

UNESCO Chair in Bioethics

**Moral Games for
Teaching Bioethics**

Darryl R.J. Macer, Ph.D.

UNESCO Chair in Bioethics Office

**UNESCO Chair in Bioethics,
P.O.Box 6451, Haifa 31063, Israel
e-mail: acarmi@research.haifa.ac.il
Tel: 972 4 911 3281
Fax 972 4 821 1721**

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The International Center for Health, Law and Ethics
Faculty of Law, University of Haifa

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Darryl R.J. Macer, Ph.D.

Regional Adviser in Social and Human Sciences for
Asia and the Pacific,
Regional Unit for Social and Human Sciences in
Asia and the Pacific (RUSHSAP),
UNESCO Bangkok, Thailand

www.unescobkk.org/rushsap

Comments to Email: d.macer@unesco.org

Israel National Commission for UNESCO

**The International Center for Health, Law and Ethics
Faculty of Law, University of Haifa, Israel**

Chairholder: Prof. Amnon Carmi

UNESCO Chair in Bioethics

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Preface

This book is intended for all who enjoy to teach others how to think. The objective of learning should be to impart knowledge and skills that can help assist learners in their personal paths towards finding their place in the world. Critical thinking is enhanced by asking questions, and lots of them. This book is simply called Moral Games for Bioethics, but the games can be used for many subjects and adapted to make learning enjoyable for all involved.

There are many definitions of bioethics, but ten years ago I called Bioethics the love of life, reflecting the hope that bioethics should value life in a process involving emotions and rationality. If we love life we will enjoy it, and it is hoped that participatory methods, which not only help people learn more facts, will also be more enjoyable to learners. Research shows that if we enjoy something we will retain more of the associated knowledge, and I therefore urge users of the book to make ethics classes fun.

Feedback is appreciated from users, and students. The book will also be available on-line for free downloads, and in that spirit I hope that we can assemble more games for use by teachers and facilitators around the world.

I wish to thank two colleagues in particular for their intellectual support, as well as to the many in the international bioethics education projects that have worked together to develop teaching materials and test them in many countries in the past years. In recent years in bioethics training work, Dr. Lindsey Conner introduced me to some of the games used in education, and several specific examples of hers are referenced in this book. I also wish to thank Prof. Amnon Carmi, for his request to write this book, suggested improvements, and patience to allow time to put these descriptions down onto paper.

I thank many former students, be they students in classes for years or for single classes, who have given feedback on different styles of teaching. There is no age limit for most of these games, as ethics is something we should learn lifelong. Happy reading and have fun, while trying to make the world we live in a little better.

1. Bioethics and choices

Moral dilemmas face everyone of us. There have been numerous books written to explain moral theories and how these can be applied to dilemmas we face in medicine, daily life and a range of professions. Given the rapid development of science and technology, for example, genetic engineering, neuro-engineering, and nanotechnology, and the implications these raise for individuals and society, people need to have the opportunity to shape the direction, purposes and goals of science and technology.

Bioethics includes ethical issues related to all branches of knowledge, including the environment, life sciences, and medicine and associated technologies. To ensure public participation and making wise decisions about their own and their children's future, providing bioethics education at all levels is necessary. Although the primary audience of this book is teachers, the debates generated in the classroom are likely to spill over into the family and community in general. This book aims to bring moral theory to life by a participatory style featuring a number of moral games that can be used and adapted to teach ethics in a practical manner.

There has been universal agreement for more than a decade that bioethics education at all levels should be provided to citizens through the adoption of the *Universal Declaration on the Human Genome and Human Rights* by the UNESCO General Conference in 1997, and by the United Nations General Assembly in 1998. The international standards for bioethics education were reinforced in the *International Declaration on Human Genetic Data*, adopted in 2003; and the *Universal Declaration on Bioethics and Human Rights*, adopted by UNESCO's 33rd General Conference, in 2005. In essence the apparently new choices raised by new technology acted as a catalyst to stimulate the consideration of how people make decisions in general. The work of educators in moral values through millennia was applied to the issues raised by science and technology, and empowering learners to make choices that make them live a better life.

For some the title of this book "moral games" would imply that the games here are all moral. There have been discussions of whether electronic games are moral or too violent. This is not the meaning of

"moral" taken here. Rather morality is something that is learned through clarification of our values and application of these values to cases. The participatory games explored in this book aim to guide moral decision making.

Critical thinking capacity is essential for empowering persons to cope with changing times. Critical thinking should not only promote the creation of ideas but also the formation and adoption of humane moral values while treating patients, or while forming social decisions with regard to human health and life.

Participation can promote the creation of ideas and individuality, which we all need in the era of globalization. Learning is acknowledged as being the result of complex interacting influences thus teaching must recognize numerous interconnections because of the impact it has upon peoples' lives.

A teacher's job is to ask questions to make students think for themselves. There are some general characteristics of good questions. Good questions should stimulate thought, be short, simple and clear, be definite and unambiguous, encourage persons to express themselves, be relevant to the content covered and be appropriate to the learner's ability

This concept of using moral games is also linked to movements such as student-centred learning, participatory learning and action. There is a number of approaches, tools, attitudes and behaviours to enable and empower people to present, share, analyze and enhance their knowledge of life and conditions. These games may help them to plan, act, monitor, evaluate, and reflect on moral choices.

2. Goals of Bioethics

Bioethics could be defined as the study of ethical issues and decision-making associated with the use of living organisms. I have defined bioethics as love of life (Macer, 1998), and inculcating a balanced love of life and love of learning is one of the goals of using moral games to teach bioethics. Bioethics includes both medical ethics and environmental ethics, and this book includes examples from both. Bioethics is learning how to balance different benefits, risks and duties. Concepts of bioethics can be seen in literature, art, music, culture, philosophy, and religion, throughout history. Every culture has developed bioethics, and in this book there is a range of teaching resources that can be used that are written from a cross-cultural perspective by a variety of authors.

In order to have a sustainable future, we need to promote bioethical maturity. We could call the bioethical maturity of a society the ability to balance the benefits and risks of applications of biological or medical technology. It is also reflected in the extent to which public views are incorporated into policy-making while respecting the duties of society to ensure individual's informed choice. Awareness of concerns and risks should be maintained, and debated, for it may lessen the possibility of misuse of these technologies. Other important ideals of bioethics such as autonomy and justice need to be protected and included when balancing benefits and risks.

Bioethics is not about thinking that we can always find one correct solution to ethical problems. The moral games included here teach that a range of solutions is possible, although in the process it will show that there are some inappropriate solutions to moral dilemmas, such as to always believe you are right and others are always wrong. Ethical principles and issues need to be balanced. Many people already attempt to do so unconsciously. The balance varies more between two persons within any one culture than between any two. A mature society is one that has developed some of the social and behavioural tools to balance these bioethical principles, and apply them to new situations raised by technology.

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

-
- a) Knowledge
- Development of 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 acquiring should be multi-faceted or many sided, and 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 developing "informed choice"
 - Developing required skills to detect bias in scientific method, interpretation and presentation of research results
- c) Personal moral development
- 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.

Increasing respect for different people and cultures, and their values

Developing scientific attitudes, reflective processes, and an ability for holistic appraisal, while not ignoring the value for reductionist analysis.

Developing 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 personal morals/values (values clarification)

Conducting values analysis and value based utilization of our scarce natural resources

Many of these goals apply to ethics education and development of critical thinking in general. The games included in this book will help achieve some of the above goals, and the list is not-exclusive. I welcome feedback from users of the book to assess how these goals were met for each user.

Providing different types of teaching methods and models for different target groups such as lectures, seminars, workshops, drama, narrative, role plays, case presentation and analysis, essay composition, small group discussion, on-line discussion forums, newsletters, public open discussion, media commentary and critiques, all have important roles uses in accomplishing the above goals. Researchers and educators need to work together to research into appropriate teaching methods for different target groups, to assess the effectiveness and impact (both positive and negative) of ethics education. Generating sustainable ethics teaching and promotion programmes is a method in itself, required by education planners.

We do not need to achieve all goals to consider a class to be successful, and different teachers and schools put a different amount of emphasis on each goal. It is important at all these levels to evaluate whether our teaching is having any impact or not. Because investigating bioethical issues is complex, the educators need to consider what knowledge needs to be developed in order for students to make sense of moral issues, to be able to critically evaluate them and to possibly take action based on this knowledge (Conner, 2004). Persons at all

levels do mix ideas in different ways.

The type of class that we are teaching will also affect the outcomes. For example if we are training medical students to become medical professionals the goal may be to create medical professionals with competence and compassion. Medical education aims to teach not only high skills in medical practice, but also to foster compassionate and sympathetic attitudes in future medical professionals. But there is a difference between these two goals (Nagaoka, 2008). Competence may be measured more or less objectively. For instance, a doctor's ability to diagnose disease, to prescribe proper medication for that problem and so on can be measured by the outcomes. On the other hand, whether an act is seen as compassionate or not depends on the context. Compassion or kindness is an evaluative judgment, made by the other partner in the interaction, and therefore influenced by the nature of the interaction as well as the mental states of the other partner. One could teach compassionate attitudes by character building, or through cases. We can see that goals of knowledge, skills and personal moral development are inter-related, and different choices of questions, cases, examples and different games can be used in ethics education.

Evaluation options

Crucial to the development of bioethics education is a method of evaluation that allows for improvement of materials to better meet the needs of students in different countries. There are different methods of evaluation including development of specific evaluation forms for student and teacher responses to questions, and a range of ways to analyze the content of student discourse, essays and reports. One important goal of teaching about bioethical issues is to get students to critically evaluate the issues and most of these moral games can be used to allow opportunities for students to go beyond agreement to consider carefully the issues, if sufficient time is given.

One of the difficult questions in bioethics education is how to evaluate the usefulness of the materials provided, beyond mere student or teacher satisfaction. One concept to use is whether students demonstrate "bioethical maturity" in some way. "Bioethical maturity" assumes a certain level of recognition of weighing up the different

arguments that can be used to discuss an issue, the different ethical frameworks that can be used, and comparisons and balancing of the benefits and risks of the dilemmas". There are several indicators of "Personal moral development" that can be used (Maekawa and Macer, 2005). These include whether students can understand and express both sides of view. Mature persons should be able to express more than one side of an argument or a question being mentioned, even though they may have their own opinion. The personal point of view (e.g., an "I think" statement) can be developed into reflective discourse so that it is mixed with other people's points of views being stated, regardless of whether they concur.

Integration of scientific facts is also important in moral reasoning. A concrete and/or detailed scientific fact is more intellectually demanding than a broad statement of common sense. We could expect persons to be able to cite scientific evidence, as well as quantitative facts and statistics. We would expect students can also provide reliable sources for their information and be able to detect and acknowledge the bias in information they use. A commonly used source of material in many schools is newspaper articles. Teachers would sometimes take two opposing articles and have the students discuss.

Environment and biocentric ideas can be promoted. A statement made mentioning concerns for the environment or ecological concerns, or for example the care or treatment of animals may be raised as a concern. Generally people tend to reason and write from an anthropocentric viewpoint, but as they develop bioethical views they will be able to view issues from different perspectives.

A utilitarian view is judging an act as being morally acceptable based on the opinion that the benefits of the action to one group or individual will outweigh the risks or harm produced affecting a larger population. It can balance interests of society versus those of individuals, and it is not limited to human beings.

A keyword denoting an ethical principle or connotation of one regardless of whether being directly stated or not would indicate understanding of how to apply theory into moral decision making. This could include the term "rights", or specific bioethics principles

and keywords such as benefit and risk assessment, informed consent, enhancement, public welfare, autonomy, justice, equality of life, animal welfare, etc.

An idea is a distinct message unit, statement or concept. Ideas can come from many sources, others or themselves. Analysis of the number of ideas, key words and concepts can be used to measure the diversity of thinking. Changes in the frequency of keywords and concepts used by persons over time need to be measured against several variables, including internal factors connected to the class such as the wording of the statements discussed, the nature of the materials used, the comments given by the teacher, and the comments made during the groups and class. Examination of the progress of moral development can be aided by detailed discourse analysis of oral discussion or written reports.

There is a consensus among many Western scholars that the balancing of four main bioethical principles, which are autonomy, justice, beneficence and non-maleficence, is central to making better decisions (Beauchamp and Childress, 1994). Autonomy means "self-rule", and includes ideas such as respect for privacy and respect for personal choice. Justice is to respect the autonomy of others, and to treat persons equally. Beneficence is to try to do good, and non-maleficence is to avoid harm. When solving or trying to reach a consensus about bioethical problems, these four main principles can be a good guide in balancing which ideas should be mostly weighed. One measure of bioethics education could then be whether students are able to use these principles in decision-making. Currently the use of principles as expressed in the UNESCO Universal Declaration on Bioethics and Human Rights (2005) is being used to develop a core curriculum to teach bioethics based on inclusion of the consensus view of bioethics as included in that Declaration.

No matter how we learn, reaching a good moral decision is often difficult. The best decision may not be the same if made in different times and situations. One approach that is common in education is to teach learners to break down ethical dilemmas into manageable problems, for example, the separation of action, consequence and motives connected to a moral decision. This separation can be used to teach different bioethical theories. No matter what bioethical theory

one uses, moral games can be used to allow students to develop their application of theory into practice, comparing different ways of thinking in the exercises.

Kohlberg's (1969) theory of moral development holds that moral reasoning, which he thought to be the basis for ethical behavior, has developmental stages. He claimed that these are universal, however there is now a consensus that they are not because of different cultural norms and customs. Kohlberg's six stages were grouped into three levels: pre-conventional, conventional, and post-conventional. He claimed it is not possible to regress backwards in stages nor to 'jump' stages; each stage provides new perspective and is considered "more comprehensive, differentiated, and integrated than its predecessors." One criticism of Kohlberg's theory is that it emphasizes justice to the exclusion of other values. As a consequence of this, it may not adequately address the arguments of people who value other moral aspects of actions more highly. His theory was the result of empirical research using only male participants (aged 10, 13, and 16 in Chicago in the 1960s). Carol Gilligan argued that Kohlberg's theory therefore did not adequately describe the concerns of women. She developed an alternative theory of moral reasoning that is based on the value of care. Among studies of ethics there is a tendency in some studies to find females have higher regard for ethics theories (Ford and Richardson, 1994). Other psychologists have challenged the assumption that moral action is primarily reached by formal reasoning (Crain, 1985). People often make moral judgments without weighing concerns such as fairness, law, human rights and abstract ethical values. If this is true, the arguments that Kohlberg and other rationalist psychologists have analyzed are often no more than post hoc rationalizations of intuitive decisions. Macer (1998) argued that bioethics is love of life, but that the decision making process that combines both emotion and rationality is based on moral principles.

One of the common goals of school education is that students can produce a good argument (Toulmin *et al.* 1984). An argument consists of integrating the following:

A conclusion or claim - assertions or conclusions about an event or theory

Facts - data that is used as evidence to support the assertion

Warrants - the statement that explains the link between the data and the claims

Backing - underlying assumptions which are often not made explicit

Rebuttals - statements that contradict the data, warrant or backing of an argument

To create an argument a person needs to state their claim, then support it with facts (data) that are arranged logically. For each fact, they should give the evidence for the fact (warrant), and for each warrant, state the quality of its validity (backing). Then for each warrant and its backing, people should think of an opposing point of view (rebuttal). They then consider further possible warrants and backing for the rebuttals. At the end then they review, having argued the rebuttals, examining whether they need to qualify their original claim.

