Why teach about change and the future?

Most educational systems have as one of their aims the preparation of students for the future. Indeed, it is only the existence of the future that gives education any sort of purpose. Yet most school curricula are heavily focused on the past, and give students little opportunity to reflect on where they are going, and what they might ultimately be doing with the knowledge they are accumulating.

Talk to a school-age child about what the future will be like, and you are apt to be subjected to a barrage of images – space travel, robots, weapons of destruction, and intergalactic battle. Their impressions of the future are shaped largely by television, films, video and computer games.

> '. . . most of learning, especially learning in school, is concerned with the past, and . . . students are taught to drive into the future through a rear-view mirror.'
>
> S. Nicholson, *The Future of Politics*, 1982

Rarely are young people given the opportunity to reflect thoughtfully in an educational setting about what kind of world they would really like to live in. But when such an opportunity is provided, students often amaze their teachers with their serious attitudes of concern and caring about the future. Today's young people will spend most of their lives in the 21st century, and it should come as no surprise that they care deeply about what their future holds in store for them.

The future can be treated as a dimension to be considered across all subject areas, as a cross-curricular theme. Education about the future can help to make students more aware of how actions taken in the past have affected the present, and of the fact that actions taken in the present will shape the future. It can help students understand that the future is not fixed and predetermined, but subject to change. There are a variety of alternative futures which may occur, and it is our behaviour today which decides which of these alternatives will become reality. For the purpose of learning about the future is not to make a game of predicting what might happen in a given number of years; students need to learn about alternative futures because of the urgent need for all members of society to make well-informed choices in the present.

It is a fact that change is happening at a faster pace today than in previous centuries. Education about the future must be linked to an exploration of the process of change and an understanding of how change occurs. The rapid changes that are occurring locally, nationally, and globally produce feelings in many students of being overwhelmed or helpless, or lacking in

the ability to control the forces that affect their lives. While students need to accept that some alternatives for change and action may not be open to them, exploring realistic possibilities can be empowering, and a healthy antidote to despair. Students need to leave their schools with a belief in their own capacity to affect the change process, and a willingness to do so.

Some key concepts

ALTERNATIVE FUTURES

A number of different futures are possible. The future is not a single, predetermined entity. It can be useful to categorise these alternatives into **possible, probable,** and **preferable** futures.

CHOICE AND EMPOWERMENT

All people have the responsibility to make conscious and informed choices about the future. Every choice made in the present has an impact that extends over time, helping to create change and bring about a certain kind of future. Human beings are not at the mercy of the forces of change; human beings *are* the forces of change.

REACTION AND PRO-ACTION

One can face the future by waiting for problems or crises to take shape and then *reacting* to them. It is important to understand that even a person who chooses to do nothing in the face of a local, national, or global problem has made a choice which has social, political, and economic consequences.

One can also face the future by being *pro-active* – by considering current events and trends, anticipating possible outcomes, and taking action either to avert greater problems or promote more just, sustainable, and peaceful alternatives.

Teaching about change and the future: Aims and objectives

Knowledge	Skills	Attitudes
• Knowledge of major development issues and trends, past and present. • Knowledge of the main factors which cause change. • Understanding the difference between short- and long-term change, and between desirable and undesirable change. • Understanding of one's own personal options for creating change.	• Ability to think hypothetically. • Being able to envisage a variety of alternatives and their outcomes. • Ability to analyse and evaluate alternatives. • Ability to translate knowledge and skills into concrete action at local, regional and global levels.	• Belief in one's own ability to create positive change. • Outlook of hopefulness, of not seeing oneself as, or allowing oneself to become, the victim of larger global issues and problems. • A readiness to take practical action which is appropriate to the learner's own situation.
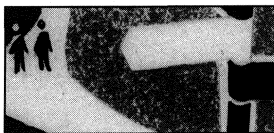
Simple changes

OBJECTIVES

To encourage students to see the process of change as a series of steps, and to help them reflect on the factors that bring about different types of change.

MATERIALS

A copy of one of the sets of **Simple changes** cards (pages 255–7), cut into individual cards, for each pair of students; glue, paper and pencils.

PROCEDURE

Step 1

Students form pairs. Each pair receives *one* set of **Simple changes** cards (six cards, including one blank card).

Step 2

Students work together to put their cards in a logical sequence that shows how a change takes place. The blank card is to be the last card in the sequence. Students can decide on a final step in the sequence, which they draw themselves on this blank card.

When students have completed the sequencing, they stick their cards onto paper with glue.

Step 3

Students join with another pair that had the same set of cards, and compare both the sequence and the final step.

Step 4

As a class, the students discuss the following questions:

- How were the three sets of cards different? (The teacher may wish to point out that the first set deals with a change in nature, the second with a change in an individual, and the third with a community change.)
- For each set of cards, what were the forces that brought about change?

VARIATIONS

1 Younger students may simply put five cards in sequence, leaving off the blank card with the final step.

2 Students make up new sequencing cards appropriate to their classmates' ages and interests.

FOLLOW-UP

Students collect a series of newspaper articles about a change that is occurring in their community, nation, or the wider world. They make a set of sequencing cards that illustrate the change.
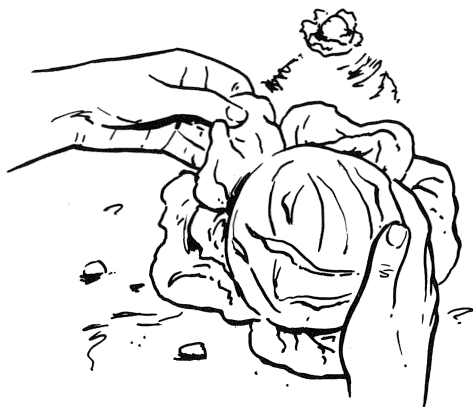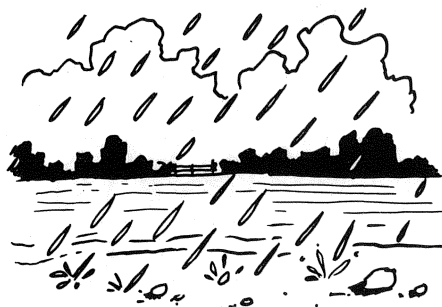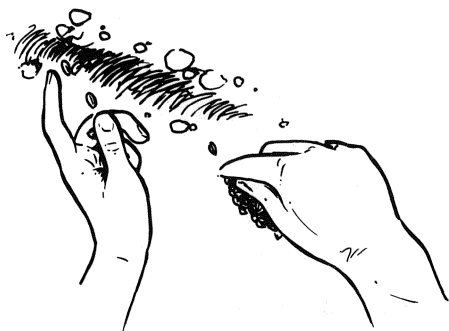
IN THE CURRICULUM

