

1. Bài tập 1

MAU PIALUG, OCEAN NAVIGATOR

Mau sailed from Hawaii to Tahiti using traditional methods.

In early 1976, Mau Pialug, a fisherman, led an expedition in which he sailed a traditional Polynesian boat across 2,500 miles of ocean from Hawaii to Tahiti. The Polynesian Voyaging Society had organised the expedition. Its purpose was to find out if seafarers in the distant past could have found their way from one island to the other without navigational instruments, or whether the islands had been populated by accident. At the time, Mau was the only man alive who knew how to navigate just by observing the stars, the wind and the sea. He had never before sailed to Tahiti, which was a long way to the south. However, he understood how the wind and the sea behave around islands, so he was confident he could find his way. The voyage took him and his crew a month to complete and he did it without a compass or charts.

His grandfather began the task of teaching him how to navigate when he was still a baby. He showed him pools of water on the beach to teach him how the behaviour of the waves and wind changed in different places. Later, Mau used a circle of stones to memorise the positions of the stars. Each stone was laid out in the sand to represent a star.

The voyage proved that Hawaii's first inhabitants came in small boats and navigated by reading the sea and the stars. Mau himself became a keen teacher, passing on his traditional secrets to people of other cultures so that his knowledge would not be lost. He explained the positions of the stars to his students, but he allowed them to write things down because he knew they would never be able to remember everything as he had done.

Do the following statements agree with the information in the text? Write:

TRUE if the statement agrees with the text

FALSE if the statement does not agree with the text

NOT GIVEN if there is no information about this in the text

1. At the time of his voyage, Mau had unique navigational skills.
2. Mau was familiar with the sea around Tahiti.
3. Mau thought it would be difficult to use a compass and charts.
4. Mau's grandfather was his only teacher.
5. Mau used stones to learn where each star was situated in the sky.
6. The first inhabitants of Hawaii could read and write.
7. Mau expected his students to memorise the positions of the stars.

2. Bài tập 2

INVESTIGATING A CRIME SCENE

Assessing the scene

On arrival, the police officer's first job is to carry out an initial assessment of the scene. If they are at first unsure whether or not a crime has taken place, it's best to assume that it has. Valuable time and evidence in the investigation could be lost otherwise. First they must deal with anyone at the scene needing medical help. Any other people present at the scene must be kept apart, as they may be eyewitnesses or suspects. Witnesses at crime scenes are not allowed to talk to each other. A person's perception of what happened can get distorted during conversation.

The police officer then calls for a Scene of Crime Officer (SOCO).

Preserving the scene

When the SOCO arrives at the crime scene, they put on a full protective body suit, gloves, a mask, and plastic overshoes. Without this, the SOCO's skin cells, hair, fibres, fingerprints or shoeprints could be added to the crime scene.

Recording the scene

The SOCO must produce a permanent record of the crime scene, using detailed written notes, sketches, photographs and videos. It is essential that the original position of items at the scene is recorded. Some biological and chemical evidence may quickly deteriorate. Other evidence may be very fragile, and might be destroyed as the SOCO tries to recover it. Other evidence from the scene of crime will be sent to the forensic lab for analysis.

Photographing the scene

When photographing a crime scene, the SOCO follows four rules:

1. Photograph the whole crime scene.
2. Photograph each item at the scene before doing anything to it.
3. Add a scale and photograph the item again.
4. After collecting trace evidence from the item, or removing it for analysis, photograph the same part of the crime scene again.

The search for evidence

Any evidence at the crime scene may turn out to be important at some stage in the investigation, so it's important that the team's search is thorough and systematic.

- Some of the evidence, such as a cigarette butt, may be immediately obvious to the SOCO.
- Some of the evidence, such as fibres, may be present in very small amounts. This is called trace evidence.
- Other evidence, such as fingerprints, may be invisible to the naked eye, and special techniques are needed to reveal it.
- Some evidence may have been damaged, for example burnt. Special procedures are then needed.

Storing the evidence P2

Each item of evidence must be packaged separately, labelled and sealed before it is stored. Small items, such as hairs, fibres, glass fragments and paint, are put into plastic bags or bottles and sealed. Clothing and shoes are put into paper sacks. Evidence must be stored in secure facilities. Most types of

evidence are kept in cool, dry rooms. Biological samples are refrigerated or frozen to prevent their decay.

Using the evidence in a criminal investigation

SOCOs must always use standard methods to process evidence. Only then will it provide valid information that can be used, or be admissible, in court. If fingerprint and DNA evidence are absent, incomplete or damaged, other types of evidence may be very important in solving the crime. The way in which the SOCO team searches for, collects, packages and stores such evidence is important in preserving it. Badly preserved evidence may not provide useful information for the investigation and may not be admissible in court.

Do the following statements agree with the information in the text? Write:

TRUE if the text confirms the statement

FALSE if the text contradicts the statement

NOT GIVEN if it is impossible to know from the text

1. The police may ask the people who are at the crime scene to wait together until they can talk to them.
2. SOCOs are not normally first at a crime scene.
3. Sometimes hair, skin cells, etc. from a SOCO are left at the crime scene, even though they wear protection to try to stop this.
4. Every item at a crime scene is photographed five times.
5. Fibres are an example of trace evidence.
6. If evidence is burnt, it cannot be dealt with.
7. A SOCOs job is to help get good evidence to court.
8. SOCOs may have to go to court to provide evidence.

3. Bài tập 3

AUSTRALIAN CULTURE AND CULTURE SHOCK

By Anna Jones and Xuan Quach

Sometimes work, study or a sense of adventure take us out of our familiar surroundings to go and live in a different culture. The experience can be difficult, even shocking.

Almost everyone who studies, lives or works abroad has problems adjusting to a new culture. This response is commonly referred to as 'culture shock'. Culture shock can be defined as 'the physical and emotional discomfort a person experiences when entering a culture different from their own' (Weaver, 1993).

For people moving to Australia, Price (2001) has identified certain values which may give rise to culture shock. Firstly, he argues that Australians place a high value on independence and personal choice. This means that a teacher or course tutor will not tell students what to do, but will give them a number of options and suggest they work out which one is the best in their circumstances. It also means that they are expected to take action if something goes wrong and seek out resources and support for themselves.

Australians are also prepared to accept a range of opinions rather than believing there is one truth. This means that in an educational setting, students will be expected to form their own opinions and defend the reasons for that point of view and the evidence for it.

