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B2 First for Schools and C1 Advanced: Speaking Part 3 – Ed Tech

Description

This lesson plan is designed to help students prepare for B2 First for Schools / C1 Advanced Speaking Part 3, the collaborative task. It can be delivered face to face or online. The 'online options' column gives teachers ideas how the stages could be adapted for teaching online.

Note to teachers

You can use the lesson plan as a starting point and create your own PowerPoint slides to use in the lesson. If you are teaching with an online platform, use the functionality that you have available to you. Many platforms have the option to share your screen with the students. Before class, use offline resources such as Microsoft PowerPoint to prepare any materials you want to use. With some platforms, like Zoom, you can share a whiteboard with the students, which you can work on in real time. However, it might be easier to use a Word document with the text already prepared, which you need to share electronically with your students e.g. by email. This way, students have the content ready to use in the lesson.

Time required:	*60 minutes (can be extended or shortened as required).*
Materials required:	▪ *Prepared presentation/PowerPoint slides* ▪ *Internet video link to:* **https://www.ted.com/talks/michael_bodekaer_this_virtual_lab_will_revolutionize_science_class** ▪ *Student Handout (see below)*
Aims:	▪ *To encourage students to reflect on the future of education and the impact of new technologies on teaching and learning* ▪ *To practise authentic listening* ▪ *To encourage students to discuss and work towards a negotiated outcome (Part 3 Speaking task)*

Procedure

Lesson Stages	Online options
Welcome students – ask them say hello to confirm they can see and hear you.	If your platform allows you to see your students, ask them to also wave and check everything is working as it should be.
Warm up (15 minutes) – whole class activity or in pairs/small groups	Show the warm up questions on a PowerPoint slide.

• How is education today different from the way your parents learned? • What digital resources and tools do you use in your classroom? • What digital resources and tools do you use when you study at home? • What are their advantages and disadvantages? • How will teaching and learning change in 20 years' time?	Pairs and small groups: • If the platform has breakout rooms, put students into pairs or threes to discuss ideas. • Bring the class back together for whole group feedback. Discuss with the whole class: • Ask students to speak up if your platform allows you to hear them or use the chat window to type their ideas and answers. • In larger groups, the chat box is a helpful option when eliciting ideas and getting feedback.
Listening (20 minutes) – individual. Students are going to watch a **video*** (click to open hyperlink) about how virtual reality can revolutionise science lessons. Talk through the Listening questions on the student handout and check understanding before playing the video. Students refer to the questions in the handout and watch the video. They are going to watch the video twice. **It is not necessary to watch the whole video as answers can be found from the beginning of the video until 3'53''.*	Provide the Listening questions from the student handout on a PowerPoint slide. Embed the link into the PowerPoint slide for quick access. **https://www.ted.com/talks/michael_bodekaer_this_virtual_lab_will_revolutionize_science_class** Students make notes of the answers before feedback.
Feedback (5 minutes) – in pairs. Discuss answers by speaking aloud or typing into the chat box Confirm answers for the whole class on a PowerPoint slide (see Teacher material below).	Breakout rooms: Pairs/ threes discuss answers. Elicit answers from class if your students can speak on your platform. Elicit answers into the chat box if there is not an option for speaking aloud on your

	platform. Show answers on a prepared PowerPoint slide.
Speaking and feedback (20 minutes) – in pairs. Show the mind map from the Student Handout on a PowerPoint slide and check understanding. Remind students of the details of the discussion phase of the Part 3 Collaborative Task in B2 First for Schools and C1 Advanced: Students discuss for 2 minutes, which is followed by a 1 minute decision-making task. Students discuss together. The task is to complete the mind map with five benefits that virtual reality can have for education, using the ideas generated in the lesson and from the video. Invite pairs to share ideas in whole-class feedback. If there is time, watch the remainder of the video, or students can watch the rest of the video at home. Ask students to think about the following questions: 1. What other points were mentioned in the video? 2. What did you learn about this topic?	If you have break-out rooms on your platform: Put students into pairs or threes to discuss before regrouping as a whole class for feedback on the communicative task/ problem-solving task. Chat box option: If your students don't have access to break-out rooms, open up a whole class spoken discussion or conduct the discussion using the chat box. 1. Pose questions and indicate by name which student you would like to respond. 2. Once the student has responded, ask the class to comment and add their ideas. 3. Pose another question to another student and elicit another idea in response to the communicative task/problem solving question. While the chat box option is not the perfect solution, the advantage is that students will be able to practise writing for fluency without concern for accuracy.

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Student Handout

Listening

You are going to watch a **video*** on TED.com about how virtual reality can revolutionise science lessons. Read the questions first and then watch the video. You are going to watch the video twice.

Questions

1) Who is going to help us solve the great challenges that we are facing nowadays and that will continue to grow?

2) How do students in many universities around the world feel, according to Michael Bodekaer?

3) Where did Michael and his co-founder find the inspiration for his idea to use virtual reality in the science class?

4) Michael mentions three advantages of using virtual reality in the science class. They are:

1.