The activity develops skills in interpreting visual images, sequencing, and anticipating consequences. It could be used in an English, humanities, or science class.
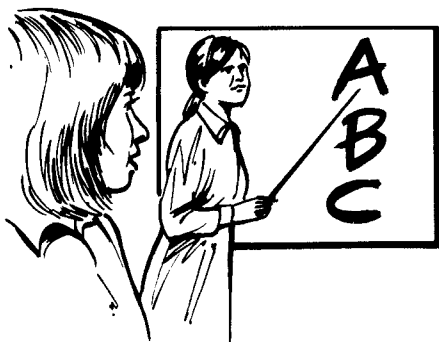
Simple changes cards (1)
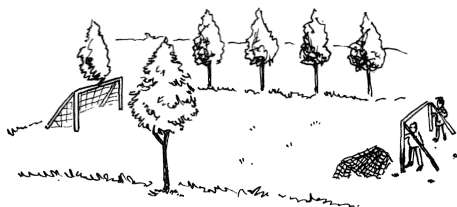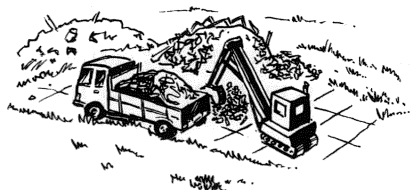
255

worksheet

Simple changes cards (3)

257

worksheet

Alternative futures cartoons

OBJECTIVES

To introduce students to the idea that the future is not fixed, but that there are alternative futures; to encourage them to anticipate the consequences of actions.

Age level 1:
7–11 years

MATERIALS

A copy of one **Alternative futures** cartoon (pages 260–3) for each pair of students, pencils.

PROCEDURE

Step 1

Students form pairs. Each pair receives one of the **Alternative futures** cartoons. They read the first two frames, and then complete the cartoon by drawing pictures, and writing captions if necessary, in the next four frames.

Step 2

Pairs of students then join together to form groups of four. This should be done by having each pair with Cartoon 1 join with a pair that has Cartoon 2. The first frames of Cartoon 1 and 2 are identical, but the second frames are different. Thus, the outcomes drawn by the students are likely to be different.

Similarly, each pair with Cartoon 3 should join with a pair that has Cartoon 4. These two cartoons also begin in the same way, but the second frames show various alternatives, which will affect the outcome.

Pairs explain their cartoon endings to each other.

Step 3

Students post their completed cartoons around the room, and walk around looking at each others' work.

Step 4

The class comes together to discuss the results of the activity. The following questions can be raised:

- What was your first reaction when you saw the cartoon that the other pair had completed?
- Did pairs whose cartoons had the same first frame also have the same ending? Why or why not?
- What are some other possible events that could have changed the outcome of the cartoon?
- In real life situations, is a particular outcome the only one possible, or are there usually a number of possible outcomes?

VARIATION

Students use the events in story books as the basis for the cartoons.

FOLLOW-UP

Students collect stories of current events, problems or conflicts from radio or television broadcasts. They discuss some of the possible outcomes of these events, and try to predict what will happen next. They reflect on the factors at work that might change the course of events.

IN THE CURRICULUM

The activity requires skills in sequencing and anticipating consequences. It could be used in an English or humanities class, depending on the topic of the cartoon.

worksheet

Alternative futures (2)

worksheet

Interviews about change

OBJECTIVES

To help students gain an understanding of the forces that have brought about positive change on a local or national level; to increase their awareness of change as a process which takes place over time.

MATERIALS

Paper and pencils; tape recorders (optional).

PROCEDURE

Step 1

Pairs of students invite an adult member of their family, school, neighbourhood or community to participate in an interview on **Change in our community/country**. The adults being interviewed are asked to think of a community (or national) issue or problem which has changed for the better in their lifetime (for example, a new clinic built to respond to health care needs, a new school built to relieve overcrowding, environmental pollution which was cleaned up, or a conflict between two groups that was resolved).

Step 2

Prior to the interview, students plan the questions they might ask, such as:

- What is a situation that has changed for the better in your lifetime?
- What was it like before any changes took place?
- How did the change begin?
- What happened next?
- How do you feel about this change now?
- Are there things about this situation that you would still like to see changed?
- What might make those changes happen?

Step 3

Students carry out the interview, taking notes. If possible, recording the interview with a tape recorder is helpful.
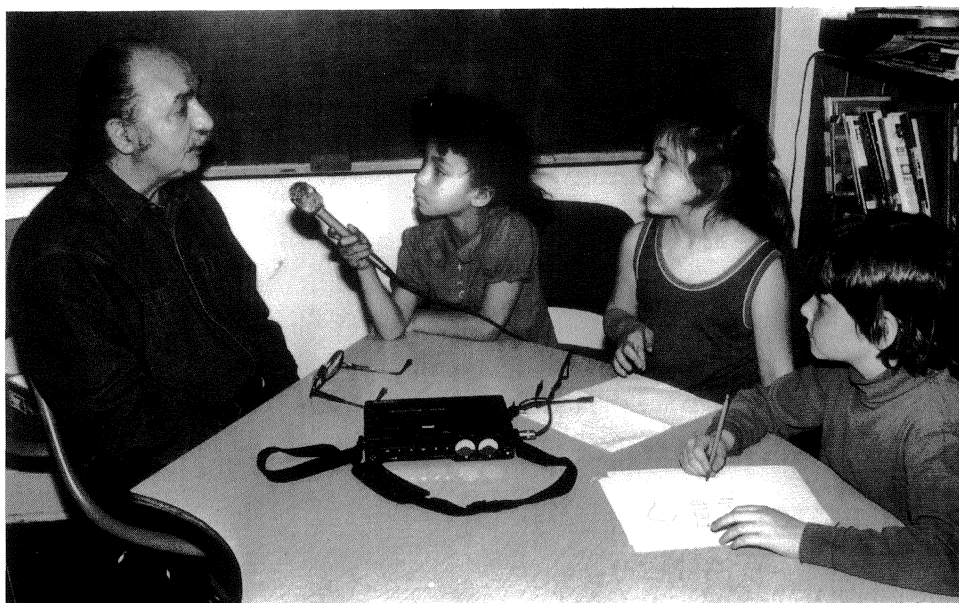
'Tell us about a change that has happened in your lifetime'

Step 4

The students report to the class on what they learned. Summaries of the interviews may be compiled into a class book on 'Change in our world'.

