

UK CENTRE FOR THE ADVANCEMENT OF INTERPROFESSIONAL EDUCATION

CAIPE

**TOWARDS A EUROPEAN APPROACH
TO AN ENHANCED EDUCATION
OF THE HEALTH PROFESSIONS
IN THE 21st CENTURY**

**REPORT
OF
THE EUROPEAN INTERPROFESSIONAL
CONSULTATION
1999 – 2001**

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THE CONSULTATION included
senior colleagues in educational institutions for
for
Medicine, Nursing, Occupational Therapy
and Physiotherapy
in
France, Germany, The Netherlands, Portugal
Sweden and the United Kingdom

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was conducted by Professor Charles E Engel
with
the UK Centre for the Advancement of Interprofessional Education

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EXECUTIVE SUMMARY

From the very start this consultation was conceived as merely the first step towards the creation of an informed climate of opinion.

The overall aim is to assist in the development of enhanced curricula in higher professional education. Such curricula should extend the education of their students *beyond* discrete disciplinary boundaries. Within the context of their profession-specific studies the students should be exposed to the wider problems and challenges that relate to the world at large. The students would also have opportunities to work with students of other professions and with people from other cultures and in other countries. These experiences should equip future professionals to be able to *adapt themselves to change and to participate corporately in the management of change* – not only within their particular profession, *but also on behalf of society at large*.

The underlying proposition is that the Twenty First Century will witness an escalation in the frequency and gravity of changes that will affect society worldwide. The identification, mitigation and long term remediation of these changes will call for the *active collaboration of all professions with governments nationally and internationally*.

The successful practice of the related wider, social responsibilities would depend on the appropriate education of future members of the professions.

The consultation was planned as a three stage process.

Round 1 would invite a manageable number of senior colleagues from educational institutions for medicine, nursing, occupational therapy and physiotherapy in France, Germany, The Netherlands, Portugal, Sweden and the United Kingdom. They would be invited to respond to the following questions:

- (i) Which competences are needed for *making decisions* related to *adapting to change* and *participating in the management of change*?
- (ii) Which competences are needed for *participating in managing change*?
- (iii) Which educational interventions are likely to help in developing these competences?

Round 2 would invite the participants to comment on the consolidated responses from Round 1 and to address two further questions:

- (i) How may the proposed educational interventions be accommodated in your existing or in an amended curriculum?
- (ii) What are the conditions (eg legal, organisational, financial) that would need to be satisfied to enable an *enhanced curriculum* to be planned, implemented and sustained?

The Report from Rounds 1 and 2 would be distributed as widely as possible.

The report would also be designed to provide a platform on which a global extension of the present consultation could build. This extended programme would address all health professions with a more comprehensive sample and across all continents.

The result would lead to a progressive involvement of the many other professions, also on a worldwide scale.

A number of issues were identified in Rounds 1 and 2. These would need further consideration in subsequent consultations.

- Some respondents did not find it easy to consider issues that relate directly to their profession *separately from* the more global, societal challenges. The distinctions between responsibilities related specifically to one's own profession and societal responsibilities, that should be assumed by all professions (*supra professional* responsibilities), would need to be emphasised more clearly.
- The Appendix represents a collation of the participants' detailed responses. These should not be seen as exhaustive specifications, nor were the respondents asked to produce a consensus statement. This is a preliminary exploration of an as yet unfamiliar set of responsibilities that need to be extended and refined.
- The focus has been on undergraduate, basic education. Some respondents felt that it might be premature to prepare students for responsibilities that might be more appropriate for professionals with some years of real life experience. Yet others expressed the view that undergraduate education for such more global and societal responsibilities should be seen as no more than an important stage in a consistent continuum after primary and secondary education and followed by postgraduate and continuing education – a part, but an important part of life long learning. Indeed, it was emphasised repeatedly that postgraduate and continuing education for junior and senior teachers and supervisors were important for the development of appropriate role models.
- The specification of educational interventions pointed to the importance of effective sequencing within a supportive curricular structure and the importance of effective educational implementation of the interventions. Repeated reference was made to a helical or spiral structure for cumulative learning and to a problem-based learning approach for integrated, contextual and active learning.
- Future interprofessional consultations should also pay attention to the assessment of students' progress and achievements, not only in profession-specific competences but also in those more closely related to global, societal responsibilities.
- It is hoped that the Network: Community Partnership for Health through Innovative Education, Service and Research will be able to undertake a significantly extended follow-up consultation through its world-wide membership.

REASONS FOR A SOCIALLY RESPONSIVE HIGHER PROFESSIONAL EDUCATION

Continuing change will be the constant in the new century¹

Changes in the Twenty First Century will range from those that are specific to a particular profession, or group of professions, to changes that affect a particular country or region and changes that have a worldwide effect.

Profession-specific changes, exemplified in this report by those related to the health professions, will include:

- (i) The emergence of new diseases and an increase in antimicrobial resistance, as well as an increase in the needs for health care by a growing number of elderly in virtually all populations.^{2,3}
- (ii) Continuing advances in science and technology with their impact on the quality and quantity of life.
The conflict between the possible and the affordable, leading to a further escalation of ethical challenges.
- (iii) Changes in the respective roles of the health professions, due to regional overproduction or underproduction in some professions, confronted by financial constraints; a demographic shift that makes competing careers more attractive; growth in the opportunities, offered by higher education, for progressively all the health professions; changes in the law that permit other health professions to assume progressively more of the responsibilities that used to be reserved for registered medical practitioners.
- (iv) Social and educational changes, as well as global information technology, which tend to increase the expectations of the public and of professionals and thus have a decided influence on their relationship with each other.

Supra-professional changes, that is changes for all professions, are primarily related to well recognized geodemographic, environmental, social and economic factors that have a major impact on the health status and socio-economic wellbeing of populations.

A few illustrative examples:

- (i) Foreign debt burden and growing numbers of the world's population exist below subsistence level.
- (ii) Unregulated use of technology exacerbates the overuse of irreplaceable raw materials; e.g. growing competition for limited water supplies lead to threats of war over access to water.
- (iii) Reduction of biodiversity and continuing desertification are accompanied by pollution of air, water and soil, with resultant detrimental influences on the global environment.^{4,5,6}
- (iv) The continuing expansion of the world's population is likely to contribute significantly to these problems.⁷
- (v) The fate of human values in the 20th Century has not been a happy one. The prospect for the 21st Century is likely to be equally unpromising, due, in part, to increase in extreme poverty, growing nationalistic, political and religious extremism. These changes tend to lead to armed conflict, mass migration and social destabilization.

Whose Responsibility?

At the very least professionals will need to be able to adapt themselves to these changes. In addition, it is suggested that governments will need the assistance of all the professions, in order to resolve such an array of complex and interrelated global problems. Individual professionals might understandably shy away from so vast a responsibility – “*not within my expertise*”.

Yet, the professions could *collectively* contribute from their corporate experience and expertise towards the international exploration of cause and effect. Many of the resulting mitigating interventions are likely to be of a long term nature and almost inevitably unpopular. Governments will, therefore, need the consistent, non-political support of the professions. *This, in turn, will require the professions to achieve interprofessional consensus and collaboration on many fundamentally important issues.*

The magnitude and complexity of the issues facing the new century will require nothing less than interprofessional and intersectoral collaboration across the world. This will call for the abandonment of the historically conditioned, somewhat inward looking and reacting characteristics of some professions.

All professions will need to become outward looking and socially proactive.

What, then, should be the responsibility of the universities? Can they persist in their emphasis on scholarship and pure research, in splendid isolation from the stark realities that face our planet?

The key proposition of this proposal is that the universities of the 21st Century should accept the responsibility to ensure that their graduates are able to *adapt to change and corporately to participate in the management of change.*

The linking of social responsibility with participation in the management of change will expect the *universities and their graduates to accept corporate, supra-professional, societal responsibilities for interprofessional and intersectoral collaboration.*

Why concentrate on the Health Professions?

Reference has already been made to the insecurity of human values. Yet, what would be the quality of human existence in the absence of human values? Numerous examples could be cited to substantiate the claim that the caring professions should be the primary guardians of human values.

As long ago as 1847 Rudolf Virchow wrote in his report on a typhus epidemic in Upper Silesia “*The improvement of medicine will eventually prolong life, but improvement of social conditions could now achieve this result more rapidly and more successfully. The physician’s responsibility is to serve as the advocate for the poor.*”⁸

More recently Professor Graham Watt of the University of Glasgow wrote in the *British Medical Journal* “*We should take a moral lead as educators and advocates on the issue of social exclusion*”.⁹ The editorial comments referred to this author by saying “*In particular he wants doctors to renounce their silence and start to speak up about the wider aspects and implications of poverty and deprivation.*” These are just two examples from the medical profession. **All professions ought to renounce their silence and speak up about wider issues that affect the world as a whole.**

Christine Ewan, now Deputy-Vice Chancellor, University of Western Sydney, Australia, contributed the first major paper on aspects of social responsibility in medical education.¹⁰ Since then the World Health Organization has been a key protagonist for the emphasis on social responsibility in health sciences education.¹¹ Perhaps the most telling recent example is based on the personal experience of the Professor of General Practice at the University of Western Australia, where he observed how Aborigine children with upper respiratory problems were treated repeatedly, yet nothing was done to remove the causes of their problems.^{12a,b}

The international influence of the health professions on educational innovation is amply demonstrated by the many enquiries into the need for educational change^{13,14,15,16} and numerous health professional publications on educational innovations.^{17,18,19,20,21}

Perhaps the development of problem-based learning is an outstanding example of far reaching change in higher education brought about by innovation in health sciences education.²²

The health professions are thus in an eminently credible position to stimulate by example the reform of higher education for societal responsibility *for all the professions*.

What are the Educational Requirements?

If education is a means towards engendering change, the first step must be to identify the precise nature of the desired change.

In the present challenge this will call for the definition of the specific competences that professionals will need, in order to be able to adapt to change and to be able to participate in the management of change. This will help to determine the content – what is to be learned, and the process – how the learning is to be accomplished.