Price also comments that Australians are uncomfortable with differences in status and hence idealise the idea of treating everyone equally. An illustration of this is that most adult Australians call each other by their first names. This

concern with equality means that Australians are uncomfortable taking anything too seriously and are even ready to joke about themselves. Australians believe that life should have a balance between work and leisure time. As a consequence, some students may be critical of others who they perceive as doing nothing but study.

Australian notions of privacy mean that areas such as financial matters, appearance and relationships are only discussed with close friends. While people may volunteer such information, they may resent someone actually asking them unless the friendship is firmly established. Even then, it is considered very impolite to ask someone what they earn. With older people, it is also rude to ask how old they are, why they are not married or why they do not have children. It is also impolite to ask people how much they have paid for something, unless there is a very good reason for asking.

Kohls (1996) describes culture shock as a process of change marked by four basic stages. During the first stage, the new arrival is excited to be in a new place, so this is often referred to as the "honeymoon" stage. Like a tourist, they are intrigued by all the new sights and sounds, new smells and tastes of their surroundings. They may have some problems, but usually they accept them as just part of the novelty. At this point, it is the similarities that stand out, and it seems to the newcomer that people everywhere and their way of life are very much alike. This period of euphoria may last from a couple of weeks to a month, but the letdown is inevitable.

During the second stage, known as the 'rejection' stage, the newcomer starts to experience difficulties due to the differences between the new culture and the way they were accustomed to living. The initial enthusiasm turns into irritation, frustration, anger and depression, and these feelings may have the effect of people rejecting the new culture so that they notice only the things that

cause them trouble, which they then complain about. In addition, they may feel homesick, bored, withdrawn and irritable during this period as well. Fortunately, most people gradually learn to adapt to the new culture and move on to the third stage, known as 'adjustment and reorientation'. During this stage a transition occurs to a new optimistic attitude. As the newcomer begins to understand more of the new culture, they are able to interpret some of the subtle cultural clues which passed by unnoticed earlier. Now things make more sense and the culture seems more familiar. As a result, they begin to develop problem-solving skills, and feelings of disorientation and anxiety no longer affect them. In Kohls's model, in the fourth stage, newcomers undergo a process of adaptation. They have settled into the new culture, and this results in a feeling of direction and self-confidence. They have accepted the new food, drinks, habits and customs and may even find themselves enjoying some of the very customs that bothered them so much previously. In addition, they realise that the new culture has good and bad things to offer and that no way is really better than another, just different.

Adapted from Intercultural Communication for Students in the Faculty of Economics and Commerce, University of Melbourne



Do the following statements agree with the information given in the reading passage? Write:

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

1. Australian teachers will suggest alternatives to students rather than offer one solution.
2. In Australia, teachers will show interest in students' personal circumstances.
3. Australians use people's first names so that everyone feels their status is similar.
4. Students who study all the time may receive positive comments from their colleagues.
5. It is acceptable to discuss financial issues with people you do not know well.
6. Younger Australians tend to be friendlier than older Australians.

4. Bài tập 4

THE WORLD WIDE WEB FROM ITS ORIGINS

Science inspired the World Wide Web, and the Web has responded by changing science.

'Information Management: A Proposal'. That was the bland title of a document written in March 1989 by a then little-known computer scientist called Tim Berners-Lee, who was working at CERN, Europe's particle physics laboratory, near Geneva. His proposal, modestly called the World Wide Web, has achieved far more than anyone expected at the time.

In fact, the Web was invented to deal with a specific problem. In the late 1980s, CERN was planning one of the most ambitious scientific projects ever, the Large Hadron Collider*, or LHC. As the first few lines of the original proposal put it, 'Many of the discussions of the future at CERN and the LHC end with the question "Yes, but how will we ever keep track of such a large project?" This proposal provides an answer to such questions.

The Web, as everyone now knows, has many more uses than the original idea of linking electronic documents about particle physics in laboratories around the world. But among all the changes it has brought about, from personal social networks to political campaigning, it has also transformed the business of doing science itself, as the man who invented it hoped it would.

It allows journals to be published online and links to be made from one paper to another. It also permits professional scientists to recruit thousands of amateurs to give them a hand. One project of this type, called GalaxyZoo, used these unpaid workers to classify one million images of galaxies into various types (spiral, elliptical and irregular). This project, which was intended to help

astronomers understand how galaxies evolve, was so successful that a successor has now been launched, to classify the brightest quarter of a million of them in finer detail. People working for a more modest project called Herbaria@home examine scanned images of handwritten notes about old plants stored in British museums. This will allow them to track the changes in the distribution of species in response to climate change.

Another new scientific application of the Web is to use it as an experimental laboratory. It is allowing social scientists, in particular, to do things that were previously impossible. In one project, scientists made observations about the sizes of human social networks using data from Facebook. A second investigation of these networks, produced by Bernardo Huberman of HP Labs, Hewlett-Packard's research arm in Palo Alto, California, looked at Twitter, a social networking website that allows people to post short messages to long lists of friends.

At first glance, the networks seemed enormous - the 300,000 Twitterers sampled had 80 friends each, on average (those on Facebook had 120), but some listed up to 1,000. Closer statistical inspection, however, revealed that the majority of the messages were directed at a few specific friends. This showed that an individual's active social network is far smaller than his 'clan'. Dr Huberman has also helped uncover several laws of web surfing, including the number of times an average person will go from web page to web page on a given site before giving up, and the details of the 'winner takes all' phenomenon, whereby a few sites on a given subject attract most of the attention, and the rest get very little.

Scientists have been good at using the Web to carry out research. However, they have not been so effective at employing the latest web-based social-networking tools to open up scientific discussion and encourage more effective

collaboration.

Journalists are now used to having their articles commented on by dozens of readers. Indeed, many bloggers develop and refine their essays as a result of these comments. Yet although people have tried to have scientific research reviewed in the same way, most researchers only accept reviews from a few anonymous experts. When Nature, one of the world's most respected scientific journals, experimented with open peer review in 2006, the results were disappointing. Only 5% of the authors it spoke to agreed to have their article posted for review on the Web - and their instinct turned out to be right, because almost half of the papers attracted no comments. Michael Nielsen, an expert on quantum computers, belongs to a new wave of scientist bloggers who want to change this. He thinks the reason for the lack of comments is that potential reviewers lack incentive.

adapted from The Economist

* The Large Hadron Collider (LHC) is the world's largest particle accelerator and collides particle beams. It provides information on fundamental questions of physics.

