Welcome to the UNESCO Workshop on Bioethics Education

**Aim:** the workshop will focus on methodologies of application and integration of scientific facts, technology and ethical knowledge and ideas into practice. How can we teach science and ethics of research, policy making and empower individuals to make informed choices? The examples will include medical ethics, biotechnology, public health and environmental issues, and teaching ethics.
Workshop objectives include:

- Participants will learn about the means, methods and resources to teach ethical issues in the context of different subject materials.
- Participants will share experience and develop skills to teach ethics of science and technology. They will receive feedback from experienced experts.
- Participants will develop/revise their own teaching programs after consideration of the available content and methods.
Introduction to Bioethics

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What future do we have?
Ways to view bioethics (1)

1. Descriptive bioethics is the way people view life, their moral interactions and responsibilities with living organisms in their life.

   *from: Bioethics is the Love of Life*
Bioethics includes...

Medical Ethics

Environmental Ethics

Science & Technology
Balancing ideals of:
- Doing good
- Doing harm
- Individual autonomy
- Justice to all

Long heritage seen in ... biology, medicine, society, religion...
Love of life is a common ethic across different cultures...
Many still live close to nature
Anthropocentric, biocentric, ecocentric views

- Asian and Pacific culture is more biocentric
- Transition in modern times away from biocentric or ecocentric thinking

- Cultural specific approaches and materials need to be developed and shared.
Bioethics for the People by the People
Ways to view bioethics

2. Prescriptive bioethics is to tell others what is ethically good or bad, or what principles are most important in making such decisions. It may also be to say something or someone has rights, and others have duties to them.

from: Bioethics is the Love of Life
The imperatives of love

The ethical principle of loving good, beneficence, supports the development of science and technology that might cure sick persons or feed hungry people.
The imperatives of love

Respect for the ethical principle of self-love, autonomy (self-rule), supports empowerment of people so they can access technology according to their values.
New technology will one day be old!
How to analyze it?
The imperatives of love

The ethical principle of loving life, do no harm, warns us to do technology assessment on all options, current and new, to provide the best alternative for the local situation now.
The imperatives of love

The ethical principle of loving others, justice, makes us consider the risks for future generations, and for all to share in the fruits of scientific endeavour. Benefit sharing of technology and poverty eradication.
Freedom of expression could be given more emphasis as a principle of bioethics

- Article 19 of the 1948 Universal Declaration of Human Rights, upholds the “freedom to hold opinions without interference.”

- Article 21 of Universal Declaration on the Human Genome And Human Rights 1997 “States should … also undertake to facilitate on this subject an open international discussion, ensuring the free expression of various socio-cultural, religious and philosophical opinions.”
Level of Participants in Relationships

e.g. Visit to a doctor to seek treatment

Doctor \[\longleftrightarrow\] Patient

Paternalism  Informed Consent  Informed Choice

Doctor \[\leftrightarrow\] Patient

Doctor \[\leftrightarrow\] Patient

e.g. Visit to a supermarket to buy food

Shop \[\longleftrightarrow\] Consumer

Paternalism  Informed Consent  Informed Choice

Consumer \[\leftrightarrow\] Shop

Shop \[\leftrightarrow\] Consumer
In all societies there is a transition

Informed choice

Informed consent

Paternalism
Challenges of the “new” frontiers of science, burden of disease, misuse of science and technology, environmental crisis, led the United Nations to take action.
UNESCO = United Nations Educational, Scientific and Cultural Organization
192 Member States

Since 2002: Ethics as one of the five priorities of the Organisation

Division of Ethics of Science and Technology

- education
- science
- social and human sciences
- culture
- communication and information

Human rights
Philosophy
Social policy
Sports
UNESCO Ethics Committees

The Division of the Ethics of Science and Technology in Paris HQ acts as the Secretariat of two bioethics advisory bodies: the International Bioethics Committee (IBC) composed of 36 independent experts, and the Intergovernmental Bioethics Committee (IGBC), composed of representatives of 36 Member States; and the World Commission on Ethics of Science and Technology (COMEST).