The process will need to pay special attention to four educational imperatives:

- (i) *Cumulative learning* will require repeated opportunities for students to build on what they have learned already.
- (ii) *Integrated learning* will allow students to seek a deeper understanding in several different fields of knowledge, in order to *apply* a combination of new understanding.
- (iii) *Experiential learning* will enable students to reflect on, and share with other students, experiences that lead to new insights and deepen their understanding of fundamental issues.
- (iv) Such experiences should be closely related to the *context* in which the learning would subsequently be applied.

All these considerations will help to determine not only a rational sequence of interlinked educational experiences, *in the context of a profession's own curriculum*, but also an educationally acceptable, effective and sustainable approach to the implementation of the curricular construct and content.

It will be essential to bear in mind that this sequence of wider experiences, but within a profession-specific curriculum, must be an integral part of the *maturation process that is to transform lay men and women into professionals*.²³

PURPOSE AND CONDUCT OF THE CONSULTATION

The purpose of the consultation was to explore how future professionals could be educated, so that they would be able to

- **adapt themselves to change** and
- **participate in the management of change on behalf of society, as well as in their own profession.**

The report aims to stimulate wider consultation across Europe and beyond – “a snowball to create an avalanche” towards creating an informed climate of opinion.

The consultation was based on four propositions.

1. In order for the professions, including the health professions, to assume the enhanced responsibilities outlined in the preceding section, *all the professions would need to be proactive and collaborating with each other, within and between countries.*
2. Such corporate initiatives would need to be supported by their members’ ability to *adapt to change and to participate in the management of change on behalf of society*, as well as within their own profession.
3. For many professionals participation in the management of change on behalf of society would primarily be a *corporate responsibility with their profession, rather than a separate, individual initiative.*
4. Institutions for the education of future professionals would need to help their students to *develop their capability in adapting to change and in participating in managing change.*

The task of this study was to explore the use of the Delphi approach,²⁴ in order to assemble sufficiently concrete proposals that would act as a working foundation for a wider programme of consultation. The pilot project was, therefore, limited to a small number of senior educators in medicine, nursing, occupational therapy and physiotherapy from France, Germany, The Netherlands, Portugal, Sweden and the United Kingdom. The project has also been fortunate to be supported by very creative responses from a number of colleagues in Australia, Canada and the United States of America.

The conduct of the consultation was effected in two “Rounds”.

Round 1 invited the respondents to nominate the knowledge, understanding and skills that future professionals would need, in order to be able to adapt themselves to change and to participate in the management of change *on behalf of society* and in their own profession.

The respondents were also asked to suggest educational interventions that could be used to help students to acquire the appropriate knowledge, understanding and skills.

Round 2 asked the respondents to

- (i) propose amendments and/or additions to the consolidated responses from Round 1;
- (ii) indicate how the proposed educational interventions could be accommodated within their existing or in a reformed curriculum;
- (iii) specify conditions that would need to be met, in order for such enhanced curricula to be planned, implemented and sustained.

The Report would be made available, as far as the available funds would permit, to Ministries of Education, Environment and Health, professional organisations, educational institutions and non-government organisations.

BACKGROUND INFORMATION FOR ROUND 2

As a result of some comments in Round 1 further explanation was offered in relation to the processes that may be involved in adapting to change and in participating in managing change.

Adapting to Change – in the present context –

When confronted by a proposed or actual change, individual professionals will need to decide whether to ignore or actively avoid the practice and consequences of that change, or whether to work towards delaying or, indeed opposing the change. Alternatively the professionals can decide to accept the change in part or as a whole.

When they examine the nature and potential implications of the change, professionals will need to decide how to act as individuals, as members of their family, their profession, their community, their country or of society at large.

Their perceptions, reactions and actions may be influenced by the culture of the environment in which they function and by the culture of their profession. They are likely to feel a strong need for security and they may thus wish to hold on to what is familiar and safe. Potentially inhibiting attitudes may, therefore, need to be counterbalanced by a deeply felt acceptance of professional responsibilities and *supra professional responsibilities (responsibilities that are common to all professions)*.

Only when professionals have decided how to respond to the change will they determine their personal role in relation to the management of the change.

Participating in Managing Change - in the present context -

Managing change may range across a wide spectrum of activities, from attempting to interest others in something quite new, to setting out to delay a change until all possible implications have been fully examined. Between these extremes would be other interventions, such as assembling information for rational planning, acting as an advocate on behalf of others, as well as assisting, guiding, informing family, friends, colleagues in adapting themselves to change.

For the present purpose, participating in managing change may be described as *taking part or accepting a circumscribed role* in the management of change.

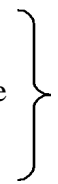
Especially in the context of the wider responsibilities of the professions to society, the role of individual professionals may here be restricted to collaboration with members of their own and other professions.

**Overview of Actions Involved
In
Adapting to, and Managing Change
[Leading to Identification of Related Competences & Personal Characteristics]**

Adapting to Change

Deciding whether to:

- i. Adopt fully
- ii. Adopt partially
- iii. Challenge/delay/modify/oppose
- iv. Avoid actively
- v. Ignore



Tasks

Problem-solving

- Analysing factors for/against a change
- Information gathering and critical appraising
- Decision making



- vi. Participate in management
(see right hand column)

Managing Change

- Planning strategy and tactics
- Reviewing support/opposition and resources
- Acquiring new knowledge and skills
- Participating as change agent
- Monitoring progress
- Evaluating outcomes

Participating in Managing Change

Deciding own role in relation to specific aspects of change (and in accordance with decisions made in left hand column)

Implementing own role(s)

Some Considerations for Developing the Competences and Personal Qualities and for Related Educational Interventions to be Accommodated in Existing or Amended Curricula

Effective adult learning may be fostered through

- *active learning*, where students identify what they need to learn and pose their own questions that lead to the desired learning; where they are helped to reflect on their experiences, and where they engage in discussion to identify how they learn and what they learn (metacognition);
- *cumulative learning*, where growing familiarity is fostered through repeated revisiting of earlier learning but at progressively more challenging levels: this suggests a spiral or helix type curricular structure²⁵
- *contextual learning*, where the learning is closely related to the situations that the students will encounter in their professional life with its interprofessional responsibilities;
- *integrative learning*, where the students conduct their learning in a combination of disciplines, in order to be able to apply such learning to profession-related and interprofessional activities;
- *deep learning* for understanding (as opposed to surface learning for short term memorisation) is supported by
 - (a) helping students to “activate”, to build upon, what has already been learned/ experienced/practised on previous occasions;
 - (b) helping students to “elaborate”, to think about and organise the new learning in their long term memory.²⁶

A maturation process²⁷, from lay status to professional status, sets out to foster the progressive development of explicit competences and personal characteristics. This process depends on a smooth and consistent progression of increasing independence and increasing responsibility. The educational environment for the maturation process includes an informal contract, where teachers and students collaborate to ensure successful learning, in a “society of scholars” where both engage in learning and where students are valued as future colleagues.

As professionals are expected to act in the best interest of their patients/clients, this environment would avoid or mitigate stress.

An active mentorship would foster self-confidence, and empathic teachers and supervisors would provide appropriate role models.

Frequent formative assessment with positive feedback and infrequent summative assessment foster and support the aims of such a curriculum that does not inhibit youthful curiosity and creativity.

It may not be very easy to make room for additional educational interventions in an already full curriculum. Might it be possible to *integrate* the new experiences with existing educational experiences by *interspersing them throughout the curriculum*? Many curricula may already offer some of the suggested interventions. However, additional time may need to be given for due emphasis to the supra professional and more global experiences.

RESPONSES FROM ROUNDS 1 AND 2

This resumé illustrates the wide range of suggestions for task-related, as well as enabling competences and personal qualities with relevant educational interventions.

The Appendix provides a comprehensive list of competences in juxtaposition with a fuller set of suggested educational interventions.

A. Competences needed for Decision Making for Adapting to Change (“How should I react?”) and for Participating in Managing Change (“What should be my role?”)

Ability to –

1. **Identify issues** that point to a need for change or issues that may affect a proposed/actual change.
Use an understanding of internal and external drives for change.
2. **Analyse implications** of a change with reflection on the change process as it may affect self/others;
Use an understanding of the phenomena of resistance to change.
Accept that adapting to change and participating in change are crucial to survival.
3. **Critically appraise** related information.
4. **Formulate possible explanations/options/solutions.**
5. **Construct a decision, individually or with stakeholders.**

B. Competences needed for Participating in Managing Change

Ability to –

1. **Plan strategy and tactics** – This would include use of clear knowledge of the intended goals of the change and defining the nature of the process towards achieving the goals of the change.
2. **Review** expected support/resistance, and required/available facilities and resources, including the expected time frame within which the steps in the process of change are to be undertaken, time needed for achieving persuasion/commitment, recruitment and training of human resources (numbers, strengths, constraints, aspirations, need for reward). Assess risks with a broad overview, a “helicopter” view.
3. **Practise self-directed learning** to identify and acquire requisite new knowledge/skills, with critical appraisal of the literature and available documentation.
4. **Implement** plan of action:
 - 4.1 **Act as advocate** –
Demonstrate a vision; provide a balanced explanation of positive and negative aspects; persuade colleagues and senior policy decision makers; use assertiveness with discretion and diplomacy.
Challenge the status quo.
 - 4.2 **Challenge, seek to amend aspects of a change**, but with a more adversarial remit. Work with, rather than against a change (e.g. work towards modification that is justified by evidence and offer advantages, such as practicability, enhanced outcomes).
 - 4.3 **Negotiate** for a change by acting as negotiator, arbitrator, consultant.
 - 4.4 **Assist others to adapt to a change** – Persuade, explain, inform, teach, demonstrate, support colleagues and others in accepting the purpose, nature, practical consequences of the change, as well as foster the acquisition of new knowledge and skills with the use of adult learning methods.

- 4.5 **Monitor progress** in relation to the role(s) adopted as change agent together with other stakeholders.

