an awareness of culture and highly developed intercultural communication skills in not only the staff, but also in the approach of their institution to 'internationalisation'. Development of intercultural competence is a key outcome of such an educational approach with global citizenship as an acknowledge key generic graduate attribute (National Graduate Attribute Project 2009; Frenk et al. 2010). Students with such awareness and skills, combined with relevant knowledge, will be able to contribute in professional and community roles both in their home country as well as overseas. It is widely accepted that working with potentially less advantaged or not mainstream communities requires the development of a relationship and trust as a precondition. Building bridges between cultures takes time, sustained effort and considerable sensitivity and therefore is a key aspect of developing an internationally competent medical practitioner.

However, a potential conflict exists between the perception of what 'internationalisation' may mean for a medical school and for the wider educational institution within which it is embedded. International in this sense differs, we believe, from global; an institution may wish simply to be seen to produce internationally competitive graduates and be performing on the international stage. When not preceding 'health', the word internationalisation is less politically charged. Currently, 'internationalisation' at the institution level is often confined to a concept of the staff or the student profile, and may not be considered to impact on the programme content or the methods of teaching and assessment. Thus, conflicts may occur between two broadly perceived aspects of internationalisation; the first, in relation to how international activities embed both at home and abroad, and the second has been described as 'structural' or 'cultural' – and thus may relate to approaches to inclusion within programmes (Middlehurst & Woodfield 2007). Clarity on these issues, and developing an understanding of such underpinning fundamental differences is essential to progress inclusion of any concept of 'internationalisation' within meaningful learning experiences, and especially for programmes developing healthcare professionals.

Kress (2000) has challenged the educational model underpinning most higher educational institutions. Whilst agreeing

that the fundamental aim of further study is one of providing 'those skills, knowledge, aptitudes and dispositions which would allow the young who are experiencing that curriculum to lead productive lives in the societies of their adult periods', he urges us to consider whether universities should do more. He suggests that the needs of society and globalisation require higher education experiences to move on from a concept of 'uniformity' of requirement of educational outcome, to one of adaptability and capacity for responsive change; an education for instability.

As medical educators, burgeoning globalisation places an extra requirement on us to prepare our students for practice in a much wider world. Doctors from any one country may now work widely across the world. Also, patients are increasingly mobile and in one country may be from almost anywhere in the world. The impact of globalisation is as keenly felt in a UK healthcare centre, as it may be by working in another country. This causes a range of educational imperatives.

Significant variation exists even across medical schools in the quantity, quality and variety of global health education opportunities within undergraduate medical training. There has been surprisingly little emphasis generally in medical education curriculum development that considers the implications of the substantial and rising global health interest and activities. If we accept that medical education and training needs to adapt to meet the challenge posed by a world where national and discipline-based boundaries are becoming increasingly porous, then programmes will need to ensure that its graduates are educated appropriately. Internationalisation of a programme will require that the key elements of global health training and the responsibilities of global citizenship are included for all graduates, and not just as an opportunity for a (self)-selected minority.

There have been some drives to call for standardised global health competencies (Brewer & Saban 2009) and attempts are being made to codify the core competencies of a global health programme (Evert et al. 2006; Houpt et al. 2007). Consensus on global health core competencies have been outlined by a number of organisations including the Global Health Education Consortium (2010), Medsin (2010), Institute for International Medical Education (2010), Medact: Global Health Studies (2010), and others (websites listed in references). The recommendations produced by such groups continue to evolve, and such documents may assist medical schools determine their routes of development.

Whilst the rationale for a defined and standardised global health curriculum may be attractive, this is certainly not the whole solution. Many would argue that the medical curriculum is already overloaded, and therefore addition of further specified content would potentially dilute other essential areas. Others would, in addition, consider that there is no need for every undergraduate to achieve any more than a rudimentary concept of global health, and that this should be an area for individualised postgraduate study. However, this would potentially undermine the holistic benefits of developing a significant understanding about global health. Good medical educational practice accepts that programmes should continually evolve to reflect changes in knowledge and skills, and societal shifts to deliver effective healthcare practice. The issue should surely not be about defining content but more about defining what change is required within programmes to affect meaningful and responsive development of a competent global healthcare workforce fit for the future.