VARIATION

The interviews may be done by older students as homework.

FOLLOW-UP

Students can listen to radio or television news broadcasts for stories of changes that are occurring in their community or country. Summaries of these can be compiled on a large chart.

IN THE CURRICULUM

The activity develops questioning, listening, and recording skills. It can be used in a humanities class, as part of a unit on local or national history.

Activity 51 **Personal time lines**

OBJECTIVES

To enable students to see the past, present, and future as a continuum; to introduce the idea of alternative futures.

MATERIALS

Paper and a pencil for each student.

PROCEDURE

Step 1

Working individually, students draw a horizontal line that stops half-way across their sheet of paper. They are told that the point farthest to the left represents their birth, and that the point farthest to the right represents the present. Between these two points, they are to plot along the line the major events of their lives to date.

If necessary, the teacher may suggest what some of these might be – birthdays, moving to a new class in school, births of siblings, moving house, trips, illnesses, starting a new hobby or interest, etc. A sample time line could be drawn on the blackboard (see page 268).

Step 2

From the point representing the present, students are then asked to draw two arms or branches (the time line will now look like the letter Y on its side). Each branch represents a different possible future.

The upper branch indicates events that might happen in the student's *ideal* future. The lower branch indicates events that students think are likely to be part of their *probable* future.

Step 3

Each student joins another and explains her time line. They discuss their alternative futures, any differences between the ideal and the probable future, and why those differences exist.

Plotting past, present and future on a personal time line

Step 4

As a class, the students discuss the following questions:

- Did anyone include events (past, present, or future) that were of a global or national nature, rather than only personal?
- Did anyone feel that their ideal future was likely to occur? Why or why not?
- What actions would need to be taken in the present in order for the ideal future to become a reality?
- Which of these actions could practically be taken?

VARIATIONS

1 If younger students find the idea of a time line difficult to grasp, they can begin by plotting the events from a familiar story that the teacher has read to the class along a time line.

   Then they can try making a simple personal time line which extends into adulthood, but without the two branches.

2 Older students review their personal time lines, and choose one event which they consider the most significant or important. They imagine how their lives would have been different if this event had not taken place. They then draw new time lines, including projections into the future, which show how their lives would have changed.

3 Or, they pick a significant technological development, and consider how

267

their lives would be different if, for example, cars had not been invented. (Or computers, television, airplanes, vaccinations.)

4 Older students may also wish to choose a well-known local or national event – perhaps the building of a new road or playground, construction of new shops or a school, the election of a particular official – and project how their lives would have been different if this event had not occurred.

FOLLOW-UP

Students consider the types of actions that might be taken in order to bring about their ideal or preferred future. Students attempt to write a contract with themselves to do one of those things. The contracts can be posted on a bulletin board.

IN THE CURRICULUM

The activity develops skills in sequencing and anticipating consequences. It could be used in a humanities or English class.
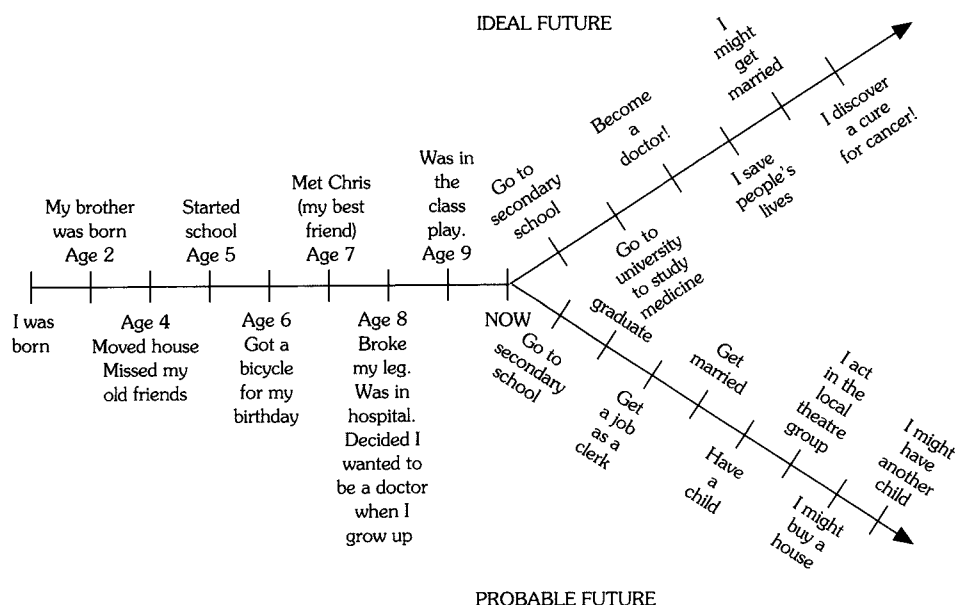
Ideal and probable futures

Steps to change

OBJECTIVES

To help students see that change can come about in a sequence of carefully planned steps; to familiarise them with development issues around the world in which local efforts have brought about change.

MATERIALS

A copy of one of the **Steps to change** sheets (pages 271–3) for each group of three to four students; these should be cut into sections to form eight individual sequencing cards, which are placed in an envelope. Paper and glue are also required. (The teacher 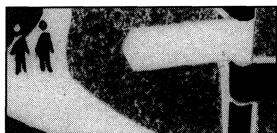should keep a master copy of each of the **Steps to change** sheets for reference, as this shows the steps listed in their correct sequence.)

PROCEDURE

Step 1

The students form groups of three or four. Each small group is given an envelope containing eight sequencing cards from *one* of the **Steps to change** sheets.

The students are told that the envelopes contain cards telling the story of a problem in a developing country and the steps its people took to bring about a positive change. The card with the number 1 on it sets the scene in this country, describing the problem. The card with the number 8 on it tells what the situation was like after the change took place.