The mental mapping project, or human behaviourome project¹ identified different classes of ideas, and attempted to explain the linkages between ideas in the construction of moral choices by different persons (Macer, 2002a). The Ideas, Evidence and Argument in Science Education (IDEAS) project of Osborne *et al.* in the UK², has as its goal the assistance of teachers in developing their skills to teach about ideas, evidence and argument in science. The materials they wish to develop include worksheets and video clips to enable teachers to teach children to develop and evidence scientific argument. The IDEAS project suggests that the following criteria can be used in evaluating students' arguments: Is there a claim? Does the argument have data to support the claim? Does the argument link the data to the claim? Are there further justifications to support the case? Is there any anticipation of a counter argument and how it could be opposed?

Ratcliffe and Grace (2003) gave examples of knowledge, understanding and skills that students studying ethical issues in science acquire and that can be used to design assessment questions. They listed several different levels of knowledge:

1. <http://www.eubios.info/menmap.htm>

2. <http://www.kcl.ac.uk/depsta/education/ideas.html>

Conceptual knowledge: Learners can demonstrate understanding of: underpinning science concepts and the nature of scientific endeavour; probability and risk; the scope of the issue - personal, local, national, global, political and societal context; and environmental sustainability. Procedural knowledge: Learners can engage successfully in: processes of opinion forming/decision making using a partial and possibly biased information base; cost-benefit analysis; evidence evaluation including media reporting; and ethical reasoning.

Attitudes and beliefs: Learners can: clarify personal and societal values and ideas of responsibility; and recognize how values and beliefs are brought to bear, alongside other factors, in considering socio-scientific issues.

As with the questions that Kohlberg used for the linkage of student arguments to moral stages of development, and with the goals of bioethics education in the Bioethics Education Action Plan discussed above, there are a number of ways that could be developed into evaluation tools for assessment of bioethics education.

Evaluation must be done ethically. It is very important to examine the direction of bioethics education and how this might enable people to question scientific endeavours and use of technology, and what impact their moral decisions will have on them as individuals and upon their societies. The skills that are required to do this involve the ability to identify existing ideas and beliefs, listen to others, be aware of multiple perspectives, find out relevant information and communicate the findings to others. These skills cannot be 'given' to students through a didactic approach to teaching, where the teacher imparts the knowledge in a one way stream. Instead, students need to experience situations that will allow them to develop these skills through interacting with the teacher and with each other. The methods outlined in this book allow sharing of cases and experience in a range of cultures as well.

When bioethics is applied to professional behaviour, such as in medical ethics, methods to evaluate have included the way students conduct a patient examination. In Buffalo University Bioethics program³

3. <http://wings.buffalo.edu/faculty/research/bioethics/eval.html>

(Singer *et al.*, 1993), they applied the technology of the objective structured clinical examination (OSCE) (Cohen *et al.*, 1991) using standardized patients to the evaluation of bioethics. Methods to evaluate the ethical abilities of students, trainees, and practising professions that have been used include multiple-choice and true/false questions (Howe and Jones, 1984), case write-ups (Siegler *et al.*, 1982; Doyal *et al.*, 1987; Hebert *et al.*, 1990), audio-taped interviews with standardized patients (Miles *et al.*, 1990), and instruments based on Kohlberg's cognitive moral development theory (Self *et al.*, 1989).

The reliability and validity of these methods have seldom been examined. Auvinen *et al.* (2004) applied the use of Kohlberg's stages of moral development to assess ethics teaching in nursing students in Finland, and they found significantly higher ethical maturity when nurses actually had to deal with ethical dilemmas in their practical training in clinics. Pre and post questionnaire surveys about specific topics relating to the content of the lecture or teaching intervention can be useful to measure change. A mix of qualitative and quantitative methodology can help in the monitoring of bioethical maturity.

3. Participatory Methods

This book provides a number of examples of participatory games that can be used to teach moral decision making and values. Prior to listing examples there are some general issues that can be discussed on the concept of participation. Quite simply, unless students participate in learning they will not learn nor apply. Generally speaking the greater the extent of participation and mental involvement the more lessons we would expect to be retained.

While certain sights can stimulate moral revulsion, such as photos of victims of war, disaster or abuse, the fact that we take note of them is due to a mental participation and empathy with those we see, or imagine. This book is trying to achieve the next level of participation, in which students go beyond simple empathy, to apply reason and logic as well as feelings to specific cases, which will create a practice of critical thinking when exposed to real moral questions in their future.

Facilitators

One of the critical skills for teachers in many of these exercises is being able to facilitate group discussions. This skill is needed to increase the participation of all people in group discussions and to ensure that a wide range of perspectives and interests are included in the discussions. Good facilitation skills help to improve the quality of group discussion and problem solving. They can also help build consensus where necessary, and encourage group ownership of the ideas.

The teacher is the chief facilitator, and there are also opportunities in many games where tutors or leaders of groups are appointed to manage the smaller groups, or decided by the group themselves. The facilitator needs to introduce themselves and the purpose and nature of the time given to the group to participants. The facilitator may normally ask each person in the group to introduce themselves to the others in the group. This can ensure that everyone is comfortable, can see and hear each other. The participants in the group should agree on the aims of the session and how much time is available. The group agrees on 'ground rules' with participants, including the need

to respect opinions and confidentiality. There should be agreement between the participants on how the discussion will be recorded and what will happen to this record at the end of the session. Who is going to take notes? Who will check time? Everyone can take their own notes if they want, and the nominated rapporteur should summarise the main points of the session and follow up that has been agreed. At the end the facilitator should give thanks to the participants for their time and contributions and, if appropriate, agrees a time and place for a further meeting.

An important quality of a facilitator is to develop the appropriate attitudes and behaviours in themselves and others. These are to be empowering rather than disempowering, facilitating rather than dominating, participatory rather than excluding, flexible rather than rigid, for example. Positive traits include being humble, listening to others, respecting others' viewpoints, and supporting learners. There needs to be a willingness to treat people with equality regardless of age group, socio-economic status, knowledge, or any other difference. Giving people time to come up with their own ideas requires patience. A teacher should not be imposing, nor talk all the time. The teachers should not impose their own ideas in a prescriptive form of ethics indoctrination, rather be an interactive facilitator of learning. While a time may come in the natural flow of discussions for teachers to give their opinion, it should be resisted when it will inhibit discussion.

Some people are not comfortable participating in classes and even groups of 8 persons may seem to daunting for them. This may be more common in cultures where education has a tradition of being only from teacher (or video) to learner. Having to think for oneself is not always emphasized in education. At the same time classes can get out of control if no instruction is provided in response to the outcomes of these games and activities, and if certain dominating behaviours are allowed to monopolise the discussion. A balance is required.

Above all a facilitator must trust that students can analyze, plan, act, monitor, evaluate and reflect on issues. In modern society young people grow up with excessive amounts of information, and have been exposed to many moral topics prior to classroom discussions. Conducting group discussions and games allows all to learn from

people, and to share their own knowledge. Teachers should not judge people, but can challenge certain ideas to help people see things in a new way if done in a respectful way.

Class-size

We can often hear complaints from teachers that there are too many students in a class so there is no way to let the students talk. While there are different ways to describe the participation of students, in a lecture for 800 students compared to 32 or 10 students, class-size is not a barrier to participatory learning. In the case of large classes there are methods that can be used to improve the participation of students such as talking in pairs while sitting in the class, or working in small groups of three or more persons to discuss particular questions from the text. Many of these games can also be tried outside, not only inside classrooms. Make efforts to ensure that the games are conducted in places where participants feel comfortable expressing themselves freely.

While if everything is equal we would prefer less students in a class, a student will probably learn more in a class that has other students than themselves. Interactive responses between students and teachers are important in learning, for not only those asking questions but for all those listening. In the case that you have too few students, or diversity, then modern free software may allow internet-based video conferencing between classes and groups on different sides of our planet. That can also be attractive for many students.

At the start of each description of a game there is a summary purpose, a suggested guide on class size, and a comment on the actual interactive unit size for these discussions. A suggested time is added, as an initial guide. This time does not include the time that may be used for debriefing or general discussion in the class after the game. In general most games will take only 2-4 minutes to explain the first time, and then become easier as students become familiar with them. With variations to the games the time taken will vary.

The name of the game

In the rest of this book there is a series of moral games and exercises

that encourage participation of students, with some examples of concrete questions that can be used. Some of the games have been given names, and other persons may prefer different names. There are many interactive discussion methods that can be used in classes with many persons, and I hope that as readers develop more games they can be shared as resources with all. The point is to explore methods that make us all think.

The references provide some further background material that can be openly used and reproduced, but there are many potential background materials for all of these topics. We would also hope that students will be able to gather more of the background themselves if they have access to the materials, whether in hard copy or on-line over the Internet or in movies. There are books that provide many other examples of games, whether for classes or for parties.

As part of a participatory method of education it is suggested that students from different cultures produce media resources, including power point presentations, posters, games, films, puzzles, etc., that can then be shared between culture and institution. Some people are gifted in mathematics, others in drawing, others in singing and others in speaking or mime. Use the gifts that people have to make us all think. Rather than having outside persons make resources, the student created resources have also been found to be very useful. It will lead to learning among those who create the resources, as well as sharing knowledge between cultures.

Ethical considerations

Teachers have a great moral responsibility. Participants in small groups discussing sensitive issues, including personal information, also need to exercise responsibility with each other. That is one of the moral lessons to be learned from these moral games. There are some general ethical issues that may be helpful for participants to reflect on and understand when participating in these exercises with other persons. These include:

How much information should be shared with students before enrolling in a class? There could be a difference in the way to approach classes between the case that students are in compulsory classes to

students in voluntary classes who have agreed to sharing more sensitive information in the learning process.

Is there agreement on confidentiality and anonymity if necessary, or if desired by the participants sharing cases and opinions?

How is the information being recorded and documented?

Is their agreement on who owns the information and who can use the information?

Do members of the defined community participating in the activity have a concern or experience with the issue?

Is there a wide understanding of what the activity is about, what it aims to achieve and the process?

If the focus is on action than it should be more than just an exercise in gathering problems (vulnerabilities and risks) and 'wish lists'. If it is activity based then the activity should also explore the assets and strengths of all participants.

If an action plan affecting others is made than we can ask will the activity benefit the community touched by the group?

Does the written report reflect multiple voices/perspectives of the class? Has it, and other outputs, been agreed by all participants?

Have all participants given their permission for their opinions to be presented to a larger group?

Does the activity methodology allow all people to participate equally?

Does it allow for participants to develop their own conclusions?

Is their agreement on acknowledging different interpretation and issues between people?

Who owns the data from the sessions and can the results be published? Is adequate reference citation given to the materials and cases used?

Perhaps the most important ethical consideration is that learning should be fun, and teachers have responsibility for helping participants to clarify their values, and to answer adequately for each participant the questions that stem from the teaching process. There are many questions which we do not know the answer to, and an

honest teacher will acknowledge that while preparing students to start to find their own solutions at the appropriate age.

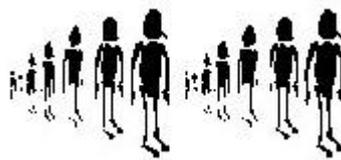
Game 1: Donuts

Purpose: Values clarification; Listening to others; Ice-breaking

Class size: No limit except physical constraints of space

Time needed: 10 minutes

Interactive unit size: Pairs facing each other



Description

Make two circles of people with pairs facing each other. The pairs dialogue for 1 minute each on a moral question, and then one of the circles shifts around two persons so that new pairs are made. The new pairs repeat the exercise with the identical question. For the third time ask the other circle to move so that new pairs are formed again. The people can then go back to their seats.

After repeating three times the persons have each given three answers to the same question and heard three answers from three different persons. If there is not space to make circles (donut-shapes), the exercise can be also done with two lines of persons facing each other to fill available space in a classroom (e.g. at the front of the class, in walkways between desks, etc.)

Teacher Background

This exercise is deliberately placed as the first moral game because it can function as an ice-breaker for a new group of people. It is especially recommended to happen at the beginning of a new course, or new class, allowing people to get to know each other. For each person to know others in the class will encourage a constructive social atmosphere essential to learning, and boost the confidence of students to speak to others.

The exercise provides an opportunity for each person to clarify their

thinking on the question being asked. At the end of the exercise the teacher can ask students how their views have developed over the course of the exercise. They also will have been able to listen to others' views and describe what others said.

In case there is insufficient room for circular donuts the exercise can be done by forming two lines of persons facing each other, to make pairs, and to shift one line each cycle. There is therefore almost no limit to the number of persons who can do this, and the whole exercise takes only ten minutes of class time. The teacher can then let the students sit down and describe their experience and then this can be related to the theoretical background.

Examples

Almost any question can be asked, to express opinions and/or knowledge. For example:

- Q1) Do animals have rights?
- Q2) Should we experiment on animals?
- Q3) How many children should we have? How many would you like?
- Q4) Should we allow sex selection for couples wanting to have a family with a balanced number of males and females?
- Q5) What would you like to do to solve the food shortage in the world?

Game 2: How do you think?

Purpose: Values clarification; Listening to others; Ice-breaking

Class size: No limit except physical constraints of space

Time needed: 20-30 minutes

Interactive unit size: Divides class into different groups based on their opinion, ideally no more than 15 in a group (smaller are better)

Description

Before the class the teacher should place a set of statements at different places around the classroom. Place these signs on walls (or trees outside if you want to take the class outside) in different parts of the space where you are working. The students will then be asked to cluster next to the statement that best describes their own opinion. They could be given a written list of all statements so they can chose and also for later reference to class discussions. This game involves students standing next to different statements relating to the subject, that best agree with their opinion.

If the group number allows, teachers can ask the students to explain why they are standing by their different signs in the total group, but this can also be done inside each small group now formed. When the activity is complete, encourage the students to discuss what the game has shown. For example, where was there most agreement and disagreement? Why do people have different attitudes?

The groups that are separated could then be given different tasks, e.g. this could include to work together to list their opinions for why they chose that statement. There is a separate entry for small group work, and large groups will tend to have less discussion.

If small breakout rooms are available a statement can be linked to each room and students would be asked to go to each room. Then the students in each group could develop the reasons why they agree with the statement in a room, and longer time could be spent. The clusters of students can prepare for further exercises, such as preparing to debate with other statements. Sometimes you can encourage them to try to persuade others to change their minds. Students who change

their minds can move groups if they wish to.

The exercise can also be done so that students cluster next to the statement that they most disagree with, instead of using agreement.

Teacher Background

This game allows the students to exercise their choice in which group they form based on some moral similarity with others in response to the statement. The game can provide a lively and non-threatening way for people to explore their attitudes about key issues. It can help identify whether people have similar or different attitudes, and why. This way of looking at personal statements about agreeing or disagreeing can be particularly useful for exploring attitudes about moral decisions, gender, cultural traditions and stigma, and sensitive questions that people may be afraid to express orally in a large group. They will be able to move to statements close to their own opinion together with others. The teachers should choose statements about which people will have different opinions.

Welcome disagreement among the participants and allow enough time for everyone to participate fully. Don't move on to a new topic or statement too quickly because students may benefit by developing their moral reasoning in depth on one topic then by simply having to agree or disagree with a lot of different statements. It is important not to let your own attitudes as a teacher influence the activity.

Examples

The statements could be descriptions, questions like "Why use it?", "Why do this?", "Do you agree with this quotation?", "Do you disagree with doing this?" For example:

- Q1) Develop 4-6 statements of attitudes and beliefs about HIV/AIDS, e.g. "You can catch HIV through kissing", "You should only use a condom with a sex worker." Draw or write three signs: "I agree", "I disagree" and "I am not sure".
- Q2) Statements about genetics and intelligence, e.g. "Genes determine your intelligence", "Environment determines your intelligence", "Intelligence is increasing", "We are what we eat", "Only intelligent people should have children".