Do the following statements agree with the information given in the reading passage? Write:

- TRUE** if the statement agrees with the information
FALSE if the statement contradicts the information
NOT GIVEN if there is no information on this

1. Tim Berners-Lee was famous for his research in physics before he invented the World Wide Web.
2. The original intention of the Web was to help manage one extremely complex project.
3. Tim Berners-Lee has also been active in politics.
4. The Web has allowed professional and amateur scientists to work together.
5. The second galaxy project aims to examine more galaxies than the first.
6. Herbaria@home's work will help to reduce the effects of climate change.

5. Bài tập 5

THE WAY THE BRAIN BUYS

Supermarkets take great care over the way the goods they sell are arranged. This is because they know a lot about how to persuade people to buy things.

When you enter a supermarket, it takes some time for the mind to get into a shopping mode. This is why the area immediately inside the entrance of a supermarket is known as the 'decompression zone'. People need to slow down and take stock of the surroundings, even if they are regulars. Supermarkets do not expect to sell much here, so it tends to be used more for promotion. So the large items piled up here are designed to suggest that there are bargains further inside the store, and shoppers are not necessarily expected to buy them. Walmart, the world's biggest retailer, famously employs 'greeters' at the entrance to its stores. A friendly welcome is said to cut shoplifting. It is harder to steal from nice people.

Immediately to the left in many supermarkets is a 'chill zone', where customers can enjoy browsing magazines, books and DVDs. This is intended to tempt unplanned purchases and slow customers down. But people who just want to do their shopping quickly will keep walking ahead, and the first thing they come to is the fresh fruit and vegetables section. However, for shoppers, this makes no sense. Fruit and vegetables can be easily damaged, so they should be bought at the end, not the beginning, of a shopping trip. But psychology is at work here: selecting these items makes people feel good, so they feel less guilty about reaching for less healthy food later on.

Shoppers already know that everyday items, like milk, are invariably placed towards the back of a store to provide more opportunity to tempt customers to buy things which are not on their shopping list. This is why pharmacies are also

generally at the back. But supermarkets know shoppers know this, so they use other tricks, like placing popular items halfway along a section so that people have to walk all along the aisle looking for them. The idea is to boost 'dwell time': the length of time people spend in a store.

Having walked to the end of the fruit-and-vegetable aisle, shoppers arrive at counters of prepared food, the fishmonger, the butcher and the deli. Then there is the in-store bakery, which can be smelt before it is seen. Even small supermarkets now use in store bakeries. Mostly these bake pre-prepared items and frozen ingredients which have been delivered to the supermarket previously, and their numbers have increased, even though central bakeries that deliver to a number of stores are much more efficient. They do it for the smell of freshly baked bread, which arouses people's appetites and thus encourages them to purchase not just bread but also other food, including ready meals.

Retailers and producers talk a lot about the 'moment of truth'. This is not a philosophical idea, but the point when people standing in the aisle decide to buy something and reach to get it. At the instant coffee section, for example, branded products from the big producers are arranged at eye level while cheaper ones are lower down, along with the supermarket's own label products. But shelf positioning is fiercely fought over, not just by those trying to sell goods, but also by those arguing over how best to manipulate shoppers. While many stores reckon eye level is the top spot, some think a little higher is better. Others think goods displayed at the end of aisles sell the most because they have the greatest visibility. To be on the right-hand side of an eye-level selection is often considered the very best place, because most people are right-handed and most people's eyes drift rightwards. Some supermarkets reserve that for their most expensive own-label goods.

Scott Bearse, a retail expert with Deloitte Consulting in Boston, Massachusetts, has led projects observing and questioning tens of thousands of customers about how they feel about shopping. People say they leave shops empty-handed more often because they are 'unable to decide' than because prices are too high, says Mr Bearse. Getting customers to try something is one of the best ways of getting them to buy, adds Mr Bearse. Deloitte found that customers who use fitting rooms in order to try on clothes buy the product they are considering at a rate of 85% compared with 58% for those that do not do so. Often a customer struggling to decide which of two items is best ends up not buying either. In order to avoid a situation where a customer decides not to buy either product, a third 'decoy' item, which is not quite as good as the other two, is placed beside them to make the choice easier and more pleasurable. Happier customers are more likely to buy.

Do the following statements agree with the information given in the reading passage? Write:

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

1. The 'greeters' at Walmart increase sales.
2. People feel better about their shopping if they buy fruit and vegetables before they buy other food.
3. In-store bakeries produce a wider range of products than central bakeries.
4. Supermarkets find right-handed people easier to persuade than left-handed people.
5. The most frequent reason for leaving shops without buying something is price.
6. 'Decoy' items are products which the store expects customers to choose.

6. Bài tập 6

THE MIT FACTOR: CELEBRATING 150 YEARS OF MAVERICK GENIUS

by Ed Pilkington

*The Massachusetts Institute of Technology has led the world into the future
for 150 years with scientific innovations.*

The musician Yo-Yo Ma's cello may not be the obvious starting point for a journey into one of the world's great universities. But, as you quickly realise when you step inside the Massachusetts Institute of Technology, there's precious little going on that you would normally see on a university campus. The cello, resting in a corner of MIT's celebrated media laboratory — a hub of creativity — looks like any other electric classical instrument. But it is much more. Machover, the composer, teacher and inventor responsible for its creation, calls it a 'hyperinstrument', a sort of thinking machine that allows Ma and his cello to interact with one another and make music together. 'The aim is to build an instrument worthy of a great musician like Yo-Yo Ma that can understand what he is trying to do and respond to it,' Machover says. The cello has numerous sensors across its body and by measuring the pressure, speed and angle of the virtuoso's performance it can interpret his mood and engage with it, producing extraordinary new sounds. The virtuoso cellist frequently performs on the instrument as he tours around the world. Machover's passion for pushing at the boundaries of the existing world to extend and unleash human potential is not a bad description of MIT as a whole. This unusual community brings highly gifted, highly motivated individuals

together from a vast range of disciplines, united by a common desire: to leap into the dark and reach for the unknown.

The result of that single unifying ambition is visible all around. For the past 150 years, MIT has been leading the world into the future. The discoveries of its teachers and students have become the common everyday objects that we now all take for granted. The telephone, electromagnets, radars, high-speed photography, office photocopiers, cancer treatments, pocket calculators, computers, the Internet, the decoding of the human genome, lasers, space travel ... the list of innovations that involved essential contributions from MIT and its faculty goes on and on.

