The Butterfly Effect

Jobs of the Future

Jacobs

Age	Activity Summary	Resources
5-6	Assigning class roles.	Recycled paper and pens.
6-7	Discovering new jobs and acting these out or drawing them.	Some classroom objects, recycled paper and pens.
7-8	Identifying our strengths and weaknesses in terms of skills.	Skills PowerPoint, recycled paper and pens.
9-10	Watching and reporting back on videos by STEAM professionals.	Jobs of the Future Video List, recycled paper and pens.
10-11	Discovering what's meant by automation and considering how other processes could be automated.	
11-12	Challenging our own unconscious bias by drawing pictures of who we think of when we consider specific roles and examining these.	STEAM jobs list, recycled paper and pens.

Teachers Notes:

Jobs of the Future

We are learning…

what a job is and why they are important.

We can now…

identify what a 'job' is and why they are important.

Activity

Assign the class a list of roles/jobs for the day. These can include checking tables have been tidied correctly, caring for children in the playground, switching off lights when leaving a room etc. If a list is already in place, or, at the end of the day, discuss how it feels to have a role to play, why it is important, and what a reward system is available if jobs are done correctly (even if this is simply praise). Why do the pupils feel it is important that everyone has a role?

Digital / At Home Version

Run the activity in the same way but with household tasks.

Additional Challenge

Explore the concept of altruism and volunteering by asking "Does a reward system always need to be there; if not, why?"

Additional Support

Work in pairs to complete jobs or roles.

Resources

Recycled paper and pens.

Suggested Follow-On Activities

Interview school staff or family members about their jobs, why they like them and why they feel they are important.

UN Sustainable Development Goals

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Jobs of the Future

We are learning…

to identify some of the jobs we see around us.

We can now…

discuss some of the jobs I already know and learn about some new ones.

Activity

Discuss the jobs that we know already. Can the pupils list them? Teacher, police officer, shop keeper etc. Then, look at some objects in the class; how did they get there? Someone designed them, someone made them, someone transported them. Discuss the fact that many jobs exist that we often aren't even aware of. Can the pupils take one of these jobs and draw a picture or act out a scene of them doing it?

Digital / At Home Version

Run the activity in the same way using a video call system.

Additional Challenge

Can you make a list of all the different jobs that exist in your school?

Additional Support

Provide a list of jobs for pupils to choose from to act out or assign specific jobs to pupils.

Resources

Some classroom objects.
Recycled paper and pens.

Suggested Follow-On Activities

Dress up/role play activity where the children can act out some of the jobs they know.

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Jobs of the Future

We are learning…

to better understand what a skill is and identify our strongest skills.

We can now…

talk about what I am good at and what I want to get better at.

Activity

Everyone has different things they are good at and/or enjoy. Working in groups, or as a class, use the PowerPoint to show what skills you think you are best at and what you'd like to get better at it the future.

Digital / At Home Version

Complete the activity in the same way using a computer at home.

Additional Challenge

Rate a partner on their skills and compare the ratings you gave them to those they gave themselves. Did you both give similar or different ratings? Discuss why that might be.

Additional Support

Work with a teacher or partner to complete the task.

Resources

Skills PowerPoint. Recycled paper and pens.
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Suggested Follow-On Activities

Think about a few different jobs you know about and identify which of the key skills you've been looking at would be important for them.

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Jobs of the Future

We are learning…

about how jobs change over time.

We can now…

discuss how changes in technology might mean that different jobs are created.

Activity

Did you know that many of the jobs people do today didn't even exist 10 or 20 years ago? With technology changing quickly, the jobs available are constantly changing too. Can you think of any jobs that didn't exist until recently?

Research 3 things that have been invented in the last 20 years and think of some of the jobs that have been created as a result.

Digital / At Home Version

Complete the activity in the same way using a computer at home

Additional Challenge

Think: Is there anything that all these jobs have in common, for example; would you need to be a good communicator to do them? Would you need to be good at problem solving? What does this tell us about the skills that are important in a rapidly changing world?

