

PRIMARY TOOLKIT: PERSONALISING YOUR PROJECT

This guide is a flexible, stand-alone resource for teachers, parents and governors, focusing on ways to personalise career related learning (CRL) projects in order to make them engaging and relevant to a variety of contexts including school location, curriculum and the range of educational needs of your pupils in years 5 and 6 (although many aspects can be modified for earlier years and into the early secondary phase).

Schools may choose to run the TeenTech City of Tomorrow programme as their core CRL and use this additional resource.

TeenTech City of Tomorrow is a flexible, cross-curricular programme which can be delivered to groups, several classes at a time, and whole year groups. It can also be delivered to children in school or at home with their parents at home as a virtual event. It offers pupils the opportunity to apply their knowledge of science, technology and engineering to create the TeenTech City of Tomorrow where no ideas are too big, and everything is smarter, kinder and safer than before.

Teachers can access a full set of up to date, free resources, worksheets, lesson plans and materials required to deliver this programme can be accessed by registering on http://teentechcity.com/register-your-interest/

Aims

Reasons why personalising resources is important to the success of your career related learning (CRL) experience.

- Authenticity and relevance to pupils: Putting the topic into a real-world context both local and global and adapting the information to suit rural or urban areas helps engage the pupils.
 Linking the project with real-life problems and challenges help pupils connect to the relevance of subjects they are learning in school as well as developing their core skills and personal qualities.
 - Link: Careers and Enterprise Company's six principles of good practice for primary CRL
- Bringing the project to life: Including up to date information about news and developments
 happening locally (in technology and environmental issues for example) in your presentations
 and resources help create an inspiring narrative the power of real-life stories makes a
 memorable impact.
- Engaging with career opportunities Exploration of job and career opportunities -both local and further afield helps to raise pupils' awareness and understanding of the wide range of opportunities open to all, helping to break down stereotypes and social barriers.
- Accessible pupil centred resources and approach to promote a positive focus on individuality, personal skills and qualities, variety in roles, and learning for life. Pupils will be encouraged to understand that anything is possible, inspiring self -confidence, and many essential core skills.
 Link: Ofsted Framework



Outcomes

What will be the result and impact of personalising your CRL programme?

- Pupils will be engaged throughout the activity and demonstrate positive interaction during presentations and collaboration within teams due to the accessibility of the materials and resources.
- Teachers will see pupils who can often struggle with their learning performing to a
 higher level as all children will have the opportunity to demonstrate their own skills and
 personal qualities in response to a personalised programme they can relate to.
 TeenTech's City of Tomorrow encourages children to look to the future and what
 tomorrow's world could bring: Pupils are encouraged to understand that anything is
 possible, inspiring confidence, bold and innovative thinking.
- Pupils will have multiple opportunities to learn about work, employment and the skills that are valued in the workplace, with a range of career paths being explored. Link: Gatsby Benchmarks
- In time, CRL and contact with representatives from the world of work will become established and embedded within the curriculum, the programme fully supported by senior management and governors.
- Pupils will be enthused and inspired by their CRL experiences, showing increased confidence about their aspirations and demonstrating an appreciation that all opportunities are open to them regardless of gender or background.
- Pupils' knowledge about key employability skills, the breadth of jobs available now and likely to be in the future will increase. They may decide to share their interests further in a variety of exciting and proactive ways
- Fun feedback cards / questionnaires following sessions are a great way to measure impact and pupils' response

Steps to follow to personalise your CRL experience

1. Prior to session:

Around 4 – 6 weeks beforehand: Seek external local support

- Seek and gain support from business ambassadors, District Councils, local training and
 education colleges, universities, and employers covering a range of expertise and skills and
 who are keen to engage with your school and pupils. (see **Appendix 1** below)
- Reach out to local LEPs to better understand the skills need of local employers as this is constantly evolving.