These Committees cooperate to produce advice, recommendations and proposals that each submits to the Director-General for consideration by UNESCO’s governing bodies.
UNESCO Ethics of Science and Technology

Mediate between scientific expertise and policy-making (research-policy linking)

- IBC
  - Standard-setting actions
- IGBC
  - Political decision making regarding ethical issues in the Member States
- COMEST
  - Capacity building
  - Awareness raising
- Inter-agency Com
  - bioethics
  - science ethics
  - environmental ethics
  - space ethics
  - nanotechnology ethics
How we work

Three main structuring lines

1. "Studying what is" -> promoting empirical research
2. "Anticipating what could be" -> promoting philosophical reflection and future-oriented studies
3. "Determining what should be" -> developing and promoting international standards

in order to draw up recommendations for policies and action.
International Standards for Bioethics

UNESCO General Conference 1997 and the UN General Assembly 1998
  Universal Declaration on the Human Genome and Human Rights

UNESCO General Conference 2003
  International Declaration on Human Genetic Data

UNESCO General Conference 2005
  Universal Declaration on Bioethics and Human Rights
1997 2003 2005

Bioethics standard-setting actions
Universal Declaration on Bioethics and Human Rights

Preamble

General provisions
- aims
- scope

Principles

Application of the principles

Promotion of the declaration

Final provisions

1. **Human dignity and human rights**
2. **Benefit and harm**
3. **Autonomy and individual responsibility**
4. **Consent**
5. **Persons without the capacity to consent**
6. **Respect for human vulnerability and personal integrity**
7. **Privacy and confidentiality**
8. **Equality, justice and equity**
9. **Non-discrimination and non-stigmatization**
10. **Respect for cultural diversity and pluralism**
11. **Solidarity and cooperation**
12. **Social responsibility and health**
13. **Sharing of benefits**
14. **Protecting future generations**
15. **Protection of the environment, the biosphere and biodiversity**
RUSHSAP was established in 1975 as part of the decentralization policy of UNESCO. Bangkok is also the UN regional hub.

UNESCO Bangkok
Asia and the Pacific
Regional Bureau for Education

Offices of Regional Advisors in:
• Social and Human Sciences (+Unit)
• Communication & Information
• Culture
Partners

- Declarations address a wide range of decision-makers and actors - including individuals, professional groups, public or private institutions, corporations or States.

- Regional and National workshops are held to increase knowledge and awareness of these Declarations for Policy Makers, Parliamentarians, health care professionals, judges, academics, youth leaders, science communicators, journalists and civil society groups.

- Programmes in the 47 countries in the Asia-Pacific region coordinated through RUSHSAP at UNESCO Bangkok.
Partnerships and Delivery: 
UNESCO Asia-Pacific School of Ethics

Goal: to bring together many active institutions and individuals who are self-funded and collaborating with the Regional Unit in Social and Human Sciences for Asia and the Pacific (RUSH SAP) of UNESCO Bangkok, in coordination with the Division of Ethics of Science and Technology, to meet needs and priorities of the region for research and activities in ethics of science and technology.

The School of Ethics aims to increase the capacity of integrating sound research into policy for each culture across a region of almost 4 billion people facing many social challenges.

Members: Currently the school includes 30 partner institutions and 120 individuals who are involved in collaborative research and activities. (In addition to IBC and COMEST members). The criteria is output based, to recognize those actively involved with our UNESCO regional ethics programmes.
What do you think is the goal of bioethics?

Sit next to the goal you think is most important.