From the moment MIT was founded by William Barton Rogers in 1861, it was clear what it was not. While Harvard stuck to the English model of a classical education, with its emphasis on Latin and Greek, MIT looked to the German system of learning based on research and hands-on experimentation. Knowledge was at a premium, but it had to be useful. This down-to-earth quality is enshrined in the school motto, *Mens et manus* - Mind and hand - as well as its logo, which shows a gowned scholar standing beside an ironmonger bearing a hammer and anvil. That symbiosis of intellect and craftsmanship still suffuses the institute's classrooms, where students are not so much taught as engaged and inspired.

Take Christopher Merrill, 21, a third-year undergraduate in computer science. He is spending most of his time on a competition set in his robotics class. The contest is to see which student can most effectively program a robot to build a house out of blocks in under ten minutes. Merrill says he could have gone for the easiest route - designing a simple robot that would build the house quickly. But he wanted to try to master an area of robotics that remains unconquered —

adaptability, the ability of the robot to rethink its plans as the environment around it changes, as would a human.

'I like to take on things that have never been done before rather than to work in an iterative way just making small steps forward,' he explains. Merrill is already planning the start-up he wants to set up when he graduates in a year's time. He has an idea for an original version of a contact lens that would augment reality by allowing consumers to see additional visual information. He is fearful that he might be just too late in taking his concept to market, as he has heard that a Silicon Valley firm is already developing something similar. As such, he might become one of many MIT graduates who go on to form companies that fail. Alternatively, he might become one of those who go on to succeed in spectacular fashion. And there are many of them. A survey of living MIT alumni* found that they have formed 25,800 companies, employing more than three million people, including about a quarter of the workforce of Silicon Valley. What MIT delights in is taking brilliant minds from around the world in vastly diverse disciplines and putting them together. You can see that in its sparkling new David Koch Institute for Integrative Cancer Research, which brings scientists, engineers and clinicians under one roof. Or in its Energy Initiative, which acts as a bridge for MIT's combined work across all its five schools, channelling huge resources into the search for a solution to global warming. It works to improve the efficiency of existing energy sources, including nuclear power. It is also forging ahead with alternative energies from solar to wind and geothermal, and has recently developed the use of viruses to synthesise batteries that could prove crucial in the advancement of electric cars.

In the words of Tim Berners-Lee, the Briton who invented the World Wide Web, 'It's not just another university. Even though I spend my time with my head

buried in the details of web technology, the nice thing is that when I do walk the corridors, I bump into people who are working in other fields with their students that are fascinating, and that keeps me intellectually alive.'

adapted from the Guardian

* people who have left a university or college after completing their studies there

Do the following statements agree with the information in the reading passage? Write:

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

1. The activities going on at the MIT campus are like those at any other university.
2. Harvard and MIT shared a similar approach to education when they were founded.
3. The school motto was suggested by a former MIT student.
4. MIT's logo reflects the belief that intellect and craftsmanship go together.
5. Silicon Valley companies pay higher salaries to graduates from MIT.

7. Bài tập 7

HISTORY OF THE POSTER

The appearance of the poster has changed continuously over the past two centuries.

The first posters were known as 'broad sides' and were used for public and commercial announcements. Printed on one side only using metal type, they were quickly and crudely produced in large quantities. As they were meant to be read at a distance, they required large lettering.

There were a number of negative aspects of large metal type. It was expensive, required a large amount of storage space and was extremely heavy. If a printer did have a collection of large metal type, it was likely that there were not enough letters. So printers did their best by mixing and matching styles.

Commercial pressure for large type was answered with the invention of a system for wood type production. In 1827, Darius Wells invented a special wood drill - the lateral router - capable of cutting letters on wood blocks. The router was used in combination with William Leavenworth's pantograph (1834) to create decorative wooden letters of all shapes and sizes. The first posters began to appear, but they had little colour and design; often wooden type was mixed with metal type in a conglomeration of styles.

A major development in poster design was the application of lithography, invented by Alois Senefelder in 1796, which allowed artists to hand-draw letters, opening the field of type design to endless styles. The method involved drawing with a greasy crayon onto finely surfaced Bavarian limestone and offsetting that image onto paper. This direct process captured the artist's true intention; however, the final printed image was in reverse. The images and lettering

needed to be drawn backwards, often reflected in a mirror or traced on transfer paper.

As a result of this technical difficulty, the invention of the lithographic process had little impact on posters until the 1860s, when Jules Cheret came up with his 'three-stone lithographic process'. This gave artists the opportunity to experiment with a wide spectrum of colours. Although the process was difficult, the result was remarkable, with nuances of colour impossible in other media even to this day. The ability to mix words and images in such an attractive and economical format finally made the lithographic poster a powerful innovation.

Starting in the 1870s, posters became the main vehicle for advertising prior to the magazine era and the dominant means of mass communication in the rapidly growing cities of Europe and America. Yet in the streets of Paris, Milan and Berlin, these artistic prints were so popular that they were stolen off walls almost as soon as they were hung. Cheret, later known as 'the father of the modern poster', organised the first exhibition of posters in 1884 and two years later published the first book on poster art. He quickly took advantage of the public interest by arranging for artists to create posters, at a reduced size, that were suitable for in-home display.

Thanks to Cheret, the poster slowly took hold in other countries in the 1890s and came to celebrate each society's unique cultural institutions: the cafe in France, the opera and fashion in Italy, festivals in Spain, literature in Holland and trade fairs in Germany. The first poster shows were held in Great Britain and Italy in 1894, Germany in 1896 and Russia in 1897. The most important poster show ever, to many observers, was held in Reims, France, in 1896 and featured an unbelievable 1,690 posters arranged by country.

In the early 20th century, the poster continued to play a large communication role and to go through a range of styles. By the 1950s, however, it had begun to share the spotlight with other media, mainly radio and print. By this time, most

posters were printed using the mass production technique of photo offset, which resulted in the familiar dot pattern seen in newspapers and magazines. In addition, the use of photography in posters, begun in Russia in the twenties, started to become as common as illustration.

In the late fifties, a new graphic style that had strong reliance on typographic elements in black and white appeared. The new style came to be known as the International Typographic Style. It made use of a mathematical grid, strict graphic rules and black-and-white photography to provide a clear and logical structure. It became the predominant style in the world in the 1970s and continues to exert its influence today.

It was perfectly suited to the increasingly international post-war marketplace, where there was a strong demand for clarity. This meant that the accessibility of words and symbols had to be taken into account. Corporations wanted international identification, and events such as the Olympics called for universal solutions, which the Typographic Style could provide.

