Digital Production Design and Development

Essential Skills Guide

Skills Builder PARTNERSHIP

Technical Education Networks

About this Guide

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This guide has been produced by Skills Builder Partnership to support teachers with identifying and utilising opportunities within the T Level curriculum to develop and progress their students' essential skills. It can be used in a variety of ways including in curriculum planning, schemes of learning and/or lesson plans.

What are essential skills?

At Skills Builder, we define a skill as a repeatable action whereby the more you do it, the better you become. It's something that can be taught.

Essential skills are those highly transferable skills that everyone needs to do almost any job, which make specific knowledge and technical skills fully productive. They are therefore distinct from basic skills (literacy, numeracy and digital skills) and technical skills (specific to a particular sector or role, sometimes drawing off a particular body of knowledge).

Essential skills can unlock learning in the classroom, boosting academic outcomes, perseverance and self belief. They halve the likelihood of being out of work, and increase earnings across a lifetime. They even boost wellbeing and life satisfaction. You can read more on the research around essential skills on the Skills Builder website.

The Universal Framework

The Universal Framework: The Skills Builder Universal Framework is a tool for measuring and building essential skills. It breaks the 8 essential skills down into a sequence of steps, starting from absolute beginner through to mastery. It is supported by research and was developed with leading businesses, academics and educators. It consolidates an array of different skills frameworks into something comprehensive and practical.

LISTENING	SPEAKING	PROBLEM SOLVING	CREATIVITY	STAYING POSITIVE	AIMING HIGH	LEADERSHIP	TEAMWORK
Listening to others	Speaking clearly	Completing tasks	Generating ideas	Keeping trying	Working effectively	Understanding emotions	Working well with others
Demonstrating listening	Speaking engagingly	Exploring problems	Developing ideas	Finding opportunities	Setting goals	Managing tasks	Contributing to the group
Recognising influence	Speaking adaptively	Analysing problems	Innovating effectively	Managing risks and rewards	Creating plans	Supporting others	Improving a team
Listening critically	Speaking influentially	Implementing strategic plans	Supporting others to innovate	Supporting others to stay positive	Developing strategies	Adaptive leadership	Influencing a team

The Universal Framework was Developed by the Essential Skills Taskforce: for more information see Towards a Universal Framework for Essential Skills

Building your students' essential skills:

Students can complete an online self-assessment using the Skills Builder Benchmark tool to discover their initial skill score. Alternatively, you can use the Universal Framework as a useful tool to explore what progress in a particular skill might look like for your students.

- You may find that your students have different starting points and will develop their essential skills at different rates and through different experiences, such as industry placements and classroom activities. Students' progress through the skill steps may not be linear.

- You may wish to use some of the suggested activities in this guide to support your students in their learning journey and to build their essential skills as they progress through the T Level course.

- The activities suggested in this guide are not an exhaustive list and there will be other ways to develop these core skills.

In the T Level specification for **Digital Production Design and Development**, there are four core skills identified, with the main essential skills supporting development of these core skills below:

Core Skill 1:
Reflective evaluation

STAYING POSITIVE

AIMING HIGH

Core Skill 2:
Communication

SPEAKING

LISTENING

Core Skill 3:
Working with others

LEADERSHIP

TEAMWORK

Core Skill 4:
Problem solving

CREATIVITY

PROBLEM SOLVING

Why developing reflective evaluation skills is important for students to progress in their future career:

- **Professional growth:** The digital sector evolves rapidly, making continuous learning and development crucial. Accurately assessing their own performance can identify areas for improvement and stay relevant in a fast-changing industry. This self-awareness drives personal growth and career advancement.

- **Skill development:** Reflecting on one's performance helps identify skill gaps and emerging industry trends. Understanding the need for ongoing learning and proactively acquiring new skills and knowledge increases adaptability to new technologies and methodologies.

- **Performance optimisation:** Self-evaluation is key to improving efficiency and effectiveness in digital roles. Learning from both successes and failures, and continuously enhancing performance can lead to better outcomes for projects and organizations.

Core Skill 1: Reflective evaluation

To develop this core skill, building essential skills in staying positive and aiming high are important.