1. Rationale for bioethics education (Reason for actions)

2. The societal mandate for bioethics education

3. Goals

- Research has shown that there are a number of goals of bioethics education including:
  - a) Knowledge
  - b) Skills (capacity building in skill acquiring should be multi faceted or many sided)
  - c) Personal moral development
Goals of Bioethics Education

Research has shown that there are a number of goals of bioethics education including:

a) Knowledge

- Developing trans-disciplinary content knowledge
- Understanding the advanced biological concepts
- Being able to integrate the use of scientific knowledge, facts and ethical principles and argumentation in discussing cases involving moral dilemmas,
- Understanding the breadth of questions that are posed by advanced science and technology
- Understanding cultural diversity and values
b) Skills (capacity building in skill acquisition should be multi-faceted or many-sided). The goals include:

- Balancing benefits and risks of Science and Technology
- Being able to undertake a risk/benefit analysis
- Developing critical thinking and decision making skills and reflective processes
- Developing creative thinking skills
- Developing foresight ability to evade possible risks of science and technology
- Developing skills for “informed choice”
- Developing required skills to detect bias in scientific method, interpretation and presentation of research results
c) Personal moral development (1/2)

- Understanding better the diversity of views of different persons
- Increasing respect for all forms of life
- Eliciting a sense of moral obligation and values including honesty and responsibility
- Being able to take different viewpoints to issues including both biocentric and ecocentric worldviews rather than only anthropocentric perspectives.
c) Personal moral development (2/2)

- Increasing respect for different people and culture, and their values
- Developing scientific attitudes, reflective processes, and an ability for holistic appraisal, while not ignoring the value for reductionist analysis.
- Gaining knowledge about bias in the interpretation and presentation of research results, benefits and risks of technology and bioethical issues, and how to detect bias
- Exploring morals/values (values clarification)
- Promoting values analysis and value based utilization of our scarce natural resources
Critical thinking

- Critical thinking capacity is essential for empowering persons to cope with changing times. How do we promote the creation of ideas and individuality in an era of globalization?

- Rapid progress of technology has led to challenges in the way that we live.

- The systems and patterns that are seen in the relationships between patients, families, health professionals, and the society in general have changed.
Joint Plan of Action for Bioethics Education (2/2)

4. Implementation challenges
5. Targets
6. Curriculum development
7. Teaching materials
8. Teaching methods
9. Evaluation
10. Human capacity building
11. Networking

All of these are opportunities for cooperation with natcoms.
Recommendations to universities

- To establish Bioethics Departments and Centres
- To establish bioethics teaching and learning resources centres
- To give adequate resources to support the activity of the centres
- To establish and to provide sustainable support-courses for bioethics education in for teacher capacity building
Ways to view bioethics

3. Interactive ethics is discussion and debate between people, groups within society, and communities. Such dialogue skills are necessary to live harmoniously with others.

from: Bioethics is the Love of Life
Providing opportunities for cross-cultural dialogue

- UNESCO Bangkok Bioethics Roundtables (Regional)
Local standards and approaches are important

- Cultural norms differ.
- Could enable better community involvement and participation.
- Better involvement and deeper reflection of local researchers and policy makers to build up capacity.
- Legal diversity in different countries.
- More immediate response to local issues, such as media events, changes in social stigma and discrimination that communities may face.
- There is still debate over how to apply most bioethics principles
Partnerships:

Youth leaders in ethics of science and technology

- Training of youth leaders for peer-to-peer discussion of ethical issues of science and technology, e.g. Joint Training Workshop between National Science Museum of Thailand and Regional Unit in Social and Human Sciences for Asia and the Pacific (RUSHSAP) of UNESCO Bangkok, for 125 student leaders. Training in SCE...

- The students will implement action plans.

- International youth dialogues on these issues.

- Campus bioethics weeks.

- Video and internet conferences.