However, the International Typographic Style began to lose its energy in the late 1970s. Many criticised it for being cold, formal and dogmatic. A young teacher in Basel, Wolfgang Weingart, experimented with the offset printing process to produce posters that appeared complex and chaotic, playful and spontaneous - all in stark contrast to what had gone before. Weingart's liberation of typography was an important foundation for several new styles.

These ranged from Memphis and Retro to the advances now being made in computer graphics.

Adapted from www.internationalposter.com

Do the following statements agree with the information in the reading passage? Write:

- TRUE** if the statement agrees with the information
FALSE if the statement contradicts the information
NOT GIVEN if there is no information on this

1. By the 1950s, photographs were more widely seen than artists' illustrations on posters.
2. Features of the Typographic Style can be seen in modern-day posters.
3. The Typographic Style met a global need at a particular time in history.
4. Weingart got many of his ideas from his students in Basel.

8. Bài tập 8

MAKING A CHANGE

How easy is it for us to change our lives - and why?

In 1990, a young American named Christopher McCandless gave up his career plans, left behind everyone he knew, including his family, and went off on an adventure. He was 22 at the time. In an act of kindness, he donated all his savings to the famous charity, Oxfam International, and hitchhiked his way through America to Alaska. His decisions were so unusual for his age that Jon Krakauer wrote a book about them called *Into the Wild*, and Sean Penn directed a film that had the same title.

Of course, this is an unusual story. Most college graduates would not do quite the same thing. However, studies do show that in teenage years, people are more likely to try out new experiences. Instead of following the family career path, for example, and working his way up the same organisation like his grandfather did, a 15-year-old may dream about becoming a traveller - only to find in his early 20s that this fascination with new places is declining and change is less attractive. This age-related trend can be observed in all cultures. The reason why people all over the world become less keen to change as they get older may be because people's lives generally follow similar patterns and involve similar demands. Most people, wherever they are, aim to find a job and a partner. As they get older, they may have young children to look after and possibly elderly family members. These responsibilities cannot be achieved without some degree of consistency, which means that new experiences and ideas may not have a place in the person's life. New experiences may bring excitement but also insecurity, and so most people prefer to stay with the familiar.

However, not every individual is the same. One toddler may want to play a different game every day and get fed up if nothing changes at the nursery. Another may seek out and play with the same children and toys on every visit. Young children who avoid new experiences will grow up to be more conventional than others. Psychologists argue that those who have more open personalities as children are more open than others might be when they are older. They also suggest that young men have a greater interest in novelty than women, although, as they age, this desire for new experiences fades more quickly than it does in women.

The truth is that, as we get older, we prefer the things we know. We tend to order the same meals in restaurants, sit on the same side of the train when we commute to work, go on holiday to the same places and construct our day in the same way. If you are older than 20, remember that your openness to new experiences is slowly declining. So you are better off making a new start today than postponing it until later.

Do the following statements agree with the claims of the writer in the reading passage? Write:

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

1. Teenagers are more ready to have new experiences than young adults.
2. Grandparents usually encourage their grandchildren to get a well-paid job.
3. Life demands are different depending on which country you live in.
4. Some toddlers find repetitive activities boring.
5. Children who dislike new experiences become more adventurous than others as adults.
6. If you want to change something in your life, you should avoid delay.

9. Bài tập 9

THE POMPIDOU CENTRE

More than three decades after it was built, the Pompidou Centre in Paris has survived its moment at the edge of architectural fashion and proved itself to be one of the most remarkable buildings of the 20th century.

It was the most outstanding new building constructed in Paris for two generations. It looked like an explosion of brightly coloured service pipes in the calm of the city centre. However, when in 1977 the architects Richard Rogers and Renzo Piano stood among a large crowd of 5,000 at the opening of the Centre Culturel d'Art Georges Pompidou (known as the Pompidou), no one was really aware of the significance of this unusual building. Rogers was only 38 when he and Piano won the competition to design a new cultural centre for Paris in the old market site. Young, unknown architects, they had been chosen from a field of nearly 700 to design one of the most prestigious buildings of its day. After six difficult years, with 25,000 drawings, seven lawsuits, battles over budgets, and a desperate last-minute scramble to finish the building, it had finally been done.

Yet the opening was a downbeat moment. The Pompidou Centre had been rubbished by the critics while it was being built, there was no more work in prospect for the architects, and their partnership had effectively broken down. But this was just a passing crisis. The Centre, which combined the national museum of modern art, exhibition space, a public library and a centre for modern music, proved an enormous success. It attracted six million visitors in its first year, and with its success, the critics swiftly changed their tune. The architects had been driven by the desire for ultimate flexibility, for a building

that would not limit the movement of its users. All the different parts were approached through the same enormous entrance hall and served by the same escalator, which was free to anyone to ride, whether they wanted to visit an exhibition or just admire the view. With all the services at one end of the building, escalators and lifts at the other, and the floors hung on giant steel beams providing uninterrupted space the size of two football pitches, their dream had become a reality.

The image of the Pompidou pervaded popular culture in the 1970s, making appearances everywhere - on record-album covers and a table lamp, and even acting as the set for a James Bond 1 film. This did much to overcome the secretive nature of the architectural culture of its time, as it enabled wider audience to appreciate the style and content of the building and so moved away from the strictly professional view.

The following year, Rogers was commissioned to design a new headquarters for Lloyd's Bank in London and went on to create one of Britain's most dynamic architectural practices. Piano is now among the world's most respected architects. But what of their shared creation?

It was certainly like no previous museum, with its plans for a flexible interior that not only had movable walls but floors that could also be adjusted up or down. This second feature did not in the end survive when the competition drawings were turned into a real building. In other ways, however, the finished building demonstrated a remarkable degree of refinement - of craftsmanship even - in the way the original diagram was transformed into a superbly detailed structure. It was this quality which, according to some critics, suggested that the Pompidou should be seen as closer to the 19th-century engineering tradition than the space age.

Nevertheless, as a model for urban planning, it has proved immensely influential. The Guggenheim in Bilbao* and the many other major landmark projects that were built in the belief that innovatively designed cultural buildings can bring about urban renewal are all following the lead of the Pompidou Centre.

Other buildings may now challenge it for the title of Europe's most outlandish work of architecture. However, more than a quarter of a century later, this construction - it is hard to call it a building when there is no façade, just a lattice of steel beams and pipes and a long external escalator snaking up the outside - still seems extreme.

Today, the Pompidou Centre itself still looks much as it did when it opened. The shock value of its colour-coded plumbing and its structure has not faded with the years. But while traditionalists regarded it as an ugly attack on Paris when it was built, they now see it for what it is - an enormous achievement, technically and conceptually.