Changing the educational approach

Different pedagogical approaches to the internationalisation challenge within both university and postgraduate training have potential to stimulate educational innovation. Sustainable internationalisation may be harder to achieve since this requires a strategic approach around changes within activities, targets, aims and objectives. A significant and sustainable type of internationalisation may occur only when members within the learning environment (teachers and learners) co-create and sustain internationalisation within their daily interactions, practices and learning encounters. Such an approach provides and contributes to a learning environment which goes beyond nationality and creates potential for cultural change. It also offers a dynamic and catalytic way to support institutions, not just in the training of healthcare workers but additionally to ensure that graduates from many disciplines have potential to be better prepared and able to help support and develop others wherever they are (Al-Youssef 2010).

Approaches to sustainable internationalisation of medical curricula include the expansion of opportunities for training in global health areas within programmes. These should not only include content around global health topics, but consideration must be given to how this is embedded into all learning and assessment elements. Transparency of such learning outcomes will ensure recognition by both learner and teacher, and are able to be evidenced for institutional audit as well as personal development. Key components for the successful implementation of such an educational framework include not only the breadth of such a pedagogical approach for truly integrated and effective internationalisation of the curriculum, but also consideration of the need to increase faculty/staff expertise to infuse the curriculum with real and meaningful learning experiences (Morey 2000; Internationalisation of curriculum case studies, Oxford Brookes University 2010).

It may be valuable to explore three potential pedagogic approaches (Figures 1–3, Tables 1–4):

(a) Model A: which almost certainly reflects the commonest current practice in medical education; an 'additive' or contributory model of global health content.
(b) Model B: an 'integrated' approach.
(c) Model C: the most demanding and potentially tantalisingly attractive, whilst posing most challenges, the 'transformative' approach.

The 'additive' approach (Model A; Figure 1 and Table 1) is characterised by global health inclusion within programmes where content is added to the curriculum without changing its basic structure. Such material is often easiest to include, even against opposition, but its key drawback must be reinforcing of the concept that such learning is the privilege or remit of an interested minority rather than a necessity for all.

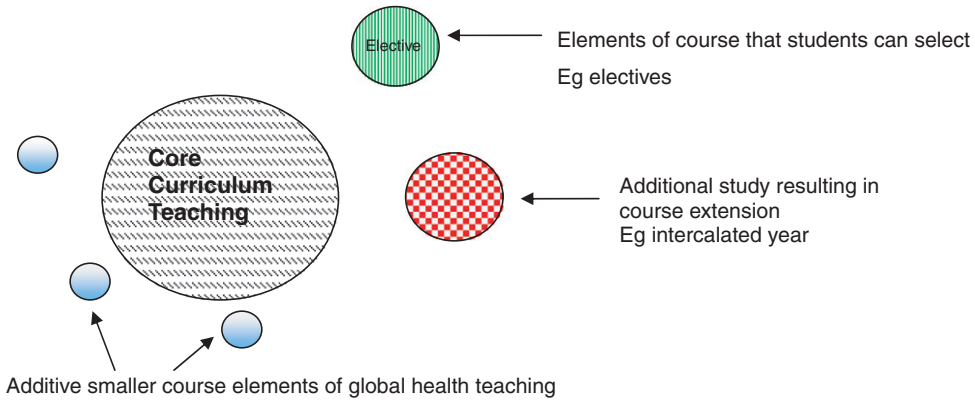

Figure 1. Model A: 'Additive' teaching content around global health topics; supplementary to the mainstream core curricular teaching.

