Unit 3 The Future of Learning

Task 1 Rank the following words depending on the level of autonomy in the relationship:

facilitator tutor consultant guide coach mentor

Task 2 Video

(https://www.ted.com/talks/sugata_mitra_build_a_school_in_the_cloud#t-287904 – 00.00-12.20)

Watch Sugata Mitra talk about his idea of a school in the cloud. Answer the following questions:

1. What does Sugata mean by "the Global computer"?
2. What was the aim of education in the Victorian era?
3. What kind of school is *obsolete*?
4. What was the explanation for the fact that the kids learned to browse so quickly in the first experiment?
5. What was the result of the experiment in a remote village?
6. What were the children asked to do on the computer to improve their pronunciation?
7. What kind of "absurd" experiment did Sumata design to test the limits of the method?
8. What is "the method of the grandmother"?

Can you predict the conclusion Sugata will draw from what he has said?

Task 3 Grammar - Conditionals

Complete the sentences:

If you give a computer to a group of children, ……..

If you left your pupils alone in a classroom, …….

If Sumata had done the experiment in the Czech Republic, …….

Revise the rules for

Conditional I

Conditional II

Conditional III

Task 4 The Skills of the 21st Century – EXAM PRACTICE

I. Complete the gaps with the parts of sentences below:

A) of whether they choose to pursue a scientific career or not
B) that focused on memorising facts and working in isolation
C) there was a larger shift in focus towards teaching "21st century skills"
D) they are facilitators of learning
E) requires us to possess the right skill set to tackle these issues
F) will have many jobs in a variety of industries in their lifetime
G) as facts like these can be so easily accessed by a single google search
H) foster a deeper understanding of scientific concepts

Why creativity, critical thinking, communication and collaboration should be the forefront of the science curriculum. Emma Fazzino, August 2017

We live in a rapidly changing world, with fascinating scientific discoveries, technological breakthroughs and new inventions filling headlines daily. We also face many challenges such as climate change, increasing globalisation and big data. This shifting landscape in which we live (1) _____ . Both decision makers and everyday citizens need to be flexible, to have the courage to take initiative, and to think creatively to solve problems.

The Old Way

Fifty years ago, most jobs required technical skills, such as knowing a specific trade like mechanics or having specialised knowledge such as bread-making. Schools did an excellent job at preparing students for these types of careers; with a rigid, textbook-driven curriculum (2) _____ .

But now, we live in the information-age, and many industries are being replaced by automation. The demands of the workforce are different, and the types skills we need for these jobs have changed. No longer is there much value in rote-learning the first twenty elements of the periodic table, (3) _____ .

So why does our current education system still focus heavily on spoon-feeding teaching content?

21st Century Skills

It's about time that (4) _____ . These include the "4 C's" of creativity, critical thinking, communication and collaboration. And what is one of the best ways to teach these? Through science education.

At its heart, science is curiosity, creativity and it requires collaboration. There is a strong connection between 21st century skills and science education. When taught with an emphasis on skills, science helps develop critical thinking, problem solving and digital literacy, whilst enhancing understanding of content knowledge and student engagement.

Science develops creativity

To do this, science taught in schools must reflect science in the real world. Scientific concepts are made relevant to students, they become more accessible and interesting. Real-life examples and hands-on learning (5) _____ . Encouraging students to look beyond the scientific facts and seek a practical application makes science less daunting and provides an exciting avenue for explanations about their world. Give students the opportunity to explore and wonder, and without knowing it, they will be asking questions, thinking critically, wanting to find out how or why. Science education is one of the best ways to exercise our inherently creative minds.

Science develops collaboration

Science education also promotes teamwork and communication, skills needed to thrive in the workforce of the future. When a collaborative, inquiry-based approach to teaching science is used,

students learn to discuss problems, critique theories and negotiate solutions with one another. Being able to explain ideas and express opinions is crucial for success in life, regardless (6) _____ . And in reality, scientists don't work in isolation, they work in teams, and develop new ideas. So why not teach science in this way?

Careers of the future

Careers with a strong scientific understanding are growing close to 1.5 times faster than jobs in other industries. Many employers have identified that science literacy is one the core capabilities in an ideal employee.

Additionally, the careers of the future will be increasingly diverse. Rather than following a single linear career path that our parents most likely took, the young people of today (7) _____ . There will be more choices, more opportunities, and more adaptability needed.

The role of the teacher

The educators in today's schools need to be preparing students for multiple careers, by designing learning activities that promote 21st century skills. Easier said than done.

Current teachers need to acknowledge that they are more than instructors, (8) _____ , who are responsible for shaping the culture of their classroom. They must work interactively, have an appreciation for blended learning environment, and always consider innovative ways to promote creativity, critical thinking, collaboration and communication into the classroom. Ultimately, teachers play a fundamental role in creating an environment where students learn how to be adaptable, analytical and resourceful in order to succeed in a global environment.
(https://blogs.unimelb.edu.au/sciencecommunication/2017/08/10/the-skills-of-the-21st-century-emma-fazzino/)

II. Explain the meaning of the highlighted expressions.