

OXFORD

INTERNATIONAL
AQA EXAMINATIONS

INTERNATIONAL INDEPENDENT PROJECT QUALIFICATION (IPQ)

(9693)

Quick guides

For teaching from September 2017 onwards

For first assessment from 2019 onwards

CONTENTS

Introduction to IPQ	3
Quick Guide to delivery models	5
Quick guide to being a supervisor.....	7
Quick guide to being a Centre Coordinator	9
The production log and its purpose.....	10
Quick guide to ethical principles for the IPQ	14
Quick guide to practical science projects	18
Quick guide to using a technical mentor or consulting specialist.....	20
Quick guide to working to a brief.....	22
Quick guide to the presentation	23
Quick guide to internal standardisation for Project qualifications	25
Quick guide to internal moderation and submission of grades	27

INTRODUCTION TO IPQ

This qualification offers an opportunity for students to produce a researched written report on a topic of their own choice. The purpose is to learn how to plan, resource, complete and evaluate a detailed study in a manner that would be recognised by academic and business institutions.

The development of the necessary skills and their application is an essential element, as is the independent nature of the work. The student is the principal decision maker in the development of their aim and in the implementation of their plan. The responsibility of centres is to provide a taught programme of appropriate skills and to support the decision making without directly issuing instructions.

ASSESSMENT OBJECTIVES (AO)

There are five assessment objectives for the International IPQ:

AO1: Selection of topic – Identify and select an area of interest, devise aims and objectives and establish a working title using a selection of appropriate sources (10%).

AO2: Planning, monitoring and developing – Produce a project plan which incorporates a time schedule, undertake a risk assessment and monitor progress against objectives (20%).

AO3: Demonstration of research skills – Research, select, organise and scrutinise a range of information and resources, justifying the selection of any secondary and primary sources used (20%).

AO4: Analysis and application of research – Implement the project plan, analyse the findings of the research and synthesise these findings into a 5,000 word report with references and bibliography. Include a conclusion and communicate outcomes in both a report and a presentation (40%).

AO5: Evaluation of product, process and self – Evaluate the strengths and weaknesses of the project process (including review of own learning arising from it) and product (10%).

TAUGHT SKILLS GUIDANCE

The success of students relies heavily on the skills demonstrated in the process of planning and completing an independent project. The centre is responsible for teaching these and the **production log** has a section for describing how this has been done.

Centre Coordinators will have considered 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 the Project over a longer period of time, for example, over 5 terms, sometimes spend the first term teaching skills with students not starting their actual Project until the second term of the course. In this case the delivery model is sometimes based on a mini-project, set by the Centre, and designed to deliver specified skills. Where the Project is being delivered within a shorter timeframe, Centres may introduce workshop sessions focusing upon the delivery of skills needed by students at a particular point in their project. With this model, there is usually a need for some 'front loading' of skills delivery before students start working independently.

A skills 'audit' is a useful mechanism in assessing the skills students might already possess. These will clearly differ in terms of the background of the students.

Whilst the Centre Coordinator has overall responsibility for a Centre's Taught Skills Programme, neither the Coordinator, nor the Supervisor, will necessarily deliver the entire Taught Skills Programme. 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 local university.

The scheme of work contains suggestions for a taught skills programme which could be used by centres.

QUICK GUIDE TO DELIVERY MODELS

When you launch the IPQ there are some key points to consider when deciding on the right delivery model for you and your students.

The taught skills programme takes up 30 of the 120 guided learning hours (GLH). All students should undertake the taught skills programme and some could require specialist teaching, depending on their area of research - for example how to use laboratory equipment safely.

To ensure that you have time to deliver the Taught Skills element at the most appropriate times, you need to find the model that works for you.

There are a number of delivery models available. The three most common, along with their advantages and disadvantages, are below. If you would like to discuss which of these would work best for you please go to oxfordaqaexams.org.uk/subjects/projects/ipq – ‘Ask a question about this specification.’ Enter your question and this will be passed to a subject specialist for a response.

MODEL 1

- Start IPQ in September of Year 12
- Submit IPQ in March Year 12
- Advantage:
 - less likely to experience staff changes.
- Disadvantage
 - students may lack the maturity demanded by a level 3 qualification.

MODEL 2

- Start IPQ in September of Year 12
- Submit IPQ in March Year 13
- Advantages:
 - an extended period of time, that may be used to ensure students get plenty of time to develop their ideas and be taught key skills
 - students have the opportunity to use a summer vacation
 - time pressure removed and students could have an internal centre deadline at the centre’s choosing.
- Disadvantages:
 - possible staff changes more likely
 - possible competition with a-level mock exams (but this can be overcome by using an internal centre deadline)
 - supervisors may change jobs and/or responsibilities and this could affect the IPQ assessment process.