- Q3) Who should have the right to the information in your brain? Put up signs around the room: Lawyers, doctors, family members, employers, insurance companies, marketing agencies, government intelligence organizations?
- Q4) What kinds of genetic changes to organisms do you think would be helpful or harmful? Put up 3 signs for: Helpful changes; Harmful changes; Changes that only make profit for companies.



Game 3: Agree or disagree

Purpose: Values clarification; Listening to others

Class size: <100 maximum, ideally <40

Time needed: 20 minutes

Interactive unit size: Divides class by opinion into three different groups according to the questions asked based on their agreement, disagreement or uncertainty

Description

This game to ask people whether they agree or disagree with a statement. It is a simple form of values' clarification in which each learner is asked to show their opinion, and develop their opinion as a result of sharing their opinion and listening to others. A particular statement is made and then the statements, "I Agree", "I Disagree", and "I am not sure" are stuck to places around the room (similar method to moral game 2). The students are told that if they strongly agree with the statement, they should stand by the "I Agree" sign; if they are unsure, they should stand somewhere in the middle near "I am not sure" sign, and those who disagree should stand near the "I Disagree" sign. Explain to the students that as you read each statement they should go to the board which best reflects their views. Select a sample of participants to explain why they choose to take a particular position. People may change positions if convinced by other pupils' explanation, and they can be asked to explain why they changed position.

Teacher Background

Values clarification is the process of identifying and critically examining one's values, beliefs, attitudes, convictions and opinions on different issues. Values' clarification aims at allowing students to recognise, acknowledge and tolerate the variety of opinions held by others. For a larger class you can use 5 signs labeled "strongly agree, agree, not sure, disagree, strongly disagree". Begin with a less threatening or a more general statement so that they get used to the method. The teacher must avoid expressing their own opinion. The

role of the teacher is to create a climate of tolerance and a sense of how broad the spectrum of ideas can be. If the discussion becomes heated, the teacher could ask the pupils to pay attention to how deeply felt values can be.



Examples

The examples should be something that we can expect a division of opinion on, and it can be related to an issue you wish to address later. For example, do you agree, disagree or are not sure of the statement:

- Q1) Everyone has equal human rights. The answers may differentiate those who interpret this as a description of the reality in the world (have), or as an ideal (should have).
- Q2) An embryo is a person.
- Q3) We should all drive cars.

Game 4: Moral continuum (line-up)

Purpose: Values clarification; Listening to others

Class size: <50 maximum, <25 ideally

Time needed: 15-20 minutes

Interactive unit size: As entire class

Description

A statement is made and then students are asked to stand in a U-shape line facing each other to form a continuum based on their view between two extremes along a moral continuum. The students need to be able to see each other and form a single line. After some students give their explanations for why they are standing at that point in the line then students may move to the appropriate point in the moral continuum so that they are more positive or negative than their immediate neighbours according to the side.



Teacher Background

The interaction in this shape can start with a general question and then after students give responses to explain where they are they will move their positions. Then after some time a modified question can be given and the students asked to move along the continuum to their new positions. Then a more personal question, or alternative can be asked by the teacher to see how students move. The questions asked by the teacher at the end will be more personal questions to see how the students respond to a case more related to their own moral choices.

The line could be in a U shape or straight if a small number. The U shape allows all students to see each other more easily (and listen to each other) in the case of a larger number of students, so it is preferred. Let the students define the issues (the teacher can go into depth after they sit down again).

Examples

This can include a transition from an abstract question through other questions to end with a personal question, e.g.

- Q1) a. Do you support the use of reproductive human cloning?
 b. Would use reproductive cloning if that was the only way for you to have a genetically related child after you lost your 8 year old daughter?

- Q2) a. Do you think we should allow patients to choose to end their own life earlier if they are in pain? b. Do you think that persons who are depressed can commit suicide? c. If you had a terminal cancer and were in a lot of pain, would you take an injection of a medicine to die?

Game 5: Talk in pairs

Purpose: Values clarification; Listening to others; Ice-breaking

Class size: No limit.

Time needed: 5 minutes

Interactive unit size: Pairs sitting next/close to each other.

Description

To break the monotony of a lecture, and increase participation, students can simply stay seated where they are and be asked to talk to someone sitting next/close to them. It will be also an ice-breaking exercise if they are asked to choose someone they do not know well.



Teacher Background

This can aid student concentration in addition to having them think about the content of the lecture. You can ask them to talk to a different person for a limited time as well, in a similar way to donuts (moral game 1). The close proximity of students to each other can make this rather noisy, however it can also bring persons sitting far apart in a large lecture room close to others to interact with each other. It will break the ice and allow increased student interaction in the larger group at question time.

Examples

The questions will usually be involving "What do you think about this?", with each person listening to the other.

- Q1) What do you think students should do to make the world a better place?
- Q2) Who do you think should be a surrogate mother? Should we allow surrogacy? Would you be a surrogate mother?
- Q3) What do you think about using bleaching creams to make your skin whiter?
- Q4) Are criminals whose prefrontal cortex is damaged responsible for their criminal behavior?

Game 6: Consensus Pairs

Purpose: Listening to others; Consensus building

Class size: No limit except physical constraints of space

Time needed: 10-15 minutes in the group, then reporting back to the class

Interactive unit size: Pairs

Description

The students form groups of two and work in a pair to provide a consensus view based on their discussion to the larger group. They can be given different tasks, but for consensus pairs they must find a common message.

Teacher Background

Students sit next to other persons in a classroom setting, and may or may not choose whom to sit next to based on various preferences. These preferences should be taken into account when deciding whether the pair work should be done with their neighbour (who might also be their friend), or whether numbering off of students into particular groups is required. If the goal of the moral game is to arrive at a consensus view then it can be easy for two students with similar views to reach a consensus. However, perhaps greater in-pair learning can be achieved through teaming up with a person of the opposite viewpoint. Consensus building with persons of different views is more challenging, so it may be advisable to have them get used to making consensus with someone of similar views first, before deliberately making pairs of persons with opposite viewpoints. At the same time, it will teach greater skills if they must build a consensus with someone who has a different view. The pre-selection could be done by grouping using agree and disagree statements, and then numbering the two groups and matching the persons together.

Examples

Q1) Imagine that you have to give advice to the Minister of Energy

on whether the country should build a nuclear power station to provide energy to a new industrial city, or whether renewable energy will be sufficient. Provide three sentences of advice to assist this decision.

- Q2) You must give advice to your friend whose mother has been diagnosed with terminal cancer. She has said she does not want to tell her mother she is sick, and has asked the doctor not to tell her mother. What should you say to your friend, and what information do you need to know regarding this?



Game 7: From pairs into groups

Purpose: Listening to others; Consensus building

Class size: No limit except physical constraints of space

Time needed: 10-15 minutes in the group, then reporting back to the class

Interactive unit size: Pairs

Description

After a pair of persons has developed their mutual understanding and possible consensus (or recognition of difference) on an issue, then that pair may like to join up with another pair to form a small group of four. Each pair should report on their own consensus and then work together to develop a consensus view from the four persons. This process can continue to increase size to a larger group, though the maximum I would suggest is 8 because after that we will see increasing numbers of silent members appear.



Teacher Background

After the process of consensus building is familiar to the class then the students can try building broader consensus inside a larger group. The sentences that are developed in the larger group may become refined than they were as a group of only two. The students may combine ideas into longer sentences, and sometimes there will be more complex sentences made containing many ideas. The teacher may have to give guidance if they want to limit the number of ideas in the sentences. This exercise can also improve literacy skills.

Examples

Please provide 3 policy options to the government on the following points:

- Q1) Anti-retroviral treatment should be free for everyone.
- Q2) The government should give the land in national parks and game reserves to landless people.
- Q3) Scientists believe that the human ability to be ethical has evolved over hundreds of thousand of years. Do you agree or disagree? What policies should be changed resulting from the consensus answer?
- Q4) What should the government action plan be to respond to attempted female infanticide?
- Q5) Make a list of ethical concerns about genetic engineering.

Game 8: Small groups

Purpose: Values clarification; Listening to others

Class size: No limit except physical constraints of space

Time needed: 20-30 minutes

Interactive unit size: Groups of 3-8 persons

Description

Break the class into small groups. Optimal size is 3 persons, but often more may be chosen, especially if tutors are required.

Teacher Background

Some sensitive issues that people may not wish to discuss in the larger class can be more easily discussed in small groups. A common name for small groups is "buzz" groups, stemming from the idea that there will be a lot of discussion like a buzz sound made from bees. Participants can discuss sensitive ideas with more confidence in these groups, building up confidence as they see their ideas being developed. The ideas generated in the small groups can then feed into the larger groups, so that in general we see a wider diversity of ideas being generated.



Examples

- Q1) There could be a small group discussion about autonomy. Ask members to look around the group and see something that they and each person has done to make them look different to other persons? What have you and others done

to look the same? Are there limits to the expression of autonomy that people have?

- Q2) If your sister tests positive for the BRCA1 (breast cancer 1) gene that increases risk to get breast cancer, would you recommend to her that she have her breasts or ovaries removed as a preventative measure? Some women do this if they are at 90% risk of developing breast cancer. Would you?
- Q3) Do you think golden rice is a "good" GM food? What other information do you need to make a judgment?

Game 9: Card sorting

Purpose: Values clarification; Listening to others

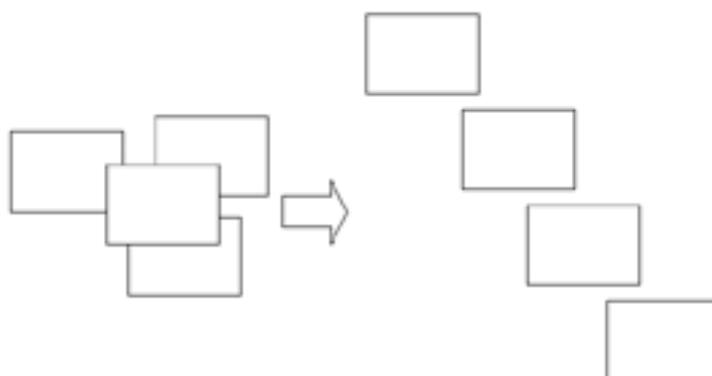
Class size: No limit except physical constraints of space

Time needed: 20 minutes

Interactive unit size: Small groups, 3-6 persons

Description

A series of examples is described on cards and these cards are given to groups of students to discuss and sort into groups on a desk, and then explain the rationale to others. Card-sorting works best with smaller groups of people. Agree on the issue to be explored. You can provide cards already written with a list of ideas to place into groups to ensure all the major issues are covered (Examples are given later). One variation is to ask students to write down or draw on separate cards all of the different things which relate to the issue, either in addition to the cards already provided or in place of providing any cards. Then after the small group time is finished all the class can look at the different groups' cards, with one person from each group explaining the logic of sorting. The different groups can compare the placements made by each group, and the new ideas written in each group.



Teacher Background

After choosing the topic and cards to include, then ask students to sort the cards into different categories according to their own criteria about the issue to be explored. When the activity is complete, discuss what it shows. For example, what idea is in each category and why? Why did people use these categories? Discuss how to use the information. Students could sort cards into different categories, e.g. from some action that is easy to do to very difficult. Allow students to naturally come up with their own categories if these have not been established yet. This tool is a simple way to sort issues when there is a lot of information.

Example statements

- Q1) What helps some orphans and vulnerable children to lead a better life?

An example of card words and the possible broader categories that they could be sorted into is below (let the participants decide the categories for sorting, as there are different ways to sort.):

(HEALTH AND NUTRITION): Improve food production, Improve food distribution, Encourage good hygiene, Vaccination, introduce home health services and home visits, increase public health nurses.

(SOCIAL INCLUSION): Support special days to raise consciousness, training in child rights, identify most vulnerable households, set up a children's club, reduce stigma.

(EDUCATION): Create internet sites, provide vocational training, provide practical, Benefits and incentives for vulnerable groups to attend school, Make teachers aware of special needs, allow flexible school hours.

- Q2) What factors help and what hinder communication between doctor and patient?
- Q3) Separate the following activities from high to low risk of hepatitis transmission.

Game 10: Moral Continuum (using cards)

Purpose: Values clarification; Listening to others

Class size: No limit except physical constraints of space

Time needed: 20 minutes

Interactive unit size: Small groups, 3-6 persons

Description

A series of examples is described on cards and these cards are given to groups of students to discuss and sort into groups or into a continuum from most acceptable to least acceptable, and then explain the rationale to others. Students have to discuss and agree what issues to rank and the scale of the ranking. When the activity is complete, discuss what the ranking shows. For example, compare where items have been placed, and how they could be ranked in different places if another scale was used. Are there items that always appear high or low on the scales used for measuring moral acceptability? How can the information shown by the ranking be used?

Teacher background

Putting things in order of importance and showing the reasons for the order is a way to apply theoretical knowledge. You can also explore the concerns and priorities of different people. You can explore which problems are most serious or most common, and why. Ranking can also be used to sort out information gained during an assessment. Be aware that students may feel overwhelmed and allow enough time for discussion at the end of the activity. Allow a maximum of three or four criteria. Different objects, instead of paper or cards can be used to represent different items.

Exercise

*Exercise on Cloning & Stem Cell Research*⁴

1. Sort the following cards into claims and counterclaims.

4. Exercise developed by Lindsey Conner, University of Canterbury, Christchurch, New Zealand

2. Resort the cards into facts and opinions.
3. On your own paper, make a list of evidence that you would need before you could accept the "facts" statements as justifiable.
4. Are there any flaws in the arguments given?
5. How do the bias and interests of each person influence the position they have taken?
6. Which opinion would you prefer to take and why?

Teacher notes

1. Photocopy the Table of comments onto card and cut them out.
2. Students try to match the statements (in pairs or small groups) by physically moving the cards.
3. Students answer the questions at the top of the worksheet on their own paper.
4. More research is needed to find out;
 - a. Whether human stem cells can be multiplied for use in transplantation
 - b. Whether the cells, when multiplied, are damaged in any way
 - c. Whether their multiplication can be controlled to avoid health risks to recipients
 - d. What leads cells to develop into specific kinds of tissue
 - e. How cells multiply- this might help us understand and combat cancer, which happens when cells divide in an uncontrolled way to form tumours.

