

Teaching guide: The Taught Element of Project Qualifications

Before you launch a Project Qualification, you need to devise a programme of Taught skills.

Taught skills are essential to a successful project and students should learn these skills ahead of implementing them in their project. The skills can be delivered in flexible ways, including student-led learning. There are lots of resources available to support taught skills learning.

- To help EPQ students get used to independent learning, ask them to enrol on one of the free FutureLearn courses:
 - How to succeed in your EPQ: the nuts and bolts of completing your project from the University of Bath
 - <u>Developing your research project</u> from the University of Southampton
- There are many excellent <u>university resources</u>, all easily adaptable for remote delivery. Some of these resources can be used independently by students at home but others would benefit from teacher delivery and input. (See below for some suggestions about the use of some of these resources).
- There's an AQA approved textbook available for the EPQ. The publisher has also provided, free of charge, various PowerPoint presentations together with a Scheme of Work to help you get the best use out of the textbook to guide 3 (Taught Element).

Depending on your timescales, consider asking students (possibly in small groups) to complete a mini project, with a short research report on a given topic, in order to teach and develop some of the core skills in a project context.

Before students start planning their own project and before they commence detailed research, they should have covered the taught skills on project planning and management, how to approach research ethically and safely and how to scrutinise sources for reliability, relevance, currency, etc. Great emphasis should be placed on the need to **evaluate** sources thoroughly **before** using them.

Note therefore, that ideally at least half the taught skills should be delivered before a proposal is submitted. (See the *Teaching guide: The project process and Production Log for Project Qualifications* for a more detailed breakdown).

When planning your Taught Element, it may be helpful to consider 60 half hour sessions. Try to cover as many different approaches to each skill area so that students may choose the approach and skill that suits them and their own unique project best. Consider the following factors in planning the programme delivery:

- Over what time period is the Project Qualification being delivered?
- What do students already know, or can do?
- Who in the centre is best qualified to deliver the programme, or aspects of it?

Centres delivering Project Qualifications over a longer period of time, for example, over five terms, sometimes spend the first term teaching skills while students begin thinking about potential project topics. Where the Project Qualification is being delivered within a shorter timeframe, centres may introduce workshop sessions focusing upon the delivery of skills needed by students at particular points in their project journeys. With this model, there's still a need for some 'front loading' of skills delivery before students start working independently.

Whilst the Centre Coordinator has overall responsibility for a centre's Taught Element neither the Coordinator, nor the Supervisors, will necessarily deliver the entire Taught Element. Centres frequently make use of librarians, teachers, IT specialists or others with specific skills or experiences. These might or not be centre based, but come, for example, from a university.

No single fixed programme is appropriate for all centres. The outline programme below offers a starting point from which you may develop your own programme. Timings are just suggestions.

Session	Objectives	Content and focus	Activity
Introducing the Project Qualification and setting out your centre delivery model, deadlines etc. (30 mins)	To introduce the process nature of the qualification. To emphasise the research focus of the qualification. To explain that the qualification is regulated with strict JCQ guidelines.	Focus on the Assessment Objectives and the importance of the Production Log in providing evidence of skill development.	Activity: Ask a student who has achieved an award in the Project Qualification in a previous series to talk about their experiences/achievements. You could also include here one or two Project presentations delivered by students from an earlier cohort. Activity: A skills 'audit' is a useful mechanism in assessing the skills students might already possess and in focussing their attention on the qualification's main thrust – to improve skills. Use <u>this</u> <u>questionnaire</u> from the University of Sheffield to kick start your skills audit, then discuss and examine the audit with your students in more depth.