Step 2

The students read the other cards and decide what order to place them in so that the story of the change is told in a logical sequence. When this is done, and each person in the small group agrees on the sequence of the story, they may write the numbers 2, 3, 4, etc. on the cards, and glue them to a piece of paper.

Step 3

When everyone has finished, small groups which had the same story can

269

meet together to compare their results. The stories are then read aloud to the whole class.

Step 4

The class discusses the following questions:

- What were the factors that brought about change? (Government action? Action by non-governmental organisations? The work of one committed individual? Local organising by the people involved? Other factors?)
- Do you think the changes made will have a short-term or a long-term impact on the people? Why?
- Can you think of other similar situations in which people would benefit from the types of actions taken in the stories?

VARIATION

Students look only at the first and last sequencing cards, and brainstorm ways in which they think the change might have come about. They follow the brainstorm with the sequencing activity, and compare the results.

FOLLOW-UP

1 Students write to UNICEF field offices to find out more about the projects described.

2 They research local changes which have had a positive impact, create stories about them, and design sequencing activities for each other, or for other classes.

IN THE CURRICULUM

The activity develops skills in critical thinking, sequencing, and imagination. It can be used in a humanities class during a study of a developing country. It could also be used in an English class to help students understand the logical sequencing of events in a piece of writing.

Steps to change in Ceara (North-east Brazil)

1 In 1986, two thirds of the people in the state of Ceara lived below the poverty line. 28 per cent of the children were malnourished, and many of them died before they were a year old.

In 1986, a newly elected government conducted a survey on the health conditions of children in Ceara, and found that action had to be taken to change these conditions.

The government decided it had to work first on getting health care information to the people who needed it most.

The government asked television, radio, businesses, and churches to spread information about health care issues, such as nutrition, immunisation, and preventing diseases.

The response of the Catholic Church was especially strong. It provided thousands of volunteers to bring health care messages to the poorest areas.

When more people had information about health, the government trained thousands of low-income women in basic health practices.

The women who were most skilled were given additional training as community health workers. They were placed around the state, and each was responsible for the needs of 100 families.

8 In Ceara today, malnutrition and the infant death rate have been reduced by one-third. The immunisation rate is up by 40 per cent.

worksheet

Steps to change in Lebanon

1 In 1989, after years of war in Lebanon, children of different religious and cultural groups had practically no contact with each other. They lived in different neighbourhoods and went to different schools.

Because young people of different religions and cultures were full of fear and suspicion toward each other, UNICEF officials in Lebanon decided to try to bring them together by setting up a summer 'Peace Camp'.

First, young people who had experience in summer recreation camps or in scouts were trained to become monitors. They learned how to help children get to know each other, learn from each other, and become friends.

When the monitors were trained, a Peace Camp for children from different religious and cultural groups was opened in July 1989.

Children were brought to the Peace Camp in buses. UNICEF arranged for them to pass the many security checkpoints.

Once they arrived at the Peace Camp, some children were frightened of being with others who were different from themselves. But after living, working, and playing together, many became close friends.

Because of the success of the Peace Camp, other organisations decided to open similar camps.

8 By 1990, tens of thousands of young people had attended Peace Camps in Lebanon, overcoming their fears and prejudices about different groups. Now the UNICEF office in Lebanon is preparing an Education for Peace curriculum for schools.

Steps to change in Honiara (Solomon Islands)

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1 Several years ago, people living in the capital city of Honiara found that their wages were too low to be able to afford the freshly grown food which was brought in from the countryside. Child malnutrition began to rise, as did diseases related to poor nutrition in adults.

Dr Helen Paton, the Town Council Medical Officer, became concerned about the increase in malnutrition.

With some nurses and other concerned local people, Dr Paton started a gardening club, to help city dwellers grow their own food.

The new gardening club got support from the Town Council, which gave it some land on a hillside near the centre of town.

With this extra land, the club could take in more members. It began advertising, using radio, posters, a special magazine, and a song contest.

The advertising campaign encouraged many women to join the club. UNICEF was asked to provide support for classes in nutrition, gardening, crop rotation, and composting.

Some women who have been gardening club members for several years, and have taken the nutrition and gardening classes, have now begun to return to their villages in the country, taking with them improved ways of growing food.

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8 Malnutrition in Honiara is beginning to decrease, and parents can now feed their children nutritious food that they have grown themselves.

Jobs and the future

OBJECTIVES

To encourage students to think about how technology has changed, and will continue to change our lives.

MATERIALS

The Help Wanted sections of local newspapers; copies of the sheets titled **Jobs today** and **Jobs in the future?** (pages 276 and 277).

PROCEDURE

Step 1

Working in pairs, students look through the Help Wanted section of a newspaper. They circle jobs which they think would not have existed a hundred years ago.

Step 2

Together they fill in the sheet titled **Jobs today**, noting the name of the job circled and the reason it exists now, but did not in the past.

Step 3

The whole class discusses the reasons why jobs have changed over time. Technology may figure prominently among these reasons. Students should reflect on changing economic and social needs as well.

Step 4

Pairs join together to form groups of four. Together they fill in the **Jobs in the future?** sheet.

Step 5

The whole class then comes together to discuss the results of the activity. Questions might include:

- What types of jobs do you think will be eliminated in the future?
- What types of jobs will still be needed in the future?
- Can you think of a job that will be needed in the future that does not exist today?

- What kinds of changing social or economic conditions might cause a need for a new type of job?
- What are some of the benefits that might be a result of these new jobs?
- What are some of the problems that could arise from these new jobs?
- How might these potential problems be solved?

VARIATION

Students research jobs which existed in the past, but no longer exist today. Why are these jobs obsolete?

FOLLOW-UP

1 Students write a newspaper advertisement for a job that might exist in the future. What skills and qualifications would be required for such a job? How would applicants acquire these skills?

2 Students could invite representatives of the business community and employment agencies to speak to the class about what types of jobs they feel will be most needed in the short-term future (the next ten to 15 years).

IN THE CURRICULUM

The activity involves skills in reading, evaluating, critical thinking, divergent thinking, and anticipating consequences. It would be appropriate in a history or economics class, or in a unit on career awareness.