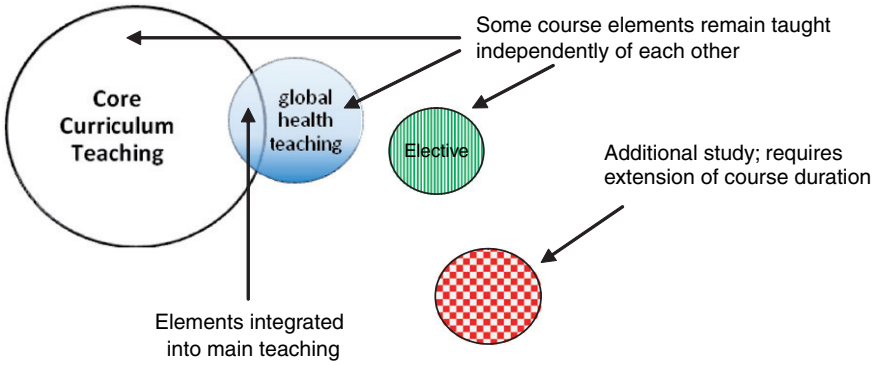

Figure 2. Model B: Some elements of 'integrated' global health teaching components are embedded within mainstream curricular teaching, contributing to broader learning outcomes. Additional global health teaching components can be retained.

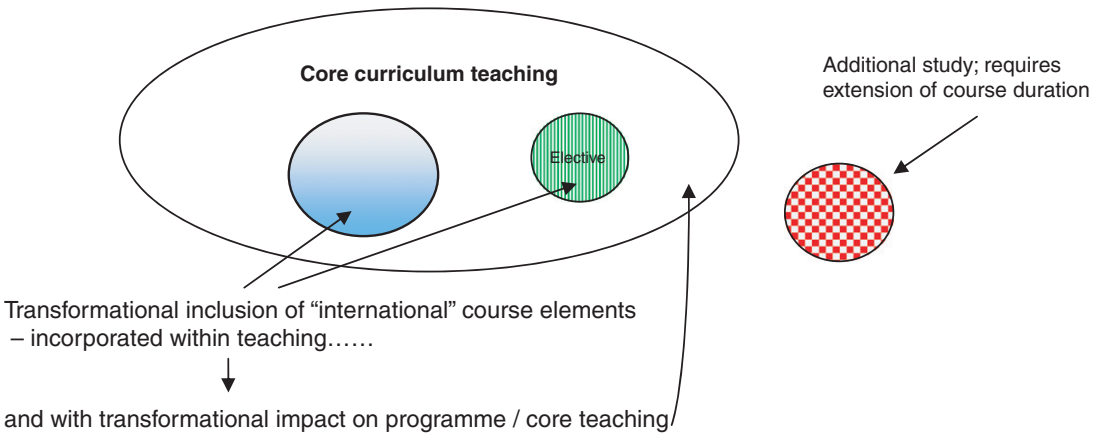

Figure 3. Model C: 'Transformational' global health and internationalisation teaching and learning experiences are embedded throughout the programme, with dynamic and interactive effect on both.

Adopting an 'integrated' approach incorporates global health learning outcomes within the mainstream curriculum and ensures that students are challenged to consider issues of diversity at home as well as abroad (Model B; Figure 2 and Table 2). Integrating global health concepts within teaching has the advantage of embedding the material as well as ensuring recognition of global health and internationalism as essential parts of the practice of medicine, irrespective of geography of delivery. Such a medical school programme thus recognises the need to equip future healthcare practitioners

Table 1. Model A: Examples of 'additive' course content.

Additive course components are not integral to the teaching programme, and provide a varied and unregulated learning experiences for (self)-selected students.

- *Options*: opportunities for students to 'select' courses or projects that would allow them to explore areas relating to international health in more depth. This could either be an additional course taken in their own free time, or a course component with underpinning skill development objective where there is flexibility over the topic actually covered (for example Student Selected Components (GMC 2002, 2009; Yates et al. 2002; Riley 2009))
- *Elective*: many schools in Western developed countries allow time nearer graduation for periods of study abroad.
- A number of schools also provide opportunities for students to extend their studies by undertaking an additional intercalated year. Some schools in the UK actually provide an option to do a Bachelor of Science in International Health (Yudkin et al. 2003, International Health and Medical Education Centre at University College, London, UK; Leeds Nuffield Institute for Health, University of Leeds, UK). Such opportunities are invaluable for providing experience and developing those students who have already identified a strong interest in global health.
- Individual teachers with international experiences or interest can introduce global health material into their sessions, often utilising anecdote or international examples. Such material enriches the learning for students. However, this approach can have a disadvantage of inconsistency, and potential to detract from intended learning outcomes if not managed appropriately. Examples of such resources are available from Global Health Studies, Tropical Health and Education Trust and The Network: Towards Unity for Health (websites listed in references)

Table 2. Model B: Examples of 'integrated' global health content.