Session	Objectives	Content and focus	Activity
Introduce the role of Supervisor/ Coordinator (30 mins)	To make clear the specific roles of the Supervisor and the Coordinator.	Explain how to make good use of time spent with Supervisor. Supervisor as a resource, as a critical friend.	
Keeping a journal (30 mins)	To introduce use of a journal as a research tool.	The importance of notes/records as 'aide memoire'. Emphasise the need to evidence autonomous decision-making throughout project process.	Activity: Lead a discussion: What works best for you? Notes on your phone? A physical journal? Activity: Ask a PHD student to share their research journal with students. Why are the notes so valuable?
		Ensure students are aware that the journal is a working document to support production log completion	
Choosing a topic What makes a good project topic? (30 mins)	To explain the different structures of artefacts and written research reports.	Explain differences/ similarities carefully between the types of product.	Activity: Use of concept maps to explore student interests Various university resources available, such as these from <u>The University of Manchester</u> .
Why might some Project titles not lead to success? (30 mins)	To illustrate what this implies for the student. To understand what makes a good topic and why some Project titles might not lead to success.	Emphasise that both are assessed using the same set of assessment criteria, ie this is a process-based research qualification.	

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Health and safety risk assessment (1 hour) Ethics of	To make clear that all research activities should be assessed for potential harm to self or others. To understand	Introduce the concept of control measures, how risk might be reduced.	Activity: In class, give example scenarios for students to assess for risk, working in groups.
Etnics of research Encouraging students to think deeply about the ethical implications of research. (2 hours)	To understand the need for consent/right to withdraw/ debriefing etc. To understand that research involving human beings might have unintended harmful consequences.	Please see our guide to Ethics and safeguarding in Project Qualifications You could repurpose the NSPCC's Research ethics guidance for your students. It includes useful information about consent the and avoidance of personal and social harm. The British Psychological Society (BPS) has produced a set of ethical principles which can be discussed and then applied by all students. Respect Competence	Ideally ask an expert to deliver these sessions, possibly the Safeguarding Lead in school Activity: Examine the ethical implications of a range of research activities. Eg questionnaires to children (parental consent required), interviews, experimentation using fellow students.
		Integrity	
		Responsibility	

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Creating a working title (1 hour)	To develop a question/ title To understand: • What do question words imply? • What questions might work well? Is there any ambiguity?	Why might some titles lead to poor projects? Stress that working title is not fixed but that by mid-project review a title needs to be focused and 'pithy'.	Activity: Lead group discussion on: 'How', 'Why', 'Investigate', 'To what extent', 'Compare', 'An exploration of'

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Time management (2 hours)	To understand how to plan the project and work independently.	Look at different ways to plan a Project. Introduce critical path analysis and contingency planning. Use of Gantt charts/planning sheets/action plans.	Activity: In groups get students to prepare a plan for a project topic and title supplied to them.
Aims and objectives (1 hour)	To understand that project planning must include aims and objectives that can be monitored as the project progresses.	What is a project aim? Understanding that when writing a 5000-word report, 5000 words is an aim. Setting SMART objectives.	Activity: Link to previous activity. Identify the aims and objectives for the Project. Can the objectives be refined to make them SMART? How will this improve the planning/monitoring?
Using the Production Log (30 mins)	To understand the importance of evidencing decisions, ideas and reflections in the Log.	Use <u>our</u> <u>PowerPoint</u> <u>presentation</u> on How to complete a production log.	Activity: Start to write up the Record of Initial Ideas, using research journal notes to jog memory.
Types of resource (1 hour)	To understand what is meant by 'primary' and 'secondary' research. To understand that there is a wide variety of potential resource types and possible relevant sources of information.	All artefact projects will require some form of primary research but for 5000-word report products there is no requirement to use primary research.	Activity: Give students a jumbled list of resources and ask them, working in groups, to sort them into primary and secondary.