Examples this may be evidenced through:
- be able to apply reflection and evaluation techniques;
- provide evidence that the product meets brief requirements:
- include measures against success criteria;
- provide evidence that the product meets user needs from testing;
- discuss how it could be improved if the problem was revisited and given detailed consideration.

Build students' Staying Positive skills

STEP 4

Can students keep trying when something goes wrong and think about what happened?

Example activities to develop this:
- Students **reflect** on an experience that didn't go to plan or were presented with a challenge during the T Level (or could share an example one).
- Students **analyse** what happened, **consider** if anything could have prevented it and **consolidate** what learning they can take from it for the future.

STEP 7

Can students look for opportunities in difficult situations?

Example activities to develop this:
- **Present** students with a scenario, e.g., the sequencing of some programme code is in the wrong order and is impacting a project with an employer.
- Students **identify** opportunities that could be explored when dealing with the situation.
- Students **create** solutions for the situation and exchange in pairs to suggest potential opportunities.

Build students' Aiming High skills

STEP 4

Can students work with a positive approach to new challenges?

Example activities to develop this:
- Students **reflect** on a time they have succeeded at something new.
- Students **discuss** what factors may have contributed to their success or what they learnt.
- Students **create** a toolbox of strategies they can use when facing new challenges.

STEP 11

Can students create plans that include clear targets to make progress tangible?

Example activities to develop this:
- Students **create** SMART targets for an aspect of their practice and **discuss** what success will look like for them.

STEP 12

Can students create plans that are informed by external views, including constructive criticism?

Example activities to develop this:
- Employers **review** the different ways data can be stored for their organisations for different purposes including the limitations of each.
- Students **reflect** the different ways data can be stored for different organisations and **provide** a plan for each purpose.

For more ideas and resources to build your students' essential skills, check out the Universal Framework and the Staying Positive and Aiming High workshops.

Why developing communication skills is important for students to progress in their future career:

- **Working with diverse teams**: In digital businesses, projects often involve diverse teams with varying levels of technical expertise. The ability to communicate effectively across these groups ensures that all stakeholders understand project goals, progress, and challenges.

- **Explaining technical concept:** Digital professionals frequently need to explain complex technical concepts to non-technical stakeholders, including executives, clients, and end-users. This is crucial for gaining buy-in, managing expectations, and ensuring that all parties can make informed decisions.

- **Stakeholder engagement:** Clear communication is key to engaging stakeholders at all levels of the organization. Adapting communication styles to suit different audiences can be more effective when gathering requirements, reporting progress, and addressing concerns.

Core Skill 2: Communication

To develop this core skill, building essential skills in speaking and listening are important.

Examples this may be evidenced through:
- be able to communicate with technical and non-technical audiences, using the appropriate tone and levels of technical vocabulary through face-to-face communication, written communication and visual and audio communication;
- communicate how and when issues are resolved to appropriate stakeholders.

Build students' Speaking skills

Step 5

Can students speak effectively by using appropriate language?

Example activities to develop this:
- Students **identify** key technical and non-technical terms when interpreting code in a related programme language.
- Students **participate** in a role play with peers to consider the language they are using and practice for both technical and non-technical audiences.

Step 10

Can students speak adaptively by changing their language, tone and expression depending on the response of listeners?

Example activities to develop this:
- Students **deliver** a presentation on a new computing system being used in the workplace.
- Students in the audience, **take on the roles** of different stakeholders.
- Set questions for the 'audience' to ask that will **challenge** the students to **adapt their answers** based on who is asking.

Build students' Listening skills

Step 5

Can students listen to others and record important information?

Example activities to develop this:
- Students **listen** to a video or audio recording of a potential client e.g., sign a website and record key pieces of information.
- Students **compare** what information they recorded and how they recorded it, e.g., bullet points, mind maps etc.

Step 7

Can students show they are listening by using open questions to deepen their understanding?

Example activities to develop this:
- Students **listen** to a video or audio clip or how to carry out a particular website design technique.
- Students **create** a list of questions based on the clip that would further their understanding.
- Students **identify** any closed questions and try to rewrite them as open questions.

For more ideas and resources to build your students' essential skills, check out the Universal Framework and the Speaking and Listening workshops.