<p>Our inherited and traceable common heritage which establishes our identity, would be threatened by the use of anonymous sperm or eggs.</p>	<p>In New Zealand, there is no practice anticipated which would threaten identity by producing inherited traits.</p> <p>- Independent Bioethics Council.</p>
<p>Research with stem cells will not lead straight to medical benefits such as a new cure for a disease or condition.</p> <p>- Independent Bioethics Council</p>	<p>Amendment 2, also known as the Missouri Stem Cell Research and Cures Initiative, if passed by voters, would protect human embryonic stem cell research in the state from legislative action. According to the proposed amendment, but not stated in the ballot question, human embryos used for stem cell research would come from fertilization clinics or by artificial creation of embryos using a process known as somatic cell nuclear transfer (SCNT). During SCNT, the nucleus of a non-reproductive body cell is inserted into a woman's egg cell after its own nucleus is removed. The cells eventually fuse and form an embryo, without male fertilization having taken place.</p>
<p>Embryos may be produced simply for the purposes of cloning for medical benefits.</p>	<p>In most countries where there are controls on the use of human embryos there is a ban on cloning human beings. i.e. producing children who are genetic copies of other people.</p>
<p>The cruelest deception of all is the deception of miracle cures. Scientists are using people who have diseases and disabilities and giving them false hopes.</p>	<p>Some people consider that using human embryo stem cells for research is the equivalent of killing a human life because it destroys the embryo.</p>
<p>A mother who wants a cure for her daughter's Type I diabetes- "My feeling is there are embryos out there which have already been produced with the effort to benefit infertile couples that are being discarded - they are being thrown away," she said. "There is good reason to believe these embryos could provide cures for a lot of people, including children like my daughter.</p>	<p>Embryonic stem cells are derived from the inner cell mass of an early embryo, fetuses from pregnancy terminations. Because they can divide and develop into each of the approximate 200 adult cell types in the human body, embryonic stem cells could provide regenerative medicine for now incurable diseases, some scientists believe, and replace damaged tissue.</p>
<p>The potential to relieve disease is a high moral calling. We have a moral responsibility to act in the best of our knowledge and within the limits of our resources to alleviate human suffering.</p>	<p>Another view of the moral question says that growing an embryo in a laboratory to generate a line of stem cells is far different from an embryo in a womb, said the Rev. Bob Towner, pastor of Christ Episcopal Church.</p>
<p>The human body fights against alien tissue and rejects it. This is the main problem for cell, tissue and organ transplants. Using donor cells that are genetically the same as those of the recipient is much more effective.</p>	<p>Bone marrow cells have limited ability to develop into other types of cells or tissues. They can produce all the different kinds of blood cells and may be able to replace damaged tissue. If more research can be done to find out what determines that a cell is of a certain kind, then it might be unnecessary to use embryonic stem cells.</p>

Game 11: Debates

Purpose: Values clarification; Listening to others

Class size: <50 persons

Time needed: 30 minutes plus

Interactive unit size: Varies from 10-20 active students

Description

The concept of a Socratic debate in philosophy is something that has developed in many countries over millennia. First set a topic for the debate, called a "motion" to debate (a motion is statement about a subject which is likely to create discussion). Nominate two chair persons also and allow them to develop rules, such as only one person talks at a time with a strict time limit. Ask for ten volunteers. Five volunteers will defend the statement. The other five will challenge it and say that the statement is incorrect. It does not matter whether they agree or disagree with the statement personally, their role is just to try and defend or challenge the statement. Give the people time to prepare an argument by thinking of all the reasons the statement maybe correct or incorrect. It may help them to write down a small speech, or do research and homework to refer to facts that can support the statement. The role of the chairs is to make sure that only one person talks at a time and that the debate does not turn into an argument! The role of the remaining class members is to listen to each of the debaters in turn and consider the merits of each argument. Each debater presents their argument in a two minute speech. First a debater who supports the motion, then a debater on the other side who challenges the motion, and so on.

After all the arguments have been presented, the other participants may be allowed to comment on what they have heard one by one. After a given period of time (e.g. thirty minutes) the chair should call the debate to a close and ask people to vote with their hands on who won the debate; and secondly on whether they agree or disagree with the motion (since these two may differ). Discuss what people learnt from the debate. Who changed their minds?

Teacher Background

A debate is a discussion between two individuals or groups of people who take on opposing views about the same subject. It provides a non-threatening way to start a discussion about sensitive subjects, regardless of whether agree or disagree with the motion that they will debate. It is important to have the students adopt rules of the debate and structure, so that they move from holding mere arguments or conversations to a disciplined use of time and argument. Structured debates between groups of persons on different sides of moral dilemmas have a long history of use in philosophy. There are many variations that can be used. The teams should spend some time brainstorming their arguments before the debate. One variation is to have larger teams to assemble arguments which only several speakers will present.

Examples

Adopt a question and then assign 5 speakers to each of the two opposing views, for example:

- Q1) Genetics determines your intelligence versus Environment determines your intelligence.
- Q2) Brain death is human death versus Brain death is not human death.
- Q3) People living with HIV/AIDS should not be stigmatized: Yes or no.
- Q4) Are criminals whose prefrontal cortex is damaged responsible for their criminal behavior? Debate the following statements:
(i) They should be punished in jail; (ii) They should not go to jail but should be rehabilitated; (iii) If we have methods to modify their behaviour by brain surgery and/or drugs we should do that, even if they do not agree.

Game 12: Whispers

Purpose: Listening to others

Class size: No limit

Time needed: 10 minutes

Interactive unit size: 10-15 persons in a row or circle

Description

The students can either stay seated in rows across a lecture theatre, or sit in groups with ten to fifteen people. This is a game played in parties and sometimes called Whispers or Muddling messages. The teacher should print several statements, one on each piece of paper, and give the same statement to the first person in each group. That person should read in a whisper what it says to the next person, so that only that person can hear it. They should not show the paper. The second person will whisper to the third person what they think they heard, and then the third person will whisper that to the fourth person. At the end of the group the last person should then repeat aloud to everyone what they heard. If there are multiple groups in a larger class then the last person in each group should read what they heard, and at the end the teacher will read what the original statement was.

You can then try again with another person starting. People can also make their own statement to read.

Teacher Background

This game will show that during communication between two people there will be miscommunication. When bioethical cases are chosen that have critical elements we can see how these may change the understanding of the information between persons, and this can mirror a process that can happen in a healthcare team over medical ethics and treatment decisions. It can also show how misunderstandings can occur in processes of community engagement.

Examples

It is more fun when you involve multiple subjects and moral agents and events which will tend to get muddled. For example:

- Q1) Jack is a cat who is going senile and wants to receive euthanasia. His caregiver Bob is taking him to the doctor to give him a lethal injection.
- Q2) Sally wants to have a baby that is genetically the same as her and the clinic will help her.

Game 13: Who am I?

Purpose: Communication; Testing knowledge

Class size: No limit except physical constraints of space

Time needed: 20 minutes

Interactive unit size: Whole class mingling together with each person talking to others.

Description

Pin the name of a different famous person to each student's back, so that they cannot see it. Then ask students to walk around the room, asking each other questions about the identity of their famous person. The questions can only be answered by "yes" or "no". The game continues until everyone has figured out who they are. The number of different persons that the students could be expected to know will depend on their historical knowledge and prior reading. It is not absolutely necessary to give different names to each student.

Teacher Background

This game could be used as a fun alternative to a written test. The choice of the famous persons could be made known to persons before the game and then they could be asked to study about the major ethical theories, or events, associated with that person. It could also be played without prior advice to the students to check their knowledge. The teacher can mingle to observe that the quality of the questions and answers is high, and that students play the game properly. After the game the students can reflect on the results. The students could also be given different famous persons for a second time and repeat the exercise.

Examples

- Q1) Example of remembering famous figures in ethics. Write the following names onto papers to stick onto the back of students, ensuring they do not know who they have on their back. Always add some extra names to this list or else do not

use all the names, so students cannot merely use the process of elimination to deduce the name of the person that they have on their back.

Names: Aristotle, Avicenna, Tom Beauchamp, Jeremy Bentham, Daniel Callahan, James Childress, Confucius, Dalai Lama, H. Tristram Engelhardt Jr., Joseph Fletcher, Mahatma Gandhi, Adolf Hitler, David Hume, Immanuel Kant, Martin Luther King Jr., Hans Kung, Aldo Leopold, C.S. Lewis, John Stuart Mill, John Rawls, Peter Singer, Plato, Mo Tzu, etc.

Game 14: Hot seat

Purpose: Understanding others

Class size: <40 persons, Ideally <25

Time needed: 20 minutes

Interactive unit size: 10-40 persons



Description

Before the game, prepare a limited number of case studies for people to read. These case studies should be realistic life dilemmas, written in the first person. Alternatively, ask participants to write down some dilemmas. Ask for a volunteer to sit in the "hot seat". This means to sit down in a chair in front of all the other students. Ask the person to read out the case study as if they were the person in the case study. Invite the rest of the students to ask questions addressing the person in the case study as if they are that person's friends.

Where questions require information not provided in the case study, encourage the volunteer in the hot seat to fill in the details. Repeat the game with other volunteers and other case studies. After the game the students should discuss what they have learned and why it was easy or difficult to respond to the questions.

Teacher Background

This game helps people understand the situations that may lead someone to make certain decisions and face the consequences that they do. Sensitive issues can be dealt with. Different roles can be explored, not only friends. It can be less threatening if two people take the hot seat together. Don't pressurise people to take the hot seat if they don't want to. This game is particularly effective for getting

people to put themselves in others shoes and think through the implications and pressures faced in different situations. The game can also help identify what people already do and don't do about the topic, and explore how people feel about related issues.

Examples

Q1) In the following case the hot seat could be the position of the mother or the grandmother.

First Family: A baby boy is born. The whole family is very happy and all members of the family distribute sweets to their neighbors on this occasion.

Neighboring Family: A baby girl is born and the whole family seems to be sad. The neighbours come and complain to the mother for giving birth to a baby girl. This hurts the mother acutely and she takes the new born away to a distant place to kill the child. As she is snatching the child, the grandmother of the newborn baby watches this and follows her child. After walking for a distance she asked her daughter why she had taken her new born daughter to a distant place. The mother replies that the agony of giving birth to a girl child has been pricking her mind and so she has made up her mind to kill the newborn. The grandmother politely says to the newborn's mother if she had killed her when she was born as a female child, what would have been the plight of the family?

At this point you will be asked questions from the class. There are various options, for example, a) the grandmother advises her child and the mother apologises for her act; b) the newborn baby, her mother and her grandmother return home and celebrate the birth of the new girl child; c) the mother kills the child and faces the consequences of hiding the truth or having the truth revealed; d) the baby returns to the village but is teased constantly. Use your imagination.

Q2) You are a nurse in an oncology ward in a privately funded hospital in Bangladesh. The surgeon has told the medical staff that patient S has incurable colon cancer with secondary tumours around their body. The family wants the patient S, who is 43 years old and a mother of 4 teenage children, to have surgery which they think will cure the disease, and

they do not want the patient to be told the true nature of the disease. The patient asks you, the nurse, about her condition. She is very tired of the disease, but does not want to die. She does not know exactly what the problem with her health is. She wants to go home. You must answer questions from the class, who will play many different roles. The roles could include that of child, patient, parent, medical doctor, hospital administrators, ethics committee, your own family about your work, and so on.

Game 15: Concept blocks

Purpose: Lateral thinking

Class size: Limited by space

Time needed: 20-30 minutes

Interactive unit size: Break into groups of approx. 25 persons maximum

Description

Prepare twenty to thirty cubes (e.g. 4cm each side) made of polystyrene and stick labels for one concept onto each one. Then give one block to each person and ask them to place the blocks on top of each other into different categories. Ask each person to justify the reason for selection of that category as they place the block into the category. The students are told they must try to balance the number of blocks. If there are already too many blocks in that category then the teacher should ask them to put the block into another category. The students should tell the reasons why they would place the block into the selected category. If they had initially intended to place the block in another category but they can not because it already has too many blocks, they should give the reasons that they first had for placing the block into that category.

Teacher Background

Usually four categories are given. The power of the activity is that some of the concepts (ideas) on the blocks can go on several categories and the discussion and reasoning behind putting them on a particular one is important. People have to explain their original category and the new one if they had to achieve a balance. As the stacks of blocks get higher there is a need to balance. This helps develop lateral thinking.

Sometimes the persons will create an extra category in the middle of all four, which may or may not be accepted by the teacher. However, to encourage lateral thinking it is often better to restrict the categories to just the original four - it is a variation. The teacher should reinforce

each student, and make them talk with sufficient details of their idea to others. At the end of the exercise the class can discuss the concepts, and the teacher can provide more facts and information to them.



Examples

You can think of 20-30 concepts that relate to a theme and make appropriate categories and blocks. Try to ensure that there is at least one block for each student in the group. If multiple small groups are chosen, then it is not essential that the keywords are the same for each group.

e.g. Sustainable Development

Q. The different aspects of sustainable development (Ecological; Social; Cultural; Economic)⁶, can be taken and a number of items can be included. For example block names that have been used include:

Biodiversity	Ecosystems	Habitats
Endangered	Species	Mountains
Sewage	Old Batteries	Teachers
Schools	Rivers	Physical Processes
Smog	Garbage	Natural Resources

6. Original categories taken from Morgan Pollard, Sustainable Development, Chapter B6 in Macer, DRJ., ed., A Cross Cultural Introduction to Bioethics (Eubios Ethics Institute, 2006; eubios.info). Thanks to Lindsey Conner, University of Canterbury, New Zealand for the idea.

Social welfare	Culture	Freedoms
Health & Medical	United Nations	Desires
Politics	Democracy	Human Resources
Greenpeace	Police	Religion
Ethics & Behaviour	Legal System	Military Industries
Entertainment	Responsibilities	Family Values
Television	Media	Horse racing
Economies of scale	Common resources	Sports
Goods	Services	Rights
Employment	Product diversity	Car pools
Quality of Life	Production efficiency	Fair Trade
Discount travel	Consumerism	User pays

Game 16: Bus stops

Purpose: Values clarification; Listening to others

Class size: <100 students

Time needed: 20-30 minutes

Interactive unit size: Class

Description

A series of questions is set up around the class room, and each of these places is called a bus stop. The students go to each bus stop answering the question. They may write their answer at the bus stop on the open list of all students' comments to the question, or just indicate if they agree with the comment of the previous person. They could also write their comments on a post-it to stick onto the comment space. Alternatively, they may answer the question on a paper, which they keep with them.



Teacher Background

Some students may be shy to express their comments verbally in front of all the others, so this method allows them to write their comments, with or without their name, on questions set up at the bus stops. Afterwards the class can discuss the comments relating to each statement. The students could also be asked to write a report about the statement and their experience. This game is also suitable in a class between students who are deaf and those unable to read sign language, as all can read the comments.

Examples

The statements chosen can be any type of statement, or opinion, or quotation. The statements do not need to be related to each other, or they can be.

- Q1) For example here is a set of questions on values, to reflect upon where values come from. Each could be a different bus stop.
- Q. What are values?
 - Q. What are your personal values?
 - Q. Why do you value them?
 - Q. What are the values in your society?
 - Q. How do you make choices?
 - Q. Are your choices based on your values?
 - Q. What values would be useful in society?
- Q2) Q. What are the limits to personal choice?
- Q. Who limits your choices?
 - Q. Are limits to choices good?
 - Q. Do you limit other's choices?
 - Q. Should the government limit people's choices?

Game 17: Thought shower

Purpose: Values clarification; Listening to others; Lateral thinking

Class size: <100 students

Time needed: 20 minutes

Interactive unit size: One paper for every 6 students

Description

Ask each small group to stand by a large blank piece of paper (e.g. 2m x 1.5m in size), that could be spread out on tables or on the wall. Provide different coloured marker pens to each group. Ask them to write down as many ideas as possible about how to improve the challenging situation that the teacher reads out. Before they start, stress to students that at this stage, any and all ideas should be written down without anyone judging them. After 5 minutes, the teacher should tell them to "Change!" and ask each group to move to another piece of paper, that another group had been working on. Ask them to add to the ideas written by the previous group. After a further 5 minutes, ask the students to "Change!" again. If the class size is small enough you can repeat the process until all of the groups have added to all of the pieces of paper, e.g. 5-6 times.

Bring the class back together and stand around each paper in turn as the class discusses it. Read through what they have written on the pieces of paper and ask students to explain anything that is unclear to others.

Teacher Background

This exercise can help clarify values after first identifying many different ideas. The ideas can also be used to help prepare students to write a report in a following class to examine how they can integrate these ideas into a framework.

Examples

The questions could be general or specific attempts at problem solving.

- Q1) List all the factors which we should consider before removing life sustaining treatment from a patient in a coma.
- Q2) Should we provide rewards to students who pick up litter on the school field? Should we punish those who litter? How?
- Q3) There may be many other reasons for Child Labour. Can you list some of the reasons which you have encountered in your locality? Think about who can eradicate Child Labour? List some suggestions to eradicate Child Labour.
- Q4) Can you describe any examples of genetic engineering you have heard of?