- Poster and activity contests.
Bioethical maturity

How do we form a mature society full of well informed and balanced persons? Bioethically mature means a person, or a society that can balance the benefits and risks of alternative options, make well-considered decisions, and talk about these.
F. PROMOTION OF THE PRINCIPLES SET OUT IN THE DECLARATION

20. States should take appropriate measures to promote the principles set out in the Declaration, through education and relevant means, inter alia through the conduct of research and training in interdisciplinary fields and through the promotion of education in bioethics, at all levels, in particular for those responsible for science policies.

(1997 Universal Declaration on the Human Genome and Human Rights)
UNESCO Bangkok Bioethics Education Project

This project aims to increase the amount of free on-line teaching materials for bioethics education in different countries. The main products so far have been:

1) Production of cross cultural materials. Improvement via expert meetings. Adapted and translated in different languages to teach school and university classes about bioethics.

2) A network of teachers in different countries that have tried the materials, and created bioethics curricula for their local school, bioethics clubs and other endeavours.

3) Development of a joint action plan (July 2006)

4) Testing of evaluation methods

5) Sharing of museum displays and teacher training strategies

6) Moral games and participatory methods

7) Teacher training workshops

8) Curriculum review and development
How to make bioethics practical? At what level?
Globalization of Children’s Cartoon Characters and Educational Aids
(Disney Characters in West African playground)
Meeting with teachers and principals
Museum exhibitions of ethics of science & technology

Aim: to provide information of biology, technology and ethical issues to encourage a holistic understanding of humans and the everyday affairs of humans. Exhibition started in Science Centre for Education in Bangkok (next to UNESCO), February 2008-May 2009(+), in partnership also with BIOTEC, Thailand

Would like to extend to mobile and fixed museum displays in both rural and urban settings

Further displays planned in:

Philippines, Japan, India, Sri Lanka,

Open to others…
Exhibition Contents (prototype, open source)

Bioethics and Moral Choices

Ethics of Science and technology, e.g. agricultural ethics, energy ethics, clothing and ethics, space ethics, animal rights, infoethics

GMOs and biosafety, Nanobiotechnology, Genetic medicine, PGX, gene therapy, Stem cells, cloning, health & disease,

Bioethics tree and comment board

Laboratory - Biotech and Bioethics
Entrance area
Bioethics tree for comments
Teacher training
Participatory methods (workshop examples)
Donuts (where two circles of people are made and they dialogue for 1 minute each and then the circle shifts around one person so that they repeat the exercise)
Participatory methods (workshop examples)
Stand in a line to form a continuum based on their view between two extremes along a moral continuum.

Yes  No
Participatory methods (workshop examples)
Polystyrene blocks for sorting concepts into different categories, lateral thinking
Challenges to make ethics relevant
Universal Declaration on Bioethics and Human Rights

Article 14 – Social Responsibility and Health

a) The promotion of health and social development for their people is a central purpose of governments, that all sectors of society share.

b) Taking into account that the enjoyment of the highest standard of health care is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition, progress in science and technology should advance:

   (i) access to quality health care and essential medicines, including especially for the health of women and children, because health is essential to life itself and must be considered as a social and human good;

   (ii) access to adequate nutrition and water;

   (iii) improvement of living conditions and the environment;

   (iv) elimination of the marginalization and the exclusion of persons on the basis of any grounds; and
UNESCO does not prescribe universal norms of ethics without regard for different cultures. The *Universal Declaration on Bioethics and Human Rights* provides a framework for principles and procedures for guidance.
Bioethics Core Curriculum Proposal (UNESCO)

- based on principles of Universal Declaration on Bioethics and Human Rights
- aim: to facilitate the introduction of bioethics primarily in medical schools
- proposes a minimum program
- flexibility: does not impose a particular model
- global outreach: useful in all regions
- heterogeneity: variety and diversity around a common core
- Teaching resources - region specific as well as development of educational resources, multimedia, case books
Universal Declaration on Bioethics and Human Rights