Skill 3: Working with others

Why developing working with other skills is important for students to progress in their future career:

- **Working with different departments:** Digital projects often involve many different departments and multiple stakeholders. Successfully implementing digital initiatives requires good communication and teamwork and effective stakeholder management.

- **Strong relationships:** Building strong relationships with diverse stakeholders enables digital professionals to gather key insights, align priorities, and gain support for digital projects and strategies

- **New technologies:** As technology becomes more important in all areas of business and new technologies continue to emerge, being able to explain digital concepts to people with different backgrounds will be a valuable skill in many careers.

Core Skill 3: Working with others

To develop this core skill, building essential skills in teamwork and leadership are important.

Examples this may be evidenced through:
- understand the roles and responsibilities of the digital team within the software development life cycle;
- understand how to maintain code as part of a larger team;
- understand and be able to select appropriate technologies used in a social and collaborative environment;
- understand the reasons for using collaborative techniques.

Build students' Teamwork skills

STEP 3

Can students work well with others by taking responsibility for their tasks?

Example activities to develop this:
- Students are provided with a scenario to reduce development time on a project.
- In groups they must **combine** all the different ideas to reduce development time on a project into an overall plan.

STEP 4

Can students work with others by supporting others if they can do so?

Example activities to develop this:
- **Create a group task** with clearly defined roles and tasks, ensuring that some tasks will take longer or are more complicated.
- Set a time limit for the group to complete the task. Once the time limit is over, ask students to **reflect** on how the task went and if those who completed their tasks supported others in their role.

STEP 6

Can students contribute to group decision making?

Example activities to develop this:
- Students research the benefits and drawbacks of connecting devices to form networks.
- Students share, in groups, what they have learnt.
- Groups must then reach a unanimous consensus on the most important benefit and drawback of connecting devices to form networks.

Build students' Leadership skills

STEP 4

Can students manage time and share resources to support completing tasks?

Example activities to develop this:
- In groups students **undertake** a scenario of being a manager in the different key areas of an organisations.
- Each group must **produce a plan** for how the required daily and weekly IT tasks will be managed in each of the teams and specify how they will use their resources.

STEP 7

Can students recognise their own strengths and weaknesses as a leader?
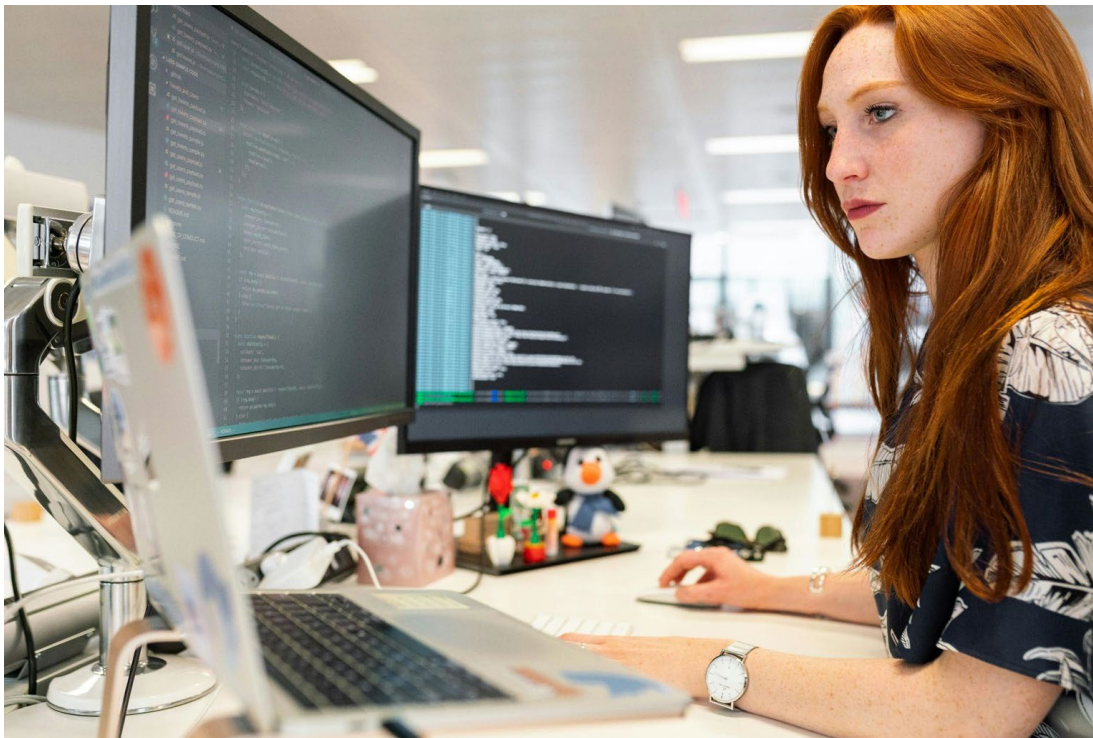
Example activities to develop this:
- Students **reflect** on a great leader of their choice and **consider** the strengths and weaknesses of their chosen leader.
- Students **self-reflect** on their own strengths and weaknesses as a leader and **consider** activities to help them develop their weaknesses.