There are many examples of how global health material can be integrated into core curricular content. Uniformity of integration across the course components is crucial for sustainability and reproducibility of key outcomes, for both the mainstream curriculum and for integrated global health components.

- The development of critical appraisal skills; course content can utilise literature samples/papers that draw from studies of populations from a range of different environments, for example, if students were considering accommodation and environmental factors affecting health, they could be directed to a number of papers representing different geographical, cultural environments etc.; the linking learning outcome would be a critical appraisal of aspects of the methodology, for example, whilst encouraging discussion and reflection on the other international aspects.
- Problem-solving in a range of global/cultural/societal settings requiring students to consider problems from a variety of cross cultural perspectives. Examples can be found from many resources (e.g. THET, Medact, The Network (2010))
- Utilisation of international tutors and visiting guest speakers to provide stimulus, facilitate discussion and share experiences across a range of cultural perspectives.
- Inclusion within course components designed to develop specific skills a necessity to demonstrate an awareness of other cultures. An example could be a mainstream course component designed to develop Information Management skills which would require students to locate, evaluate and utilise relevant information from a non-English language and/or international source.
- Communication skills training within a range of contexts and modes; this could for example require a student to demonstrate a competence in communicating with patients, carers and families where English is their second language. Demonstration of the skill of history taking using an interpreter, who may or may not be a family member.
- Personal and professional development curricular strands could include experiences of team working exploring an understanding of the complexity of cultural diversity, identification of underlying cross cultural relationships and how to work effectively in culturally diverse teams.
- Inclusion of expected learning outcomes demonstrating an understanding of international health, multicultural and intercultural issues could be included as key learning outcomes for individual mainstream modules within programmes as well as expected graduate outcomes.
- Including group reflective experiences which involving students with their host, patient, other community member can be beneficial to facilitate the group to reflect on 'gold standards'. This way the reflective practice may help inform both future strategy and Quality Management and Enhancement.

Table 3. Model C: 'Transformative' learning experiences.

Transformative curricular material considers the perspectives of the learner, the teacher and the learning environment, and what all can contribute to the learning situation. The inter-relationship of these with the intended learning outcomes allow a dynamic approach to learning method, content and even assessment methodology.

- Recognition and utilisation of international staff and students (and patients/community) as resources and co- developers of curricular material.
- Utilisation of international students' experiences to not only contribute to the sessions but also to develop session material sensitive to their needs and utilisation of their longer term expectations.
- Accommodation of students' culturally different learning styles and preferences.
- Inclusion of group tasks where members are from different cultures.
- Utilisation of web technologies including online networking and liaison with schools and students from international schools to facilitate co-learning including sharing of resources, learning materials, learning outcomes.
- Consideration of assessment methods that are collaboratively developed and reviewed to identify cultural assumptions.
- Incorporation of assessments to measure performance of students', teachers' and institutions' intercultural engagement, performance and skills.
- Course evaluations within Institutions' Quality Management and Enhancement procedures considers cultural assumptions, biases of content, teaching approaches and assessment.
- Utilisation of international benchmarks. Regular review of content to ensure dynamic and responsive material, not type casting other countries or cultures.

(Morey 2000; Schoorman 2000; Internationalisation of the curriculum case studies (2010), Oxford Brookes University, Internationalising the curriculum (2010), Victoria University)

Table 4. Transforming the 'additive' internationalisation elements.