Additional Support

Provide a list of things that have been invented in the last 20 years for pupils to work from.

Resources

Computers for research.
Recycled paper and pens.

Suggested Follow-On Activities

Pick your favourite of the new jobs you've learned about today and write a list of the skills you'd need to be able to do that job.
Are there any jobs that no longer exist because of changes in technology?

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Jobs of the Future

We are learning…

what professionals from STEAM industries think Jobs of the Future will look like.

We can now…

discuss the current and evolving roles of STEAM professionals.

Activity

Assign each group in the class a video to watch from the list. Ask them to report back to the class on how the professional answered the questions around Jobs of the Future and identify whether there are any common themes.

Digital / At Home Version

Complete the activity in the same way using a computer at home.

Additional Challenge

Compare multiple videos and report back to the class on any similarities or differences you found between them.

Additional Support

Assign a designated 'Reporter' to report back on the group's findings.

Resources

Jobs of the Future Video List. Recycled paper and pens.

Suggested Follow-On Activities

Create your own class video with each pupil answering the question 'How do you think jobs will change in the future?'. Please share online using the hashtag #STEAMatJacobs.

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Jobs of the Future
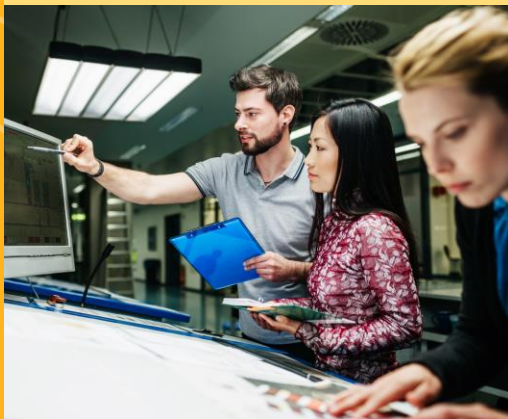
We are learning…

some of the pros and cons of automation.

We can now…

explain why automation can be both good and bad.

Activity

Processes are constantly evolving to become more and more automated; and be completed by machines rather than people. Do you think this is a good or a bad thing? Why? Is there anyone that doesn't benefit when a system is more automated? What sort of tasks cannot be performed by a machine as well as a human? Work in groups invent a machine to do something that humans currently need to do.

Digital / At Home Version

Complete the activity in the same way using a computer at home.

Additional Challenge

Pitch your final designs to a judging panel in the school, or your STEAM Mentor. The judges need to decide whose machine is the most useful in terms of automation.

Additional Support

Provide a list of potential tasks that could be automated. These could include; making breakfast, sorting laundry, building a house etc.

Resources

Suggested Follow-On Activities

Research how likely it is that your desired career will become automated in the future.

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Jobs of the Future

We are learning…

about unconscious bias and how damaging it can be.

We can now…

discuss and challenge our own unconscious bias and that of others.

Activity

Draw a picture of a person who does one of the jobs on the list of roles in STEAM. Discuss what everyone has drawn. Now challenge the drawings; why have the pupils drawn someone of a certain gender/ethnicity/age/height/physicality etc?

If you change the person's gender/ethnicity/age/height/physicality etc could they still complete the task? Why/why not? We all have some level of unconscious bias and the first step in removing it is to recognise and challenge our own perceptions and behaviour.

Digital / At Home Version

Complete the activity in the same way using a computer at home.

Additional Challenge

Consider any benefits that might come from removing unconscious bias in the workplace, both to employees and employers.

Additional Support

As a class, or in groups, research a description of any roles that pupils may be unclear on.

Resources

STEAM jobs list.
Recycled paper and pens.

Suggested Follow-On Activities

Working as a group to think about how an employer might design the application process for a job in a way that removes as much unconscious bias as possible. For example, if you can work out someone's age by knowing the dates they attended university would that potentially cause bias? How could you prevent this?

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