Pose questions to be answered in relation to the expected quality and timing of the progress: the acceptability, effectiveness and sustainability of the change agent's activities in relation to set targets. Identify valid and reliable methods for obtaining the data to answer the above questions. Analyse the data; the answers should contribute to decisions for improving subsequent actions.

- 4.6 **Evaluate outcomes** with those involved and at least one independent "outsider", as the aim will be to provide answers that can assist in policy decisions whether to continue, abort or make major amendments.

C. Competences that will Enable the Task-Related Competences (A & B) to be Implemented

Ability to:

1. **Problem solve** with a range of approaches (e.g. the hypothetico-deductive approach).
2. **Critically appraise** spoken, visual, written information with quantitative and qualitative methods of appraisal.
Advance clear reasons/evidence for own conclusions, orally and in writing.
3. **Creative, lateral thinking, investigating, experimenting –**
Identify and explore alternatives.
Plan and implement investigations with application of basic research skills, including critical literature review.
4. **Use theories of change processes and strategies for the management of change²⁸**
Identify responses to change; nature of how political systems, organisations, institutions and individuals react to intrinsic/extrinsic factors.
Identify forces for change, e.g. technology, science, economy.
Identify global influences for change.
Identify behaviour by groups/individuals in relation to life style and the environment.
Identify the functions and constraints of national/international agencies.
5. **Apply theories of leadership^{29,30} in the role(s) of a change agent**
Articulate a goal and hold it in balance with current realities.
Manage self and with others.
Empower others to participate and “own” aspects of the change.
Compromise on less important, less fundamental aspects/issues.
Adopt appropriate leadership styles.
6. **Collaborate and co-ordinate, with application of emotional intelligence³¹ and Systems Theory³².**
Identify roles, strengths, constraints and recognise potential contributions of other professions, organisations, sectors – their ethical, legal position, cultural, religious points of view, professional language and codes of conduct.
7. **Apply Emotional Intelligence**
In 1990 P. Salovey and J.D. Mayer in their paper Emotional Intelligence (Imagination Cognitive Perception, 9, 185-211) defined this intelligence as a type of social intelligence that would involve the ability to monitor one’s own emotions

and those of others, to discriminate among these emotions and to use the information to guide one's thinking and actions. In 1993 they discussed in a subsequent paper (Intelligence, 17, 433-42) that emotional intelligence included "the verbal and nonverbal appraisal and expression of emotion, the regulation of emotion in the self and others, and the utilization of emotional content in problem solving."

8. **Communicate, multilingual:**

8.1 *Speak and write* at least one other main European language.

8.2 *Solicit* information

Question, listen and accept other points of view and suggestions.

8.3 *Give information* and explanation and ensure full understanding.

8.4 *Persuade and negotiate* rather than impose control.

8.5 *Consult* in order to help others to arrive at their own conclusions/ decisions.

9. **Socially responsible with a global perspective and cultural competence:**

Take account of global issues and influences at local, country, regional and continent levels.

Apply an understanding of the influences related to anthropology, cultures, economics, ethics, environment and climate, human psychology, law, demography and migration, living conditions in other parts of the world.

Use new concepts, ideas and alternative view points. Reflect on own values, and beliefs in confronting new forms of knowledge and experiences, including reaction to change.

10. **Life-long, self-directed learning, to keep up to date not only within own profession, but also more widely in aspects that affect society as a whole:**

Identify what new knowledge and skills need to be developed for new or changing roles and responsibilities.

Formulate appropriate questions and tasks leading to the acquisition of the required new knowledge, skills.

Benefit from own and peer appraisal.

Use appropriate resources of information, e.g. experts to consult, data bases, journals, books, documents, Internet, the media.

Critically appraise such information.

Unlearn³³, in order to accept new ideas, concepts, facts, methods.

Identify own preferred learning style.

Activate, elaborate, organise own knowledge base, reflect on experience and foster deep learning.

D. Personal Qualities that cannot be defined as Competences

1. **Tolerant** in recognising the inevitability of change, of uncertainty, or ambiguity.
2. **Open minded** in accepting cultural, religious differences, and flexible in seeing both sides of an issue.
3. **Balanced, self-confident, curious, inquisitive**, recognising own strengths and limitations, willing to say “I do not know but I want to find out”.
Willing to admit “I have made a mistake; I would like to discuss it, in order to learn from my mistake for the future.”
4. **Keen to keep up to date** in own profession and well beyond.

E. Educational Interventions for Developing the Competences (Sections A-C) and Fostering Personal Qualities (Section D) [The complete collation of responses is in the Appendix.]

- (a) **For developing competences for *decision making* (for adapting to change and for participating in change)**

In relation to society as well as your profession

Suggested interventions	Related competences
Journal club meetings; Current Affairs seminars; review of new laws, regulations, government proposals, etc; ‘Problem-Based Learning’ (PBL) tutorials ^{34,35} , discussions with other professions/sectors.	-1- Identify issues that point to a need for change or issues that may affect a proposed/ actual change.
Exercises in best evidence-based practice and relate to wider issues/problems, (e.g. environment), requiring search for, and appraisal of, relevant information; projects related to a proposed change; group discussion on personal affect versus “greater common good”; case studies to identify positive and negative effects and their interplay: what works, what does not.	-2- Analyse implications of a change with reflection on the change process as it may affect self/others; with consideration of the acceptability, effectiveness and sustainability of the change using review of resources, facilities, principles, etc of professions/ sectors/communities (stake holders) involved; and with examination of possible knock on effects on different professions/ communities and also on financial, political decisions.
Practise application of quantitative and qualitative methods to examine the validity and reliability of data when reviewing information.	-3- Critically appraise related information.
Use problem-based learning tutorials and discussions for formulating alternative explanations/strategies by extrapolating trends and balancing conflicting factors.	-4- Formulate possible explanations/options/ solutions.
Participate in/observe committees that make/implement policy decisions.	-5- Construct a decision

(b) For developing competences for *participating in managing change***In relation to society as well as your profession**

Suggested interventions	Related competences
Practise use of algorithms ³⁶ for long term, rather than short term planning.	-1- Plan strategy and tactics.
Practise use of Forcefield ³⁷ analysis. Practise Concept Mapping ³⁸ and “Gaming” ³⁹ in a small group.	-2- Review expected support/resistance, and required/available facilities and resources.
Identify what new knowledge/skills are needed.	-3- Self-directed learning to identify and acquire requisite new knowledge/skills.
	-4- Implement plan of action:
Role play, essay writing. Membership of committees, debating society, community group. Nominal Group exercise for identifying students’ concerns and for proposing remedies.	-4.1- Act as advocate Demonstrate a vision; provide a balanced explanation of positive and negative aspects.
Role play, lobbying, essay writing, debate, membership of a decision making body in the educational institution, in the community. Practise assertiveness under supervision.	-4.2- Challenge, seek to amend aspects of a change but with a more adversarial remit.
Act as mentor, teacher/facilitator, preceptor for more junior students. Act as facilitator for a change with members of the community.	-4.3- Assist others to adapt to a change. Persuade, explain, inform, teach, demonstrate.
Participate in audit ⁴⁰ , Nominal Group sessions for monitoring the students’ experiences of the immediately past semester. Design and analyse questionnaires. Participate in design and analysis of research projects.	-4.4- Monitor progress in relation to the role(s) adopted by the change agent with the involvement of other stakeholders.
Examine and discuss major evaluation reports, eg White, K.L. (1989) <i>Towards a New Beginning: Review of the College of Medicine, University of Saskatchewan, Saskatoon, Saskatchewan, Canada.</i>	-4.5- Evaluate outcomes with those involved and at least one independent “outsider”.

(c) For developing competences that enable the task-related competences (a & b) to be implemented

In relation to society as well as your profession	Suggested interventions	Related competences
	Problem-based learning sessions. Projects. Modified Essay Questions ⁴¹ .	-1- Problem solve with a range of approaches (e.g. the hypothetico-deductive approach).
	Practise analysis of progressively more complex information from review articles, research papers, official documents, lectures, discussions, mass media.	-2- Critically appraise information with quantitative and qualitative methods of appraisal.
	Problem-based learning sessions, discussions, debates ⁴² , access to committees to explore different explanations and different strategies for dealing with problems. Examine successful/unsuccessful changes.	-3- Creative, lateral thinking, investigating, experimenting – Identify and explore alternatives. Plan and implement investigations with application of basic research skills, including critical literature review.
	Discuss observations at policy making committee. Analyse as a group what has/has not worked in the management of a change at the personal, institutional, professional, community level, with consideration of political/organisational factors.	-4- Use theories of change processes and strategies for management of change. Identify responses to change; nature of how political systems, organisations, institutions and individuals react to change with intrinsic/extrinsic factors.
	Study examples of training in leadership as described in Hammar, M., Gustafsson, P.A., Svedin, C.G., Domeij, D. & Heijl, A. (1997) Personal and professional development in the training of communication and leadership in undergraduate medical education. <i>Education for Health, 10</i> , 47-56. Orion Programme: Curriculum for Leadership in Nursing and Care (1999) National Centre for Nursing and Care (LCVV), Utrecht.	-5- Apply theories of leadership to the role(s) of a change agent Articulate a goal and hold it in balance with current realities. Manage self and with others. Empower others to participate and “own” aspects of the change. Compromise on less important, less fundamental aspects/issues.