Game 18: Postboxes

Purpose: Categorizing different ideas, and relating ideas to each other

Class size: No limit except physical constraints of space

Time needed: 15 minutes

Interactive unit size: Individuals in a class

Description

A series of questions is given to students, and they must place the answer papers which they post into the appropriate postbox. The postboxes are placed at different points in the room. It is possible to make some students responsible for "correct" delivery of a comment into the appropriate postbox if the postboxes are chosen to represent categories of ideas. Some students can be made responsible for opening of the post in one box and reporting of the answers back to the class.



Teacher Background

The game can help compare different ways of categorizing comments and sorting of ideas. Discussion can be held at the various stages of the process. Modifications can be made. It also has the potential to be used electronically in distance education, or in classes at different locations, such as those in different cultures.

Examples

The questions could be attempts at problem solving, or could be used to clarify stages in a moral argument.

- Q1) Consider the following living organisms and whether we can use them for testing the safety of a new drug to attempt to cure acne. Each of the following is written on a postbox, and you should write your vote with yes/no and your name: corn plants; cockroaches; mice; apples; chimpanzees; human adults; prisoners.

Game 19: Brainstorming

Purpose: Values clarification; Listening to others; Idea organization

Class size: <50 students

Time needed: 10-15 minutes

Interactive unit size: Class or small groups of the class

Description

A statement or question is written down and everyone needs to make a comment about that. Stating the statement at the beginning gives students the opportunity to think while the first ones are answering. You can ask every student by name to mention one issue and repeat the exercise until the class has run out of ideas.

Next the ideas generated can be discussed. The ideas are owned collectively by groups of students and there can be attempts made to justify or explain any answer. After the period of brainstorming, time for reflection on the ideas or prioritising of the list should be allowed. The brainstorming can be done as a whole class or in groups.

Teacher Background

Brainstorming is a technique in which every student's response that applies to a given topic is acceptable. It is important not to evaluate ideas but accept and record each idea on the class board or large piece of paper as it comes. Students need to know that they will not be criticized for any idea. This can promote respect for other persons and is a quick method to generate ideas. A time limit can be given per response to ensure it progresses. This is one way of determining the general knowledge about an issue before starting to discuss the topic. Brainstorming is effective for sensitive and controversial issues that need to be explored, and can encourage students who are hesitant to enter into discussions. It can generate a large number of ideas as quickly as possible

Examples

The more general the question is the more likely that you can generate more ideas. When the class reaches the apparent end, some prompts can be given to help develop the ideas. Example:

- Q1) Should we keep animals in zoos?
- Q2) Should we sell a kidney to help get money for our child's education?
- Q3) Do you see anything wrong with using drugs if they enhance our ability to focus or improve our mood? What do you think society would be like if drug enhancement became the norm?

Game 20: Drawing a Relationships Web

Purpose: Clarification of reasoning; Idea organization

Class size: <50

Time needed: 20 minutes

Interactive unit size: Small groups of 5-10 persons

Description

Explain the purpose of the game and ask students to select a type of person to focus on. Ask the group to draw a picture with the person in the centre of the web. Encourage the students to think of all of the different types of people and organisations that could affect the person, including those who could provide support to the person and those who may have negative attitudes or behavior to the person. Ask students to write/draw them in a circle around the outside of the central person. Encourage the students to identify which of the people and organizations have links to each other. Draw different lines to show those links. On the lines, write what special relations are shared, e.g. care, support, financial insurance, education (both given and received). When the activity is complete, encourage the students to discuss what the web shows. For example, how many different types of people and organisations are associated? What are the relationships like among the different types of people and organisations? Which relationships empower people rather than making them dependent?

Teacher Background

The relationship web involves students drawing the web of people and organisations that interact or affect a person. In the case of a vulnerable person the web can help identify what makes a helping relationship and what makes the situation more difficult. The discussion can identify the worst problems and also the best type of help and support for those different people. The web can identify the type of relationships that exist between people involved in care and support. It can be used to explore what makes good, supportive and empowering relationships.

Emphasize that relationships are a two-way process. They are about the person and the different people and organisations both treating each other with respect and providing each other with support. An alternative way to drawing is to do a relationships web using a ball and string and pass the string around everyone who is connected.

A variation called a "helping relationships web" is particularly useful for identifying the network of support that is - or could be - available to community members with particular needs.



Examples

Examples might include "a teenage girl living with HIV/AIDS" or a "grandmother who has been diagnosed with Huntington's disease". Encourage the students to think about different types of links. For example, there might be a formal, professional link between a doctor and a community health worker. But there might also be an informal, personal link between that community health worker and family members.

- Q1) Draw all the relationships of people to a teenage girl living with HIV/AIDS.
- Q2) Draw all the relationships of a grandmother who has been diagnosed with Huntington's disease.

Game 21: Courage to change

Purpose: Experiential tool; Clarification of thought; Relating theory to practice

Class size: <50

Time needed: 10-15 minutes

Interactive unit size: Groups of 15-20 persons



Easy

Hard

Description

Mark a line on the ground. State that one end means "easy" and the other end means "hard." Ask the students to identify a way in which individuals or the community need to change in relation to the problem. Ask for a volunteer to stand on the line that you have drawn, according to how easy or difficult they think it would be for individuals or the community to make the change. Ask the volunteer to explain why they have chosen to stand where they are. Ask them what support individuals or the community would need to make the change easier. Ask the students to identify another way in which individuals or the community need to change, and then have the other student stand on the line. Ask the other students if they agree, and repeat the process for another 6-8 changes. Record what is easy and what is hard to change in a way that all students can see.

When the activity is complete, encourage the students to discuss what Courage to change has shown. For example, what makes changes easy or hard? What sort of support do individuals or the community need to make changes easier? How could that support be provided? Who by?

Teacher Background

This tool involves students standing at different points along a line to show how easy or hard it is to make changes relating to a behaviour. Using Courage to change provides a non-threatening way to identify the changes that people need to make in their lives and community to solve a problem. It allows people to assess how people feel about those changes, including which changes are easy or hard and why. The Courage to change activity is particularly useful for exploring what individuals need to do to accomplish their wishes.

Talking about changes that need to be made can be difficult. Help students to feel comfortable by agreeing that all sensitive information is confidential. Remind students that the activity is about the changes that people like them can make. It is not necessarily about the changes that they, personally, can or must make.

Instead of a line, you can use a "secret vote". This involves students having voting cards and using a scale of 1 - 5 star to show how easy or hard a change is. For example 1 dot (*) would show that it was very easy and 5 (*****) that it was very hard. Read out an example of a change that is needed. Ask the students to vote - by putting dots on a card and putting it into a box or basket. Count up the votes and discuss what the total says about how easy or hard the change is.

Examples

- Q1) We should reduce the use of private cars to only essential tasks.
- Q2) We should not print out paper files when we can read them on our computer.
- Q3) We should adjust the temperature of heating or cooling to minimize the need for energy consumption.
- Q4) We should not play any risky sports.
- Q5) Where is the line between trying to look neat and tidy, to look nice, to look handsome or beautiful, and merely to cater to other person's images of what we should look like?
- Q6) We should give up smoking.

Game 22: Fish tanks

Purpose: Values clarification; Listening to others; Powers of observation

Class size: No limit except physical constraints of space

Time needed: 10 minutes

Interactive unit size: Threesomes or Foursomes in lines or circles

Description

In the moral game called donuts (number 1) the class makes two circles of people with pairs facing each other (donuts). In a fish tank you can add an extra observer in a third circle outside the inside two, who is only recording and making notes on the conversations between the other two persons. The pairs dialogue for 1 minute each on a moral question, and then one of the circles shifts around two persons so that new pairs are made, and they repeat the exercise with the identical question. The observer needs to follow the person whose conversation they are concentrating on observing. It is possible to have two observers per pair, or in other words, one observer for every person in dialogue, and that observer will follow that person through the donut process. After repeating three times the persons have each given three answers to the question and heard three answers from three different persons. The observer has seen the changes in one of the persons that they have stayed to observe.

Teacher Background

The exercise provides an opportunity for each person to clarify their thinking on the question being asked, with an objective and silent observer. At the end of the exercise the teacher can ask both the observers and active students how the students' views have developed over the course of the exercise. The speaker may not notice the changes so well as the observer. They all will have been able to listen to others' views.

It is also possible to use one observer for every active student (e.g. two per pair of speakers). In case there is insufficient room for circles

the exercise can be done by forming straight lines of persons facing each other, to make pairs with observers behind them, and to shift one line each cycle.

Examples

Simple questions as for donuts (game 1) can be used as well as discussion points to share information. For example:

- Q1) We should put all pandas into zoos because their natural habitat is threatened.
- Q2) Patients should be always told the truth about their disease and prognosis.
- Q3) Is there any difference between 'good drugs' and 'bad drugs', and if so, what are they?
- Q4) If scientists can read your thoughts, do you think that they can also change them?

Game 23: Role plays

Purpose: Values clarification; Listening to others

Class size: Less than 50 will ensure greater participation

Time needed: 20-30 minutes

Interactive unit size: 4-8 actors and class as the audience

Description

Pupils act out what they would say or do in a given situation. The acting can last 5 to 10 minutes. Other pupils watch and listen carefully. First give a description of the role and the situation briefly to the entire group. Ask for volunteers or appoint students to act out the role play. Tell the players that they can add to their roles and use their own ideas about what the person would say or feel in the situation. Give the actors a few minutes to prepare and let them act out the play within 5 to 10 minutes. After the role play, the class should discuss the performance.

In the case that the students become emotionally involved with the roles it may be advised to de-role them afterwards to avoid them getting stuck with the names and roles that they assumed in the play. To de-role the students, you may briefly explain that the roles and names the acting pupils took in the role play are not part of the pupils' real life. The acting pupils have not taken on new names or roles.

After the role play, all the class can discuss the performance and the situation. Ask the volunteers what it was like to act the parts, what they learned and how they felt. Then, ask the audience what it was like to watch, what they learned and how they felt. Pupils may raise and discuss questions such as: Does this happen in our community? Who or what causes this problem, how can it be solved and who can solve it? Who had the most power in the situation? What might have been the effects of the situation? What could have made the situation better?

Teacher Background

In role play, pupils use their own experience and creativity to imitate

a real life situation. When done well, role play increases pupils' self confidence, gives them the opportunity to understand or feel empathy for other people's view points or roles, and usually encourages them to come up with practical answers, solutions or guidelines on various issues. If the students are used to the method then they can create a role play themselves, and they can prepare an outline of a common situation they would like to role play, and then make it. For the first time it may be advised for the teacher to write a situation beforehand - including brief details of the roles and situation for students to act out, so that the students can develop the ideas themselves.

If the class was subdivided then the subgroups can compare their experiences together, e.g. those who played the same role in the different role plays can discuss with each other their opinions and feelings as they played out the roles.

Choose enthusiastic and appropriate volunteers to play the roles. Encourage them to be creative - for example, even making up costumes - in order to bring the situation to life. If students are making a story, encourage the volunteers to develop a realistic, everyday story, rather than an extreme one. This will help you to use the role play to discuss real life situations and issues. Role plays are not just about what people say, but what they do. Pay attention to the body language of both the volunteers and the audience. It can be useful to "pause" a role play at an interesting point and to have a discussion. You can then re-start the story afterwards. Alternatively, audiences can suggest different actions or endings at this point.

Role plays often involve fun which helps people to relax and talk openly. Find the right balance between fun and retaining the point of the role play. Role plays can bring up a lot of emotions. People might be reminded of their own painful experiences or the experiences of family and friends. Be aware of that and provide plenty of time for discussion. It can be useful to have a series of role plays that focus on the same situation, but are slightly different. For example, in the second role play the key characters might be women rather than men, or have positive rather than negative attitudes, counsellors rather than clients etc.

Examples

- Q1) You are a train conductor and have found that a woman passenger has not paid the train fare. Upon speaking to her you suspect that she is mentally handicapped. Should you impose a penalty fare, ask her name and address, or be satisfied with her payment of the normal train fare. Other passengers give various opinions. She seems not to be accompanied by anyone else.
- Q2) You are a school student of 13 years who is pregnant. You trust your teacher more than your parents and tell your teacher. He does not know who to contact, because you have previously complained that your father beats you at home. The teacher must also consult with other persons, such as the school principal and counsellor. Who should go to the clinic for the medical consultation?
- Q3) A number of pharmaceutical companies are developing new chemicals to improve memory. Would it be a good idea to take a pill to improve your memory and attention? Would a desire to perform well at school outweigh any potential side effects that you may experience, particularly if those side effects would not arise until later in life? What ethical issues can you see arising from the development of such a drug? Imagine you are a student wanting to do well in an exam, the doctors, an Alzheimer patient, and family of the experimental subjects in the clinical trials of these drugs.

Game 24: Make dramas

Purpose: Values clarification; Listening to others; Self-expression

Class size: 5-20 persons maximum, can subdivide class into small groups.

Time needed: One to two class periods

Interactive unit size: Small groups of 5 to 20

Description

Divide the class into teams of students who will develop a drama production. This exercise is best to do with students who have gained experience with role plays, and allows the students to develop a drama. For more sophisticated dramas there can be responsible students for music, costumes, backstage, props, directing, audience feedback forms. In this way everyone can be given a task.

Teacher Background

Drama is an art form that can be used to reinforce the lessons that are learnt through oral discussion. It will be useful to choose a theme to guide the development of the drama. It can also help to mention the key roles that should feature in the drama.

Examples

- Q1) There is a written script on brain death and organ transplantation in a resource book chapter that can be used as an example of a 15-20 minute drama involving over 10 actors.⁷
- Q2) Once students are familiar with drama they can be given a subject to develop a drama on. It will be more participatory if many are involved, e.g. consider the relationships of people in a surrogacy case with donated sperm and donated eggs,

7. Alireza Bagheri, Brain death and organ transplant drama, Chapter D6 in Macer, DRJ., ed., *A Cross Cultural Introduction to Bioethics* (Eubios Ethics Institute, 2006; eubios.info).

involving multiple parents, medical professionals, agents, other children, and the society in general.

- Q3) Many traditional medicines of vegetable and animal origin are harvested from nature, often from endangered species. How do you think sustainable use of natural products can be ensured? If pharmaceutical companies produce new drugs based on traditional knowledge and/or resources coming from indigenous peoples, how should these be rewarded? You could include plants and animals as characters in the dramas, as well as Western and indigenous healers.

Game 25: Pass the parcel

Purpose: Values clarification; Listening to others

Class size: Divide the class into groups of 10-15 persons

Time needed: 20 minutes

Interactive unit size: Groups of 10-15 persons



Description

The facilitator will wrap a small object with many different layers of paper. On each layer they have written a task or a question. Examples of tasks are 'recite a quotation from a famous philosopher' or 'tell the year of publication of a major book'. Examples of questions are: 'What is your ethics and why?' or 'What is a positive reason to support the proposed research proposal?' The facilitator starts the music. The students pass the parcel around the circle, or throw it to each other. When the facilitator stops the music, the person who is holding the parcel takes off one layer of paper and carries out the task or answers the question that is written on the paper. The game continues until all the layers have been unwrapped. You can make it appealing by having the object be a gift to the last person to take off the wrapping.

Teacher Background

This game is a variation of a party game, and thus is suited to younger students especially. The questions and tasks could all relate to the theme of the discussion, and a series of questions can be developed on a particular topic.

Examples

There can be a whole series of questions on each layer, either related to a particular theme, or else to test historical knowledge and results of lectures study.

