

ACTIVITY**English in Science****Activity 1****A CAREER IN SCIENCE**

Look at the table and discuss in your group about the possible reasons that can make the choice of a career in science worthwhile. Say if you agree with them and add others that come to your mind as possible reasons to go for it.

Features	Requirements	Rewards
Challenging	forced to think about new fields	head off into independent thinking new intellectual adventures
Freedom	pick projects that interest them	broad scope of funding agencies
Enjoyable	read papers and attend conferences	inspired by work being done by others
Bring the world together	part of a global community	international cooperation among individuals
Flexible schedules	manage own time	arrival times, lunch breaks, evenings or weekends are not
Contribution to the common good	generate knowledge: build understanding of the world in which we live	education and mentoring are contributions to society
Self-improvement	social endeavour: produces not only results but also close relationships	continual challenges for learning builds friendships

Now in the group, think of possible setbacks.

Examples: *very demanding, difficult to get a job, need to find funders, etc.*

Activity 2**WHY IS ENGLISH IMPORTANT?**

There are some job profiles where English is not essential. Think of some examples.

However, for many others, English may be almost essential. What are the advantages of learning English? Match the first part of these reasons to the sentences on the right.

Then think of the order of importance they have from your point of view. When you are ready, discuss with your classmate about it.

1. It's the language of the media industry	a) If you are a movie freak, but also for TV shows, series, books or video games
2. It provides access to a wide range of knowledge	b) Put an effort on the retaining power of your mind by constantly revising the words you have previously learnt before.
3. It makes communication easy with other students worldwide.	c) A lot of words and syntaxes of English are very similar to other European languages
4. It enables to study abroad	d) English is a "qualifier filter". Having good English skills is a plus point
5. It offers more future job opportunities	e) Even in countries where English is not widely spoken, most of the things there, like signs, ticketing machines and maps have some form of English written on them.
6. It provides opportunity for scholarships	f) You will be surprised to know that most of the students face the same issues.
7. Good command boosts your confidence when speaking in public	g) English is the language chosen for some courses because they are for students from all over the world
8. Access to online courses	h) Exposure to new cultures and thinking provides a wider perspective
9. Access to multiple cultures	i) Through media that you can know about the current happenings around the world
10. It offers world travel benefits	j) Most books and scriptures are already translated into this language
11. Improves your understanding of other cultures	k) To gain a place at a foreign university, it is very important that you have a good command of English
12. Access to a wide range of entertainment	l) Most scholarship programs require the candidate to represent themselves, their country and their culture
13. Through English you can learn other foreign languages	m) Students usually have to research about a topic thoroughly right
14. English leads to digital literacy	n) It is a known fact that if you know what to say and how to present your opinions, then you will seem more confident.
15. It improves memory	o) Almost all major apps have their user interface in English.
16. The majority of the internet information is cryptic with the English language	p) By consuming the English content available out there, you can develop a much better understanding of the world and also accelerate your personal growth.

Activity 3

ENGLISH AS THE LANGUAGE OF SCIENCE

Science as a career attracts people from across the world. But whether researchers come from Beijing, Berlin or Buenos Aires, they have to express most of their ideas and findings in English. Having a dominant language can streamline the process of science, but it also creates extra barriers.

Researchers who are not fluent in English often face hurdles beyond learning a new language. Would this be a problem for you?

Read the testimonies of people from around the world talking about their personal experience. Analyse and list the main point from each of them. Discuss in the group. Do you think this is the way it should be? Can you think of any possible ways to change this?

“I suspect that a lot of native English speakers view language barriers as a minor problem. They probably think that Google Translate can solve everything. But the technology isn't there yet. You can't run a scientific paper through a translation programme and get a meaningful result.”

TATSUYA AMANO:

Embrace linguistic diversity

Zoologist at the University of Queensland, Brisbane.

“There are so many people out there who want to contribute to science but can't because they don't know enough English. Funding agencies could help by including clauses to encourage visiting researchers to hire local residents, even if they aren't fluent in English. These locals understand the problem better than does a scientist who has never been to the area, and that knowledge matters whether it's expressed in Hindi or English.”

SNEHA DHARWADKAR:

Have an open mind

Wildlife biologist at the Centre for Wildlife Studies in Bengaluru, India

“English speakers have become the gatekeepers of science. By keeping those gates closed, we're missing out on a lot of perspectives and a lot of good research.”

VERA SHERIDAN:

It takes a partnership

Language and intercultural relations researcher at Dublin Univ

“There's nothing about English that makes it intrinsically better for science than any other language. Science could have gone just as far in Chinese or Swahili. But many economic and geopolitical forces made English the dominant language of research, for better or worse.”

MICHAEL GORDIN:

A long and unfair history

Professor of modern and contemporary history at Princeton University, New Jersey, and author of Scientific Babel (Univ. Chicago Press, 2015).

“The language barrier has never stopped me from doing what I wanted to do. But speaking at conferences, writing papers and asking for fellowships in English is harder and demands more energy when you're not a native speaker. You need to fight with the language.”

MONTSERRAT BOSCH GRAU:

Improve English-language education

Director of in vitro studies at Sensorion in Montpellier, Fr

“In my experience, people who grow up speaking a language other than English are at a real competitive disadvantage when it comes to science. And it's not only because they will struggle to read and write scientific papers. Many haven't been exposed to the process and culture of science. Simply learning a new vocabulary won't be enough to help them to succeed. They need real mentorship, and they need it in their own language.”

CLARISSA RIOS ROJAS:

Reach out for mentoring

Director of Ekpa'palek in Valkenboskwartier, Netherlands.

“In secondary school, people assumed that I would become a translator, a common career path for women in China. But I wanted to do science. I had no problem taking university entrance exams in English, but a lot of my colleagues — who are brilliant scientists — struggled with that process. They decided not to pursue a PhD outside China simply because of the language barrier.”

YANGYANG CHENG:

A complicated issue

Physicist at Cornell University in Ithaca, NY.

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