In relation to society as well as your profession

Suggested interventions	Related competences
<p>Reflect on the requirements of effective collaboration⁴³. Meet, discuss, work with such other professions, etc, in committees, clubs, societies, think tanks, social activities. Shadow other professions, members of various sectors, communities, reflect on experiences.</p>	<p>-6- Collaborate and co-ordinate with application of emotional intelligence. Apply roles, strengths, constraints and potential contributes of other professions, organisations, sectors – their ethical, legal position, cultural, religious points of view, professional language, and code of conduct.</p>
<p>In small groups, in the context of problem-based learning, students are encouraged to develop emotional literacy by examining their emotional perceptions, consciously controlling their reactions, recognising emotions in others and responding helpfully – as essential for collaborating in teams and for responding to patients' needs.</p>	<p>-7- Apply Emotional Intelligence This was originally defined as a type of social intelligence that would involve the ability to monitor one's own emotions and those of others⁴⁴.</p>
<p>Practise retrieval of information through use of information technology, from documents, the media; and face to face interviews with individuals and focus groups including different professions and community leaders from different cultures and countries.</p>	<p>-8- Communicate, multilingual: -8.1- Solicit information</p>
<p>Practise in problem-based learning sessions, in debating society meetings, journal club meetings, community group meetings, sessions with school children. Practise essay writing, report writing and presenting. Role play and micro teach with application of adult learning principles.</p>	<p>-8.2- Give information and explanation, ensuring full understanding.</p>
<p>Role play. Practise proposing changes in the curriculum by writing a report addressed to the academic staff; write a report on proposed improvement in the community addressed to a government department.</p>	<p>-8.3- Persuade, negotiate rather than impose control.</p>

In relation to society as well as your profession

Suggested interventions	Related competences
<p>Act as mentor to more junior students. Role play and practise with community leaders.</p>	<p>-8.4- Consult, in order to help others to arrive at their own conclusions/decisions.</p>
<p>Practise in the context of current studies and with other professions. Work, study, travel in appropriate other country(ies). Read newspapers, professional journals in the other language(s).</p>	<p>-8.5- Speak and write at least one other main European language.</p>
<p>Participate in inter-professional Current Affairs seminars and journal club meetings. Write summary reports based on Internet surveys for interprofessional, intersectoral and intercultural discussions on issues of topical interest.</p> <p>Consistent study of these influences in the context of problem-based learning, throughout the curriculum and during student exchanges and voluntary service in other countries.</p>	<p>-9- Socially responsible with a global perspective and cultural competence:</p> <p>Take account of global issues and influences at local country, regional and continent levels.</p>
<p>Assemble a reflective portfolio, including reflective essays. Reflective debriefing after significant experiences. Examine and discuss different codes of professional practice. In problem-based learning make ethically justified decisions and attempt to resolve dilemmas.</p>	<p>Apply an understanding of the influences related to anthropology, cultures, economics, ethics, environment and climate, human psychology, law, demography, migration, living conditions in other parts of the world.</p> <p>Use new concepts, ideas and alternative view points. Reflect on own values, and beliefs in confronting new forms of knowledge and experiences, including reaction to change.</p>

In relation to society as well as your profession

Suggested interventions

Participate in General Knowledge competitions and in problem-based learning, where not knowing is not shameful but an incentive to want to learn more. Practise the application of qualitative, as well as quantitative methods of critical appraisal of what is observed, heard and read.

Practise best evidence-based practice approaches with emphasis on the responsibility to make and implements decisions that can be justified.

Reflect on what has been learned and how it has been learned with identification of concepts, principles and generalisability.

Related competences

- 10- **Life-long, self-directed learning:**
to keep up to date not only within own profession, but also more widely in aspects that affect society as a whole.

Identify what knowledge and skills need to be developed. Formulate appropriate questions and tasks leading to the acquisition of the required new knowledge, skills. Benefit from own and peer appraisal. Use appropriate resources of information.

Unlearn, in order to accept new ideas, concepts, facts, methods.

Identify own preferred learning style. Activate, elaborate, organise own knowledge base, reflect on experience and foster deep learning.

(d) For developing personal qualities

In relation to society as well as in your profession

Suggested interventions

It has been suggested that the development of these enabling personal qualities could be fostered through the summative effect of educational experiences. These would be an integral part of a curriculum with a supportive educational environment⁴⁵, where, for example, the students are treated as future colleagues, and where academics and practising colleagues act as appropriate role models.

Related qualities

- 1- Tolerant.
- 2- Open minded, flexible.
- 3- Balanced, self-confident.
- 4- Keen to keep up to date.

F. Responses to the question

How could the suggested educational interventions be accommodated in your existing curriculum or in an amended curriculum?

1. Accommodation within your existing curriculum?

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| <p>Considerable advances</p> <p><i>Caveat</i></p> | <ul style="list-style-type: none"> • Many respondents reported that several of the generic competences were already being developed through the implementation of the suggested educational interventions. <p>However, discipline-centred curricula, rather than integrated curricula, imposed considerable obstacles to integrated, cumulative learning.</p> |
| <p>Monitoring of implementation</p> <p>& Mentoring</p> | <ul style="list-style-type: none"> • Organisation of one curriculum included the appointment of teachers with special responsibility for monitoring the implementation of goals for specific generic competences, including the latter's assessment throughout the curriculum. <p>Mentors discuss individual progress with students every second month.</p> |
| <p>Regulations</p> | <ul style="list-style-type: none"> • Several countries reported that legal restrictions affected curriculum change. <p>Some respondents indicated that some of the interventions towards the development of many of the competences could nevertheless be implemented.</p> <p>Others indicated that they were only able to effect slow, incremental changes within their curriculum.</p> <p>More positively still, one central council for nursing, midwifery and health visiting has issued a document that refers to generic skills related to adapting to, and managing change – their development and assessment.</p> <p>Elsewhere, the regulating professional bodies encourage change through creative publications.* However, this may have a negative effect where the employer can influence content and method of education with emphasis on “fit for purpose” – for today's requirements.</p> |

* For example: Tomorrow's Doctor (1993) General Medical Council, London. Mapping Exercise (1999) National Board for Nursing, Midwifery and Health Visiting for Scotland, Edinburgh.

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| Conservative restraints | <ul style="list-style-type: none"> • In one country, where the national law for a profession's education has promulgated an exclusion clause, only two schools have so far embarked on major innovations (problem-based learning). |
| Interprofessional education | <ul style="list-style-type: none"> • A move towards an interprofessional, common introductory (Foundation) period of education has led to a number of imaginative programmes in more than one country. • The pioneering interprofessional courses and "student ward" at a Scandinavian university⁴⁶ have been emulated in that and other countries. |
| Integration | <ul style="list-style-type: none"> • Opportunities for integrated learning was mentioned repeatedly as the approach of choice for the progressive development of a range of generally applicable competences, e.g. those related to management. |
| Individual study | <ul style="list-style-type: none"> • A frequently mentioned innovation, related to self-directed learning, appears to be the introduction of timetables with dedicated time for individual study. |
| Problem-based learning (PBL) & its curricula | <ul style="list-style-type: none"> • Problem-based learning (PBL) is mentioned by a significant number of respondents as an educational approach that provides opportunities for the cumulative, integrated, contextual and active, student-centred development of profession-specific and generally applicable competences. |
| For groups & individuals | <ul style="list-style-type: none"> • PBL is reported to provide repeated opportunities for competences that relate to groups, (e.g. collaboration), as well as to individuals (e.g. critical appraisal of information). |
| <i>Caveat</i> | <p>However, several respondents have emphasised that PBL, as an educational approach, has to be used as the medium for deliberately planned intervention by the group facilitator (tutor), if students are to use PBL for the conscious development of the competences suggested by this consultation.</p> |
| Large cohorts & PBL | <ul style="list-style-type: none"> • A considerable number of curricula have adopted PBL as their central philosophy and educational approach, even though their annual intake exceeds 200 students. |

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| Graduate curricula & PBL | <ul style="list-style-type: none"> • Following initiatives in Australia, several medical schools have initiated graduate curricula⁴⁷, including PBL. PBL also represents a major influence in graduate (Masters) courses for other professions, e.g. Occupational Therapy. |
| International graduate degrees & PBL | <ul style="list-style-type: none"> • The above, linked with PBL, has been adopted by European courses where students can move to attend component courses in different member countries, e.g. the ENOTHE Occupational Therapy Masters curriculum. • PBL curricula were seen to be able to incorporate educational interventions for developing generic competences by integration with profession-specific PBL. |
| Group Projects | <ul style="list-style-type: none"> • Concepts of change, related decision making activities, have been incorporated in groups projects, integrated in a range of courses. |
| Still to be explored | <ul style="list-style-type: none"> • However, repeated comments were noted that there was as yet little corporate effort to organise interprofessional-intercountry group projects as integral parts of basic professional education. |
| Additional reform | <ul style="list-style-type: none"> • Even where a curriculum is devoted to PBL, a concerted shift in favour of enhanced attention to generally applicable competences will be needed. |

2. Accommodation within a reformed curriculum?

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| Evolution
v
Revolution | <ul style="list-style-type: none"> • Curriculum change may be incremental or total. The former may be less expensive in staff time, energy and actual cost – but perhaps only in the short term. Incremental change could be explored in discipline-specific courses. |
| Agreement among institutions | <ul style="list-style-type: none"> • In one country the medical schools have adopted a common set of objectives, the “Blueprint”. The next edition could thus give more emphasis to the development of generic competences. |

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| Maturation
&
time | <ul style="list-style-type: none"> • If the desired maturation process were to call for allocation of time that cannot be removed from profession-specific studies or training: <ol style="list-style-type: none"> (i) this should not increase the students' financial burden; (ii) any additional time should not be used for more profession-specific educational tasks. |
| <i>Studium Generale</i> | <ul style="list-style-type: none"> • Profession specific curricula should give students enhanced opportunities for a broader, general education. This should preferably be integrated with the profession-specific educational experiences. One suggestion has been the introduction of an integrated <i>studium generale</i> with emphasis on society-related general competences. |
| Strands, Themes or
Domains | <ul style="list-style-type: none"> • The competences that were identified in this consultation could be developed throughout the curriculum as <i>Strands</i> or <i>Themes</i>, e.g. "Professional Development and Change". Many schools have already organised their curricula in broad themes, e.g. "Personal and Professional Development". Others have gone further and aim to develop and assess the students' competences in distinct <i>Domains</i>.⁴⁸ |
| Focus on process | <ul style="list-style-type: none"> • A further suggestion was that curricula might concentrate on the Process of learning that could then be applied across different disciplines and different profession-specific curricula, e.g. interdisciplinary learning, PBL/Enquiry Learning. |
| Designed for
internationally
mobile students | <ul style="list-style-type: none"> • Some courses could be designated as "core", to be taken by all students and could, therefore, be studied in different countries. Other courses could be adopted by different countries and studied as "optional". In addition to "<i>selective</i> options", curricula should provide students with an opportunity to <i>elect</i> to study something of special interest but in a different country. Electives with a societal, interprofessional, international challenge could be offered to students who have demonstrated evidence of leadership qualities. Profession-specific practical experience could be linked to society-related experience in another country. |