- Q1) Series:
- a. Would you like to know if you had terminal cancer?
 - b. Would you tell your mother or father if they had terminal cancer?
 - c. How would you feel if you found out on the last day of your life that your family had not been telling the truth to you about your disease?
 - d. How would you spend the last week of your life on earth?
 - e. What would you do?
 - f. Where would you go?
 - g. Who would you see?
 - h. Do you think you can make plans to negotiate your dying process only if you are fully informed of your terminal condition?
 - i. Can you name the benefits of disclosure?
 - j. Can you name the risks of disclosure?
 - k. Does attitude towards telling the truth about terminal illnesses depend on culture?
 - l. How about in your culture?
 - m. Is there such a thing as "good dying process" and "peaceful death"? How would you describe it?
 - n. Is it something that individuals should strive for?
 - o. How should society deal with this?
 - p. What is death with dignity?
 - q. Why is that valued in present society?

Game 26: Mathematics Exercises

Purpose: Creating understanding of reality; Quantitative skills; Benefit-risk analysis

Class size: No limit except physical constraints of space

Time needed: 20 minutes, after preparation as homework

Interactive unit size: Individuals and small groups

Description

Moral dilemmas often include making estimates of benefit and harm to different agents and in different situations. Mathematical skills can be used to make calculations that raise moral implications.

Teacher Background

There are some studies suggesting that logical thinking and mathematical ability can help students organize their thinking on moral dilemmas. Benefit-risk analysis requires some quantitative skills. This moral game also can teach mathematical concepts.

Examples

This is an example of Driving Cars and the Ethics of Costs and Benefits

Cars are an integral part of the fabric of every modern society; so, most students will approach the issue of personal car use with strong predetermined ideas. The quantitative analysis is a good starting point to encourage rational and objective analysis and dispassionate reflection. A project to calculate costs and benefits was proposed.⁸ In the first session, the issue can be presented and the analysis explained and demonstrated. Students, either individually or in groups, should be assigned the task of performing the analysis for homework. In the second session, students should present the results of their analysis to the class and be encouraged to discuss some of the

8. Taken from Rick Weisburd, "Cars and the Ethics of Costs and Benefits", Chapter B7 in Macer, DRJ., ed., *A Cross Cultural Introduction to Bioethics* (Eubios Ethics Institute, 2006; eubios.info). That chapter includes further examples and material.

many questions raised in the chapter.

Some students or their parents may be uncomfortable sharing some of the data needed for the quantitative analysis, for example household income and hours worked. If so, then teachers may provide some typical values for the local community. Other data might be difficult to obtain; again, teachers might help by providing some reference values for students to use. It might also be interesting to ask different students or groups of students to perform the exercise with different types of vehicles, for example very small cars or sport utility vehicles.

Worksheet I - Start by adding up the costs of car purchase and use; calculate how much you would have to pay (or your family does pay) for each kilometer you or your family drive. If your family has its own car, use your family's actual expenses for the calculations; if not, then do a hypothetical analysis of what it would cost for your family to buy and use a car. Car dealers should be happy to provide you with cost estimates for a car purchase; they might also be able to help with estimates of the other required expenses like maintenance, insurance, and taxes. Below is a sample calculation for Japan. If you have access to a computer, the internet, and a spreadsheet program, you can download a sample Microsoft Excel spreadsheet from the Eubios Ethics Institute at <http://eubios.info/Bet/bet6cal.xls>. A hard copy example is printed below.

This sample spreadsheet can be modified to fit your local situation and perform the calculations for you. The costs should all be expressed on an annual basis; in your locality, the costs may exclude some of the items in the spreadsheet and the table below or include others. In Japan, the average car is used for only 7.3 years. The sample calculation for Japan, family sedan with an 1.8 L engine and an automatic transmission. Including all taxes and fees that are paid for the original purchase only, the price of this new car is 2,132,545 yen. The sample calculation uses the car catalog specified fuel efficiency for 10/15 mode driving (a standard urban driving sequence), but you can easily measure the fuel efficiency of a car yourself by filling the gas tank, measuring the distance until the next refueling, and then recording how much gas is needed for the refueling: divide distance traveled by fuel needed to refill the tank (km/L). The fuel

efficiency you measure will probably be less than the value listed in the car catalog. Worksheet I shows the annual costs for using this car.

EXAMPLE - WORKSHEET I		
<u>Item</u>	<u>Calculation</u>	<u>Annual basis</u>
Purchase of 1800 cc family sedan	2,132,545 Yen/7.3 years	292129
Maintenance and parts, yen		30,000
Road tax, yen		35,000
Inspection (shaken), yen		41407
Insurance, yen		80,267 (1)
Parking, yen		60000
Total fixed costs, yen		538803
Distance driven, km		10,000 (2)
Annual fixed cost, yen/km	538803 yen/10000 km	54
Fuel efficiency, km/L		16
Fuel price, yen/L		95
Fuel cost, yen/km	95 yen/L x (10000 km/16 km/L)	6
Total cost, yen/km	54 + 6 yen/km	60



Game 27: Drawing or producing Art

Purpose: Values clarification; Self-expression

Class size: No limit except physical constraints of space

Time needed: 30 minutes

Interactive unit size: Individuals then whole class

Description

Students are asked to draw a picture presenting an ethical dilemma. The students can also be given the task of drawing a series of pictures, or a cartoon to describe the situation. The art work produced can be displayed in the class room or institution to stimulate discussion of the moral dilemmas.

Teacher Background

Everyone has different talents. For artistic development some students will thrive at drawing pictures, or a series of pictures, rather than being asked to write a story or to talk about a story.

A variation would be for the students to observe a photograph or drawing and make a story from that picture. It could be useful to show such an example before students make their own.

There will be different levels of ability, but it is important like any other activity that no student is ridiculed for their drawing, or story. The ability of everyone will improve with experience.

There are many art techniques that can be used besides drawing, including taking photographs, making a collage from different photographs or magazine cuttings, sculpture or video production.

Examples

- Q1) Ask the students to draw their definition of the word "nature". After the drawing ask the students to explain their picture and then have others ask questions about it.
- Q2) Ask the students to draw their definition of the word "life".

Ask other students to ask questions about the art to the artist, and have the artist reply.

Q3) Draw a picture representing your last visit to a hospital.

Game 28: Low hanging fruit

Purpose: Values clarification; Listening to others; Setting targets

Class size: Divide larger class into groups of 20 persons maximum

Time needed: 30 minutes

Interactive unit size: Small groups of 10-20 persons

Description

Explain to students the aim of the exercise: a) to identify which activities and services which will be easier to start and which will be harder and b) to discuss some of the barriers and opportunities to starting these activities and services. Ask people to draw a tree, which has both high and low branches. Ask people to write on separate cards or pieces of papers new activities or services that they think should be introduced to solve the problem. Explain the idea of low hanging fruit: 'low hanging' fruit is the easiest fruit to pick from the tree and links with the idea that some services and/or activities would be easier to introduce and carry out than others. Fruit that is hanging higher on the tree would be harder to pick. Ask students to place the activities and services on the tree according to whether they think they are 'low' or 'high' hanging fruit.

Ask students to discuss a) things that will get in the way of carrying these out and b) opportunities that exist to begin these activities or services. If after discussion they wish to move the fruit lower or higher up the tree, let them do so. They can also draw another tree for comparison of an alternative system to see how certain services and activities may be low hanging under one system but high hanging under another. Ask one of the students to present a summary of the tree and encourage others to ask questions and make any comments or suggestions. If the tree has been drawn on something that cannot be kept, for example the ground, it is useful for someone, when it is finished, to make a photograph of it (or make a copy of it onto a piece of paper) for future reference.



Teacher Background

Low Hanging Fruit is a tool that involves drawing a tree and its fruits. The tree represents the project or programme. The fruits of the tree represent different activities or services. If the fruits are 'low hanging' they will be easier to carry out. If they are 'high hanging' they will be harder to carry out. It is useful for summarizing the responses of systems to problems under different ethical conditions. It is also useful for project and programme planning. It can be used to discuss why certain activities or services would be easier than others to introduce or carry out, and to discuss both barriers and opportunities to carrying out or introducing new activities or services. Ensure that people are giving the opportunities to discuss both barriers and opportunities before placing their cards on the tree.

Examples

- Q1) Discuss ways that people can travel to work, and ways to reduce the environmental crisis.
- Q2) Discuss ways to reduce the risks of suffering from diabetes.
- Q3) If and when gene therapy becomes effective and safe, for what conditions should we allow it? Should it be used to cure a disease, enhance our immune system, or to make our bodies stronger? Put the more acceptable options as low fruit and the least acceptable as high hanging fruit.

Game 29: Problem tree

Purpose: Linkage analysis; Problem analysis

Class size: <50

Time needed: 30 minutes

Interactive unit size: Small groups

Description

Explain the purpose of the tool and ask students to identify a problem. This may have arisen from using a previous tool. Make a large drawing of the trunk of a tree and draw or write the problem on the trunk. Encourage the students to identify all the main causes of the problem and draw these along large roots of the tree, indicating that they are 'root' problems. Select one of the main causes and ask "why do you think this happens?" This question will help students identify the "secondary" causes. Draw or write the "secondary" causes as small roots coming off the larger root of the tree. Repeat the process for each of the other main causes.



Next encourage the students to identify the main effects of the problem. Ask them to write each effect as large branches of the tree. Select one of the main effects. Ask the students "why do you think this happens?" to encourage them to identify the "secondary" effects. Ask them to write the "secondary" effects as small branches coming off the larger branch of the tree. Repeat the process for the other main effects. When completed, discuss what the problem tree shows. For example, how do the causes and effects relate to each other? What are the root causes of the problem? Students can also turn the Problem tree into a solution/objective tree.

Teacher Background

This tool involves students using a drawing of the trunk, roots and branches of a tree to identify a problem, and the causes and effects of the problem. Using the problem tree helps to provide a visual way to look closely at problems and to identify the main causes and effects of the problem. The tree can also identify the issues that lie behind the main causes and effects, and inside small groups there can be active discussion of these. Writing comments onto the tree is an easy way to visualise the different ideas people have. It can begin to identify what can be done to address the causes and reduce the effects.

For each cause and effect, the teacher (or group leader) should keep asking the students "But why does this happen?" until they have run out of ideas. This will help them to identify all of the issues involved, not just the main ones.

Examples

- Q1) An example problem is the non-acceptance of homosexuality. A variety of root problems could be identified and written on the roots, e.g. family pressure, pressure from community, lifestyle, culture, tradition, religion, norms, laws, etc. There could also be a variety of effects in the branches, e.g. criminality, suicide, prostitution, depression, drug addiction, advocacy of gay/lesbian rights, etc.
- Q2) Every person of any profession has their personal role in a family to be a father, mother, spouse, and child, in addition to their professional roles. Should we respect the health worker's autonomy to take a break from intensive work to fight a disease like SARS? Do you expect health care workers to die for protecting the public health? What are some ethical issues of quarantine?

Game 30: Problem wall and solution tree

Purpose: Values clarification; Listening to others; Problem solving

Class size: No limit except physical constraints of space

Time needed: 20-30 minutes

Interactive unit size: Groups of 20 in maximum size

Description

Cover a wall with a paper and title one half of it "problem wall" and the other half "solution tree". Draw a large tree on this side and title it "solution tree". Problem walls and solution trees can work well with large groups of people in public places, or else with small groups from 5-10 persons. Agree on a topic. Cut up lots of pieces of paper, with at least different colours and/or shapes for problems and solutions. Put these in separate piles. Ask students to write problems onto the papers and stick the papers onto the wall (the papers could be sticky, you could use glue or tape, or the wall could be pre-sprayed with adhesive spray so that papers will stick on it). The papers will need to be moved into groups later, so the method of attachment should not be permanent. Ask students to group similar problems on the wall.

Next ask people to consider these problem stickers and think of solutions to them. Invite people to write solutions on separate pieces of paper and stick these on the solution tree. Group any solutions that show similar solutions. If this tool is being used in a workshop setting, the class can agree which solutions would be easy to do and which solutions would be difficult to do alone. The teacher or rapporteur should summarise the main points of the discussion.

Teacher Background

Using a problem wall and solution tree can help to identify and discuss problems related to a particular topic. The students can group together similar problems that may have the same solution, then identify and discuss possible solutions for the problems. These walls are very easy to set up and can be left for students to complete anonymously. The students can be given several days to add to the wall to make them think more deeply and save class time for interaction. They can also be left in places where people congregate and have a little time to spare. Clear instructions left by the problem wall and solution tree will help people to do the exercise themselves.

Examples

- Q1) For example, 'What do you think of our health services?'. Put this title at the top of the wall. Have clear instructions spoken and/or written, and let ideas accumulate.
- Q2) In some countries only married women who already have children are allowed to be surrogates. Why do you think that law was made? Think about how to make policy to regulate access to surrogate mothers, and other options to treat infertility?
- Q3) How do you define vulnerability? Who is vulnerable? To what? What can we do to overcome vulnerability?

Game 31: Trust game

Purpose: Listening to others; Trust building

Class size: 20 students

Time needed: 20 minutes

Interactive unit size: Circles of 10-20 students.

Description

Ask students to sit round in a circle facing each other. Explain to students that this is a serious exercise about trust. Ask students to think of a secret that they have which they would not want anyone else to know. Ask them to write this down on a small piece of paper, fold it up and not show it to anyone. Now ask students to pass their piece of paper with the secret in it to the person to their left, but not to look at it. Ask each person around the circle how it feels to have their secret in someone else's hand. Now ask each person how in turn how it feels to have someone else's secret in their possession. You can record some of these responses on a flip chart. Now ask students to give back the pieces of paper with the secret on them to the person the secret belongs to. Once this is done, tell students that they can all destroy their pieces of paper and relax! No-one has to share their secret.

Debrief students by asking them: What does this tell us about confidentiality? What kind of things might people share with us, which should be kept confidential? What rules should we have about confidentiality in different circumstances?

Teacher Background

This exercise helps people to understand issues of confidentiality. It also helps people to gain trust in each other. Remind students that trust is something you do, not something you have. You have to earn and keep earning trust; and it can be taken away at any time if you break someone's trust. We all like to think that we are trustworthy. But people are unlikely to automatically trust you just because you are a doctor or some other professional. Whoever you are, trust has

to be built and maintained. The point of this game is not for students to share their secrets. If some do, that is up to them, but no-one should feel pressured in any way to do so.



Examples

The students can share anything they feel is secret, whether real or hypothetical. If it is imaginary then it could be related to a health topic, e.g. genetic screening or being carrier of a disease for example.

Game 32: Risk game

Purpose: Risk assessment and balancing

Class size: <50

Time needed: 10 minutes

Interactive unit size: Ideally 30 persons but manageable with larger

Description

Explain the purpose of the tool to students. Before the activity, make a list of about 15 true and false ways that something can happen, e.g. that a gene can be inherited, or HIV can be transmitted. Examples might include "having sex without a condom" or "sharing a cup with a person living with HIV/AIDS". Draw or write each one on a separate piece of card. Draw a line on the ground. Explain to the students that this is a risk line. One end is "no risk of HIV infection" and the other is "high risk of HIV infection".

Ask for a volunteer. Give them one of the cards and ask them to read it out. Ask them to place the card on the line according to the level of risk they think is involved in the behaviour. Ask the volunteer to explain their decision. Encourage the other students to say if they agree or not. Explain to students the true level of risk and why it is that level. If they do not agree, have them place a card with a question mark (?) next to the doubtful card. Repeat the activity until all of the cards have been placed on the risk line. Return to any cards associated with a card with a question mark, or cards that someone says are now put in the wrong place on the line.

