A New Ice Age

William Curry is a serious, sober climate scientist, not an art critic. But he has spent a lot of time perusing Emanuel Gottlieb Leutze's famous painting "George Washington Crossing the Delaware", which depicts a boatload of colonial American soldiers making their way to attack English and Hessian troops the day after Christmas in 1776. "Most people think these other guys in the boat are rowing, but they are actually pushing the ice away" says Curry, tapping his finger on a reproduction of the painting. Sure enough, the lead oarsman is bashing the frozen river with his boot. "I grew up in Philadelphia. The place in this painting is 30 minutes away by car. I can tell you, this kind of thing just doesn't happen anymore."

But it may again soon. And ice-choked scenes, similar to those immortalised by the 16th-century Flemish painter Pieter Brueghel the Elder, may also return to Europe. His works, including the 1565 masterpiece "Hunters in the Snow", make the now-temperate European landscapes look more like Lapland. Such frigid settings were commonplace during a period dating roughly from 1300 to 1850 because much of North America and Europe was in the throes of a little ice age. And now there is mounting evidence that the chill could return. A growing number of scientists believe conditions are ripe for another prolonged cooldown, or small ice age. While no one is predicting a brutal ice sheet like the one that covered the Northern Hemisphere with glaciers about 12,000 years agoNorthern Hemisphere with glaciers about 12,000 years ago, the next cooling trend could drop average temperatures 5 degrees Fahrenheit over much of the United States and 10 degrees in the Northeast, northern Europe, and northern Asia.

"It could happen in 10 years," says Terrence Joyce, who chairs the Woods Hole Physical Oceanography Department. "Once it does, it can take hundreds of years to reverse." And he is alarmed that Americans have yet to take the threat seriously.

A drop of 5 to 10 degrees entails much more than simply bumping up the thermostat and carrying on. Both economically and ecologically, such quick, persistent chilling could have devastating consequences. A 2002 report titled "Abrupt Climate Change: Inevitable Surprises", produced by the National Academy of Sciences, pegged the cost from agricultural losses alone at $100 billion to $250 billion while also predicting that damage to ecologies could be vast and incalculable. A grim sampler: disappearing forests, increased housing expenses, dwindling fresh water, lower crop yields, and accelerated species extinctions.

The reason for such huge effects is simple. A quick climate change wreaks far more disruption than a slow one. People, animals, plants, and the economies that depend on them are like rivers; says the report: "For example, high water in a river will pose few problems until the water runs over the bank, after which levees can be breached and massive flooding can occur. Many biological processes undergo shifts at particular thresholds of temperature and precipitation."

Political changes since the last ice age could make survival far more difficult for the world's poor. During previous cooling periods, whole tribes simply picked up and moved south, but that option doesn't work in the modern, tense world of closed borders. "To the extent that abrupt climate change may cause rapid and extensive changes of fortune for those who live off the land, the inability to migrate may remove one of the major safety nets for distressed people," says the report.

But first things first. Isn't the earth actually warming? Indeed it is, says Joyce. ' In his cluttered office, full of soft light from the foggy Cape Cod morning, he explains how such warming could actually be the surprising culprit of the next mini-ice age. The paradox is a result of the appearance over the past 30 years in the North Atlantic of huge rivers of fresh water - the equivalent of a 10-foot-thick layer - mixed into the salty sea. No one is certain where the fresh torrents are coming from, but a prime suspect is melting Arctic ice, caused by a build-up of carbon dioxide in the atmosphere that traps solar energy.

The freshwater trend is major news in ocean-science circles. Bob Dickson, a British oceanographer who sounded an alarm at a February conference in Honolulu, has termed the drop in salinity and temperature in the Labrador Sea - a

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body of water between northeastern Canada and Greenland that adjoins the Atlantic - "arguably the largest full-depth changes observed in the modern instrumental oceanographic record".

The trend could cause a little ice age by subverting the northern penetration of Gulf Stream waters. Normally, the Gulf Stream, laden with heat soaked up in the tropics, meanders up the east coasts of the United States and Canada. As it flows northward, the stream surrenders heat to the air. Because the prevailing North Atlantic winds blow eastward, a lot of the heat wafts to Europe. That's why many scientists believe winter temperatures on the Continent are as much as 36 degrees Fahrenheit warmer than those in North America at the same latitude. Frigid Boston, for example, lies at almost precisely the same latitude as balmy Rome. And some scientists say the heat also warms Americans and Canadians. "It's a real mistake to think of this solely as a European phenomenon," says Joyce.

Having given up its heat to the air, the now-cooler water becomes denser and sinks into the North Atlantic by a mile or more in a process oceanographers call thermohaline circulation. This massive column of cascading cold is the main engine powering a deep-water current called the Great Ocean Conveyor that snakes through all the world's oceans. But as the North Atlantic fills with fresh water, it grows less dense, making the waters carried northward by the Gulf Stream less able to sink. The new mass of relatively fresh water sits on top of the ocean like a big thermal blanket, threatening the thermohaline circulation. That in turn could make the Gulf Stream slow or veer southward. At some point, the whole system could simply shut down, and do so quickly. "There is increasing evidence that we are getting closer to a transition point, from which we can jump to a new state."