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| Interprofessional seminars, conferences | <ul style="list-style-type: none"> • Interprofessional seminars and conferences could be organised several times during the curricula, with major student input and student-led discussion of regional/global issues. |
| Requirement for an interprofessional, societal project | <ul style="list-style-type: none"> • A suggestion was made that an end of course thesis or major project (10 weeks of full time study) could involve an in depth analysis of selected other professions with cultural, economic, political aspects of society in another country.
A similar suggestion would require all future professional degree courses to include an interprofessional, intercultural project, focused on a global issue. |
| Specialists for societal, global issues | <ul style="list-style-type: none"> • Societal, global elements of the curriculum could become the special interest and expertise of a group of academics who would be responsible for the planning, teacher training, implementation, assessment and monitoring of these parts of the curriculum.
Academics with such special interests could act as mentors for the students. |
| PBL & other approaches | <ul style="list-style-type: none"> • While PBL is seen as a key approach to the development of the competences through the educational interventions identified by the consultation, a mixture of educational approaches might be considered. This might involve a transition from teacher-led to student-directed learning through “integrated dual learning”.⁴⁹ |

G. Responses to the question:

What are the conditions for ensuring that such enhanced education could be planned, implemented and sustained in the present curriculum or in an amended curriculum?

The wide range of responses has here been summarised under the following headings:

Considerations of Change

Regulations

Curriculum

Information Technology

Assessment

Staff Development

Organisation

Facilities and Resources

Considerations of Change

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| Challenges | <ul style="list-style-type: none"> • Fundamental Challenges to change relate to <ul style="list-style-type: none"> - the inherently conservative nature of the professions; - resistance from academics, especially where teaching is centred around individual disciplines; - resistance from administrators who wish to avoid over use of limited resources and staff/student “unrest”; - resistance from students, unless the change appears relevant in the context of the students’ own goals and interests. |
| Accrediting Bodies
v
Education
Institutions | <ul style="list-style-type: none"> • Tension between regulatory bodies, commissioning agents (employers) and educational institutions may inhibit or adversely affect educational change. |
| Reaction to change | <ul style="list-style-type: none"> • Reaction to the prospect of change may be due to <ul style="list-style-type: none"> - fear that a manageable <i>status quo</i> may be threatened; - lack of information, lack of understanding; - lack of involvement; - fear of loss of power, of more work/effort, of inability to adapt to the new. • Intellectual arguments may be necessary, but these may not be sufficient. |

Consideration of emotional reactions may suggest

- providing answers to “What will be to my advantage, to my disadvantage – my gain, my loss?”

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| Adopting change | <ul style="list-style-type: none"> • Introduction of change will call for <ul style="list-style-type: none"> - persuasion, with regular provision of information over a considerable period of time for all stakeholders (policy decision makers, administrators, academics, practising colleagues, students, community leaders, etc); - familiarisation with new concepts and methods; - active involvement in the various aspects/stages of the change; - offer, where necessary, of alternative forms of power; - with constant attention to individual and corporate, interests, needs and competing pressures (e.g. research, practice). • All who are to be actively involved in the conduct and/or use of the change need to be empowered, recognised and rewarded in relation to their roles. |
| “Political Will” | <ul style="list-style-type: none"> • Political and administrative support needs to be visible, with appropriate provision of funds, facilities and resources. |
| Institutionalising and beyond | <ul style="list-style-type: none"> • Even after successful institutionalisation, continuing attention to details of the change will be essential, in order to avoid reversion to former, comfortable habits, and in order to maintain interest and stimulate further improvements. |
| Involve other Faculties | <ul style="list-style-type: none"> • Specific action <ul style="list-style-type: none"> - Faculties of Management, International Relations or similar should be co-opted to contribute to the enhanced curriculum. Expertise in management can materially contribute to curriculum design and its implementation, including financial and strategic management and human resources management. |
| Student power | <ul style="list-style-type: none"> - Students can contribute ideas and approaches from their point of view and demonstrate significant influence on staff and fellow students.⁵⁰ |

Regulations affecting educational change

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| Flexibility? | <ul style="list-style-type: none"> • Even though close inspection of regulations may reveal that the wording is sufficiently vague to permit quite significant change, due diplomatic liaison with relevant authorities would suggest: <ul style="list-style-type: none"> - involvement of such officials in local plans and pilot schemes; - request comments on proposed changes; - combine with sister educational institutions in submitting proposals for change; - involve students in demonstrations of the change and in debating its advantages. |
| Affect of System's changes | <ul style="list-style-type: none"> • Major organisational changes in national systems of practice and/or education may have major implications for the organisation and administration of curricula. Collaboration with other institutions, sometimes on a regional level may be an advantage. |
| International collaboration | <ul style="list-style-type: none"> • Interprofessional, inter-country educational opportunities will call for international collaboration to achieve reform of higher professional education in the face of different educational, cultural, political systems. |

Curriculum

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| Education
v
Training | <ul style="list-style-type: none"> • An important conflict will need to be resolved: <ul style="list-style-type: none"> - on the one hand, the maturation process from lay to professional status and to that of a socially responsible citizen of the world requires progressive educational development over time; - on the other hand, present day pressures call for education and training “fit for purpose <i>now</i>” in minimum time. |
| Pre & Post-Graduation Education | <ul style="list-style-type: none"> • One possible compromise has been suggested: that the initial profession-specific education be curtailed to allow for time needed for the enhanced parts of the curriculum, and that subsequent additional time be devoted to further professional development (as in medicine) in a practice-based environment. |
| Progressive development | <ul style="list-style-type: none"> • The enhanced curriculum should provide repeated opportunities for the progressive development of the proposed competences (see Appendix) throughout the curriculum. This should include opportunities for students of different professions and cultures to work and play together. |

- Information overload • Specific criteria should be applied to the identification of the (changing) content of the curriculum, in order to minimise information overload.
- Inter – not Shared Learning • The development of interprofessional collaborative competences should be fostered by *interprofessional learning* and *not through multiprofessional or shared instruction*.
- Small is beautiful • Despite current pressures for mass education the enhanced curriculum would call for subdividing large cohorts into quite small groups for effective learning and personal development.
- Double Degrees • A recent development of “double degree” courses, e.g. “nursing and social work”, may commend itself as a prototype for the overt development of supra professional competences.
- Learning & testing by domains • Some curricula use themes that permeate throughout the construct of the course. In one Faculty the themes, known as “domains”, also constitute the focus for assessments of students’ progress and achievement.⁵¹

Information Technology

- Special considerations • The growing importance and sophistication of computer and other technologies for access to information will call for special training of teachers and for access to appropriate equipment and associated technical personnel.
 - Special intra-net, library, etc facilities will become essential to support group and self-directed learning, with special attention to interprofessional and international communication.

Assessment

- The tail that wags the student dog • Changes in professional regulations will be needed to ensure that assessment of progress and achievement in the wider generic competences, as well as in the profession-specific competences use valid and reliable testing methods. These tests should provide overt support for the curricular emphasis on *reasoned application* and not merely recall of factual information.

Staff Development

- For academics & others

 - Many respondents emphasised the importance of staff development as a basic requirement for serious reform of curricula. Such education should include not only academic colleagues, but also colleagues practising in the community, administrators and support staff.

- Also through Postgraduate and Continuing Education

 - Rather than limit staff development to facilitate curriculum change, postgraduate education and continuing professional development should include “wider higher professional education” as a topic for constant attention.

- Professionalism in Higher Professional Education
Special attention to global societal aspects

 - The above will need to become an integral part of a culture in which amateurism is exchanged for professionalism in higher professional education with active recognition, support and reward of excellence in educational activities, including scholarship and research in education.
 - Staff development will need to foster the competences that should be passed onto the students, including collaboration with other professions and interests in more global, society related issues. Such continuing support would be especially helpful for those teachers and supervisors who are the students’ role models and mentors.

- International facilities

 - The international element would be significantly supported by the establishment of (i) exchange schemes for staff to gain international experience, and (ii) by the creation of an international, interprofessional postgraduate degree course for future leaders of the more global, societal elements of an enhanced curriculum.

Organisation

- Central leadership & organisation

 - A curriculum that facilitates integrative study, as opposed to discipline-based study, will benefit from central leadership and co-ordination. This will be materially supported by a central unit that is devoted to the development, implementation, monitoring and research of the enhanced curriculum. Membership would be drawn from within the Faculty and from outside.

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| Committees with educational expertise | <ul style="list-style-type: none"> • Task-orientated committees and working parties would replace discipline-centred activities. Emphasis would be on developing groups of colleagues with specific expertise who can assist discipline specialists with, for example, curriculum design, approaches such as problem-based learning and valid and reliable assessments. |
| Policy making | <ul style="list-style-type: none"> • All who are expected to be responsible for effecting a particular part of the new programme should also be part of the group or committee that makes related policy decisions. |
| National/international networks | <ul style="list-style-type: none"> • The development of educational networks between institutions, nationally and internationally, would offer exchange of experience, educational material and moral support.⁵² |

Facilities, Resources & Finance

The key requirements will be for

- staff
- time
- space
- equipment and material
- finance

- **Staff**

Facilitators for small group work. Recruitment of colleagues from outside the university has been shown to be beneficial for students and for those practitioners when provided with academic privileges.

Role models will need educational support and dedicated time to be willing and able to influence students over an adequate period of time.

Subject experts in non-profession-specific topics, e.g. management, current affairs, could be shared with other Faculties, institutions.

Specialists for language teaching, translation, etc. These could become “adjunct” members of staff from another Faculty.

Information technologists.

Educationalists with expertise in specific aspects of reformed curricula could be recruited as temporary advisors or as members of a central education unit.

- **Time**

Dedicated time for curriculum development, teaching, assessment, etc.