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Using human beings as resources (1 hour)	To understand the issues involved when using people as resources (refer back to Ethics). To learn skills related to collection of primary data from human beings.	Interviews/ questionnaires/ email exchanges/ letters. Etiquette of letter/email writing.	Activity: Ask students to write a letter to their local MP/someone else of their choosing about an issue that concerns them. Activty: Draft a set of questionnaire questions. Activity: Draft a set of interview questions.
Facilities to use for research (1 hour 30 mins)	To raise awareness of the range of facilities available for research.	Use of library (school/college/ city/University). Use of catalogues. Museums, galleries, lectures film, etc.	Usually best delivered by a trained librarian, possibly a visit to your local university library.
Use of internet, JSTOR or similar (1 hour)	To understand how to use search engines for specific searches.	Google vs Google Scholar, which is better in which circumstance? Keeping safe on the internet.	A course often delivered by a trained librarian.
How to choose, evaluate and use sources (2 hours)	To explain that not all published material is reliable or relevant. To raise awareness of newspaper/ media/political/ religious bias.	Use of RAVEN or CRAAP to evaluate resource. Analysing data and statistics. Assessing reliability of information.	Activity: Give students a set of mixed resources and ask for a full evaluation of each one. Should each source be trusted/used and why? Activity: Provide students with articles from clearly biased sources. Can they detect the bias/criticise the methodology or discover any misuse of statistics?
Critical engagement with information (2 hours)	To learn how to extract key ideas from documents and identify themes and arguments.	Understanding how to make notes rather than copy. Paraphrasing. Synthesising key information. Triangulation of data.	Activity: Give students an article of around 550 words to read and instruct them to write a precis that includes all the key information that does not include any copy and paste.

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Collecting data (2 hours)	To develop appropriate statistical methods and learn about tools that may be used for data collection. To learn about the differences between quantitative and qualitative data.	Selecting samples. Choosing the most appropriate method for data collection. Recording information from sources and from questionnaires, experiments and interviews. Use of graphs, diagrams and statistical tests.	Many possible activities, eg: Using interview questions prepared in earlier session conduct an interview then transcribe the interview. Using questionnaire questions prepared in earlier session, collect some responses, try out different ways of displaying the responses.
Referencing and plagiarism (2 hours)	To explain the importance of being consistent with referencing. To explain what plagiarism is and how to avoid it.	Guide to Harvard and other forms of referencing eg MLA. How to use endnotes and footnotes. Efficient use of Word to insert references.	Activity: Students write a 500 word report on a topic allocated to them including fully referenced citations from at least three sources.
Report writing (2 hours)	To understand that different projects suit different report styles. To understand key aspects required for introduction and conclusion. To understand what an argument is and what makes a good argument.	Different styles of report. Writing in an academic style. Introduction and conclusion. Use of paragraphs/ sub sections. Developing an argument. Critical and descriptive modes of writing. Use of appendices.	Activity: Give students a poorly written report to critique. Ask them to highlight all the places where there is room for improvement.

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Writing, proof reading and editing the report (30 mins)	To understand how to draft and edit work.	Developing skills of critique. Use of appropriate software to help with grammar and spelling.	Activity: Follow on from previous activity – edit and improve the poorly written report.
Presentation (4 hours)	To help students understand what a Project presentation should include. To introduce different styles of presentation. To help students understand what makes a presentation boring or unsuccessful. To help students understand the need for a practice presentation, to gain confidence in answering questions 'on the spot'.	Different software to help make a Project presentation eg use of PowerPoint, Prezi. Different types of presentation eg Marketplace, viva, delivery to invited audience, etc. Public speaking skills including importance of clarity of delivery, consideration of body language, appearance, etc.	Activities: Throughout the project process have students deliver mini presentations telling the story of their project thus far. Encourage use of new/different technologies. Encourage questions from the audience.
Reflection and evaluation (30 mins)	To ensure objective evaluation of completed projects and of students' learning while undertaking their projects.	Encourage students to look objectively at processes and outcomes. How can strengths and weaknesses be identified?	Activity: Refer back to the skills audit completed in session one. How have skills developed?

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Project submission (30 mins)	To understand the difference between appropriate materials for inclusion and inappropriate materials. To understand the importance of naming, labelling and indexing materials.	Emphasise both the need for explicit evidence but stress also the need to communicate clearly and concisely.	Activity: Present students a) with a Project submission that has evidence missing and b) with a Project submission with far too many irrelevant appendices/perhaps without labels. Ask students to discuss these submissions. What is missing? What is irrelevant/unhelpful?