Jobs today

This job didn't exist a hundred years ago:	The reason this job exists today is . . .

Jobs in the future?

	Do you think this job will be needed 30 years from now?	Why or why not?
Doctor		
Farmer		
Police Officer		
Computer Programmer		
Teacher		

worksheet

A history of the future

OBJECTIVES

To encourage students to apply what they know about the factors that bring about change to a current global issue.

MATERIALS

A4 paper and pencils, large sheets of paper or poster board, plus paste or glue.

PROCEDURE

Step 1

Students form groups of four. They are told to imagine that they are living 50 years in the future. At this future time, the world has just achieved a major accomplishment: a clean environment for every individual is now a reality.

The small groups have the task of creating a photo history showing the actions that occurred to reach this milestone. They do this with drawings and captions that show the sequence of steps taken over the last 50 years to create this change. The drawings are pasted on to the large paper or poster board.

Step 2

When each small group has completed its project, they display their results around the room, and students circulate to view them all.

Step 3

They then discuss the following questions:

- Was there one cause of the change, or many causes?
- What were the most important factors which led to this change: individual action, work of non-governmental organisations, community action, government intervention, corporate actions?
- What would the main obstacles have been to this change? Why?
- Did students think that 50 years was a reasonable amount of time to allow for such a massive change? Why or why not?
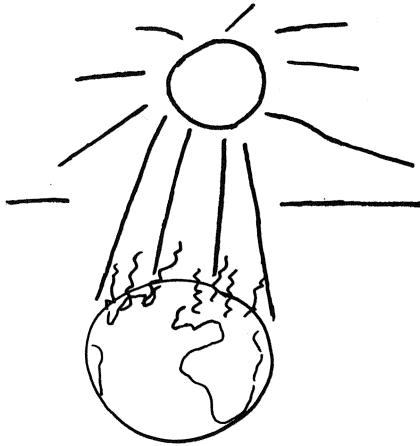
50 years ago: Skin cancer increased because of the whole in the ozone. Air pollution was so bad that many people had lung problems.
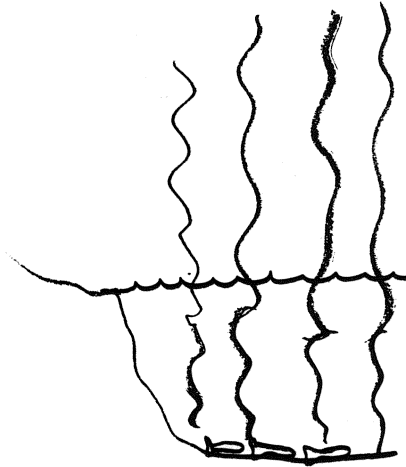
40 years ago: Water was so polluted that it wasn't safe to drink. The oceans were polluted and you couldn't eat the fish any more. People started dying earlier. Babies had more birth defects. There was world-wide PANIC!

Environmental clean-up – a history of the future in nine illustrations
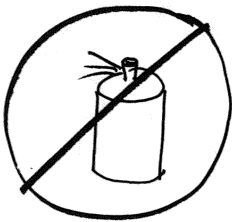
39 years ago: Laws are passed in Europe to ban all CFC's. Later the rest of the world does the same. Research begins on non-polluting fuels. Many deaths are still ocuring.
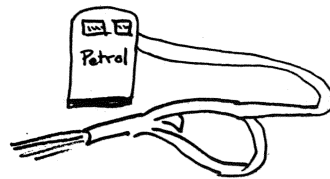
35 years ago: A non-polluting petrol substitute is found. People are still dying at a high rate.
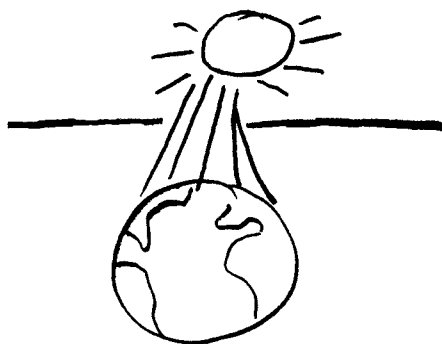
30 years ago the first evidence that the ozone layer is coming back is found.

There are non-polluting cars on the market.

25 years ago: Laws force the industries which have poluted the rivers and oceans to clean up the water and pay heavy fines.
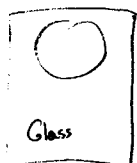
15 years ago: People are living longer. Cancers and birth defects are decreasing.

Laws are passed to make everyone recycle. People who don't recycle pay fines or go to jail.
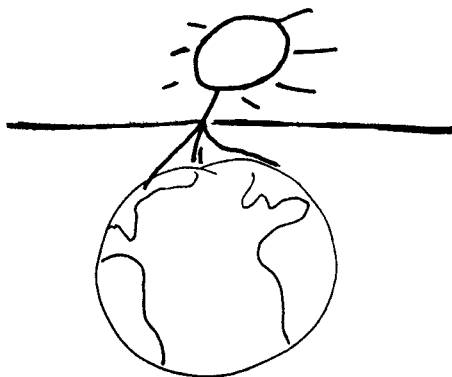
5 years ago. The ozone hole is almost closed up.

Today our environment is healthy again.

VARIATIONS

1 Students write their history as if it was to be included in a school textbook.

2 The activity can be applied to other issues. For example, small groups could write a history of how a (current) regional conflict was ended, how racial prejudice was eliminated, or how world hunger was eradicated.

FOLLOW-UP

Students contact a non-governmental organisation working in the area of environmental protection (or another issue chosen by the class), to find out more about its efforts to bring about change.

IN THE CURRICULUM

The activity develops skills in creative and divergent thinking, analysis, understanding of consequences and sequencing. It could be used in a history class, or in an English class in conjunction with the study of a piece of literature which deals with futuristic or Utopian themes.

Future scenarios

OBJECTIVES

To acquaint young people with a variety of possible perspectives on current issues, change and the future; to explore the consequences of these various perspectives.

MATERIALS

Copies of the **Future scenarios** sheet (page 285); paper and pencils.

PROCEDURE

Step 1

The class picks *one* current global issue or problem as a focus for the activity. Possible issues might include:

- ethnic nationalism;
- global warming;
- hunger;
- increasing drug use worldwide;
- homelessness;
- increased migration of peoples;
- urban crime;
- racism.