Time for students to develop supra-professional, societal competences.

Time for study in other countries.

Time for the development, application and use of special aspects, e.g. problem-based learning, information technology, interprofessional learning, use of language laboratories.

- **Space**

For small group work, language laboratory, individual study cubicles.

The University of Glasgow Medical School is building a special facility for such space requirements.

- **Equipment and Materials**

Computer intranets and publications in other major languages, including magazines, newspapers and video recordings, as well as audio tapes.

- **Finance**

The financial implications would need to be calculated carefully, as supplementary external funding is likely to be required.

This will present a further challenge to the task of augmenting current income which is primarily provided by governments in most European countries.

A symbiotic relationship with industry and commerce may assist in the exploration of innovative methods for the development of change agent capability and in creating an informed climate of opinion in relation to responsibility towards society at large.

DISCUSSION AND CONCLUSION

The design and implementation of curricula for the professions are in a state of flux. Educational institutions and their academics face a host of conflicting influences – from increasing expectations in relation to research service and teaching. All this in a climate of decreasing financial resources, and in a period of growing complexity in professional practice, with exponential growth in the related knowledge base and numerous ethical and legal complications.

The present challenge to embark on a significantly enhanced curriculum may thus be in serious danger of rejection as yet one more example of “special pleading”.

However, the adoption of a curriculum that fosters active, contextual, cumulative and integrated learning, different from single discipline teaching, could incorporate the wider education that is proposed by this consultation. Only the essential interprofessional and international educational experiences might call for an extension of the curriculum.

The global challenges that face all populations on all continents is of such magnitude that the arguments and proposals, that have been advanced by the consultation, must surely deserve serious consideration.

There is an *a priori* need to create a climate of informed opinion that there is a serious need for a wider form of higher professional education. This leads to a need to consult among all professions how their curricula could be adapted to meet the challenge of preparing future professionals to be able to adapt to change and to participate in managing change – on behalf of society at large.

We have consulted a small number of senior educators in just four health professions in only six countries in Europe. The intention has been to assemble a set of proposals that could serve as the initial focus for further consultation among greatly extended numbers of colleagues from many more professions and in all continents.

We have concentrated on undergraduate, basic education for two reasons. First, young people wish to give expression to their social conscience. Second, this wider education for societal responsibility ought to become an integral aspect of life long learning.

There is a concurrent need for teachers and supervisors of students to familiarise themselves with relevant aspects of societal responsibility, in order to be able to act as appropriate role models.

Not all future professionals will wish to act as major change agents. The majority would be expected to participate in *corporate* activities with colleagues from their own and other professions.

There will be a need for the development of leadership capability and thus the identification of students with related potential. The successful further development of personal attributes would presuppose the existence of at least *nascent* characteristics that may be identified through appropriate methods of selection.^{53,54}

Many of the suggested educational interventions relate to the development of more than one particular set of competences. This may indicate that a particular type of intervention may help to develop several different competences. However, variety of educational experiences will be the aim, in order to maintain the students' interest.

Some of the educational interventions refer to “participation in committees,” etc. As not all students would have opportunities to join committees, some Faculties have instituted “open” committee meetings, where staff and students are encouraged to attend as observers.

Although assessment of students' progress and achievement is clearly important, it was not included in the present consultation. We concentrated on the maturation process for helping lay men and women to develop into professionals. This calls for an environment where students are regarded as future colleagues in a learning society of scholars.

In considering the content of the curriculum, what is to be learned, and the process, how learning should be facilitated, a number of respondents mentioned “Problem-Based Learning” (PBL) as an approach that could satisfy many of the educational requirements. However, frequent mention of PBL should not be seen as advocating this as an exclusive, though very promising, approach to the implementation of a wider professional education.

A related aspect is the use of small groups. This would constitute a very productive environment for the development of many of the suggested competences.

It was also emphasised repeatedly that the wider curriculum would need to support progressive development by deliberately helping students to build on previous learning.

The main body of the report has concentrated on examples that illustrate the numerous proposals of the respondents.

The Appendix offers a more detailed listing of the suggested competences and the related educational interventions. The Appendix can thus serve as a useful base for more extensive consultations as proposed by the Network: Community Partnership through Innovative Education, Service and Research.

A final quotation:

“..... The challenges that advances present call for wide interdisciplinary discussion and action with an international reach”

From a letter to *The Times* (London, August 16, 2001) by Professor Sir Kenneth Stuart, under the heading Ethical Challenges that Beset Cloning.

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GLOSSARY

Algorithm	A process or set of rules to be followed for problem-solving.
Contextual learning	Learning in the context in which that learning is to be applied in practice.
Force field	A parallel set of positive and negative aspects, factors, influences that may help or hinder, for example in the implementation of a change.
Micro teaching	An observed period of practice for subsequent review of the performance with an expert.
Metacognition	Psychological awareness and understanding of one's own thought processes.
Modified Essay Questions	A sequence of short scenarios, each requiring a brief statement consisting of a decision with related justification.
Nominal Group Process	A procedure that enables each individual in a large group to register his/her view. The group will then vote to an order of priority among the individual comments; also used for end-of-term evaluation by students.
Supra professional	Involving all professions, not only the health and social care professions.



UK CENTRE FOR THE ADVANCEMENT OF INTERPROFESSIONAL EDUCATION

CAIPE

**TOWARDS A EUROPEAN APPROACH
TO AN ENHANCED EDUCATION
OF THE HEALTH PROFESSIONS
IN THE 21st CENTURY**

APPENDIX

REPORT

OF

THE EUROPEAN INTERPROFESSIONAL

CONSULTATION

1999 – 2001

We are indeed grateful for the extraordinary wealth of suggestions from the many colleagues who have contributed to this Consultation.

It has not been easy to assemble all the many proposals in a coherent fashion.

While the main text of the Report includes an abbreviated overview, the full lists in this Appendix may be of use as a tangible base on which to build further consultations with wider representation of the professions, not only within Europe, but also across the other continents.

The task will be to refine and, indeed, to extend the specification of competences and suggested educational interventions.

Even now these details may appear somewhat reductionist. However, they are the essential components that will determine the construct and process of the curriculum for an enhanced, wider higher professional education.

The Appendix represents a full collation of the suggestions made in response to Rounds 1 and 2 of the Consultation. The sequence follows the arrangements in Round 1:

- A. Competences and Educational Interventions for Particular Tasks
 - 1. Decision Making for Adapting to Change and for Participating in Managing Change.
 - 2. Participating in Managing Change.
- B. Competences and Educational Interventions
that Enable Task-Related Competences to be Implemented.
- C. Enabling Personal Qualities
that cannot necessarily be expressed as competences.

A. Competences and Educational Interventions for Particular Tasks

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1. Decision Making for Adapting to Change and for Participating in Managing Change (see Table I)		
Ref No	Competences	Educational Interventions
1.1	Identify issues that point to a need for change or issues that may affect a proposed/actual change with identification of internal and external drives for change.	Journal club meetings; Current Affairs seminars; review of new laws, regulations, government proposals, etc; ‘Problem-Based Learning’ (PBL)/Enquiry-Based Learning (EBL) tutorials ^{1,2} ; discussions with other professions/sectors. When possible, let students experience the issues that might/should lead to change. Undertake a critical incident review. Use the Nominal Group process. Use the Focus Group approach.
1.2	Analyse implications of a change with reflection on the change process as it may affect self/others; with consideration of the acceptability, effectiveness and sustainability of the change using review of resources, facilities, principles, etc of professions/sectors/communities (stake holders) involved; and with examination of possible knock on effects on different professions/communities and also on financial, political decisions. Apply understanding of resistance to change (corporate, individual).	Exercises in best evidence-based practice and relate to wider issues/problems (e.g. environment), requiring search for, and appraisal of, relevant information; projects related to a proposed change; group discussion on personal affect versus “greater common good”; case studies to identify positive and negative effects and their interplay: what works, what does not work. Case Studies to explore influence of the media, etc. Official reports, documents as triggers for discussion and analysis. Group discussion for analysis of a lecture, etc.
1.3	Critically appraise related information with critical literature search.	Practise application of quantitative and qualitative methods to examine the validity and reliability of data when reviewing information (see 1.1, 1.2). Apply the methods developed by the Cochran & Campbell Collaborations. In an interprofessional group with a scenario analyse information that is provided progressively during a sequence of meetings.

¹ Alavi, C. (Ed)(1995) Problem-Based Learning in a Health Sciences Curriculum. Routledge, London.

² Rideout, E. (2001) Transforming Nursing Education Through Problem-Based Learning. Jones & Bartlett, London.

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Ref No	Competences	Educational Interventions
1.4	Formulate possible explanations/options/solutions	<p>Use problem-based learning tutorials and discussions (see 1.1, 1.2) for formulating alternative explanations/ strategies by extrapolating trends and balancing conflicting factors.</p> <p>Use Force Field Analysis. Discussion with stakeholders. Practise with creative thinking exercises, and with option appraisal exercises. Use available evidence base.</p>
1.5	Construct a decision with and without stakeholders	<p>As for 1.4 students take turns to observe one of a range of committees, that make/implement policy decisions, and arrive at individual and group analyses. Discussion with stakeholders. “Meet the Press” to discuss what information and what form of presentation would interest the general public. Consider influence of pressure groups, political climate³. Fish bowl exercise with feedback from observing other students, etc.</p>

³ Kingdom, J.W. (1995) *Agendas, Alternatives and Public Policies* (Second Edition). Harper Collins College Publishers, New York.