MODEL 3

- Start IPQ in June of Year 12
- Submit IPQ in March Year 13
- Advantages
 - Students have completed their first year of A-levels and may have developed greater maturity in tackling level 3 qualifications.
 - Students have the opportunity to use the summer vacation.
- Disadvantages
 - Possible staff changes more likely
 - Competition with A-level exams (but this can be overcome by using an internal centre deadline)

QUICK GUIDE TO BEING A SUPERVISOR

WHAT IS A SUPERVISOR?

The Supervisor and student relationship can be the key to success in many project qualifications. Their role is to help students through a new and challenging programme of study, they don't need to be a subject specialist in the chosen area of project research. It's often better for a Supervisor to have no specialist subject knowledge, so that student and Supervisor embark on the learning journey together.

The Supervisor role has four key responsibilities: to regularly meet with their student(s), to complete key sections of the OxfordAQA Production Log, to attend each student's presentation and to grade the work of their student(s).

RESPONSIBILITY ONE

Meeting with students to:

- field initial ideas from students and take them through the initial planning stage of their project
- advise students on ways to improve and focus their initial ideas to ensure they can achieve the best result possible
- hold the planning review, mid-project review and project product review with the student, offering advice and guidance to help the student to progress, without directing the course the project takes. Often the supervisor holds additional meetings as and when the student requires support.

RESPONSIBILITY TWO

Complete the Production Log. At key points during the project process it is essential that the supervisor complete their sections of the Production Log so that the evidence of the project process is comprehensive and authenticated.

- The Supervisor must provide details of the centre's taught skills programme in the Production Log. They are sometimes involved in the delivery of these taught skills depending upon the centre set-up.
- Using the checklist in section 2.4 of the specification, the Supervisor comments on the suitability of the candidate's project proposal in Part B of the Production Log.
- Explain how the project will extend and develop from a student's main course of study in 'Part B: Supervisor's comments on candidate proposal' in the Production Log. It is important that dual accreditation is avoided; the Supervisor provides evidence that the proposed project will extend from a student's other areas of study where there is potential overlap.
- Complete the 'Presentation record part B' section of the Production Log, recording the nature of the presentation audience, the nature of the presentation, the delivery of the presentation and the questions asked of/responses given by the student
- Complete the record of grade section of the Production Log, providing supporting statements for each assessment objective and that justify the grade awarded.
- Complete the submission checklist in the Production Log and the necessary Supervisor declaration sign off.

RESPONSIBILITY THREE

Attend the presentation. The Supervisor must attend the presentation and keep a comprehensive log of the nature of the audience, the nature of the presentation, the delivery of the presentation and the questions asked/responses given. This will form the basis of the assessment evidence for this session. It is imperative that this is recorded in the Production Log 'Presentation record part B' as it is often the only evidence the external moderators have of the presentation. (Students may choose to include additional relevant information related to the presentation, such as PowerPoint slides.) Please note that while the presentation may be delivered in a language other than English, the record in Presentation Record part B must be in English.

RESPONSIBILITY FOUR

Grade the students' work. It must be ensured that each supervisor grades the submitted work of students to the same standard as their colleagues by following the system of internal standardisation and moderation that has been set up by the Centre Coordinator.

OxfordAQA provide teacher standardisation training and training for supervisors through our 'Getting started' and 'Go Further' training sessions, visit oxfordaqaexams.org.uk/support/events.

QUICK GUIDE TO BEING A CENTRE COORDINATOR

WHAT IS A CENTRE COORDINATOR?

A Centre Coordinator is one of the key roles for the project qualification. They are responsible for delivering the qualifications within a particular school, college or consortium.

The key areas of responsibility are:

- developing staff understanding of the requirements of the qualification
- devising, timetabling and delivering the taught skills element (delivery may be delegated to other colleagues or outsourced to other experts but it must be centrally organised to ensure consistency for all students)
- final sign off of all project proposals – it is imperative that the Centre Coordinator refer to the five point checklist in section 2.4 of the specification to ensure that all students have devised effective proposals that will allow them access to the full range of marks
- quality assuring the standard of supervision received by each student undertaking a project qualification
- ensuring that the OxfordAQA grading standard is understood by all supervisors and that it is maintained within the centre. This includes attending OxfordAQA's online standardisation training and using TOLS materials, communicating the standard to the supervisors who are marking the projects and then arranging internal moderation of the grading of each supervisor.