Transformation of global health learning opportunities from 'observer' experiences into experiences within which students are both useful to their hosts, patients, communities and ensure valuable and sustained learning and personal development. This does involve more than just a simple preparation relating to the risk management of the placement or activity. Some examples of activities include:

- Preparatory exercises for the students before they embark on periods of study abroad. These could, for example, include self-preparation in cultural preparedness and specific research into the country to be visited including the healthcare needs of the region they are visiting and its socio-political history and healthcare systems (Hamilton 2009; Paige et al. 2009).
- Developing prior close liaison with the host institution; explore potential for a student to contribute, or be able to undertake a project whilst there that would be of benefit to the host institution.
- Develop group, peer led and exercises with students who are recently returned from same or similar international experiences with those preparing to go. Geographical identity may not be essential as there is significant benefit from sharing potential socio-cultural and economic challenges. This can provide opportunities for longitudinal studies and real benefits for host institution (Tales from the Frontline, THET newsletter 2009)
- Some schools may offer opportunities for language options which may be able to chronologically develop valuable preparatory skills (Yates et al. 2002).
- Broad international perspectives introduced alongside 'international' course material might include geographic and historical understandings of local culture as well as an opportunity to consider and contextualise one's own profession's role (and responsibilities) within that environment.

with skills to work in a range of economic environments, particularly the least wealthy. Utilisation of global health examples can provide stimulation for engagement. An useful example of how such learning material can provide a potential generic skills opportunity comes from challenging students to develop an entrepreneurial problem-solving approach in a resource poor situation; an outcome could be enhanced awareness of how they could work more efficiently in a range of environments including those that may not seem to be so transparently in need of cost efficiency savings. Developing entrepreneurial skills amongst doctors of the future is a key aspect of re-enthusing and developing the next generation of effective and efficient healthcare practitioners. Although there will be logistic and ethical challenges, such an approach will help ensure that patient care and community needs are not compromised.

The 'transformative' approach within programmes requires not only an action approach but also the engagement of the whole institution to facilitate such adaptability and fluidity of content to reflect dynamic and responsive learning. This highest level of curricular change may involve not only dynamic content but may even require responsive, revised and re-invigorated assessment and evaluation methodologies (Model C; Figure 3 and Table 3). Opportunities would be developed and embedded within a curriculum that is more than just enhancing knowledge, developing cultural competence or specific competencies. This requires a change in educational approach to one where the curriculum is considered to be a tool for transformation, both the students as future practitioners but, of equal importance, as one of change within the learning environment. This model presumes an interactive dialogue between teacher and learner with mutually agreed and developed objectives; co-learning. This encompasses conceptually the idea that the educational purpose extends beyond developing simply knowledge or skill acquisition in global health topics.

Most approaches that are currently utilised across medical schools work on models of activities that include curricular global health content either concurrently or alongside the main stream teaching (Model A). In some schools, and one might argue those that are most effective, material is integrated within mainstream teaching (Model B). However, lack of transparency of the purpose of such integrated learning material can impede effectivity of this for both teacher and learner, and the potential to significantly alter the shape of curricular elements is limited. Additionally, learning opportunities can be included for the 'interested minority' or those stimulated to deepen their global health skills through provision of electives in all three models. Table 4 provides some suggestions to transform such add-on experiences into valuable global health learning and developmental opportunities, with potential benefits for host as well as student.

Conclusion

Higher educational leaders have called for the 'internationalisation' of institutions integrating intercultural dimensions into the teaching, research and service functions to prepare students to succeed in the twenty-first century (Childress 2009). Preparing students for the dynamic changing global healthcare workforce requires an even more encompassing breadth of approach (Frenk et al. 2010). Implementing such change can be an exciting and invigorating journey, not only for the student but also for the institution. The scope and challenge of this has potential to not only develop an understanding of global health but also foster idealism, altruism and a breadth of consideration of choice of careers. Healthcare needs of underserved communities have considerable need for specialists in areas such as primary care or public health, as well as entrepreneurial skills able to adapt to challenging environments. Exposure to an internationalised curriculum can challenge the students, staff and institutions to think more broadly about how their skills might be utilised to serve communities in the most effective way possible (Godkin & Savageau 2003; Federico et al. 2006; Panosian & Coates 2006). We must ensure that healthcare workers of the future are equipped to listen, understand, support and collaborate with those most in need as well as fit for purpose in the global employability market.

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