Around 2 weeks beforehand:

Incorporate cross curricular links:

- Talk to colleagues to find out which key topics have been/are being taught to pupils you will be working with in different subjects.
- Finding links with subject matter currently being taught helps students see the relevance of what they are learning and how it can be applied in real world situations.
- Cross curricular links can be made to these topics within your CRL presentations and
 activities helping the pupils to see that connection and build upon their existing knowledge
 (e.g. environmental issues, cyber security, transport, food and farming, design and
 technological innovations, space).
- For example: a KS2 topic on Ancient Greek history, including the making of a model Greek ship can be linked to the developments in engineering, design and technology and job roles over time and what may come in the future, prompting discussion about what was good and not so good about the ship, skills involved in the making then, now and in the future, along with solutions to problems and issues we face now and in the future with travel.
- In addition, you may wish to invite a volunteer business ambassador into school with skills connected to the topic being studied at the time. This can greatly help reinforce the importance of subjects such as English and Maths in later life if they can explain the relevance of these in a personalised way. Link: Gatsby Benchmarks

Assess the accessibility of materials and delivery of the Project

- Ascertain the educational needs and abilities of your pupils and organise the preparation of materials beforehand to ensure all pupils can access them.
- Consider differentiation for SEND children, include writing frames and templates, create
 a 'key words' glossary, use different colour paper for printing worksheets where
 necessary.
- Apply sign languages, translations for EAL and ESL children, and Braille where applicable.
- All the worksheets and lesson planning outlines, with extension ideas, certificates, and starter activities for TeenTech's City of Tomorrow can be accessed for free by registering on http://teentechcity.com/register-your-interest/
- Also, organise your pupils into teams before the event to enable the best support where required and the most comfortable and productive working relationships for the pupils.

Create Skills Certificates to reward pupils

- these can be designed and printed to reflect essential personal skills and qualities being
 particularly championed by the school such as creativity, enthusiasm, teamwork,
 resilience, oracy and awarded throughout the sessions. You will find ones for TeenTech City
 of Tomorrow when you register for the downloadable resources (link to the registration
 page)
- This gives the pupils a sense of pride and can be celebrated amongst their peers and with their teacher. Link: <u>Skills Builder Principles</u>
- A display of these can be created within their classroom afterwards and referred to in subsequent situations.



- Also, you could create role stickers according to your project which reflect the job roles the
 pupils are representing within their team (e.g. in TeenTech City of Tomorrow we focus on
 the roles of Technologist, Designer or Engineer).
- This helps pupils collaborate within their team and understand the concept of roles present within the real world of work and the important part they play.
- Downloadable skills certificates for TeenTech City of Tomorrow are available if you register on http://teentechcity.com/register-your-interest/

Personalise materials to your area

- Gather images of the school's local area which can be included within presentations or worksheets to make the connections real and personal for your pupils.
- Find out as much as you can from recent local news about developments / business
 opportunities or issues in the city, town or village discussing these also engages pupils
 and enables them to focus more sharply on information they may have been unaware of
 before. This also helps keep the project fresh and real and brings it to life.

• Localisation: Urban v Rural careers

Is your school in a rural or urban area?

- Personalise your materials and delivery to suit the environment most familiar to the pupils.
- For example, if you run a project which usually focuses on career opportunities and technological developments in cities and towns, highlight the range of opportunities in the countryside, now and into the future.
- Pupils will be able to relate to this more personally so be engaged from the start.
 (See Appendix 2 &3 for growing Urban and Rural careers)

2. DOWNLOADABLE RESOURCES.

Our downloadable worksheets for TeenTech City of Tomorrow demonstrate effective ways to open discussions amongst pupils.

There are stepped processes which enable students to work effectively, in groups or independently, to identify global and personal problems and potential solutions.

You will also find ideas for homework tasks, whole class Q&A or team mind-mapping sessions.

These elements can help build understanding, improve literacy, communication skills and help form a robust foundation to take projects forward.

Our experience has been that they improve student confidence in their own ability and potential t play an active and meaningful part in society.

Link: Character Education Framework



TOP TIPS to Help Engage your Pupils in CRL

- Keep your approach pupil centred: focus on individuality, personal skills and qualities, roles, learning for life.
- Allow enough time to approach business ambassadors, discuss your plans and how they can help so they are well prepared and confident
- · Organise your pupils in teams beforehand
- Talk with colleagues to find out current topics being taught to pupils taking part to enhance the impact of cross curricular links and helping make the CRL project relevant across the whole school
- Ensure resources and materials are ready, including equipment for practical activities, with hall space and A/V systems booked if using.
- Keep it fresh and authentic: Gather regular updates on latest developments local and global- in technology and environmental issues to share with pupils.
- Engage with career opportunities: Garner support from business ambassadors, encourage pupils to adopt roles during the task eg technologists, designers, engineers, look out for showcase festivals: (TeenTech City of Tomorrow organises regional Showcase events following on from school workshops https://www.teentech.com)