There are some important administrative tasks that must be completed by the centre coordinator to ensure that the submission of the projects for external moderation runs smoothly. These are:

- making the centre's exam officer aware of candidates who should be entered for the projects
- setting internal deadlines so that all OxfordAQA deadlines for submission can be met
- submitting grades to OxfordAQA and a requested sample of work to an external OxfordAQA moderator
- ensuring that every supervisor and the centre coordinator have signed the centre declaration sheet which must be submitted to the external moderator alongside the requested sample of work.

It is important that the Centre Coordinator registers their centre and provides OxfordAQA with relevant contact details in order that we can inform them of upcoming training and/or specification developments. The Centre Coordinator is the only person who should contact OxfordAQA directly and all questions should be escalated via them.

THE PRODUCTION LOG AND ITS PURPOSE

WHAT IS THE PRODUCTION LOG?

The Production Log is a document that is used to record a student's journey through the project process. The Production Log is not an admin document; it provides the student with the backbone of their project.

The IPQ is a process-based qualification. The outcome (the report) is a significant component, but the Production Log is just as important. It charts the student's progress from initial ideas, through their research to their final outcome and evaluation.

It is vital that students are made aware of how important this document is in relation to their final outcome and that they complete the log as they go along, rather than trying to fill it in retrospectively.

THE ASSESSMENT CRITERIA

Students should be encouraged to consider the assessment criteria when completing their Production Logs and answer the question/respond to the statement at the start of each section in a clear and focused way. The log has been designed to provide students with appropriate prompts for each section and following this structure will provide students with a framework for their project.

Below is an outline of each page of the log and some tips for their completion.

CANDIDATE RECORD FORM

Similar to student record forms for all coursework, this should be completed by the student at the end of the process. It confirms that the work they are submitting is their own.

SUBMISSION CHECKLIST

This is reminder for the Supervisor to complete before submitting a project.

THE TAUGHT SKILLS ELEMENT

Using the space provided, the supervisor should record details of the taught skills programme followed by the student.

RECORD OF GRADE

This is where the supervisor records the final grade awarded to the student. The supervisor should write a supporting statement for each assessment objective indicating the evidence seen to justify the grade awarded. The supervisor may also make a concluding statement on the project as a whole. If the project has been used for internal moderation the centre coordinator should complete the internal moderation comment as appropriate.

RECORD OF INITIAL IDEAS

It is acceptable for students to have more than one idea for their project at the beginning of the process. Students should record all their initial project ideas on this page and record how they will research these ideas in the space provided. The initial ideas and research will form the basis of the student's first meeting with their supervisor, the contents and outcomes of this meeting should be recorded in the space provided. It is good practice to record specific examples of initial research undertaken.

PART A: CANDIDATE PROPOSAL

This page is to be completed by the student. They should be as clear and detailed as possible when discussing the types of research they plan to undertake; there should be more detail than 'I will read books and look on the internet'. Specific examples should be included for high grades. This is also where students record what other courses they are undertaking. Please note that whilst students might be inspired to look more deeply into a topic they have touched on in another area of study, they should be looking to extend and develop away from those core areas of study. This is particularly important for IPQ projects.

PART B: SUPERVISOR'S COMMENTS ON CANDIDATE PROPOSAL

This is to be completed by the supervisor. The supervisor should comment on the suitability of the project working title, how the project proposal extends/develops from the student's main course of study, and whether the student's research plan is feasible. The supervisor should check that there is no risk of dual accreditation and that the project offers good scope for extension.

PART C: CENTRE COORDINATOR'S APPROVAL OF CANDIDATE PROPOSAL

This page is to be completed by the centre coordinator who gives the final approval for a project to go ahead. If you are the sole Supervisor and are also working as the centre coordinator, please enlist the help of a colleague to sign projects off. The centre coordinator should refer to the five point checklist in section 2.4 of the specification before approving project proposals. The centre coordinator should be particularly vigilant to check for any issues of dual accreditation.

Dual accreditation means entering the same piece of work for more than one accredited qualification. For example, a student using their A-level History coursework project as their IPQ Project.

Dual accreditation also refers to using research materials obtained on one course of study directly in the IPQ. For example, selecting a topic central to a course of study (eg A-level), and using associated class materials, textbooks, handouts, lesson notes, etc. to develop an IPQ on this topic. This applies to IPQs completed in year 12, where the topic is studied in Year 13.

IPQ should provide extension and development from a student's course of study and, if the student uses a topic and associated course materials from their A-levels or other level 3 programmes, they are not able to demonstrate extension and development and thus will limit their opportunity to achieve a high grade against the IPQ assessment objectives.