2.

3.

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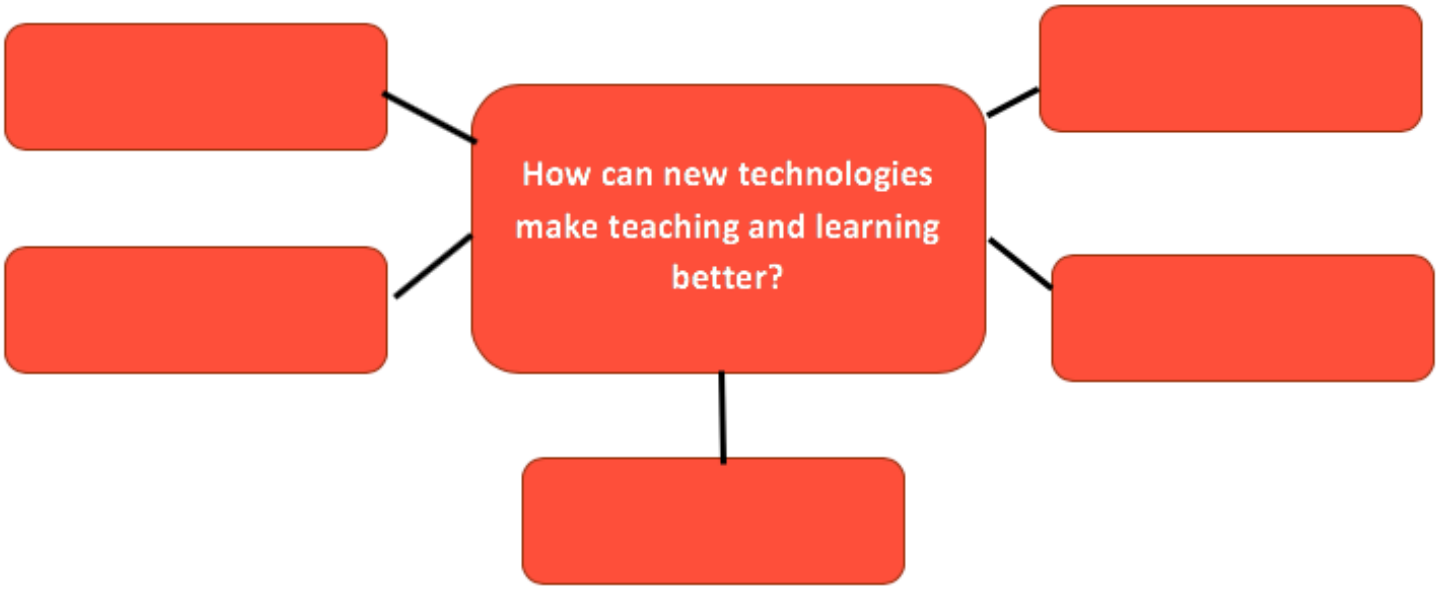
Student Handout

Speaking part 3

Speaking (20') – in pairs

Complete the mind map with five benefits that virtual reality can have for education using the ideas discussed in class and in the video.



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Teacher Material

KEY TO LISTENING ACTIVITY

1) Who is going to help us solve the great challenges that we are facing nowadays and that will continue to grow? ***Young science students / the next generation of young, bright scientists.***

2) How do students in many universities around the world feel, according to Michael Bodekaer? ***Bored, disengaged, not sure about why they're learning the topic.***

3) Where did Michael and his co-founder find the inspiration for his idea to use virtual reality in the science class? ***From flight simulators used in in-flight (pilot) training.***

4) Michael mentions three advantages of using virtual reality in the science class. Write these down:

1. ***universities can save money by letting students perform virtual experiments in virtual labs***
2. ***students get to learn and understand the lab machines***
3. ***students can carry out dangerous experiments, risk free***

TAPESCRIPT

Today, I am going to show you how this tablet and this virtual-reality headset that I'm wearing are going to completely revolutionise science education. And I'm also going to show you how it can make any science teacher more than twice as effective. But before I show you how all of this is possible, let's talk briefly about why improving the quality of science education is so vitally important.

00:35

If you think about it, the world is growing incredibly fast. And with that growth comes a whole list of growing challenges, challenges such as dealing with global warming, solving starvation and water shortages and curing diseases, to name just a few.

00:51

(1) And who, exactly, is going to help us solve all of these great challenges? Well, to a very last degree, it is these young students. This is the next generation of young, bright scientists. And in many ways, we all rely on them for coming up with new, great innovations to help us solve all these challenges ahead of us. And so a couple of years back, my co-founder and I were teaching university students just like these, only the students we were teaching looked a little bit more like this here.

01:27

(Laughter)

01:28

(2) And yes, this is really the reality out there in way too many universities around the world: students that are bored, disengaged and sometimes not even sure why they're learning about a topic in the first place.