Questions 1-4

Choose the correct letter A, B, C or D.

Write your answers in boxes 1-4 on your answer sheet.

1. **The writer uses paintings in the first paragraph to illustrate**

A ☐ possible future climate change.

B ☐ climate change of the last two centuries.

C ☐ the river doesn't freeze in winter anymore.

D ☐ how George Washington led his troops across the river.

2. Which of the following do scientists believe to be possible?

A ☐ The temperature may drop over much of the Northern Hemisphere.

B ☐ It will be colder than 12,000 years ago.

C ☐ The entire Northern Hemisphere will be covered in ice.

D ☐ Europe will look more like Lapland.

3. Why is it difficult for the poor to survive the next ice age?

A ☐ People don't live in tribes anymore.

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B ☐ Politics are changing too fast today.

C ☐ Abrupt climate change causes people to live off their land.

D ☐ Migration has become impossible because of closed borders.

4. Why is continental Europe much warmer than North America in winter?

A ☐ Wind blows most of the heat of tropical currents to Europe.

B ☐ Europe and North America are at different latitudes.

C ☐ The Gulf Stream has stopped yielding heat to the air.

D ☐ The Gulf Stream moves north along the east coast of North America.

Questions 5-9

Look at the following statements (Questions 5-9) and the list of people in the box below.

Match each statement with the correct person A-D.

NB You may use any letter more than once.

5 _____Most Americans are not prepared for the next ice age.

6. _____ The result of abrupt (đột ngột) climate change is catastrophic (thảm họa).

7. _____The world is not as cold as it used to be.

8 _____Global warming is closely connected to the ice age.

9_____Alerted people to the change of ocean water in a conference

List of People

A William Curry "The world is not as cold as it used to be."

B Terrence Joyce

"Most Americans are not prepared for the next ice age."

"Global warming is closely connected to the ice age."

C Bob Dickson "Alerted people to the change of ocean water in a conference"

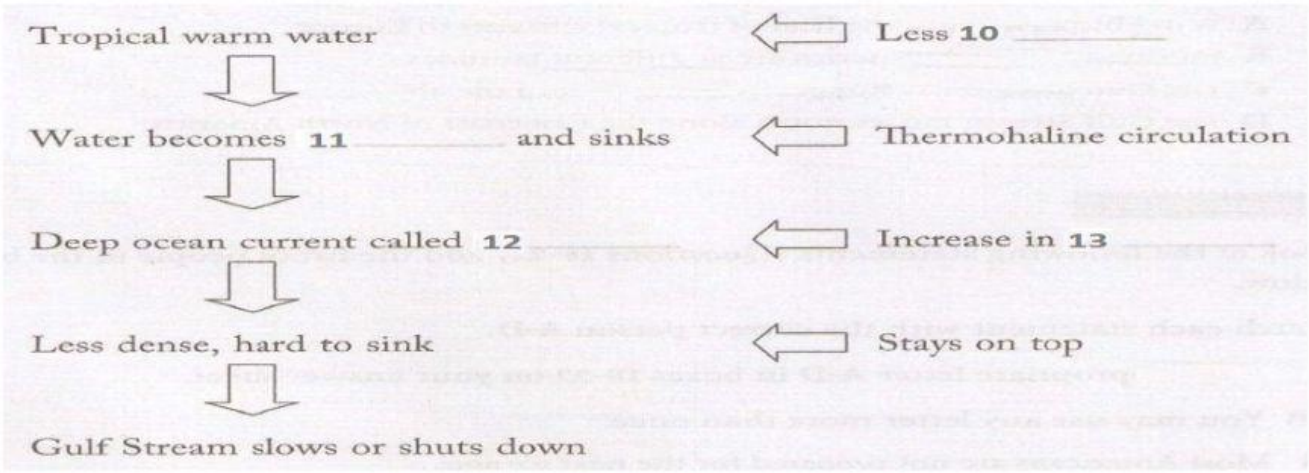
D National Academy of Sciences "The result of abrupt (đột ngột) climate change is catastrophic"

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Questions 10-13

Complete the flow chart below.

Choose NO MORE THAN THREE WORDS from the passage for each answer.



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The contribution of language to business

People say that business is all about relationships, but the truth is that business is really all about language communication. Languages make either a direct or indirect contribution to business and industry—from acquiring and retaining customers to improving employee engagement and performance. At the most fundamental level, business cannot happen without communication. This is even more true in the era of globalization. As geographic borders become porous and the world flattens, effective communication with customers, employees, partners, suppliers, and other stakeholders across the globe becomes essential to successfully running a company.