Give students information about the true level of risk involved in the behaviour and why it is that level. When the activity is complete, encourage the students to discuss what the Risk game has shown. For example, were there any surprises, such as behaviours that students thought were low risk that are actually high risk? What were the main areas of disagreement? What affect does false information have on people's attitudes and behaviours about issues? What does the line show about the level of risk in people's real lives? What action could be taken to reduce people's level of risk?



Teacher Background

This example involves students standing in different places along a line to show the levels of risk involved in behaviours relating to the issue. It can be used for various risk events, such as environmental or health risks. Using the risk game helps to explore issues about behaviour and risk, and understand people's knowledge and attitudes about levels of risk. It can help identify areas of risky behaviour that might be priorities for future action. The risk game is particularly useful for raising awareness about how to prevent adverse events from happening, especially among the general community. It can also be used to focus on levels of risk faced by specific groups, such as those in certain environments, occupations or with hereditary diseases.

Students may be anxious about risk behaviour they have had in the past. Allow time for discussion and questions, and support those who realize they have put themselves in risk in the past. The game can provide important opportunities to share accurate information about risk. If a student puts a card in the wrong place the teacher should firstly encourage them to talk about their decision. But, you should also give them the correct information, in a supportive way.

Examples on a line no risk to highest risk

- Q1) The cards relating to risk to be infected with HIV/ AIDS could include: sharing cutlery, kissing, sweat, saliva, being faithful to your sexual partner, blood transfusion, sex without a condom, mother to child transmission, tears, sharing a handkerchief, using the same clothes, for example.
- Q2) The risk of a heart attack, could include cards such as: eating

too much sugar, eating too much salt, constipation, genetic disease, fast driving, air pollution, noise, family history, viruses, for example.

Game 33: Mapping stigma

Purpose: Increase observation powers; Understanding discrimination

Class size: <50

Time needed: 60 minutes

Interactive unit size: Field work can be done in pairs or threesomes

Description

This is a field work exercise that can be conducted on a campus or in the broader community. The class can be divided into pairs, or groups of three, with individuals of mixed gender and physical characteristics. First discuss in class what stigma is. We can say that stigma is an attribute that singles out an individual or a specific group of individuals as different. They are regarded in a negative and judgmental way because they possess that attribute. It can lead to discrimination, and the exercise can also map discrimination. Discuss what type of stigma will be examined, e.g. stigma related to gender, body size, skin colour, being HIV positive.

In pairs or threes, students walk through the campus, community or location looking for places where stigma is evident or discrimination occurs. Students can also map stigma by looking at a map that they drew of the location and discussing in small groups where it occurs. Students can then walk around the venue in pairs or threes, with each observing the reaction of others to them or the member who may be the focus of unusual attention. They could compare the way that others interact with each member of the team in the same situation to observe human behavior to them. Once back in the class the teams can write up and present their results to the class. Comparisons can be made to the results from other teams.

Teacher Background

Mapping Stigma is a discussion that explores stigma faced by people in the community. Mapping Stigma is useful to identify different contexts in which stigma occurs, and to explore the reasons for stigma in different contexts. By comparisons the students can explore the

effects of stigma on different people. The results could be applied beyond a descriptive study to identify strategies for reducing stigma. The teacher can debrief students by asking students about the reasons for stigma in different places, the effects of it and strategies for reducing it. The students should be emotionally prepared for the exercise, noting that discrimination and stigma are important social concerns.



Examples

- Q1) Would you like to know your genes?
- Q2) Can you get a genetic test in your country? If yes, for what diseases? Do any of these have social stigma attached?
- Q3) Think about what characters are determined by genetics and which are determined by the environment. How do people differentiate about these?
- Q4) What is it like to sit in a wheelchair and watch the way people look at you?
- Q5) Find the institutes in your area doing genetic engineering. In which areas are they researching and why?

Game 34: Mapping social networks

Purpose: Mapping society; Understanding human relationships

Class size: <50

Time needed: 30 minutes

Interactive unit size: Small group work, 3-5 persons.

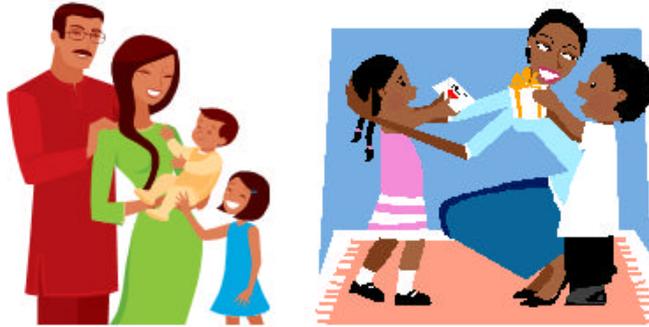
Description

Individuals and small groups can make social network maps. Different groups can make social network maps for different people. First they need to agree on which person to map, and then on any limits to the relationships to map. For example, the relationships of the person drawn at the centre of the map may be limited to human beings, or include ecosystems and the environment, or just sentient animals. The group should then draw other people (or items) with whom they have important relationships on the map. Use lines and arrows to indicate relationships. Use different coloured lines, or lines made from different objects, to show different kinds of relationships, e.g., 'helping' relationships, friendships, business relationships, ecological relationships, and so on. Use distance between people and the central object or person on the map to show the importance of the relationship - the closer to the person, the more important. Discuss what is shown on the map, and let the whole class compare the different maps made in each small group.

Teacher Background

Social network maps are diagrams that show relationships that are important to an object or normally a person (or family or peer group). Social network maps are useful to explore relationships within a community, and to understand what is important about these different relationships. For example, do these relationships provide practical help, emotional support, or information? The maps can help understand how people communicate within a community, and how information is shared (or not shared). They help explore how different people (or groups) are involved in decision-making. The groups can explore the benefits and risks of different relationships. The maps

can help students understand divisions and isolation within a community. For example, are there some people who have very few relationships



Examples



- Q1. If you visit a doctor do you make treatment decisions on your own or in discussion with other family members, and the doctor? Who else affects your treatment decisions?
- Q2. Should there be a consensus regarding truth telling by medical professionals to patients? Should there be universal standards (applicable to all countries) for truth telling? Who should decide these standards? Who could administer it? What social networks are involved?

Game 35: Health Journey

Purpose: Time analysis

Class size: <50

Time needed: 30 minutes

Interactive unit size: 1-2 persons

Description

Health Journeys are best if first drawn by individuals or in pairs. Explain to students the purpose of the tool. Ask the students to think about the different health issues experienced by a person who is sick, or to think about their own health issues. Ask the students to choose a specific period of time. Examples might include "a person's health journey in the last month" or "my health journey since being tested positive for the genetic or infectious disease." Encourage the students to draw the health journey of the person. As the journey progresses the line goes up when things get better and the line goes down when things get worse. Indicate on the line what made things better or worse at each point. Discuss the health issues that the person may experience during the chosen period of time. These include physical, mental and social health issues, and can be linked to discussions of quality of life (QOL). Show the health issues on the health journey line.

Encourage the students to identify gaps in available treatment and support. Ask students to present their health journeys, explaining what has helped the person, what has not, and how the health journey could be made easier. The class can summarise the major problems that people face, and these could be fed into a problem tree or another exercise.



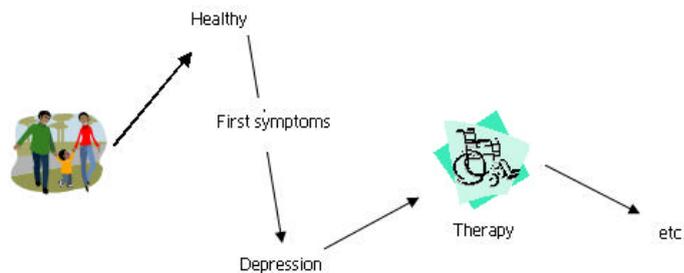
Teacher Background

This tool involves drawing the story of a person's health over a period of time. It involves identifying and indicating the person's health "ups" and "downs", identifying the treatment and support that they need, where it was lacking, and discussing where they might get it. Using a health journey helps to provide a non-threatening way to discuss sensitive issues about physical and mental health, and how to measure QOL. The process can help identify knowledge and beliefs about the disease. It can help identify common health problems faced by people living with a disease, or likely problems that may arise in future pandemics. It can help identify the treatment and support needs of community members, what treatment and support is available to people living with a risk or actual disease. It can identify barriers to accessing treatment and support and how these barriers might be overcome.

If people don't want to draw their own health journeys, ask them to make one up by thinking of the health journey of different people they are familiar with or have heard about. Encourage students to think about informal treatment and support e.g. traditional medicine or psycho-social support from friends as well as 'modern' medicine. Students could draw health journeys for different people - for example, a young man, a young woman, a child -this helps to explore the differences in health and treatment issues faced by different people

Examples

- Q1) Make a map of the stages in the progress of a disease. The map might include comments like: Person ---' Clinic ' referral to Hospital ' counseling, talking to friends, tests, loss of job, financial problems, death, recovery...The relations to other persons can be added in how they affect the health journey of the person, or as influences on the line.



Game 36: Negotiation cards

Purpose: Values clarification; Clarification of reasoning

Class size: <50 maximum

Time needed: 20 minutes

Interactive unit size: Ideally in small groups of 10-15 persons

Description

Make 20 large playing cards. Make a list of 10 "typical" community members. Make two playing cards for each "typical" person, using pictures and symbols to show what they are like (e.g. their gender, age, disease status, profession, social status, home). Divide the cards into two packs of 10 cards, so that each pack contains a full set of "typical" people. Mix the cards up, so that they are in a different order in the two packs. Put the two packs side by side and turn them face down, so that you cannot see the drawings. Turn over the top card of each pack and show the students the "typical" community members. Ask the students to imagine a situation involving those two people. Encourage them to think about which community member would have the most power and why. Ask the students to identify the skills and strategies that the person with less power would need to protect themselves in the situation, e.g. a medical consultation, making a contract, becoming friends, sexual relationships, etc. Then ask them to do the same for the person with more power.

When that discussion is complete for that case, put those cards on the bottom of the packs. Then turn over two new cards and repeat the activity. Keep repeating the activity until all of the cards have been discussed. When the activity is complete, encourage the students to discuss what the negotiation card game has shown. For example, what types of people tend to have more power in which type of situations? Why is that? What type of skills and strategies are the most important for people with less power? What could be done to improve those skills and strategies?

Teacher Background

This tool involves using cards (with drawings of "typical" people) to identify the different types of skills and strategies that are needed during different encounters or situations. Using the Negotiation card game helps to explore power within situations and associated with different professions. Identify the type of skills and strategies that people need in each situation and what the people already have, so that they can consider what skills and strategies need to be improved and how that could be done. If a situation is unimaginable between the two people shown on the cards, put one of them at the bottom of its pack and turn a new one over to replace it. This activity is a good opportunity to discuss situations that people often deny or ignore, for example, sex between adults and children or between people of the same sex. If this happens, encourage students to focus on the reality of such situations, rather than judge the people involved.

Examples

- Q1) The cards could include a mix of many different ages, gender, and professions. Think about the specific situations that are relevant to the topic of the lecture or course.

Game 37: Head or heart

Purpose: Values clarification; Clarification of reasoning

Class size: 50-100 maximum

Time needed: 10 minutes

Interactive unit size: Ideally 30 persons but manageable with larger

Description

Give a concrete case and describe four different options as answers. Ask everyone to choose one and stand in groups according to the decision. Then select several volunteers from each group to explain why they chose the position. Next you can ask whether people used their head or the heart in making the decision, by placing their left hand on their head if they used their head (a rational reason), and their right hand on their heart if they used their heart (an emotional reason). Some people will have used both.

Then you can ask them to walk into the appropriate place on a triangle drawn on the floor with three apices according to whether they used rational, emotional or intuitive decision making. This can lead to a discussion of the way that we make decisions. Different cases can be discussed. Often people use a mix of modes of decision making.

Teacher Background

This game can help people to relate the decisions that they make in response to a moral dilemma to different ethical theories. We all use a mixture of modes of decision making, yet some ethical theories only emphasize rationality over emotions or relations between people.

Examples

- Q1. Should genetic testing be performed when no treatment is available? Consider the possible options: a. All genetic tests are useful information and should be told. b. Genetic test results should not be told to patients but only used for research. c. Genetic test results should be shared to health insurance companies. d. Genetic test results should only be

told to patients if they can do something to prevent the disease.

- Q2. Should genetic testing be used for children? Why? Consider the possible options: a. Genetic tests should be done on 5 year old children but not told to them. b. 10 year old children can do genetic tests and told of any results. c. 11 year old children can be tested and informed of therapeutically useful results. d. genetic tests should only be done on 18 year olds when they are adults and can be told the full results. Follow-up: At what stage in life would you undergo genetic testing? Imagine if therapy or diet and lifestyle change in childhood can affect the health outcomes?

Game 38: Future's wheels

Purpose: Planning for the future

Class size: No limit except physical constraints of space

Time needed: 20 minutes

Interactive unit size: Small groups

Description

Explain that this activity will be to draw a set of circles, or wheels, on a piece of paper, radiating out from a central event. After considering the central event think of a consequence of the situation, and then write this consequence into a new circle. Then think of a consequence of that new situation, and repeat the exercise to form a set of radiating circles, or wheels, to see how the future rolls out from a central event. This can help consider the causes and consequences of problems and situations that are often unclear. When done in a small group the group can work for building a consensus about all the possible, or probably, consequences. It can also be useful for planning essays or compositions on causes and effects of problems or situations.

The central problem under discussion should have identifiable causes, which consequently roll out into effects. Students should brainstorm in either groups or as a class afterwards on the root causes and steadily identify more causes that lead into the central problem. In the same way they should map out the effects that emanate from the central problem. Pupils should draw arrows to show the relationships. After the exercise is completed more time may be spent to discuss the future's wheels with the whole class, and to summarise the activity by asking students questions on the lessons they have learnt.

Teacher Background

Future's wheels can be used to consider the consequences of risky behaviour. They also indicate the sense of the problem identified as a risky behaviour. Basically the problem wheel rolls into future consequences which roll into other negative and undesirable situations. Similarly, the wheels of the causes of the problem being

discussed seem to roll into the problem. This is a graphical presentation of the causes and the results of certain behaviours that can help students visualising the future.

The advantages of future wheel's are it allows for participation of all whether at group or class discussion level. The session moves quickly and usually keeps the attention of learners. The future's wheels diagram has a strong visual impact and can enhance understanding of concepts, as it provides a clear picture of the complex nature of problems. Future's wheels require that the students should have some knowledge of the subject area before it can be used.

Examples

Develop future's wheels on the following topics:

- Q1) Drug and alcohol abuse by a 15 year old boy.
- Q2) Damage caused by a cyclone to a low lying deforested coastal area.

Game 39: Devil's advocate

Purpose: Values clarification; Listening to others; Strengthening moral conviction

Class size: No limit except physical constraints of space

Time needed: 10 minutes

Interactive unit size: Pairs



Description

Devil's advocate is a form of role play in which one person tries as hard as possible to convince a friend to give in to temptation. The other person has to respond to all the devil's temptations by giving the reasons why he or she does not want to give in to the temptation. Students should identify temptations which they face in their lives (e.g. smoking, over-eating, sex, drinking, stealing, cutting down trees carelessly). In pairs one student pretends to be a bad friend (the devil) who is trying to make the other give in to the temptation. The students should reverse roles after some time. The teacher should summarise the activity by highlighting the reasons against giving in to the temptation.