01:43

So we started looking around for new, innovative teaching methods, but what we found was quite disappointing. We saw that books were being turned into e-books, blackboards were being turned into YouTube videos and lecture hall monologues were being turned into MOOCs -- massive online open courses. And if you think about it, all we're really doing here is taking the same content and the same format, and bringing it out to more students -- which is great, don't get me wrong, that is really great -- but the teaching method is still more or less the same, no real innovation there.

02:23

(3) So we started looking elsewhere. What we found was that flight simulators had been proven over and over again to be far more effective when used in combination with real, in-flight training to train the pilots. And so we thought to ourselves: Why not just apply that to science? Why not build a virtual laboratory simulator?

02:47

(4) Well, we did it. We basically set out to create a fully simulated, one-to-one, virtual reality laboratory simulator, where the students could perform experiments with mathematical equations that would simulate what would happen in a real-world lab. But not just simple simulations -- we would also create advanced simulations with top universities like MIT, to bring out cutting-edge cancer research to these students. And suddenly, the universities could save millions of dollars by letting the students perform virtual experiments before they go into the real laboratory. And not only that; now, they could also understand -- even on a molecular level inside the machine -- what is happening to the machines. And then they could suddenly perform dangerous experiments in the labs as well. For instance also here, learning about salmonella bacteria, which is an important topic that many schools cannot teach for good safety reasons. And we, of course, quiz the students and then give the teachers a full dashboard, so they fully understand where the students are at.

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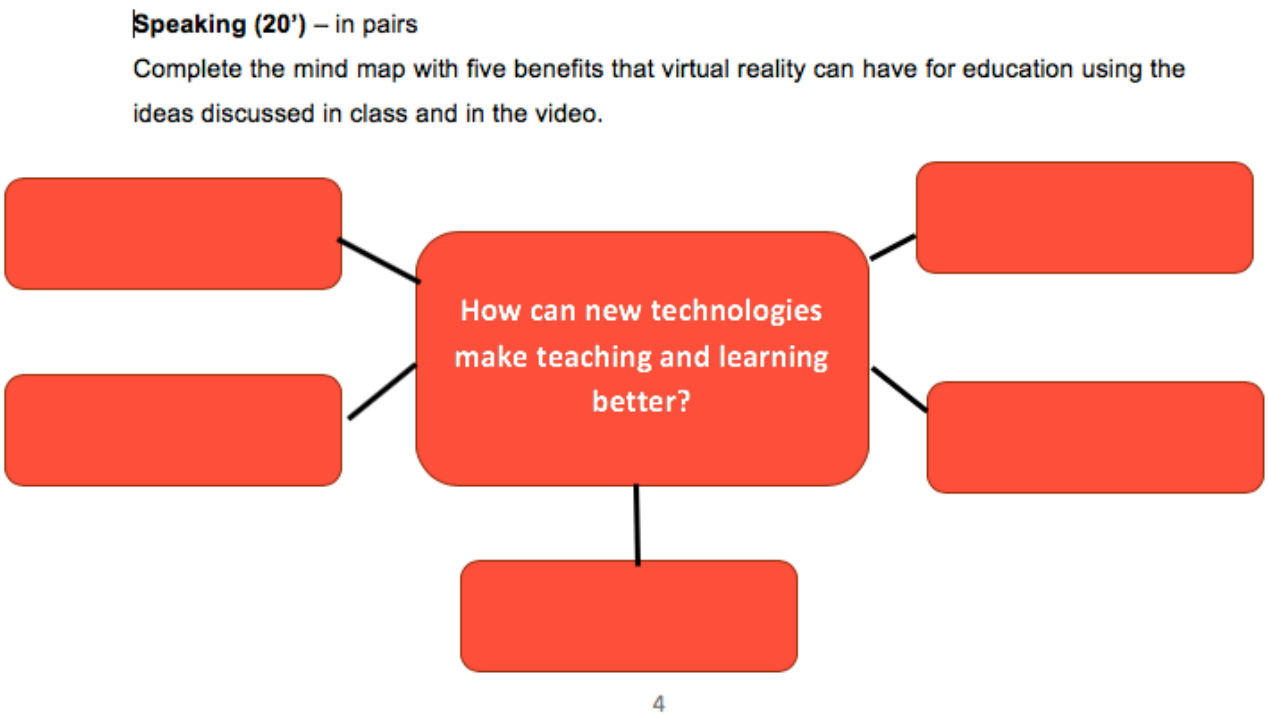
Teacher Material

Speaking part 3 and suggested answers.



- 'teleportation': learners can 'travel' to places they can't visit in reality
- learners can experience cultures and history first hand (the 'time machine effect')
- learners can engage with the lesson content in a multi-sensory way
- learners can be actively autonomous (can choose their own path within the virtual experience)
- they can develop skills in a secure and safe environment
- they are engulfed with the learning content (focussed immersion – no distractions)
- the interest level is high
- learner engagement is high
- there is no language barrier

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References

Bodekaer, M. (2015). TED Ideas worth spreading. This virtual lab will revolutionize science class. Available at: **https://www.ted.com/talks/michael_bodekaer_this_virtual_lab_will_revolutionize_science_class#t-148332**