*A modern-art museum in Spain designed by the North American architect, Frank O Gehry

Adapted from <http://designmuseum.org>



Questions 9-14

Do the following statements agree with the views of the writer in the reading passage? Write:

YES if the statement agrees with the views of the writer

NO if the statement contradicts the views of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

9. The Pompidou has influenced the way cities are designed.
10. The Guggenheim has been more popular than the Pompidou.
11. The word building fits the Pompidou better than the word construction.
12. The Pompidou's appearance has changed considerably since it opened.
13. Nowadays, the design of the Pompidou fails to shock people.
14. The traditionalist view of the Pompidou has changed over the years.

10. Bài tập 10

WHY DON'T BABIES TALK LIKE ADULTS?

Kids go from 'goo-goo' to talkative one step at a time.

By Joshua Hartshorne

A recent e-trade advertisement shows a baby speaking directly to the camera: 'Look at this,' he says, 'I'm a free man. I go anywhere I want now.' He describes his stock-buying activities, and then his phone rings. This advertisement proves what comedians have known for years: few things are as funny as a baby who talks like an adult. But it also raises an important question: Why don't young children express themselves clearly like adults?

Many people assume children learn to talk by copying what they hear. In other words, they listen to the words adults use and the situations in which they use them and imitate accordingly. Behaviourism, the scientific approach that dominated American cognitive science for the first half of the 20th century, made exactly this argument.

However, this 'copycat' theory can't explain why toddlers aren't as conversational as adults. After all, you never hear literate adults express themselves in one-word sentences like 'bottle' or 'doggie'. In fact, it's easy for scientists to show that a copycat theory of language acquisition can't explain children's first words. What is hard for them to do is to explain these first words, and how they fit into the language acquisition pattern.

Over the past half-century, scientists have settled on two reasonable possibilities. The first of these is called the 'mental-developmental hypothesis'. It states that one-year-olds speak in baby talk because their immature brains

can't handle adult speech. Children don't learn to walk until their bodies are ready. Likewise, they don't speak multi-word sentences or use word endings and function words ('Mummy opened the boxes') before their brains are ready. The second is called the 'stages-of-language hypothesis', which states that the stages of progress in child speech are necessary stages in language development.

A basketball player can't perfect his or her jump shot before learning to (1) jump and (2) shoot. Similarly, children learn to multiply after they have learned to add. This is the order in which children are taught - not the reverse. There's evidence, for instance, that children don't usually begin speaking in two-word sentences until they've learned a certain number of single words. In other words, until they've crossed that linguistic threshold, the word-combination process doesn't get going.

The difference between these theories is this: under the mental-development hypothesis, language learning should depend on the child's age and level of mental development when he or she starts learning a language. Under the stages-of-language hypothesis, however, it shouldn't depend on such patterns, but only on the completion of previous stages.

In 2007, researchers at Harvard University, who were studying the two theories, found a clever way to test them. More than 20,000 internationally adopted children enter the US each year. Many of them no longer hear their birth language after they arrive, and they must learn English more or less the same way infants do - that is, by listening and by trial and error. International adoptees don't take classes or use a dictionary when they are learning their new tongue and most of them don't have a well-developed first language. All of these factors make them an ideal population in which to test these competing hypotheses about how language is learned.

Neuroscientists Jesse Snedeker, Joy Geren and Carissa Shafto studied the language development of 27 children adopted from China between the ages of two and five years. These children began learning English at an older age than US natives and had more mature brains with which to tackle the task. Even so, just as with American-born infants, their first English sentences consisted of single words and were largely bereft of function words, word endings and verbs. The adoptees then went through the same stages as typical American-born children, albeit at a faster clip. The adoptees and native children started combining words in sentences when their vocabulary reached the same sizes, further suggesting that what matters is not how old you are or how mature your brain is, but the number of words you know.

This finding - that having more mature brains did not help the adoptees avoid the toddler-talk stage - suggests that babies speak in babytalk not because they have baby brains, but because they have only just started learning and need time to gain enough vocabulary to be able to expand their conversations. Before long, the one-word stage will give way to the two-word stage and so on. Learning how to chat like an adult is a gradual process.

But this potential answer also raises an even older and more difficult question. Adult immigrants who learn a second language rarely achieve the same proficiency in a foreign language as the average child raised as a native speaker. Researchers have long suspected there is a 'critical period' for language development, after which it cannot proceed with full success to fluency. Yet we still do not understand this critical period or know why it ends.

Adapted from Scientific American: Mind Matters

Do the following statements agree with the claims of the writer in the reading passage? Write:

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

1. People are extremely amused when they see a baby talk like an adult.
2. Behaviourists of the early 20th century argued that children learn to speak by copying adults.
3. Children have more conversations with adults than with other children.
4. Scientists have found it easy to work out why babies use one-word sentences.

11. Bài tập 11

An astonishingly intricate project is being undertaken to restore a legendary theatrical dress, Angela Wintle explains.

On December 28th, 1888, the curtain rose on a daring new stage revival of Shakespeare's Macbeth at the Lyceum Theatre in London. Topping the bill, playing Lady Macbeth, a main character in the play, was Ellen Terry. She was the greatest and most adored English actress of the age. But she didn't achieve this devotion through her acting ability alone. She knew the power of presentation and carefully cultivated her image. That first night was no exception. When she walked on stage for the famous banquet scene, her appearance drew a collective gasp from the audience.

She was dressed in the most extraordinary clothes ever to have graced a British stage: a long, emerald and sea-green gown with tapering sleeves, surmounted by a velvet cloak, which glistened and sparkled eerily in the limelight. Yet this was no mere stage trickery. The effect had been achieved using hundreds of wings from beetles. The gown - later named the 'Beetlewing dress' became one of the most iconic and celebrated costumes of the age.

Terry was every bit as remarkable as her costumes. At 31, she became a leading lady at the Lyceum Theatre and for two decades, she set about bringing culture to the masses. The productions she worked on were extravagant and daring. Shakespeare's plays were staged alongside blood-and-thunder melodramas and their texts were ruthlessly cut. Some people were critical, but they missed the point. The innovations sold tickets and brought new audiences to see masterpieces that they would never otherwise have seen.

However, it was a painter who immortalised her. John Singer Sargent had been so struck by Terry's appearance at that first performance that he asked her to

model for him, and his famous portrait of 1889, now at the Tate Gallery in London, showed her with a glint in her eye, holding a crown over her flame-red hair. But while the painting remains almost as fresh as the day it was painted, the years have not been so kind to the dress. Its delicate structure, combined with the cumulative effects of time, has meant it is now in an extremely fragile condition. Thus, two years ago, a fundraising project was launched by Britain's National Trust¹ to pay for its conservation.