There is no universal agreement on how significant the language factor is; nor the degree of language proficiency in contribution to the success of business and industry. In large modern enterprises, people have the unique experience of working with thousands of organizations across different industries and sectors that are tackling this very problem. Companies adjust to these demographic, cultural, and economic trends and proactively build workforces with the skills and capabilities needed to grow and thrive in this multicultural and international economy. Although the combination of business functions and processes impacted by improved communication may vary from company to company, language skills consistently deliver tangible business value and result for organizations that invest in language training.

Although English is dominant for international transactions, many business people also think and deal in scores of languages. Companies that operate solely in English will miss opportunities to capitalize on the explosive growth in developing and untapped markets at home and abroad. These companies also run the risk of misunderstandings with customers, and with members of an increasingly global workforce. Moreover, travellers on business need to have different levels of language proficiency. On a basic level, they are able to use the language at the airport and to check in at the hotel. Besides, they need a high language proficiency to deal with workers at their offshore factories.

One of the biggest business advantages of a workforce that can effectively communicate in more than one language is the ability to reach new markets—both at home and abroad. On the domestic side, for example, the U.S. has become even more of a melting pot than in the past, with minorities accounting for a greater proportion of the total population. Accordingly, in domestic venues, the consumer contacts and service activities also ask for workers with good skills of different languages, such as at restaurants or in duty-free stores.

The language proficiency needed to hold a conversation is quite different from that needed for negotiating. Receptionists and telephonists are the first point of contact between firms. The language proficiency they need is to gather basic factual information. Yet negotiating well in another language is one of the most difficult skills, especially nowadays when it is often done at a distance by videoconference, teleconference or email. It is also one of the most important things to do well, with usually a clear financial penalty for doing it badly. To really master the negotiating skill, negotiators need a thorough understanding of the very many phrases they might hear during a negotiation and an ability to show fine shades in meaning in their own contributions. Similar to negotiating, certain occupations like shipping, also require unbroken and detailed communication between officials.

When it comes to negotiation, the interpreters and translators are needed. Interpreters and translators aid communication by converting messages or text from one language into another language. Although some people do both, interpreting and translating are different professions: interpreters work with spoken communication, and translators work with written communication. The selection of interpreters and translators is critical. Both the loyalty and accuracy of the interpreters and translators must be put at the top of agenda. Thus, loyalty to the speaker and the original appears to be a hallmark of professionals more so than of amateurs.

Who can judge the performance of the interpreters? A person with language proficiency is needed in the negotiating team to check on the interpreters, guaranteeing the quality and accuracy of the interpretation. Listeners are

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presumably listening only to the output and as such not aware of the structure of the source speech. Only an experienced expert will understand the constraints of any given situation and be in a position to judge. Only she (or he) can assess just how the speed, density and complexity of the speech will affect interpretation in any particular language combination. And even this task is not easy: interpreters are trained to listen and speak at the same time, not to listen to two different audio streams. Therefore, the check-on is best accomplished by those trained to teach or with enough experience to have mastered this skill.

Businesses may ask help from local consultants who are responsible for hiring local workers or train company managers to deal with local consumers. That was the case with CommScope, a multibillion dollars telecom equipment manufacturer with customers, employees, and partners in 18 countries across the world. In the wake of these transactions, the company began offering Jacqueline K. Crofton, a local resident, language training to key employees and executives. The goal of the training was not to make employees fluent in the new language, as much as to give them a degree of functional proficiency. "In order to advance well in new markets and with new customers, we had to be able to at least understand and communicate at a basic level, even with the use of interpreters," says David Hartsoe, manager of CommScope's Global Learning Center. In the long run, effective communication will definitely help their employees stay positive and productive.

Questions 14-19

Do the following statements agree with the views of the writer in Reading Passage?

In boxes 14-19 on your answer sheet, 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 that the writer thinks about this**

14 There are two types of contribution that languages make to business.

15 All businesses have recognized the importance of language to business.

16 English is the most important language for all business purposes.

17 Senior executives, especially, need to be fluent in the language of their trading partners.

18 Travellers on business need several different levels of language proficiency.

19 Some businesses provide interpreter training to their employees.

Questions 20-23

Answer the questions below.

Choose NO MORE THAN THREE WORDS from the passage for each answer.

20 What level of language proficiency are the workers required in the duty-free stores?

21 Who are the first people the client usually have a contact within business?

22 Which industry is high language proficiency essential to?

23 What business are interpreters and translators needed for?

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Questions 24 – 26

Choose the correct letter; A, B, C or D.

24 One of the most important qualities of the interpreter is

A common sense.

B industry knowledge and contacts.

C appropriate reaction.

D trustworthiness.

25 A qualified interpreter is essential to the business for

A ensuring cultural appropriateness.

B accuracy of information.

C success in trading.

D financial reasons.

26 In the writer's opinion, hiring an indigenous person to improve the dialect language proficiency of the company staff is

A unethical.

B unlikely.

C sensible.

D expensive.

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