Supervisors should ensure, through meetings with their students, that the project proposal is a genuine extension and development from the student's entire programme of study. If there is any doubt about a dual accreditation risk, the supervisor should check with the appropriate subject specialist in the school to confirm if the project proposal topic(s) are, or are not, included on the relevant specification. In approving a project proposal Centre Coordinators should be satisfied that there is no dual accreditation. Centre Coordinators should contact OxfordAQA for advice on dual accreditation.

PLANNING REVIEW

This section provides the student with an opportunity to map out their next steps by developing a project plan that will allow them to chart their progress. Some students use Gantt charts or other project management tools to help with the management of their projects. These can be helpful tools when used effectively but they aren't compulsory for a successful project, students can use the Production Log to plot and chart their progress against their aims. However, it is important to note that the high grade criteria's refer to 'novel planning techniques.' There should be evidence of how the candidate chooses to plan and monitor their project. The planning review also provides the opportunity for the student to arrange a meeting with their supervisor to discuss their planning, and record outcomes and actions from this meeting in the space provided. It also provides a good opportunity to discuss any risks associated with the project to fulfil the risk assessment requirement.

MID-PROJECT REVIEW

By this stage the student's title should be finalised. They will have undertaken most of their research, and will be ready to start producing their written report. Any changes that have been made as a result of their research, conversations with their supervisors or other input should be logged and fully explained. Students should be reminded that the project is graded holistically and that there may be opportunity for reflection and evaluation at any point. If they have made a decision to refine their title, for example, then this would be an appropriate time for them to justify that decision and reflect upon how they came to that decision.

PROJECT PRODUCT REVIEW

This section provides students with an opportunity to measure how well they have managed the project process since the mid-project review, as they near the completion of their written report. Students should be reminded of the necessity of recording their own monitoring processes and discuss the extent to which they have reached the goals they set themselves/met their own deadlines. The supervisor may have some more comments or points that the student could choose to incorporate in their report at this stage.

PRESENTATION RECORD PART A

This is an opportunity for the student to outline what form their presentation will take, who will be there, the content of their presentation and any changes they make as a result of a discussion with their supervisor after a rehearsal. See the quick guide to the presentation for more information on this important aspect of the project qualifications.

PRESENTATION RECORD PART B

This is completed by the supervisor. In order for OxfordAQA moderators to support the grade you award as a result of the presentation, a detailed record must be made which supports that grade. We do not ask you to submit recordings of the presentations, but a comprehensive written record of the questions asked and answers given makes it much easier for moderators to support your marks. Please avoid vague statements such as 'the student answered confidently' and instead document specific examples from the presentation, as directed by the prompts on Presentation record part B.

SUMMARY AND REFLECTION

Students should provide an abstract/brief outline of their report. There are a number of online resources on how to write an effective abstract which could form part of the taught skills programme.

Often students think that if they admit to any failings they will be penalised; this is not the case. Honest reflection on what went well and what they have learned, coupled with what went less well, and what they would do differently, are key to a successful reflection. Students should understand that admitting to any problems they encountered and acknowledging the ways in which they dealt with those problems are a legitimate aspect of an effective reflection. The student should reflect on the project process and the project outcome.

The Production Log belongs to the student. It is their document and they are the ones who are responsible for its completion (apart from the pages indicated for the supervisor and centre coordinator). The student is also responsible for the selection of any additional evidence they wish to include. Additional evidence can be useful only if it is relevant to the project process and outcome. The careful selection of such material should form part of the taught skills programme.

WHAT SUPPORT IS THERE TO HELP ME WITH THE PRODUCTION LOG?

We can provide support in a number of ways:

- Go to oxfordaqaexams.org.uk/subjects/projects/ipq – ‘Ask a question about this specification.’ Enter your question and this will be passed to a subject specialist for a response.
- OxfordAQA provides training via the ‘Go Further’ series of webinars – see oxfordaqaexams.org.uk/support/events

QUICK GUIDE TO ETHICAL PRINCIPLES FOR THE IPQ

WHY ARE ETHICS IMPORTANT?

All educational providers have a responsibility for the safeguarding of students and the protection of children. It is the responsibility of the centre to ensure that all research undertaken for the IPQ meets these regulatory requirements.

We take safeguarding responsibilities very seriously and external moderators can refer projects to malpractice if they feel a centre submits student work that suggests these ethical responsibilities have not been met.

There are also educational reasons for an emphasis on ethics for IPQ. Students are not just learning how to undertake their own independent research they are also encountering the often challenging issues regarding the impact of the research itself; on participants, on the researcher and the school, and wider community.