It turned to textile conservator Zenzie Tinker to do the job. Zenzie loves historical dress because of the link with the past. 'Working on costumes like the Beetlewing dress gives you a real sense of the people who wore them; you can see the sweat stains and wear marks. But it's quite unusual to know who actually wore a garment. That's the thing that makes the Beetlewing project so special.'

Before any of Zenzie's conservation work can begin, she and her team will conduct a thorough investigation to help determine what changes have been made to the dress and when. This will involve close examination of the dress for signs of damage and wear, and will be aided by comparing it with John Singer Sargent's painting and contemporary photographs. Then Zenzie and the National Trust will decide how far back to take the reconstruction, as some members feel that even the most recent changes are now part of the history of the dress.

The first stages in the actual restoration will involve delicate surface cleaning, using a small vacuum suction device. Once the level of reconstruction has been determined, the original crocheted² overdress will be stitched onto a dyed net support before repairs begin. It's going to be extraordinarily difficult, because the original doth is quite stretchy, so we've deliberately chosen net because that has a certain amount of flexibility in it too,' says Zenzie. When the dress is displayed, none of our work will be noticeable, but we'll retain all the evidence

on the reverse so that future experts will be able to see exactly what we've done - and I'll produce a detailed report.'

Zenzie has estimated that the project, costing about £30,000, will require more than 700 hours' work. 'It will be a huge undertaking and I don't think the Trust has ever spent quite as much on a costume before,' she says. 'But this dress is unique. It's very unusual to see this level of workmanship on a theatrical costume, and it must have looked spectacular on stage.' If Terry was alive today, there's no doubt she would be delighted. Unlike many other actresses, she valued her costumes because she kept and reused them time and time again. 'I'd like to think she'd see our contribution as part of the ongoing history of the dress,' says Zenzie.

Do the following statements agree with the views of the writer in the reading passage? Write:

YES if the statement agrees with the views of the writer

NO if the statement contradicts the views of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

1. The National Trust conducted useful research to assist Zenzie's plans for the dress.
2. There will be some discussion over the changes that Zenzie's team should make to the dress.
3. Zenzie's estimate for the timing of the project is realistic.
4. Ellen Terry's attitude towards her dresses was typical of her time.

12. Bài tập 12

EXAMINING THE PLACEBO EFFECT

BY STEVE SILBERMAN

The fact that taking a fake drug can powerfully improve some people's health - the so-called placebo effect - was long considered an embarrassment to the serious practice of pharmacology, but now things have changed.

Several years ago, Merck, a global pharmaceutical company, was falling behind its rivals in sales. To make matters worse, patents on five blockbuster drugs were about to expire, which would allow cheaper generic products to flood the market. In interviews with the press, Edward Scolnick, Merck's Research Director, presented his plan to restore the firm to pre-eminence. Key to his strategy was expanding the company's reach into the anti-depressant market, where Merck had trailed behind, while competitors like Pfizer and GlaxoSmithKline had created some of the best-selling drugs in the world. "To remain dominant in the future", he told one media company, "we need to dominate the central nervous system."

His plan hinged on the success of an experimental anti-depressant codenamed MK-869. Still in clinical trials, it was a new kind of medication that exploited brain chemistry in innovative ways to promote feelings of well-being. The drug tested extremely well early on, with minimal side effects. Behind the scenes, however, MK-869 was starting to unravel. True, many test subjects treated with the medication felt their hopelessness and anxiety lift. But so did nearly the same number who took a placebo, a look-alike pill made of milk sugar or another inert substance given to groups of volunteers in subsequent clinical trials to gauge the effectiveness of the real drug by comparison. Ultimately, Merck's venture

into the anti-depressant market failed. In the jargon of the industry, the trials crossed the "futility boundary".

MK-869 has not been the only much-awaited medical breakthrough to be undone in recent years by the placebo effect. And it's not only trials of new drugs that are crossing the futility boundary. Some products that have been on the market for decades are faltering in more recent follow-up tests. It's not that the old medications are getting weaker, drug developers say. It's as if the placebo effect is somehow getting stronger. The fact that an increasing number of medications are unable to beat sugar pills has thrown the industry into crisis. The stakes could hardly be higher. To win FDA* approval, a new medication must beat placebo in at least two authenticated trials. In today's economy, the fate of a well-established company can hang on the outcome of a handful of tests.

Why are fake pills suddenly overwhelming promising new drugs and established medicines alike? The reasons are only just beginning to be understood. A network of independent researchers is doggedly uncovering the inner workings and potential applications of the placebo effect.

A psychiatrist, William Potter, who knew that some patients really do seem to get healthier for reasons that have more to do with a doctor's empathy than with the contents of a pill, was baffled by the fact that drugs he had been prescribing for years seemed to be struggling to prove their effectiveness. Thinking that a crucial factor may have been overlooked, Potter combed through his company's database of published and unpublished trials—including those that had been kept secret because of high placebo response. His team aggregated the findings from decades of anti-depressant trials, looking for patterns and trying to see what was changing over time. What they found challenged some of the industry's basic assumptions about its drug-vetting process.

Assumption number one was that if a trial were managed correctly, a medication would perform as well or badly in a Phoenix hospital as in a Bangalore clinic. Potter discovered, however, that geographic location alone could determine the outcome. By the late 1990s, for example, the anti-anxiety drug Diazepam was still beating placebo in France and Belgium. But when the drug was tested in the U.S, it was likely to fail. Conversely, a similar drug, Prozac, performed better in America than it did in Western Europe and South Africa. It was an unsettling prospect FDA approval could hinge on where the company chose to conduct a trial.

Mistaken assumption number two was that the standard tests used to gauge volunteers' improvement in trials yielded consistent results. Potter and his colleagues discovered that ratings by trial observers varied significantly from one testing site to another. It was like finding out that the judges in a tight race each had a different idea about the placement of the finish line.

After some coercion by Potter and others, the National Institute of Health (NIH) focused on the issue in 2000, hosting a three-day conference in Washington, and this conference launched a new wave of placebo research in academic laboratories in the U.S. and Italy that would make significant progress toward solving the mystery of what was happening in clinical trials.

