Predicting the future – fact or fiction?

A Cambridge Global Perspectives® Challenge

Skill focus: Evaluation	**Stage:** 8	**Age:** 12–13	**Topic:** Digital world

Learning objectives	Success criteria
Evaluation	
Evaluate sources, considering the author and purpose, recognising that some sources may be biased	Learners evaluate sources and statistical data about the growth of the internet when looking at trends in internet usage, showing awareness of anomalies in the information they find
Analysis	
Explain causes of a local or global issue and consequences on others	Learners use the outcomes of research on current trends in an aspect of technology to explain the implications of technological change for learning in schools in the future
Communication	
Present information and arguments clearly with some reasoning, referencing sources where appropriate	Learners depict possible futures for schools and society in the light of their findings on current trends in developments in technology

Challenge summary
By the end of this Challenge, learners will have developed their evaluation skills by comparing film and media and statistical material as evidence for predicting the future. They will develop their analytical skills in the context of explaining the consequences of technological change and clearly communicate their ideas about the impact of technology on the future of schools and society.

Challenge resources

- Teaching resources available from the Online Learning Area
- Video clips from science fiction films/series depicting the future, and contrasting visions of the future
- Sources and statistical data about the growth of the internet
- Sources about the effect of technology on learning (optional)
- Sticky labels and flipchart (optional)

- Internet access for research
- Creative materials/software tools for presenting designs
- Device for taking photographs
- Plan or diagram of a school
- Structure/exemplar to support creative writing activity

Activities (sequence)

How are computers and digital technology changing?

Learners watch several suitable clips from science fiction depicting the future, for example early 1960s/1970s editions of the science fiction series 'Star Trek' (Teacher Resource – Predicting the future T8.1). They identify examples of technology in the clips that were:

- not invented when the programme was made but are widely available now e.g. mobile telephones; personal computers
- not invented when the programme was made and not yet invented e.g. transporters; scanning devices for the body.

Lead a class discussion to illustrate:

- the power of science fiction and literature to imagine and predict the future based on trends in science and technology
- the rapidity of developments in technology and their potential to change our lives.

Show learners clips from science fiction films or other media which portray contrasting visions of the future – good and bad, utopian and dystopian. Use these alternative visions to illustrate that technology may have benefits and dangers and that different groups of people view the impact of technological change in different ways e.g. for progress or harm.

Possible extension activities:

- Discuss the value of science fiction and the arts as evidence for making predictions about the future. Some useful support material may be found at www.bbc.co.uk/archive/tomorrowsworld/

How do I use computers and technology in everyday life?

Lead a class discussion of learners' experience of using the internet.

In small groups learners survey the class (and possibly other learners) about:

- how many times they use the internet each day
- where they use the internet and how it is accessed (computer, mobile/cell phone, TV etc.)
- what they use the internet for
- how much time they use the internet per day, week and year (Learner Resource – Predicting the future L8.2).

Small group and whole class discussion of the results of the survey. Questions for consideration:

- What are the main uses of the internet?
- Are learners using the internet more?
- Is internet usage likely to grow? Why is internet usage growing so fast?
- What are the main benefits of the internet?
- Are the results typical of the wider population?

What are the worldwide trends in internet usage?

Learners in pairs carry out analysis of sources and statistical data about the growth of the internet provided by the teacher.

Learners use the information to summarise worldwide trends in internet usage. They should summarise the information individually in a structured way using graphs and diagrams.

Lead a discussion of the findings of the analysis of sources and statistical data. Key questions for consideration:

- What are the main trends in internet usage?
- Which groups of people have the most and least usage? Why?
- What are the reasons for the accelerating growth of internet usage?

Lead a discussion on the reliability of different types of information as evidence, and whether the learners found anomalies in the information from different sources. Key question:

- Which type of information is the most reliable as evidence for predicting the future – film and media, survey by learners or statistical material from research?

Does the use of computers and digital technology affect learning?

Introduce the activity, explaining that many claims have been made for the internet and learning, both positive and negative. Learners suggest aspects of learning which may be affected by the internet. You could support this activity using sources that explore this issue. Key questions for discussion:

- How might the internet help learning?
- How might the internet restrict learning?

If learners require additional support, this discussion could begin with small group activity in which learners write their initial ideas onto sticky labels and post these onto a flipchart table.

Will computers and technology change learning in schools?

Learners explore how internet and other digital technologies may shape learning and education in the future. The challenge is to design a school for the future based on internet and other related digital technologies. To stimulate learners' interest, show several video clips and provide different 'images' or 'visions' of the future of schools based on local availability and interests (Teacher Resource – Predicting the future T8.3).

Learners in groups design a school for the future. They should use internet research into different visions of the future of schools as part of the design exercise. Learners should answer the following questions during the preparatory research:

- What are the main trends in the internet and digital technology taking place today?
- How will these trends affect what and how children learn?

Learners produce an outline design of a school for the future, thinking about the following aspects:

- buildings, facilities and resources
- learning inside school, at home and in the wider community
- what staff will be needed – teachers, technicians and others
- the best way for students to develop skills
- the subjects students should study
- how students might develop personal qualities and character.

Learners may present the design in whatever way is suitable. Encourage them to be imaginative using plans, pictures, models and diagrams. Learners should create a name and design a logo that symbolises the character of the school. A possible title: 'Looking Forward to Change – A School for the Future'.

Learners present their designs to the class or another appropriate audience. They should explain the reasons for their design decisions. The designs should be evaluated either by peer or teacher assessment. Learners needing extra support could be given a plan or diagram of a school to label with their ideas about how technology will be used in the learning in the future.

Each learner reflects on their own learning and produces a written summary of the design, photographs of plans or models if appropriate, and a full explanation. This should include the main features of the school design and how it will support learning using internet and digital technologies.

What are the main trends in the development of technology? How is technology likely to affect us in the future?

Introduce the issue: How are new technologies likely to develop and affect us in the future?

Learners carry out internet research in pairs – each pair researches current trends in a specific aspect of technology of their choice, in order to make predictions about the development of the technology and possible future uses. The areas of technology to choose from could be: bio-technology; robotics; artificial intelligence; medical technology; communications; technology; and the arts.

Key questions for research:

- What is the new technology?
- How is the technology developing?
- How can the new technology be used?
- How will it affect our lives in the future?
- Are there any possible dangers in the new technology?
- How reliable are predictions about the future based on internet research?

Learners record the information they gather to use in the writing activity below.

Learners write their ideas about how technology will affect the future. Their writing should include relevant information. The writing could take different forms depending on personal choice and local priorities. Learners needing extra support could be given a structure or scaffold to follow, perhaps using a simple exemplar.

Resources – available from the Online Learning Area

Teacher Resource – Predicting the future T8.1
Teacher Resource – Predicting the future T8.3

Learner Resource – Predicting the future L8.2

Personal	Local	Global

This Global Perspectives Challenge has been designed to be flexible and should be adapted to school requirements and the needs of your learners. Further guidance and support for planning is given in the Teacher Guide.