A consideration of ethical issues is a key part of the taught skills element for all students, not just those undertaking primary research with human subjects. It is also a higher-level evaluative skill which is assessed as part of the IPQ. It is appreciated that those teachers involved in the delivery of the IPQ may need support in teaching research ethics, and this short guide is a starting point.

WHY ETHICAL PRINCIPLES?

Many students just want a list of dos and don'ts but at this level it is appropriate to expect that they think deeply about the implications of their research. The British Psychological Society has produced a set of ethical principles which can be applied by all students and teachers.

- **Respect:** This includes a consideration of the impact on all those involved in the research, be they participants in research, students, colleagues, different cultures or diverse groups within schools, colleges or the wider community.
- **Competence:** As well as research skills, this includes the appropriate interpersonal skills and maturity required to undertake the tasks proposed. For those involved with the IPQ it implies a responsibility to ensure that all are appropriately trained for the roles undertaken.
- **Integrity:** This includes honest reporting of the research procedures and findings to enable others to make assessments, as well as taking into account personal bias and assumptions when interpreting data. For students, it includes avoiding plagiarism. For staff, it includes professionalism and accountability.
- **Responsibility:** This includes a responsibility on researchers for the well-being of those involved in their research as well as taking responsibility for the wider impact of their actions. It is meaningless to make someone responsible if they are unable to respond appropriately so training for competence is an integral element. Each role has its own responsibilities discussed below.

ETHICAL PRINCIPLES FOR THE CENTRE COORDINATOR

The Centre Coordinator is responsible for ensuring that supervisors carry out their roles ethically and that the work submitted by the centre is ethically sound. There are several ways to do this:

1. Supervisor training, ensure that professional and research ethics are included in training sessions.
2. The Taught Skills Element should include input on ethical considerations before students decide on their aims and methodology.
3. The Part C: Centre Coordinator's approval of candidate proposal stage of the project process is the coordinator's opportunity to influence specific project proposals from an ethical point of view before the student begins to plan their project research. This is a crucial role, and to reach a sound judgement there needs to be enough information available in the student's Part A candidate proposal, and the supervisor's Part B supervisor's comments. Information on the proposed research process and evidence that ethical principles have been considered can be in the initial ideas section. If this is lacking then resubmission is required, with a request to the student that this is included prior to resubmission.
4. Consult OxfordAQA: we can provide advice on assessing the appropriateness of project proposals and support you with planning training and the taught skills element. Go to oxfordaqaexams.org.uk/subjects/projects/ipq - 'Ask a question about this specification.' Enter your question and this will be passed to a subject specialist for a response.

ETHICAL PRINCIPLES FOR SUPERVISORS

Supervisors ensure that students carry out their research ethically and have considered ethical issues throughout the project process. This can be done by:

- Using the initial ideas meeting to refer to the ethical considerations raised in the taught skills element and to challenge the student to apply these to their initial ideas.
- Encouraging students to use Part A candidate proposal to explain the ethical principles applied to their project proposal. Part B supervisor's comments can be used to clarify the student's application of ethical principles to ensure the Centre Coordinator is presented with adequate information to make a judgement on approval of the project proposal
- Seeking the advice of the Centre Coordinator who can liaise with OxfordAQA as required.
- Once the student's project proposal is approved the supervisor has a responsibility to ensure that the proposed safeguards are followed by the student. If their plan develops and the ethical nature of the research changes, for example, the student decides on follow up interviews to a questionnaire, then the supervisor may need to ensure the student has considered the ethical impact of this change.
- Throughout the project process and particularly at the presentation it may be appropriate to ask the student how they have considered ethical principles regarding project development decisions and applications of their research. This may provide useful evidence of evaluative skills when applying the assessment criteria.
- In centres where ethical responsibilities are taken seriously, there is no need to advise students to avoid controversial topics in their research. This applies also when students use their own experiences in their research or as inspiration.
- In cases where material may be upsetting for the student it is useful to involve a colleague to support supervision. It may also be appropriate to involve the school's designated safeguarding lead to support and advise the supervisor and student.
- Use the following Ethics Committee activity.

A STUDENT ACTIVITY: 'THE ETHICS COMMITTEE'

This activity could form a part of the Taught Skills Element. The questions can be given to students; however, the activity needs to be supervised to ensure that

- students understand the ethical principles involved, and
- the supervisor can use the outcomes to inform their judgement regarding the suitability of student proposals.

The ethics committee is formed of IPQ student peers whose job is to ensure each proposal is ethically sound prior to submission. Students take it in turns to present their project proposals and answer questions posed by their peers. Below are some suggested questions for students to select and adapt.