Preamble

General provisions

- aims
- scope

Principles

1. Human dignity and human rights
2. Benefit and harm
3. Autonomy and individual responsibility
4. Consent
5. Persons without the capacity to consent
6. Respect for human vulnerability and personal integrity
7. Privacy and confidentiality
8. Equality, justice and equity
9. Non-discrimination and non-stigmatization
10. Respect for cultural diversity and pluralism
11. Solidarity and cooperation
12. Social responsibility and health
13. Sharing of benefits
14. Protecting future generations
15. Protection of the environment, the biosphere and biodiversity

Application of the principles

Promotion of the declaration

Final provisions
Bioethics Core Curriculum Proposal

- UNIT 1: What is ethics?
- UNIT 2: What is bioethics?
- UNIT 3: Human Dignity and Human Rights (Article 3)
- UNIT 4: Benefit and Harm (Article 4)
- UNIT 5: Autonomy and Individual Responsibility (Article 5)
- UNIT 6: Consent (Article 6)
- UNIT 7: Persons without the capacity to consent (Article 7)
- UNIT 8: Respect for Human Vulnerability and Personal Integrity (Article 8)
- UNIT 9: Privacy and Confidentiality (Article 9)
Bioethics Core Curriculum Proposal

- UNIT 10: Equality, Justice and Equity (Article 10)
- UNIT 11: Non-Discrimination and Non-Stigmatization (Article 11)
- UNIT 12: Respect for Cultural Diversity and Pluralism (Article 12)
- UNIT 13: Solidarity and Cooperation (Article 13)
- UNIT 14: Social Responsibility and Health (Article 14)
- UNIT 15: Sharing of Benefits (Article 15)
- UNIT 16: Protecting Future Generations (Article 16)
- UNIT 17: Protection of the Environment, the Biosphere and Biodiversity (Article 17)
A Cross-Cultural Introduction to Bioethics

Compilation of free & open teaching materials (ongoing in multiple languages)
Teacher’s Guides (in separate document)

A. Bioethics and the ethics of science and technology
B. Environmental Ethics
C. Genetics
D. Medical Ethics
E. Reproduction
F. Neurosciences
G. Social Ethics
Collection of free and open teaching materials in different languages on the RUSHSAP website has begun

A Cross-Cultural Introduction to Bioethics


- Teacher's Guides (in separate document)
- Feedback Forms
- Content list of textbook

A. Bioethics and the ethics of science and technology

- Making choices, diversity and principles of bioethics
- Ethics in history and love of life
- Moral agents
- Ethical limits of animal use
- Ethics and Nanotechnology
B. Environmental Ethics

- Ecology and Life
- Biodiversity and Extinction
- Ecological Ethics
- Environmental Sciences
- Environment and Economics
- Sustainable Development
- Cars and the Ethics of Costs and Benefits
- Energy crisis, Resources and the Environment
- Ecotourism
- The Earth Charter
C. Genetics

- Genetics, DNA and Mutation
- Ethics and Genetic Engineering
- Genetically modified foods
- Testing for cancer gene susceptibility
- Genetic privacy and information
- The Human Genome Project
- Eugenics
- Human Gene therapy
- Universal Declaration on the Human Genome and Human Rights
- International Declaration on Human Genetic Data
D. Medical Ethics

- Informed Consent and Informed Choices
- Telling the truth about terminal cancer
- Euthanasia
- Brain Death
- Organ donation
- Heart transplant
- Play script for Role Play on Brain Death and Organ Donation
- SARS (Severe Acute Respiratory Syndrome)
- AIDS and Ethics
- Bird flu
- Helsinki Declaration
- Indigenous Medicines and Access to Health
E. Reproduction

- Lifestyle and Fertility
- Assisted reproduction
- Surrogacy
- Choosing Your Children’s Sex and Designer Children
- Prenatal diagnosis of genetic disease
- Female infanticide
- Human cloning
- United Nations Declaration on Cloning
- Human Genome Organization Statement on Stem Cell Research
F. Neurosciences