In one study last year, Harvard Medical School researcher Ted Kaptchuk devised a clever strategy for testing his volunteers' response to varying levels of therapeutic ritual. The study focused on a common but painful medical condition that costs more than \$40 billion a year worldwide to treat. First, the volunteers were placed randomly in one of three groups. One group was simply put on a waiting list; researchers know that some patients get better just because they sign up for a trial. Another group received placebo treatment from a clinician who declined to engage in small talk. Volunteers in the third group got the same fake treatment from a clinician who asked them questions about

symptoms, outlined the causes of the illness, and displayed optimism about their condition.

Not surprisingly, the health of those in the third group improved most. In fact, just by participating in the trial, volunteers in this high-interaction group got as much relief as did people taking the two leading prescription drugs for the condition. And the benefits of their “bogus” treatment persisted for weeks afterward, contrary to the belief—widespread in the pharmaceutical industry - that the placebo response is short-lived.

Studies like this open the door to hybrid treatment strategies that exploit the placebo effect to make real drugs safer and more effective. As Potter says, “To really do the best for your patients, you want the best placebo response plus the best drug response”.

adapted from Wired Magazine

* The Food and Drugs Administration (an agency in the United States responsible for protecting public health by assuring the safety of human drugs)

Do the following statements agree with the claims of the writer? Write:

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

1. Merck’s experience with MK-869 was unique.
2. These days, a small number of unsuccessful test results can ruin a well-established drugs company.
3. Some medical conditions are more easily treated by a placebo than others.
4. It was to be expected that the third group in Kaptchuk’s trial would do better than the other two groups.
5. Kaptchuk’s research highlights the fact that combined drug and placebo treatments should be avoided.

13. Bài tập 13

THE NEW WAY TO BE A FIFTH-GRADER

By Clive Thompson

Khan Academy is changing the rules of education.

I peer over his shoulder at his laptop screen to see the math problem the fifth-grader is pondering. It's a trigonometry problem. Carpenter, a serious-faced ten-year-old, pauses for a second, fidgets, then clicks on "0 degrees." The computer tells him that he's correct. "It took a while for me to work it out," he admits sheepishly. The software then generates another problem, followed by another, until eventually he's done ten in a row.

Last November, his teacher, Kami Thordarson, began using Khan Academy in her class. It is an educational website on which students can watch some 2,400 videos. The videos are anything but sophisticated. At seven to 14 minutes long, they consist of a voiceover by the site's founder, Salman Khan, chattily describing a mathematical concept or explaining how to solve a problem, while his hand-scribbled formulas and diagrams appear on-screen. As a student, you can review a video as many times as you want, scrolling back several times over puzzling parts and fast-forwarding through the boring bits you already know. Once you've mastered a video, you can move on to the next one.

Initially, Thordarson thought Khan Academy would merely be a helpful supplement to her normal instruction. But it quickly became far more than that. She is now on her way to "flipping" the way her class works. This involves replacing some of her lectures with Khan's videos, which students can watch at home. Then in class, they focus on working on the problem areas together. The idea is to invert the normal rhythms of school, so that lectures are viewed in the

children's own time and homework is done at school. It sounds weird, Thordarson admits, but this reversal makes sense when you think about it. It is when they are doing homework that students are really grappling with a subject and are most likely to want someone to talk to. And Khan Academy provides teachers with a dashboard application that lets them see the instant a student gets stuck.

For years, teachers like Thordarson have complained about the frustrations of teaching to the "middle" of the class. They stand at the whiteboard trying to get 25 or more students to learn at the same pace. Advanced students get bored and tune out, lagging ones get lost and tune out, and pretty soon half the class is not paying attention. Since the rise of personal computers in the 1980s, educators have hoped that technology could save the day by offering lessons tailored to each child. Schools have spent millions of dollars on sophisticated classroom technology, but the effort has been in vain. The one-to-one instruction it requires is, after all, prohibitively expensive. What country can afford such a luxury?

Khan never intended to overhaul the school curricula and he doesn't have a consistent, comprehensive plan for doing so. Nevertheless, some of his fans believe that he has stumbled onto the solution to education's middle-of-the-class mediocrity. Most notable among them is Bill Gates, whose foundation has invested \$1.5 million in Khan's site. Students have pointed out that Khan is particularly good at explaining all the hidden, small steps in math problems—steps that teachers often gloss over. He has an uncanny ability to inhabit the mind of someone who doesn't already understand something.

However, not all educators are enamoured with Khan and his site. Gary Stager, a longtime educational consultant and advocate of laptops in classrooms, thinks Khan Academy is not innovative at all. The videos and software modules, he contends, are just a high-tech version of the outdated teaching techniques—

lecturing and drilling. Schools have become "joyless test-prep factories," he says, and Khan Academy caters to this dismal trend.

As Sylvia Martinez, president of an organization focusing on technology in the classroom, puts it, "The things they're doing are really just rote." Flipping the classroom isn't an entirely new idea, Martinez says, and she doubts that it would work for the majority of pupils: "I'm sorry, but if they can't understand the lecture in a classroom, they're not going to grasp it better when it's done through a video at home."

Another limitation of Khan's site is that the drilling software can only handle questions where the answers are unambiguously right or wrong, like math or chemistry; Khan has relatively few videos on messier, grey-area subjects like history. Khan and Gates admit there is no easy way to automate the teaching of writing—even though it is just as critical as math.

Even if Khan is truly liberating students to advance at their own pace, it is not clear that schools will be able to cope. The very concept of grade levels implies groups of students moving along together at an even pace. So what happens when, using Khan Academy, you wind up with a ten-year-old who has already mastered high-school physics? Khan's programmer, Ben Kamens, has heard from teachers who have seen Khan Academy presentations and loved the idea but wondered whether they could modify it "to stop students from becoming this advanced."

Khan's success has injected him into the heated wars over school reform. Reformers today, by and large, believe student success should be carefully tested, with teachers and principals receiving better pay if their students advance more quickly. In essence, Khan doesn't want to change the way institutions teach; he wants to change how people learn, whether they're in a private school or a public school—or for that matter, whether they're a student or an adult trying to self-educate in Ohio, Brazil, Russia, or India. One member

of Khan's staff is spearheading a drive to translate the videos into ten major languages. It's classic start-up logic: do something novel, do it with speed, and the people who love it will find you.

Adapted from Wired Magazine

Do the following statements agree with the claims of the writer in the reading passage? Write:

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

1. Thordarson's first impressions of how she would use Khan Academy turned out to be wrong.
2. Khan wished to completely change the way courses are taught in schools.
3. School grade levels are based on the idea of students progressing at different rates.
4. Some principals have invited Khan into their schools to address students.
5. Khan has given advice to other people involved in start-up projects.