GENERIC QUESTIONS FOR ALL PROPOSALS

- How do you think your research findings could be of benefit to others?
- Does your research have the potential to inform others about different cultures or help overcome prejudice and misunderstanding between different groups?
- Have you considered the applications of your research and to what extent are you able to influence its outcomes?
- What qualifies you to undertake this research?
- How have you taken any health and safety issues into account?
- Can you give an example of how you will respect views different from your own?

QUESTIONS FOR RESEARCH USING HUMAN PARTICIPANTS

- How will you ensure that all participants are fully informed about the research before they decide to take part?
- How will you protect the confidentiality of participants and make sure that the experience of participation is a positive one for them? What will they get out of it?
- How will you ensure that your participants can withdraw at any stage and that they have the chance to see and influence the way you have used their input?
- How will you ensure all participants are fully debriefed after the research stage?

QUESTIONS FOR SOCIALLY SENSITIVE RESEARCH INTO CONTROVERSIAL TOPICS

- On balance why do you think the outcomes of this research outweigh any potential for harm or unsettling others?
- If you are aiming to bring about some positive change how will you ensure your actions actually make a positive difference?
- If you are using online research tools for surveys or creating blogs, websites or social media then how will you protect the safety of your participants and yourself?

SOURCES OF FURTHER SUPPORT

- Supervisors can look to their centre coordinators for support; coordinators can access advice from OxfordAQA.
- For more on the British Psychological Society's ethical principles, visit [bps.org.uk](https://www.bps.org.uk)
- The Wellcome Trust provide an [ethics guide](#) which is excellent for anyone considering a survey, experiment or observational study. This has been designed for EPQ students in the UK, but the principles are equally applicable for IPQ students.
- There is a free [Futurelearn online course](#) on research for the IPQ which includes ethics and can be used directly with students over 8 x 1 hour sessions. There is also a [shorter three week Futurelearn course](#) designed for the EPQ, which again, can be followed by IPQ students.

QUICK GUIDE TO PRACTICAL SCIENCE PROJECTS

Investigative scientific projects are very much in the spirit of project qualifications, particularly IPQ, with its emphasis on enquiry and analysis.

The flexibility of the project qualification lends it well to the investigative project. Many centres are supporting students through imaginative and well planned studies. Practical experimental investigations in the sciences can be very successful and allows students the opportunity to apply scientific method to their own investigation. This develops vital research skills.

The following suggestions provide more detail on these types of projects.

Most science topics where a hypothesis is tested work best as research-based written reports in the style of a scientific paper. To support this, students must complete a literature review containing the secondary research findings at the beginning followed by the methodology, data and analysis. Statistical validation of results would be appropriate to many investigations.

All project products must include a written report. The IPQ requires a report of 5000 words. It is possible for students to use findings from their own practical research within an IPQ report, but it should be combined with secondary research evidence.

WHAT RESOURCE IMPLICATIONS ARE THERE?

INSIDE THE SCHOOL OR COLLEGE

The cooperation of subject staff and technicians is essential for experimental work as all safety protocols need to be observed, and laboratory or fieldwork will need a level of supervision and appropriate risk assessments put in place. The student's supervisor does not need to be a science specialist. A staff member who is prepared to be consulted regularly and supervise any practical work can be designated as a technical mentor, leaving the project supervisor in the normal advising and monitoring role. The Production Log can be used to record the input of the technical mentor.

OUTSIDE THE SCHOOL OR COLLEGE

University departments, work experience placements, and field study centres can be useful resources; particularly where specialist technologies are required. Provided the planning stages of the project are completed before a placement there is no reason why such resources cannot be used to gather the experimental evidence needed.

Placements provide an excellent opportunity for a student to use advanced facilities. However it is important that both supervisor and student understand that a placement project undertaken independently cannot subsequently be turned into an IPQ.

The Production Log should show the initial planning and record the arrangement of the placement and the precise support or facilities to be used to implement the plan. A fully completed log with all sections correctly dated will provide evidence that the project requirements for planning have been met.

The role of technical or research staff in the placement needs to be clearly described so that the independent work of the student is clearly delineated.

WHO ELSE MIGHT BE INVOLVED?

Individual experts can be approached to advise or mentor where appropriate, provided the Production Log acknowledges this. This is no different from any other project topic where experts, such as healthcare professionals, university lecturers or subject specialist school teachers are interviewed, or their advice sought.

Centres encouraging their students to plan experimental projects can get further advice from OxfordAQA.

FURTHER USEFUL RESOURCES INCLUDE:

The following resources give guidance from UK institutions regarding EPQs. However, these guiding principles are also very helpful in relation to IPQ. If uncertain about any aspect, please contact OxfordAQA for further advice and support.