- Advances in Neuroscience and Neuroethics
- Learning to Remember: The Biological Basis of Memory
- The Neuroscience of Pleasure, Reward and Addiction

G. Social Ethics

- Revisiting the Body
- Child Labour
- Peace and Peace-keeping
- Human Rights and Responsibilities
Pilot trials in more than a dozen countries; bioethics clubs; adapting to local needs
Ethics and policy

Ethics and healthcare

Ethics and public debate
Reports and Advices of IBC

In progress - Informed consent and Social Responsibility


2003 – Report of IBC on Pre-implantation Genetic Diagnosis and Germ-line Intervention

2002 – Human Genetic Data: Preliminary Study by IBC on its Collection, Processing, Storage and Use


2002 – Advice of IBC on the Patentability of the Human Genome

2001 – Report of IBC on Solidarity and International Co-operation between Developed and Developing Countries concerning the Human Genome

2001 – The Use of Embryonic Stem Cells in Therapeutic Research

2000 – Report on Confidentiality and Genetic Data

1996 – Ethical Considerations regarding Access to Experimental Treatment and Experimentation on Human Subjects

1995 – Food, Plant Biotechnology and Ethics

1995 – Bioethics and Human Population Genetics Research

1995 – Genetic Counselling

1995 – Ethics and Neuroscience


1994 – Report on Genetic Screening and Testing
www.unesco.org/shs/ethics/geobs

GLOBAL ETHICS OBSERVATORY -
- System of databases in bioethics and ethics of science and technology
- Worldwide coverage
- Freely accessible
- Reference, collaborative, consultative, and comparative resource hub
- UNESCO’s 6 official languages: Arabic, Chinese, English, French, Russian, Spanish
Need for data into BKK websites and Paris Databases

- **Database 1**: Who’s Who in Ethics
- **Database 2**: Ethics Institutions
- **Database 3**: Ethics Teaching Programmes
- **Database 4**: Ethics Related Legislation and Guidelines
- **Database 5**: Codes of conduct in science and engineering
- **Database 6**: Teaching resources

UNESCO Bangkok Ethics Resources has a variety of ethics materials in different languages.
A summary view of ethics activities

**Standards**
- Declarations

**Capacity**
- Ethics committees
- Legislation/guidelines

**Awareness**
- Publications
- GEO databases
- Seminars & conferences

**OUTCOMES**
- Platforms for ethical action
- Intensive public debate
- Informed public opinion
- (Inter)national normative frameworks
- Morally sensitized professionals and scientists
- Assist policy-making
Ethics of Energy Technologies in Asia-Pacific project

• Launched September 2007
• 14 working groups
• 200+ members and growing
• Partners welcome at Ministry, Institution and Individual level.
• Meetings of groups across region, also virtual, web-casts

Outputs:
• Reports with policy options
• Interdisciplinary networks

Coordinated by RUSHSAP, UNESCO Bangkok
http://www.unescobkk.org/index.php?id=energyethics
Overview of Working Groups

- Energy flow, environment, and ethical implications of meat production
- Universalism and environmental values
- Ethical worldviews of nature
- Visions and hopes of the future
- Energy equity and human security
- Ethical frameworks for research agendas and policy
- Water ethics and water resource management
- Cost-benefit analysis and economic constructions
- Adoption & development of energy technologies (state of the art review with case studies)
- Community engagement
- Representation and who decides
- Educational frameworks for environmental ethics
- Stakeholder responsibilities
- Nuclear dialogues

Ethics of Energy Technologies in Asia and the Pacific Project as of 16 August 2008
UNESCO Bangkok website
http://www.unescobkk.org/rushsap
UNESCO Asia-Pacific School of Ethics
Philosophical dialogues
Ethics of Energy Technologies Project
Teaching resources

UNESCO Paris
http://www.unesco.org/shs
Asian Bioethics Association
www.eubios.info/ABA.htm