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2. Participating as a “Change Agent”⁴ in Managing Change (for specific roles, see Table I)		
Ref No	Competences	Educational Interventions
2.1	<p>Plan strategy and tactics^{5,6,7}</p> <p>This would include clear knowledge of the intended goals of the change and defining the goals of the process towards achieving the goals of the change.</p>	<p>Practise use of algorithms for long term, rather than short term planning, based on real experiences, e.g. experience of a semester, of an examination, a need for change in the community.</p> <p>Plan experiments in small groups, using Microsoft Project software.</p> <p>Review related benchmarks.</p> <p>Plan a strategy for a discrete aspect of own education.</p> <p>Discuss a video tape of goal setting with trigger questions to promote discussion on relevance, cultural/language contextual appropriateness of the goals for change.</p> <p>Use the Delphi consultation process.</p>
2.2	<p>Review expected support/ resistance, and required/available facilities and resources, including expected time frame within which the steps in the process of change are to be undertaken, time needed for achieving persuasion/ commitment, recruitment and training of human resources (numbers, strengths, constraints, aspirations, need for reward).</p> <p>Assess risks with a broad overview, a “helicopter” view.</p>	<p>Practise use of Forcefield analysis.</p> <p>Practise concept mapping, with assessment of different approaches, and “Gaming” in a small group can help in the above practices and lead to drafting a statement of intent (Mission Statement) and a plan for implementation.</p> <p>Apply an iterative process for reviewing and amending the strategic plan (objectives, appropriate activities, resource implications, deadlines, cost-benefits).</p> <p>Observe such planning and review (not only in own profession).</p>
2.3	<p>Practise self-directed learning to identify, acquire and apply requisite new knowledge/skills.</p>	<p>Throughout the activities in 2.1 and 2.2 students would be encouraged to identify what new knowledge/skills they need to acquire in order to manage these tasks. They would be given time to acquire the knowledge/skills. They would share what has been learned and practise applying this to the task in hand (PBL).</p> <p>Use a reflective journal/professional portfolio.</p> <p>Consciously practise aspects involved in self-directed learning, including time-management.</p>
2.4	<p>Implement plan of action</p>	<p>Practise circumscribed but progressively more complex tasks.</p>

⁴ Havelock, R. (1973) Change Agents Guide to Innovation in Education. Education Technology, New Jersey.

⁵ Field, L. & Ford, B. (1995) Managing Organisational Learning: From Rhetoric to Reality. Longman, Melbourne.

⁶ Kotter, J.P. (1996) Leading Change. Harvard Business School Press, Boston, Mass.

⁷ Fisher, R. & Ury, W. (1991) Getting to Yes: Negotiating, Agreement Without Giving In. Penguin Books, London.

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Ref No	Competences	Educational Interventions
2.4.1	<p>Act as advocate</p> <p>Demonstrate a vision.</p> <p>Provide a balanced explanation of positive and negative aspects. Persuade colleagues and senior policy decision matters.</p> <p>Use assertiveness with discretion and diplomacy.</p> <p>Challenge the <i>status quo</i>.</p>	<p>Role play, essay writing.</p> <p>Membership of committees, debating society, community group.</p> <p>Nominal Group exercise for identifying students' concerns and for proposing remedies.</p> <p>Witness Public Health advocacy.</p> <p>Liaise with patient representative groups.</p> <p>Explore how logical arguments may not be sufficient to persuade others to adapt to and/or participate in managing change.</p> <p>Liaise ("budding") with a critical companion.</p> <p>Act as a representative (e.g. of fellow students).</p>
2.4.2	<p>Challenge, seek to amend aspects of a change</p> <p>As for 2.4.1 but with a more adversarial remit.</p> <p>Work with, rather than against a change (e.g. work towards modification that is justified by evidence and offer advantages, e.g. practicability, enhanced outcomes).</p>	<p>Role play, lobbying, essay writing, debate, membership of a decision making body in the educational institution, in the community.</p> <p>Practise assertiveness under supervision.</p> <p>Explore how vagueness of most regulations may make it possible to circumvent apparent obstacles.</p> <p>Practise assertiveness exercises.</p>
2.4.3	<p>Negotiate change as a negotiator, arbitrator, consultant.</p>	<p>Both in relation to own professional practice and in relation to a societal change: role play collaboration, e.g. listening to other views and reflecting on own actions and reactions.</p> <p>Practise one to one interviewing techniques</p> <ul style="list-style-type: none"> - information soliciting, information giving, negotiating, consulting, counselling. <p>Design information posters/sheets/ newsletter informing about a change.</p> <p>Act as a critical companion (see 2.4.1).</p>
2.4.4	<p>Assist others to adapt to a change</p> <p>Persuade, explain, inform, teach, demonstrate, supervise colleagues and others to accept the purpose, nature, practical consequences of the change.</p> <p>Foster the acquisition of new knowledge and skills with the use of modern adult learning methods.</p> <p>N.B. This "change agent" is not expected to be a principal decision maker, but a facilitator/catalyst towards enabling others to participate in change.</p>	<p>Act as mentor, teacher/facilitator, preceptor for more junior students.</p> <p>Act as facilitator for a change with members of the community.</p> <p>Micro teaching practice.</p> <p>Experience and reflect on participation in modern methods of learning.</p>

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Ref No	Competences	Educational Interventions
2.5	<p>Monitor progress in relation to the role(s) adopted by the “change agent” with the involvement of other stakeholders.</p> <p>Pose questions to be answered in relation to the expected quality and timing of the process: the acceptability, effectiveness and sustainability of the change agent’s activities in relation to set targets. Identify valid and reliable methods for obtaining the data to answer the above questions. Analyse the data; the answers should contribute to decisions for improving subsequent actions.</p>	<p>Participate in audit, Nominal Group sessions for monitoring the students’ experiences of the immediately past semester.</p> <p>Design and analyse questionnaires.</p> <p>Participate in design and analysis of research projects.</p> <p>Practise attention to the <i>process</i> of change, as well as to the <i>outcomes</i> of change.</p> <p>Investigate complaints procedures.</p> <p>Participate in patient/client/public surveys. (Care should be taken not to overuse particular individuals/families/groups/communities/organisations.)</p> <p>Act as chairperson of a (simulated) action group.</p> <p>Practise self- and peer assessment of contributions make to group work, as well as in progress of learning.</p>
2.6	<p>Evaluate outcomes.</p> <p>As in 2.5 with those involved and at least one independent “outsider”, as the aim will be to provide answers that can assist in policy decisions whether to continue, abort or make major alterations .</p>	<p>As for 2.5, and examine and discuss major evaluation reports, e.g. White, K.L. (1989) <i>Towards a New Beginning: Review of the College of Medicine, University of Saskatchewan, Saskatoon, Saskatchewan, Canada.</i></p> <p>Use methods of appraisal, e.g. SWOT (analysis of Strengths, Weaknesses, Opportunities, Threats).</p> <p>Use Forcefield analysis of reasons for success/failure.</p> <p>Use audit tools.</p>

B. Competences that Enable Task-Related Competences to be Implemented

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Ref No	Enabling Competences	Educational Interventions
3.1	<p>Problem solve Apply familiarity with a range of approaches to problem solving (e.g. the hypothetico-deductive approach)</p>	<p>Problem-based learning sessions. Projects. Modified Essay Questions. Progressive introduction of more complex problems with no clear solution, where the students' questions lead to planning investigations (see 3.3). "Time out" sessions for metacognition with the aim of reducing fear of the unknown and developing feeling comfortable with ambiguity/uncertainty. Use Formative Assessment as a learning tool. Practise recognition and definition of the actual problem, with deliberate application of alternative perspectives⁸.</p>
3.2	<p>Critically appraise written, visual, spoken information. Apply familiarity with methods of quantitative and qualitative methods of appraisal. Advance clear reasons/evidence for own conclusions, orally and in writing.</p>	<p>Practise analysis of progressively more complex information from review articles, research papers, official documents, lectures, discussions, mass media. Participate in group discussions, debates. Practise critical appraisal of the literature that relates to present learning tasks, including "Current Affairs".</p>
3.3	<p>Apply creative, lateral thinking, investigating, experimenting Identify alternatives. Explore alternatives. Plan and implement investigations with application of basic research skills, including critical literature review.</p>	<p>Problem-based learning sessions, discussions, debates, committee membership to explore different explanations and different strategies for dealing with problems. Examine successful/ unsuccessful changes. Identify need for investigation/experimentation and carry out literature review. Participate in planning, implementing research projects with subsequent oral and written presentations. In a multi-professional team examine evidence for and against an aspect of current practice (not only in health) and discuss how the conclusions require change. Practise reflective learning⁹. Use concept mapping by groups in the context of actual problems/situations/tasks. Practise critical thinking. Invite individuals of other disciplines/professions to reflect on a topic/issue/situation. Role play, arguing from the point of view of others who are involved in a change. Practise writing and telling stories.</p>

⁸ Chapman, J.A. et al (1993) The structured oral self-directed learning evaluation: one method of evaluating the clinical reasoning skills of occupational therapy and physiotherapy students. *Medical Teacher*, 15 (2/3), 223-236.

⁹ Fish, D. & Coles, C. (1998) Developing Professional Judgement in Health Care Through the Critical Appreciation of Practice. Butterworth-Heinemann, Oxford.