The teacher explains that the class will be examining this issue through the perspective of five different future scenarios. Each of these five scenarios shows a different way in which the issue might evolve.

Step 2

Students form groups of four or five. Each small group receives a copy of *one* of the **Future scenarios**.

Within their small group, students are asked to reflect on the chosen issue and collaborate to write a three- to five-minute documentary-style news broadcast on it, according to the **Future scenario** they have been given.

Step 3

One member of each small group is then chosen to read her group's broadcast aloud, in the style of a television news report.

Step 4

The class discusses the following questions:

- What was your reaction to hearing all these different alternative futures?
- Did certain alternative futures seem less likely than others? Why?
- Did certain alternatives seem more likely than others? Why?
- Do you think that in reality this issue's future is reflected by only one of these scenarios, or will it be made up of aspects of several scenarios?
- Did hearing the alternatives cause you to feel like taking some kind of action? If so, was this more true for any particular alternative? What would that action be?
- In writing and listening to the scenarios, did anyone assume that the issue chosen had only to do with developing countries? Is this issue a reality in industrialised countries?

VARIATIONS

1 A variety of local, national, or global issues can be used.

2 A simpler version of the activity may be carried out by having students select one issue, and write a news report that is either pessimistic (emphasising the dangers and problems that will arise from this situation), or optimistic (emphasising opportunities for creative and constructive solutions to the current situation).

Is most news reporting about the future optimistic or pessimistic? What might be the reason for this? What do you think the effects of consistently optimistic news reporting might be on the listener? What do you think the long-term effects of consistently pessimistic news reporting might be?

FOLLOW-UP

Young people listen to radio or television news programmes, or read newspaper articles having to do with the future, and attempt to determine if the reporter/author is basing the story on the assumptions of one of the five future scenarios. Is one type of scenario more common than the others? Which one? Why might this be so?

What might be the effect on the listener of news about current issues which is consistently reported from only one of these various perspectives?

IN THE CURRICULUM

The activity develops skill in becoming aware of different points of view, critical thinking, comparing and evaluating. It could be done in a humanities class on world issues. It could also be used in an English class to examine how points of view are expressed in writing, or on detecting underlying assumptions.

Note: The five scenarios described on page 285 are adapted from those described by James Robertson in *The Sane Alternative* (1983).

Future scenarios

I   THE 'BUSINESS AS USUAL' SCENARIO

The future will be basically the same as the present is. Local, national, and global problems will be dealt with in much the same way as they are today, and attitudes toward these problems will be similar to what they are today.

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2   THE 'DISASTER' SCENARIO

Present problems, such as hunger, pollution, poverty, and war, will increase. At some point there will be a worldwide disaster or breakdown of human and natural systems.

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3   THE 'AUTHORITARIAN' SCENARIO

Disaster will be prevented by powerful and more controlling governments. Strong government action will enforce order and distribute resources.

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4   THE 'HYPER-EXPANSIONIST' SCENARIO

Present problems will be solved by the development of new, powerful technologies. Expanding scientific and technological research and development is the only way to deal with critical world issues.

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5   THE 'HUMANE ECOLOGICAL' SCENARIO

Global problems can be solved by a shift in attitude, toward ecological awareness, justice in human relationships, and an understanding of the need for a partnership between humanity and nature to promote a climate of peace. The role of central authorities is minimised.

285

Lawmakers of the future

OBJECTIVES

To encourage young people to consider what kind of society they would like to be living in 20 years from now; to explore the possibilities of legislation for creating positive future change.

MATERIALS

A copy of the **Proposed laws for a future world** sheet (pages 289–90) and the **Effects matrix** sheet (page 291) for each group of three or four students; paper and pencils.

PROCEDURE

Step 1

Students are told to imagine that they are living 20 years in the future. They are asked to imagine that the Earth has just been through a five-year period of regional conflicts in almost every part of the globe. As a result, a World Government has been established. While nations still exist, and national governments still have the power to make laws, any laws which are passed by the World Government take precedence over those of individual nations.

The students are the Lawmakers of the World Government. They are presently considering 12 proposed new laws, and must decide if these are to take effect.

Step 2

The class is divided into groups of or three or four. Each small group receives a copy of *one* of the laws from the **Proposed laws for a future world** sheet to prepare a position on. They consider both the positive and negative effects of this proposed law, on both industrialised and developing countries. They use the **Effects matrix** to summarise their thinking, and to decide on whether or not this law should be put into effect.

Students have the option to rewrite the law if they feel this would make it more beneficial to all concerned.

Step 3
Each small group presents its opinion on the law they considered to the whole class.

Law No. 4

This law probably won't affect developing countries that much, since not as many people own cars as here. But it could be very damaging to countries that produce a lot of oil.

A lot of people in industrialised countries would object. It could be very harmful to the auto industry and people might lose their jobs.

More railways would have to be built. Traffic and pollution would be reduced.

A law like this doesn't really make sense, because the real problem is that we need to build cars with better pollution controls. It should be rewritten to require the auto industry to invent better pollution controls. It should have a way to encourage people to use public transport, but not force them to use it.

One group's reaction to a proposed law for the future

Step 4

A vote is then taken on whether or not to pass this law. (The teacher should anticipate that a range of viewpoints will exist in the class. The proposed laws are designed to promote discussion of these viewpoints. There is no correct or incorrect result of the voting process.)

Step 5

When all the laws have been voted on, the class discusses what was learned from the activity, addressing these questions:

* Which laws were easy to decide on? Which were difficult to decide on? Why?
* What kind of vision do you have of the Earth in 20 years? How did this affect the way you voted?
* Are any laws such as these currently being discussed in your own country? If so, how do you feel about them?
* Should global concerns be considered when national laws are passed, or should national interests take priority?
* Do you think it would be a good idea to have a World Government? Why or why not?
* If a World Government was actually to be set up, what issues should it have jurisdiction over? What issues should it *not* have jurisdiction over?

VARIATIONS

1 The number of laws used can be reduced, depending on the age and ability level of the class.

2 Laws which were defeated can be considered a second time. Is there some way to rewrite this law to make it of benefit to the world's population?

FOLLOW-UP

Small groups research the work of the United Nations. In what way is the UN similar to a World Government? In what ways is it not a true World Government?