The institute for research in schools (IRIS) provides [guidance and example projects](#)

The Wellcome Trust has produced a very [useful guide to research ethics for EPQ students](#)

In addition The Wellcome Trust has produced [a practical guide to extended science projects](#)

[The Institute of Physics](#) has [guidance on supporting the Level 3 Extended Project in Physics](#). It also provides case studies of physics projects

The National Stem Centre provides resources to support STEM subject IPQs - including [ethics guides for students and teachers](#)

The Nuffield Foundation provides [guidance on health and safety](#) in school and college science laboratories

Science and Plants in Schools provide resources to support [developing skills for science and social science projects](#)

Into Biology, provide research ideas for IPQ and resources that [support biology and biochemistry projects](#)

QUICK GUIDE TO USING A TECHNICAL MENTOR OR CONSULTING SPECIALIST

The best IPQ supervisors aren't usually subject specialists. Teachers have told us that by supervising projects that aren't related to their specialism, they focus on supporting students with the process and avoid over directing their work.

However, occasionally students need specialist support from a 'technical mentor' or specialist about their project.

TECHNICAL MENTORS

Students might work with a technical mentor when they are undertaking a practical or experimental project which requires the use of specialist equipment.

A technical mentor is:

- an addition to a project supervisor
- someone who support students with technical aspects of their project
- an exception; technical mentors should only be used where necessary.

A technical mentor should:

- give technical support only
- avoid directing student's work, and certainly do no part of a student's work for them
- contribute to the taught skills element of the project where appropriate.

Students should:

- refer to their technical mentor in their production log
- justify why the nature of their project requires them to work with a technical mentor (typically because equipment cannot be used without support.)

Technical Mentors might be: lab technicians, university researchers, technical and vocational specialists such as mechanics, engineers, hairdressers, craftspeople, chefs etc.

CONSULTING SPECIALISTS

Students might consult specialists when they need information or input directly related to the topic of their project.

A specialist is:

- in addition to a project supervisor
- knowledgeable about the topic of a project
- a legitimate source of information for a student

A specialist should:

- respond to student questions, but not offer unsolicited advice
- avoid directing student's work, and certainly do no part of a student's work for them

Students should:

- Refer to communications with specialists in their production log under Part A: Candidate proposal
- Treat a specialist like any other source of information by considering the reliability of the information they provide and their authority to provide it.
- Any information used in a report as primary research (e.g. specialist information or interviews) should be fully referenced.

Specialists might be: teachers or lecturers in the relevant subject area, university researchers, established experts (some students may even contact leading world experts)

Over direction by a mentor or anyone else can undermine your students' ability to meet the assessment criteria and ultimately affect their grade. Please guide your students carefully about the use of specialists and technical mentors.

QUICK GUIDE TO WORKING TO A BRIEF

In the past we have been hesitant to encourage students to work to a brief, this was largely due to concerns surrounding the levels of independence a student can demonstrate if they are simply given a brief. However there are some great opportunities for students to base their projects on a brief.

If your students identify a broad topic in which they are interested and evaluate the opportunities available to them to complete a project in that area, they may find a brief or a programme that helps them achieve their aims incredibly valuable. Equally, a brief or a programme might be the springboard for their project leading to the identification of a topic, aims and objectives.

Here are some pitfalls and good practice to help you guide students who might work to a brief.

Suitable

- You make your students aware of the support and equipment that is potentially available to them, so they can make an informed decision that leads to a viable project. Please encourage your students to consider other sources of support such as employers and local universities.
- Your students take part in a programme or a competition and take this as a starting point for their project.
- Your students seek out a brief.
- The brief is broad enough to allow students to take their own decisions and clearly pursue their own independent research.

Unsuitable

- You or someone else tells your students what topic to study.
- Your students take part in a programme or an essay writing competition, and retrospectively fit their project to it.
- Your students are given a brief.
- The brief is tightly prescribed and prevents students taking their own decisions or undertaking independent research.

Universities tell us how important it is that students are able to undertake their own independent research. Working to a brief, working as an individual member of a team, using an existing data set, or choosing a project according to their own assessment of the support and resources available are no barrier to this. As long as students are able to make their own decisions and pursue their own independent research, then we see no reason to discourage students from seeking out a brief to work to.

For example

- A student who wants to research particular aspects of advertising might seek out a real client and attempt to create advertising that fulfils the client's brief whilst applying all the research undertaken into the chosen aspect.
- Or a student very interested in environmental matters may seek out a brief from local nature reserve and undertake practical research into an area of fauna/flora that would be of greatest benefit to the reserve.
- Equally a student could undertake research into website design and then seeks out real a client with very specific needs for whom to design a website.