Extending the programme further:

- Celebrate successes: share stories on your school social media, website or with https://www.teentech.com
- Pupils can present their creations and ideas to other year groups in assemblies or at
- Open days/ evenings for parents
- Organise employer events mini career fairs / visits / talks. Connect with your local secondary school to share links with employers or become a hub for other primaries to join.
- Establish ongoing links with volunteer employers who are able to work alongside teachers to support pupils with particular topics or launch a new challenge, to which they can come back and offer feedback to pupils about their work.
- Pupils could conduct interviews with employers for newsletters,
- Offer the opportunity for pupils to become school STEM ambassadors. We have a exciting programme for TeenTech Young Ambassadors.
- Create visual displays around the school on topics such as 'Jobs for 2030' career of the month, research, school alumni wall etc
- Giving pupils some ownership over these ideas will help sustain and embed the CRL projects



- Connecting with experts from the local council, business and industry will enhance a personalised approach to CRL and encourage a more sustainable relationship with the school. In rural areas, the local 'Linking Environment and Farming' (LEAF) ambassador could help also. Link: <u>Gatsby</u> <u>Benchmarks</u>
- This can be achieved by contacting them directly or seeking contacts through the school (parents, governors, alumni, previous projects, links with local secondary schools who will have many contacts through their careers programme).
- Meeting up with the Careers Lead at your local secondary school will help establish suitable contacts for particular projects – your pupils may even be able to attend part of one of their careers evenings.
- Contacting the STEM Manager at your local Education Business Company will also be a useful way to find suitable STEM ambassadors or business volunteers.
- If employers are keen but are unable to take time away from their job, you could arrange a virtual face time session, which pupils also appreciate. They could prepare some questions beforehand and then take turns asking the employer about their job role, skills involved, aspirations, etc. This approach could help make a CRL programme more sustainable over the year as your pupils still gain first-hand information from employers who may otherwise be able to attend in person.





APPENDIX 2 Rural schools

A CRL programme in a <u>RURAL SCHOOL</u> could highlight the following career paths and ideas:

- Arable farms need agronomists- soil and plant experts advising on everything from irrigation to tackling field pests
- Business managers / land agents / sales / insurance
- Computer programmers eg breeding programmes, milking processes
- Diversification in crops biodiesel, energy, new crops eg quinoa, soya, chickpeas
- Drone technology and AI robotics plant intelligence, AI, non- chemical weeding, crop monitoring and mapping
- Engineers high tech machinery and equipment
- Experts in marketing and public relations for successful food and farming businesses
- Forestry management
- Genetic modification/ plant developments
- Livestock breeders farm vets help in emergencies, carry out health checks and scan pregnant cows and ewes
- Renewable energy storage eg hydrogen and carbon neutral synthetic gas produced from biomethane created by anaerobic digestion of organic waste or herb-rich grass areas, wind farms
- Social networks to communicate with suppliers or customers and download data from on-board tractor computers to analyse production and efficiency







APPENDIX 3 Urban schools

A CRL programme in an <u>URBAN SCHOOL</u> could highlight the following career paths and ideas:

- Business / Finance management/ Digital Banking
- Construction, design and engineering 'Smart Cities' the Internet of Things, building technologies, digital modelling
- Cybersecurity experts developers to problem solve, create systems, engineers to deliver to the public
- Diagnostics technicians checking faults in vehicles– increase in numbers of electric and driverless cars
- Engineers and programmers data science, machine learning, automation, robotics, cloud computing, business intelligence, gaming, big data analyst / augmented reality
- Fitness wearables and technologies, blending STEM experience with sports science company well-being
- Food Technologists and Scientists creating new foods for the future
- Healthcare and medical careers to meet growing demand in highly populated cities
- Life sciences researching cause and effects of viruses and diseases affecting globalised cities
- Marketing /Retail and Logistics customer profiling
- Pollution control and waste management
- Production management
- Software developer
- Transport developments and innovations road/rail/ air/water
- Urban farming