STEP 9

Can students recognise the strengths and weaknesses of others in their team and allocate roles accordingly?

Example activities to develop this:
- **Students are given** a set of staff profiles and available jobs.
- **Students match** the staff profiles to the jobs they are most suited for and **justify** their choice.

For more ideas and resources to build your students' essential skills, check out the Universal Framework and the Teamwork and Leadership workshops.

Why developing problem solving skills is important for students to progress in their future career:

- **Systematic problem-solving:** Applying a valid approach to solving digital problems allows complex issues to be approached methodically. Structured thinking is essential in the digital sector, where data-driven decision-making is crucial. Breaking down large problems into manageable steps, increasing efficiency and effectiveness.

- **Adaptive troubleshooting:** The ability to identify and resolve issues as they arise is a valuable skill in the fast-paced digital world. Being able to overcome obstacles and keep projects on track, even when faced with unexpected challenges is vital.

- **Documentation and information management**: Recording progress and solutions is vital for continuity, transparency, and knowledge sharing in digital projects. It also aids in-meeting project requirements by ensuring all steps and outcomes are properly documented.

Core Skill 4: Problem solving

To develop this core skill, building essential skills in problem solving and creativity are important.

Examples this may be evidenced through:
- applying problem-solving skills to analyse problems and to identify solutions that can be developed into computer programs;
- solving realistic problems that may form a complete solution or a sub-part of a larger program.

Build students' Problem Solving skills

Can students explore complex problems by identifying when there are no simple technical solutions?

STEP 6

Example activities to develop this:
- Students **evaluate** a list of potential risks to organisations of using digital systems and technologies and classify them as simple or complex problems
- Students **discuss** how their approach to problem solving might differ depending on if the risk is simple or complex.
- Students **create** a series of questions to help determine if a risk is simple or complex.

Can students explore complex problems by analysing the causes and effects?

STEP 8

Example activities to develop this:
- Describe two different solutions to a digital problem.
- Students identify the different possible effects each solution may cause and justify which solution is the most appropriate.

Build students' Creativity skills

Can students generate ideas when they have been given a clear brief?

STEP 3

Example activities to develop this:
- Students **review** a digital product brief.
- Students **produce** a list of what success looks like based on the brief.
- Students **design** a possible solution that fits the criteria.

Can students generate ideas to improve something?

STEP 4

Example activities to develop this:
- Students **review** the system in place for a particular digital business system or process.
- Students **suggest** ways the system or process could be improved.

Can students develop ideas by asking themselves questions?

STEP 9

Example activities to develop this:
- **Present** students with a digital business challenge.
- Students **produce** a range of initial ideas to tackle the challenge.
- Students **review** their ideas (or their peers) and come up with 5-10 questions to challenge their work.
- Students use the questions to **redraft and improve** their ideas.

For more ideas and resources to build your students' essential skills, check out the Universal Framework and the Problem Solving and Creativity workshops.

For more information on building your student essential skills please visit the Skills Builder website at
https://www.skillsbuilder.org/

For more resources and support for this T Level please visit
https://www.technicaleducationnetworks.org.uk/digital/