IN THE CURRICULUM

The activity requires imagination, divergent thinking, anticipation of consequences, evaluation and decision-making. It would be appropriate in a humanities class on government or the role of the United Nations. It could also be used in an English class after reading literature on futuristic themes.

Proposed laws for a future world (1)

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1   Because of problems caused by people moving across national
    boundaries to escape regional conflicts and find better economic
    opportunities, a law has been proposed that would stop all
    immigration and emigration for five years.

- -

2   In order to conserve our dwindling natural resources, a law has been
    proposed that would require all electric power companies to invest 35
    per cent of their profits in research into solar and wind power.

- -

3   In order to rebuild the health of the world's populations, a law has
    been proposed that would require all national governments to provide
    free health care to all their citizens.

- -

4   In the interests of preventing further pollution of our fragile planet, a
    law has been proposed that would require all people who travel more
    than 20 miles to their place of work to use public transport.

- -

5   Because our increasingly technological society requires a high level of
    education from its citizens, a law has been proposed that would
    require all young people to stay in school until they are 18 years old.

- -

6   To relieve the long-standing problems of world hunger, a law has been
    proposed that would require all countries that produce an agricultural
    surplus to donate 40 per cent of it to countries in which hunger is a
    serious problem.

- -

7 In order to prevent the needless and wasteful deaths of our young children, a law has been proposed that would require all parents to vaccinate their children, or pay a substantial fine.

8 A law has been proposed that would require any country that starts an armed conflict against any other country to pay to the country it has attacked the full value of all property destroyed, as well as a sum in compensation for each human life lost.

9 In order to eliminate hatred between ethnic and racial groups, a law has been proposed that would require all countries to prohibit citizens from forming or joining organisations that discriminate against particular racial and ethnic groups, or act in any way to promote conflict or discrimination between groups.

10 Due to the urgent problems caused by overpopulation, a law has been proposed that would restrict all parents to having no more than two children.

11 A law has been proposed that would require all laws and customs that limit the rights and freedoms of women in any way to be abolished.

12 A law has been proposed that would require all car manufacturers to produce cars which do not use petroleum fuels in five years' time.

Effects matrix

	Positive effects	*Negative effects*
The proposed law for a new world that we considered was:		
For developing countries		
For industrialised countries		

Our recommendation on this law is: _____

_____

(Optional) We would need this additional information to make a decision on this law: _____

_____

_____

(Optional) We would rewrite this law in the following way: _____

_____

_____

worksheet

The futures tree

OBJECTIVES

To introduce students to a technique which allows them to consider in depth the possible future impacts of a particular change.

MATERIALS

Large sheets of paper and felt-tip pens for each group of three; blank index cards in three colours, preferably blue, green and yellow.

PROCEDURE

Step 1

Explain to the class that it will be creating a futures tree to explore the impact of a change on various groups in society. Lead a brainstorming session on some current changes that are taking place locally, nationally or globally. Examples might be:

- an increase in the number of women working at what were once considered men's jobs;
- increasing racial and ethnic diversity in society;
- the reduction of the ozone layer;
- the rising incidence of AIDS among young people;
- the expansion of computer technology;
- the development of inexpensive solar and wind generators for electricity;
- funding cuts for education.

Ask the class to select one change to be the subject of their futures tree.

Step 2

Brainstorm with the class the various groups of people who might be directly affected by the change the class has chosen to focus on. Depending on the nature of this change, those groups might include:

children	business people
parents	religious leaders
teachers	local media producers
elected officials	health care personnel
police	social workers

Ask students to select four of these impact groups to include in the futures tree.

Step 3

Working in groups of three, students begin creating a futures tree diagram. They draw a tree trunk, which they label with a brief description of the change they are focusing on.

They then draw four short branches radiating from the trunk of their tree, and write the name of one of the four impact groups they selected on each branch.

Step 4

Each small group is given 12 green index cards. Ask students to focus on *one* impact group at a time and think of at least one, or as many as three, *immediate* consequences of the change for that group. Stress that the consequences can be either positive, negative or neutral. When this is done, the cards should be placed on the paper at the end of the appropriate branch.

A futures tree is a complex activity to describe and carry out. Use the sample Futures tree diagram (page 296) to help explain the activity. This shows a diagram that was created by a group of teenagers on the topic of increasing numbers of women in traditionally male-dominated jobs. They decided that the four most important impact groups would be women, men, children and employers.

The diagram may be reproduced and given to young people as a model, drawn on a blackboard or large paper for the whole group to see, or placed on an overhead transparency.

Step 5

Blue cards are then given to each small group. Students look at each immediate consequence (the green cards) and decide on at least one *secondary* consequence that would arise from it. Each secondary consequence is written on a blue card. The blue cards are then laid on the paper with a branching line connecting them to the corresponding green cards.

Step 6

Once this is done, the yellow cards are distributed. These represent *third order* consequences. Students follow the same procedure, this time looking at each blue card, deciding on a third order consequence which could arise

from it, and laying it on the tree with a branching line connecting it to a blue card.

Step 7

At this point, the small groups take time to reflect on and discuss their **Futures trees**. They may stick down their cards with glue if each group member is satisfied with the arrangement. They may draw dotted lines between consequences from different branches that seem to be related to each other.

Step 8

Students move around the room to look at other groups' futures trees.

Step 9

Finally, the class discusses the following questions:

- Were there differences between the futures trees? If so, why?
- Were most of the anticipated effects positive or negative? Why might this be so?
- Did creating the diagram help you to think of effects of this change that you had not been aware of before? If so, what were they?
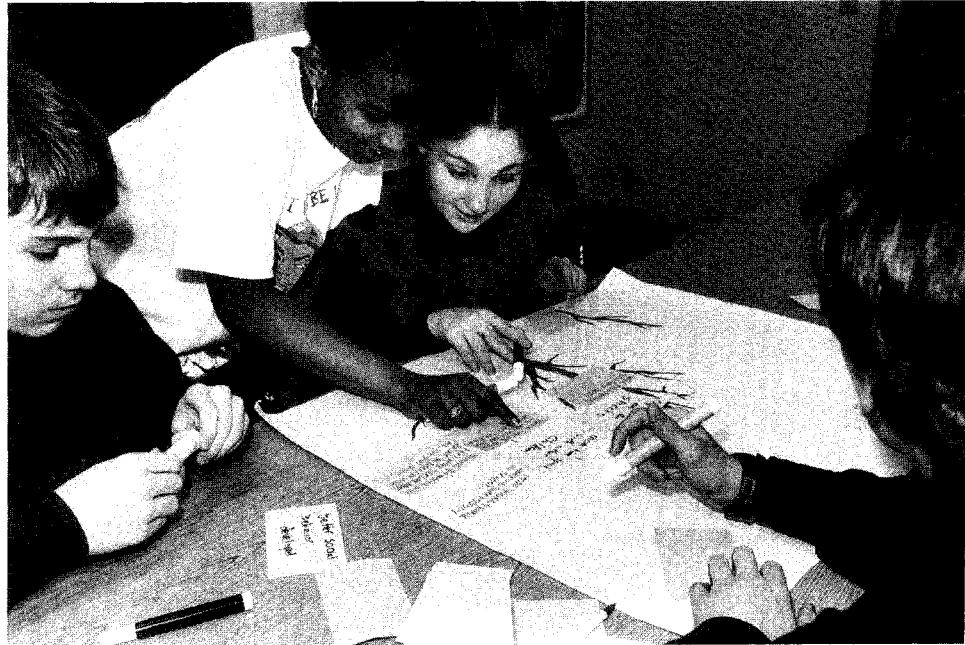
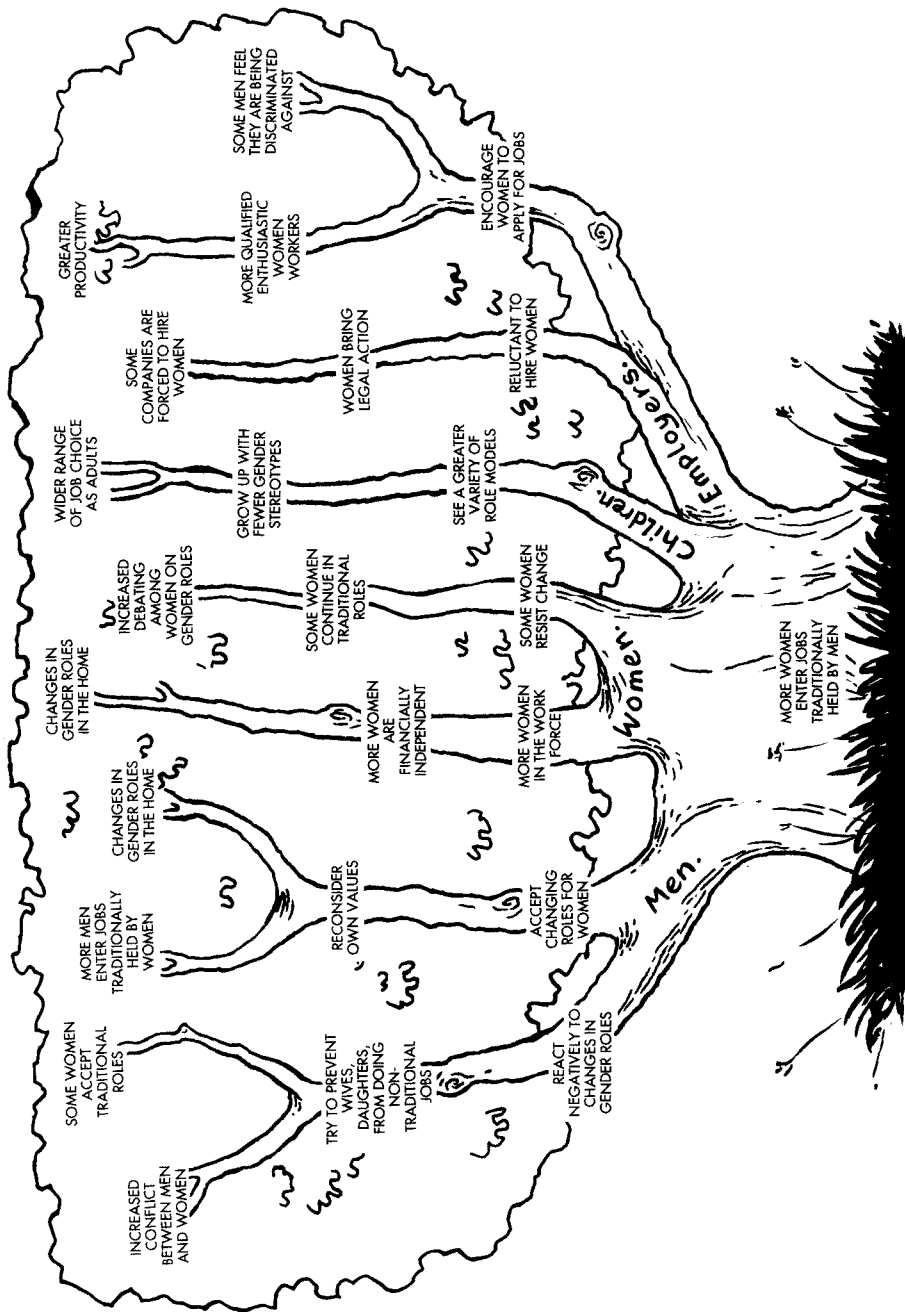*Anticipating the effects of change with a* Futures tree

VARIATIONS

1 Small groups are assigned only *one* branch of the tree (women, men, children or employers, in the example) to work on. Groups can then combine their work to make one large collaborative planning tree.

2 The number of branches on the tree need not be limited to four.

3 If index cards are in short supply, young people simply draw the consequences on to the large paper.

FOLLOW-UP

1 The futures tree can extend indefinitely beyond three levels of consequences.

2 Students select an article from a newspaper and create a short-term **Futures tree** around it. They then follow the outcome of the event, and compare it to their futures tree to see how accurate their predictions were, and why.

3 Students can use a futures tree to help them plan an action project that they will carry out. A description of the project is placed on the trunk of the tree, and the impact of the project on various groups of people charted.

IN THE CURRICULUM

The activity requires skills in analysis, divergent thinking, anticipating consequences and sequencing. It can be used in a history class to examine the impact of a particular event. It could also be used in literature to examine the ramifications of events in literature. It would be useful in science classes for examining the impact of new inventions or technologies.

Futures tree – an example