Teacher Background

Devil's advocacy is useful to promote critical thinking and problem solving skills in pupils as they need to be aware of the arguments for both sides of an issue since they exchange roles half way through the advocacy. This helps students prepare for handling peer pressure and temptation towards risky behavior. There is a danger that some pupils might be convinced by the arguments in favour of the risky behaviour if the technique is not well handled...

Examples

- Q1) In pairs, perform devil's advocate on the following examples: Early marriage, Drug and substance abuse, premarital sex, driving cars without seat belts. Discuss what are the strengths and limitations of this method?

Game 40: Field Visits/Educational Visits

Purpose: Observation powers

Class size: No limit except physical constraints of space

Time needed: Varies

Interactive unit size: Small groups of up to 10



Description

Field trips are lessons conducted outside the classroom with the aim of giving pupils first hand information and experiences on subject matter under discussions. The trip is part of ongoing study and teachers' should prepare in advance activities for pupils to do at the site. Students are given the chance to relate classroom work to their everyday life. For example, a teacher may take his or her class to a nearby pond to observe the life cycle of mosquitoes in science; or take students to a hospital when considering health education; or to a nearby main road to observe road users in environmental behaviour studies. Educational trips are outings made in order to consolidate what is learnt in the classroom. The planning process can involve the class in general discussion of how you would effectively plan and organise a field/educational trip. In small groups discuss potential aims and objectives well in advance, to prepare the field trip as part of a study unit. This should be after the teacher has made a preliminary trip to determine the suitability of the place and resource persons (if appropriate). Ensure that students have pens/pencils and paper for notes, and ideally a prepared evaluation form and guide. Discuss in class any precautionary measures to the students and agree upon a time schedule and activities to be done by students before the trip. Ask class leaders to help you control the class.

Teacher Background

The teacher may not need to do much at the site except monitor the safety of the students, rather it is the responsibility of a resource person to explain the ideas and processes to the pupils. These trips could include visits to industrial sites, hospitals and other institutions. The advantages of field trips and educational visits are that students gain knowledge, skills, and attitudes by observing (using all their senses), and students can relate classroom ideas to the real world. It provides students with an opportunity to carry out practical work in relation to what they have learnt. Providing people with a variety of learning styles helps them learn to more effectively. There are several disadvantages, firstly that it can take considerable time at both the site and in transport. It can require a lot of arrangements and organization, and sometimes requires parental consent before younger children can be taken out. There may also be economic costs, and increased risk of unforeseen events.

Examples

There are many examples of field trips, and an assessment needs to be made of objectives, alternatives and time beforehand. Experts can also be invited into the classroom instead of taking all students on a field trip. In the past trips to the cinema were also popular, but in many countries DVDs and Internet provide alternatives for students to use video resources in their own time. Many of the moral games can also be played at field sites, which may provide new stimulation to assist learning outcomes.

Game 41: Case Study

Purpose: Values clarification; Listening to others; Applying theory to practice

Class size: <50 students preferred

Time needed: 20-30 minutes

Interactive unit size: Small groups

Description

Case studies work best with small groups of students. Case studies may also be of organisations as well as people. Before the activity, prepare a case study from real life. You can do this in several ways: One way is to summarise oral life histories or write an account of a real life situation you are aware of. Explain why you are giving a case study to students. Ask a student to read out the case study. Alternatively, if there are several case studies, divide students into groups and ask each group to read through a different case study. When this is done, encourage the students to discuss the case studies. For example, what do the students feel about the situation in the case study? What are the main issues in the case study? What helped the situation? What caused problems? How does this relate to their own situation? Would students have acted the same way in this situation? What options are available to deal with the situation? What other support would have improved the situation?

Teacher Background

A case study is a true story about a real situation or person. Sometimes, the actual person featured in the case study tells the story themselves. Using a case study helps to start discussion by explaining how something affects the lives of real people, communities or organizations. The students can reflect on what lessons can be learnt from other peoples experiences. It can also provide an opportunity for people to reflect and talk about their own situations. Always gain permission to use the case study from the person or organisation that it is about. They must be informed about how the case study will be used and agree to this. Sometimes, the person in the case study tells

the story herself or himself. If a person tells their own story, it is important that they understand the possible consequences beforehand. For example, students may say things, or ask questions, which the person finds difficult or upsetting. Students may find it useful and helpful to share their own personal experiences that are similar to those illustrated by the case study. However, do not pressure people to discuss personal issues if they do not want to, and it is safest if case studies are not involving the personal experience of the class members. Explain the advantages and disadvantages of using case study as a teaching method. Advantages of using a case study are that the case study technique serves as an effective substitute for reality. The learner analyses and solves real - life challenges without suffering or going through the consequences of failure. Working in groups enables each pupil to participate actively and think through what they might do if the problem or challenging situation occurred to them. Using case studies are useful in developing critical thinking, problem solving and decision making skills. The main limitations of case study are it can take time and effort to develop the case study. There are often no definite solutions to problems presented in case studies, which means the facilitator ought to be skilled in handling case studies.

Examples

Q1) Develop a case study on a topic in a subject of your choice.⁹

9. http://www.unescobkk.org/fileadmin/user_upload/shs/Resources/ICcase.pdf

Game 42: Desired Change Diagram

Purpose: Values clarification; Listening to others; Priority setting

Class size: <50 persons

Time needed: 10 minutes

Interactive unit size: Small groups of 3-8 persons

Description

Divide the class into small groups. It is sometimes useful to make sure that different views are well-represented, as people are likely to have different ideas about what changes they would like. Agree on the time-period to be discussed, for example, by the end of the school year. Ask students to draw pictures showing important changes that they would like to see at the end of the time period. Discuss what is shown in the pictures. Looking at what people desire to change, agree what the objectives of a project should be. A few weeks later discuss the pictures again after a period of time to see which of these changes have happened, and evaluate them. Some people may measure future landmarks in terms of events related to them, seasons, festivals, rather than months or years. You can also use the matrix to start a discussion about what strategies will bring about the desired change. Students will usually identify some desired changes that are not related to project activities. This helps show how relevant project activities and objectives are to different people's priorities.

Teacher Background

A Desired Change Diagram is a picture that shows the changes that people would like to see in the future. A Desired Change Matrix is useful to identify different people's hopes for change in the future. Students can see that different people have different ideas and expectations of community action or project activities. The students can keep the matrices and use them as a base-line about the situation at the moment to evaluate the changes. This can be used in the future to see if that change has been achieved or not. You can use them to explore how well the objectives of a project or community initiative match the priorities of different people.

To focus on changes related to project activities, discuss project objectives with students before starting, so that more time is spent in the introduction.

Examples

- Q1) Do you think GM food will be an appropriate method for eradicating hunger and malnutrition from the world? How else can we eradicate hunger and malnutrition in an ever increasing global population? What can you do about this? Make an action plan matrix.
- Q2) What is your ethical concern about air pollution? List out advantages and disadvantages of oil in daily life? Please collect data on how many houses, institutions, and industries have set up solar water heaters. List ways and means you can conserve the energy. Make an action plan matrix.
- Q3) Please consider how to conserve natural resources? Think of ways to conserve water, conserve energy, protect the soil, and promote sustainable agriculture, and make an action plan matrix.

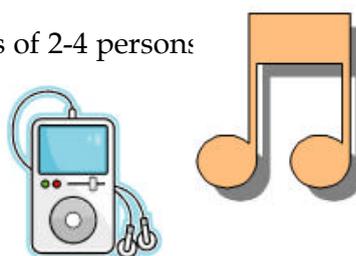
Game 43: Make a song or advertising jingle

Purpose: Promoting creativity; Listening to music

Class size: <50 persons

Time needed: 60 minutes or more

Interactive unit size: Small groups of 2-4 persons



Description

Where possible ask pupils to compose songs on specific issues, though they can choose the topic. It can help to identify songs from the local settings e.g. traditional songs, songs by bands or choirs. Listen to the songs together with the pupils. Ask questions such as: What is the nature of the song? Is it well known? Who are the target audience? What are the messages? Are they culturally appropriate? - Are the messages contributing to the understanding of the subject matter at hand? - What impact would the message(s) in the song have on the youth? Then ask students to make their own song (or poem).

Teacher Background

There are many music synthesizing software used to compose music available nowadays. It does need creativity to come up with a song or a jingle, but in many modern schools all students will have made a musical composition as part of their education. All students listen to some music and it can reach them in different ways to lectures or videos. Songs and jingles provide teachers with ready-made messages which can be discussed with pupils to determine the nature of the messages and their appropriateness. Using songs and jingles has been found to be a powerful means of reaching out to some students. Songs and jingles provide knowledge, skills and attitudes to pupils in an enjoyable manner, if they like the type of music. The messages can be further discussed with their peers after class; thus allowing for more student participation.

Examples

- Q1) Listen to any popular song and attempt to answer the above questions on it.
- Q2) Pick an ethical issue in society and write a song to describe the fate of a person facing the ethical dilemma.

Online resources and references

There are many examples of bioethics materials that can help students (and teachers) prepare for the games. There are also some commercially available books on games to play in class to encourage student participation in learning.

The International Bioethics Education Network was initiated in 2004, and the creation of networks linking research into policy is a cornerstone of efforts in all levels, from local to regional. List serves network persons, and some function in English for educators and students, and persons from a wide range of countries have tried these resources, and contributed to this project over the past years.

Internet site - <http://www.unescobkk.org/index.php?id=2508>

Internet site - <http://eubios.info/betext.htm>

Education listserve - <http://groups.yahoo.com/group/Bioethicseducation/>

Student listserve - http://groups.yahoo.com/group/Bioethics_for_students/

A growing compilation of open access teaching materials and different languages following the 2006 resources from the UNESCO Bangkok Bioethics Education project in, Macer, DRJ., ed. A Cross-Cultural Introduction to Bioethics (Eubios Ethics Institute), is available on http://www.unescobkk.org/index.php?id=multilingual_material or <http://eubios.info/ccib.htm>.

For further information, including:

News in Bioethics and Biotechnology

<http://eubios.info/NBB.htm>

UNESCO Ethics home page

<http://www.unesco.org/ethics>

UNESCO Bangkok SHS home page, and UNESCO Asia-Pacific School of Ethics

<http://www.unescobkk.org/index.php?id=1313>

Teaching Guides, References, and Internet links are in:

<http://eubios.info/BetCD/BetbkTR.doc>

Global Ethics Observatory www.unesco.org/shs/ethics/geobs

Some Internet sites offer their own exclusive bioethics resources, but these are not always openly available, e.g. BioEthics Education Project (BEEP), Graduate School of Education, University of Bristol, UK.
<http://www.beep.ac.uk/content/index.php>

Jesuit Distance Education Network, Center for Online Bioethics Education
<http://www.ajcunet.edu/distanceeducation.aspx?bid=543>

The Philosophers' Magazine (TPM) Games to play on the Internet with interactive software www.philosophersnet.com/games/

International HIV/AIDS Alliance, 100 ways to energise groups, Games to use in workshops, meetings and the community
http://www.aidsalliance.org/graphics/secretariat/publications/ene0502_Energiser_guide_eng.pdf

Informed Consent: Case Studies <http://medlaw.haifa.ac.il/index/main/4/informed.pdf>

Teaching Ethics in Psychiatry: Case vignettes
<http://medlaw.haifa.ac.il/index/main/4/psy.pdf>

Reproductive Health: Case Studies with Ethical Commentary
<http://medlaw.haifa.ac.il/index/main/4/ReproductiveHealth.pdf>

Psychiatric Ethics and Rights of Persons with Disabilities in Institutions and the Community
<http://medlaw.haifa.ac.il/index/main/4/psychethicsperlin.pdf>

Classroom Communication - Use of Emotional Intelligence and Non-Verbal Communication in Ethics Education at Medical Schools
<http://medlaw.haifa.ac.il/keidar1.pdf>

References

- Auvinen, J. *et al.* 2004. The development of moral judgment during nursing education in Finland, *Nurse Education Today* Vol. 24, pp. 538-46.
- Beauchamp, T.L. and Childress, J.F. 1994. *Principles of Biomedical Ethics*. Fourth Edition. New York: Oxford University Press.
- Cohen R, Singer PA, Rothman AI, and Robb A. (1991) Assessing competency to address ethical issues in medicine. *Academic Medicine* Vol. 66, pp. 14-5.
- Conner, L. 2004. Assessing learning about social and ethical issues in a biology class. *School Science Review*, Vol. 86, No.315, 45-51.
- Crain, W.C. 1985. *Theories of Development*. New York: Prentice-Hall.
- Doyal L, Hurwitz B, and Yudkin J.S. 1987. Teaching medical ethics symposium: Medical ethics and the clinical curriculum: a case study. *Journal of Medical Ethics*, Vol. 13, pp. 144-149.
- Gilligan, Carol. 1993. *In A Different Voice: Psychological Theory and Women's Development*. Cambridge, MA.: Harvard University Press..
- Hebert P, Meslin EM, Dunn EV, Byrne N, and Reid SR. 1990. Evaluating ethical sensitivity in medical students: using vignettes as an instrument. *Journal of Medical Ethics* Vol. 16, pp. 141-145.
- Kohlberg, L. 1969. *Stage and sequence: the cognitive-developmental approach to socialization*. Chicago: Rand-McNally.
- Macer, Darryl R.J. 1998. *Bioethics is Love of Life: An Alternative Textbook*. Christchurch, N.Z.: Eubios Ethics Institute.
- Macer, DRJ. 2002a. The next challenge is to map the human mind, *Nature* Vol. 420, pp. 121.
- Macer, D.R.J., chief editor, 2002b. UNESCO, IUBS, Eubios Living Bioethics Dictionary. Christchurch, N.Z.: Eubios Ethics Institute. On-line since 2002: <http://www.eubios.info/biodict.htm>
- Macer, D.R.J., ed., 2006. *A Cross-Cultural Introduction to Bioethics* Christchurch, N.Z.: Eubios Ethics Institute.
- Macer, DRJ. 2008. International Approaches to Evaluation of Bioethics Education. In Macer, DRJ, ed., *Asia-Pacific Perspectives on*

Bioethics Education. Bangkok: UNESCO.

Maekawa, F. and Macer, DRJ. 2005 How Japanese students reason about agricultural biotechnology. *Science and Engineering Ethics*, Vol. 10, No. 4, pp. 705-716.

Miles SH, Bannick-Mohrland S, and Lurie N. 1990. Advance-treatment planning discussions with nursing home residents: pilot experience with simulated interviews. *Journal of Clinical Ethics* Vol. 2, pp. 108-112.

Nagaoka, S. 2008. Teaching Compassion. In Macer, DRJ, ed., *Asia-Pacific Perspectives on Bioethics Education*. Bangkok: UNESCO.

Ratcliffe, M. and Grace, M. 2003. *Science for Citizenship: Teaching Socio-Scientific Issues*. Maidenhead: Open University Press.

Self, D., Wolkinsky, F.D. and Baldwin, D.C. 1989. The effect of teaching medical ethics on medical students' moral reasoning, *Academic Medicine* Vol. 64, pp. 755-9.

Siegler M, Rezler A.G. And Connell K.J. 1982. Using Simulated Case Studies To Evaluate A Clinical Ethics Course for Junior Students. *Journal of Medical Education* Vol. 57, pp. 380-385.

Singer PA, Cohen R, Robb A, and Rothman AI. 1993. The ethics objective structured clinical examination (OSCE). *Journal of General and Internal Medicine*. Vol. 8, pp. 23-8.

Toulmin, S., Rieke, R. and Janik, A. 1984. *An Introduction to Reasoning*. Second edition. New York: Macmillan.

UNESCO. 1997. *Universal Declaration on the Protection of the Human Genome and Human Rights*.

UNESCO. 2005. *Universal Declaration on Bioethics and Human Rights*.

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