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Ref No	Competences	Educational Interventions
3.4	<p>Use theories of change processes and strategies for management of change</p> <p>Identify responses to change; nature of how political systems, organisations, institutions, individuals react to intrinsic/extrinsic factors.</p> <p>Identify forces for change, e.g. technology, science, economy.</p> <p>Identify global influences for change.</p> <p>Identify behaviour of groups/ individuals in relation to life style and the environment.</p> <p>Identify the functions and constraints of national/international agencies, including politicians.</p>	<p>Attend policy-making committee and discuss observations.</p> <p>In a group analyse what has/has not worked in the management of a change at the personal, institutional, professional, community level, and with consideration of political/organisational factors.</p> <p>Discuss how and why altering a part of a system alters other parts of the system. Review the literature.</p> <p>Map recent developments in own profession, own institution, with positive/negative influences.</p> <p>Participate in Nominal Group sessions to identify how needs for change in educational experiences could be satisfied.</p> <p>Examine why and how own curriculum has changed over time in relation to models of change.</p> <p>Apply the review literature on organisational psychology and social psychology to case studies.</p>
3.5	<p>Apply theories of leadership in the role(s) of a change agent</p> <p>Articulate a goal and hold it in balance with current realities.</p> <p>Manage self and with others.</p> <p>Empower others to participate and “own” aspects of the change.</p> <p>Compromise on less important, less fundamental aspects/issues.</p> <p>Adapt to, adopt appropriate leadership styles.</p>	<p>Study examples of training in leadership as described in Hammar, M., Gustafsson, P.A., Svedin, C.G., Domeij, D. & Heijl, A. (1997) Personal and professional development in the training of communication and leadership in undergraduate medical education. <i>Education for Health, 10</i>, 47-56.</p> <p>Orion Programme: Curriculum for Leadership in Nursing and Care (1999) National Centre for Nursing and Care (LCVV), Utrecht; Royal College of Nursing (UK) postgraduate leadership programme.</p> <p>Role play where individuals argue the opposite point of view.</p> <p>Practise constructive feedback and reflection on the experience.</p> <p>Analyse the biography of an outstanding leader.</p> <p>Listen to suggestions/proposals from senior/emeritus professionals in relation to a need for change or a problem in a change process.</p>

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Ref No	Competences	Educational Interventions
3.6	<p>Collaborate and co-ordinate, with application of emotional intelligence Identify roles, strengths, constraints. Recognise potential contributes of other professions, organisations, sectors – their ethical, legal position, cultural, religious points of view, professional language, codes of conduct.</p> <p>Define each other's roles, responsibilities, powers of decision making. Agree on the purpose, goals, targets, timing of the joint enterprise. Share information on an ongoing basis. Foster opportunities for reflection and exchange of experiences, with negotiation for resolution of any conflicts. Recognise the contributions made by different members of a team. Develop effective communication strategies for all who are involved in the change. Recognise effects of stress in self and others, attempt to mitigate such stress, seek assistance, but also consider the benefits and nature of "optimal" stress.</p>	<p>Reflect on the conception and requirements of effective collaboration. Meet, discuss, work with such other professions, etc, in committees, clubs, societies, think tanks, social activities. Shadow other professions, members of various sectors, communities, reflect on experiences. Discuss recorded experiences (films, video tapes). Discuss "evidence is based on empirical results v evidence is based on the authority of the law". Participate in community projects with members of other professions. Act together, sharing perceptions of an operational problem. Design common guidelines based on individual guidelines of different professions. Share recognition of each others' problems, limitations, strengths in contributing to the process of a change. Explore "best practice" as it relates to other professions. Organise research projects where students recruit each other because of shared interest and complementary skills. Use actual experiences to reflect on professional behaviour.</p> <p>Recruit peers into task orientated groups and undertake a project where each member assumes a different contributory role.</p> <p>Encourage students to reflect on recent experiences and debrief. Discuss recognition and coping mechanisms¹⁰ related to stress.</p>

¹⁰ Adejumo, O. & Brysiewicz, P. (1998) Coping strategies adopted by baccalaureate nursing students in a problem-based learning programme. *Education for Health*, 11, 349-359.

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Ref No	Competences	Educational Interventions
3.7	<p>Apply Emotional Intelligence</p> <p>In 1990 P. Salovey and J.D. Mayer in their paper Emotional Intelligence (Imagination Cognitive Perception, 9, 185-211) defined this intelligence as a type of social intelligence that would involve the ability to monitor one's own emotions and those of others, to discriminate among these emotions and to use the information to guide one's thinking and actions. In 1993 they discussed in a subsequent paper (Intelligence, 17, 433-42) that emotional intelligence included "the verbal and nonverbal appraisal and expression of emotion, the regulation of emotion in the self and others, and the utilization of emotional content in problem solving."</p>	<p>In small groups, in the context of problem-based learning, students are encouraged to develop emotional literacy by examining their emotional perceptions, consciously controlling their reactions, recognising emotions in others and responding helpfully – as essential for collaborating in teams and for responding to patients' needs.</p> <p>Whenever educationally relevant, reflect with others on feelings and emotions and on the impact on behaviour of the individual's own values and attitudes.</p> <p>An example of deliberate development for professional behaviour is described in: Kuiper, C., Gerrits, I. & Hooyer, B. (1999) Training Attitudes from the Start of Education. Hogeschool Rotterdam en Omstreken, Rotterdam.</p>
3.8	<p>Communicate (multilingually) in a multicultural environment</p> <p>Solicit information Actively question and listen, accept other points of view and suggestions.</p> <p>Give information and explanation and ensure full understanding.</p> <p>Persuade, negotiate rather than impose control.</p> <p>Consult in order to help others to arrive at their own conclusions/ decisions.</p> <p>Speak and write at least one other main European language.</p>	<p>Practise retrieval of information through use of information technology, from documents, the media; and face to face interviews with individuals and focus groups including different professions and community leaders from different cultures and countries.</p> <p>Practice interpretation of body language.</p> <p>Practise in problem-based learning sessions, in debating society meetings, journal club meetings, community group meetings, sessions with school children. Practise essay writing, report writing and presenting. Role play and micro teaching with application of adult learning principles.</p> <p>Role play. During students' evaluation sessions practise proposing changes in the curriculum by writing a report addressed to the academic staff; writing a report on proposed improvement in the community addressed to a government department.</p> <p>Acting as mentor to more junior students. Role play and practise with community leaders.</p> <p>Practise in the context of current studies. Practise with native language speakers and from other professions. Work, study, travel in appropriate other country(ies). Read newspapers, professional journals in the other language(s). Practise essay and report writing, with use of Information Technology. Practise oral presentation to audiences of peers, other professions, lay audiences.</p>

In relation to Society as well as your Profession

Ref No	Competences	Educational Interventions
3.9	<p>Socially responsible with a global perspective and cultural competence</p> <p>Take account of global issues and influences at local, country, regional and continent levels.</p> <p>Apply an understanding of the influences related to anthropology, cultures, economics, ethics, environment and climate, human psychology, law, demography and migration, living conditions in other parts of the world.</p> <p>Apply new concepts, ideas and alternative view points.</p> <p>Reflect on own values and belief in confronting new forms of knowledge and experiences, including reaction to change.</p>	<p><i>[These competences ought ideally to be extended from prior development during primary and secondary school education.]</i></p> <p>Participate in inter-professional Current Affairs seminars and journal club meetings. Write summary reports based on Internet surveys for interprofessional, intersectoral and intercultural discussions on issues of topical interest.</p> <p>Use web sites that are especially designed to promote understanding of global perspectives.</p> <p>Senior students discuss with members of a new cohort how to become part of the global community with its diversity and its common problems.</p> <p>Consistent study of these influences in the context of problem-based learning, throughout the curriculum and during student exchanges and voluntary service in other countries.</p> <p>Discuss in small interprofessional groups current issues that affect people from different cultural backgrounds (e.g. ethical issues).</p> <p>Explore how visual art and literature are influenced and influence.</p> <p>Pen friendship with a student of another profession in another country.</p> <p>Assemble a reflective portfolio, including reflective essays.</p> <p>Reflective debriefing after significant experiences.</p> <p>Examine and discuss different codes of professional practice.</p> <p>In problem-based learning make ethically justified decisions and attempt to resolve dilemmas.</p>

In relation to Society as well as your Profession

Ref No	Competences	Educational Interventions
3.10	<p>Apply life-long, self-directed learning, to keep up to date not only within own profession, but also more widely in aspects that affect society as a whole.</p> <p>Identify what new knowledge and skills need to be developed for new or changing roles and responsibilities.</p> <p>Formulate appropriate questions and tasks leading to the acquisition of the required new knowledge/ skills.</p> <p>Benefit from own and peer appraisal.</p> <p>Use appropriate resources of information, eg experts to consult, data bases, journals, books, documents, Internet, the media.</p> <p>Critically appraise such information.</p> <p>Unlearn, in order to accept new ideas, concepts, facts, methods.</p> <p>Identify own preferred learning style.</p> <p>Activate, elaborate, organise own knowledge base, reflect on experience and foster deep learning.</p>	<p>Participate in General Knowledge competitions.</p> <p>Participate in problem-based learning, where not knowing is not shameful but an incentive to want to learn more; where the incentive is “the need to know”, in order to apply such new knowledge and skills; thus leading to deep learning in order to understand.</p> <p>Practise the application of qualitative, as well as quantitative methods of critical appraisal of what is observed, heard and read.</p> <p>Use journal club discussions, including non-profession specific sources, e.g. <i>New Scientist</i>, <i>The Economist</i>.</p> <p>Practise use of the Internet.</p> <p>Practise best evidence-based practice approaches with emphasis on the professional responsibility to make and implement decisions that can be justified.</p> <p>Practise reflection on what has been learned and how it has been learned with identification of concepts, principles and generalisability.</p> <p>Analyse own learning style(s), using Lancaster Approaches to Studying Inventory; Kolb’s Learning Style Inventory; with discussion of the implications and strategies for self-development as a learner.</p>

C. “Enabling” Personal Qualities

that cannot necessarily be expressed as competences but that may be fostered through appropriate educational experiences

In relation to Society as well as your Profession

Ref No	Enabling Personal Qualities	Educational Interventions
4.1	Recognition of the inevitability of change, of uncertainty, of ambiguity and of cultural, religious differences.	It has been suggested that the development of these enabling personal qualities could be fostered through the summative effect of educational experiences. These would be an integral part of a curriculum with a supportive educational environment, where, for example, the students are treated as future colleagues, and where academics and practising colleagues act as appropriate role models. Further supportive attributes of an appropriate curriculum are suggested in the section “Some Considerations for Planning and Implementing the Development of Enabling Competences and Personal Qualities” (page 11).
4.2	Balanced self-confidence, curiosity, inquisitiveness , recognising own strengths and limitations, willing to volunteer: “I do not know but I want to find out”. Willing to admit “I have made a mistake and I wish to discuss it, in order to learn from the mistake for the future.”	
4.3	Desire to keep up to date in own profession and well beyond.	
4.4	Personally secure and flexible	
4.5	Open minded , able to see both sides of an issue.	
4.6	Creative , able to propose alternative strategies, approaches, solutions.	
4.7	Balanced emotional intelligence (see 3.7).	
4.8	Altruistic behaviour.	
4.9	Professional behaviour.	