In each case, the planning should include plenty of time for client feedback. The student should also evaluate whether or not the brief has been followed adequately and consider whether or not the client's needs have been understood in their reflection.

QUICK GUIDE TO THE PRESENTATION

WHAT IS THE PRESENTATION?

IPQ students must complete a live presentation. The presentation should focus on the project product and cover the following:

- what their project is about
- the reasoning that underpins their project
- their aims and objectives
- what research has been undertaken and why
- a review of their performance and achievements
- lessons they have learnt
- how their product might affect their future career/education.

The presentation provides candidates with an opportunity to tell the story of their project, from initial project choice right through to final reflections. Students can demonstrate their project management, research, and evaluation skills which can provide excellent evidence to contribute towards the holistic assessment.

FORMAT OF THE PRESENTATION

The presentation should be for a non-specialist audience. The minimum number of people in the audience is two (one of whom must be the supervisor). There are a variety of ways that the presentation can be conducted, for example:

- viva (witnessed by at least one person in addition to the supervisor)
- lecture
- seminar
- market place (for large cohorts, each student has a stand and conducts their presentation to a number of small groups).

Students may wish to use flip charts, posters, slides, or short excerpts of video material to complement their presentation. In their log, students may discuss why they selected a particular format, why it was appropriate for their particular product, and any limitations that affected their choice.

The supervisor should ensure that there is a live question and answer session during the presentation. Questions should be specific to the candidate and spontaneous, the use of an identical list of questions for all candidates is not advisable. Individual targeted questioning enables the candidate's knowledge and understanding of issues arising from their project to be measured. Supervisors may also use the question and answer session to prompt responses that provide evidence missing from the project, or give further detail to support decisions made.

EVIDENCE OF THE PRESENTATION

Physical evidence of the presentation is not compulsory (for example, a video of the presentation or slides used) although students may choose to include supplementary presentation evidence which is appropriate and relevant. However, supervisors must complete Presentation Record Part B of the Production Log fully and in detail to give moderators a complete overview of the candidate's performance for verification purposes. All assessment is evidence based. If grades are awarded that credit the student's responses to questioning, a record of the questions asked and answers given must be supplied so this is visible for moderators. It is not compulsory to submit any further evidence of the presentation, however, if the student did use a PowerPoint presentation or other materials, these can be included as assessment evidence.

The presentation can be given in the student's first language, together with an authenticated translation, but all written evidence submitted should be provided in English.

WHAT SUPPORT IS THERE TO HELP ME WITH THE PRESENTATION?

We can provide support in a number of ways:

- Go to oxfordaqaexams.org.uk/subjects/projects/ipq – 'Ask a question about this specification.' Enter your question and this will be passed to a subject specialist for a response.
- OxfordAQA provides training via the 'Go Further' series of webinars – see oxfordaqaexams.org.uk/support/events

QUICK GUIDE TO INTERNAL STANDARDISATION FOR PROJECT QUALIFICATIONS

WHAT IS INTERNAL STANDARDISATION?

Internal standardisation for the project qualifications is the process by which centres ensure that all supervisors are assessing projects to the same standard. It should not be confused with internal moderation. Internal standardisation takes place before grading is undertaken, whereas internal moderation is carried out by the centre coordinator and comes after projects have been graded by supervisors.

Standardisation helps ensure that assessment is accurate and consistent. Accurate marking helps avoid adjustments being made to centre assessment following OxfordAQA moderation. Consistent assessment, where every supervisor applies the assessment criteria in the same way, is very important.

The centre coordinator is responsible for internal standardisation. If you are a new coordinator, or if assessment at your school or college has previously been adjusted following moderation by AQA, you should:

- attend our online standardisation training. This is designed to ensure that centres understand the standard before communicating it to their supervisors
- complete the teacher standardisation exercise available every academic year on TOLS. This allows you to check your grading against the OxfordAQA standard.

HOW TO DELIVER INTERNAL STANDARDISATION

Internal standardisation should be done before supervisors begin to grade live work. One way to deliver internal standardisation is for supervisors to:

- review the assessment objectives and criteria
- assess a number of example projects that are available on OxfordAQA's website and via the TOLS system
- make notes that refer to the assessment criteria and underpin the reasoning behind the marks awarded
- discuss the marks they have awarded, identify any differences and discuss them to achieve a common understanding and application of the marking criteria.

Our coordinators report that they usually spend a morning or afternoon standardising their supervisors.

WHAT EVIDENCE SHOULD I GIVE OF INTERNAL STANDARDISATION

Internal standardisation does not have to be evidenced in the Production Log, however by signing the centre declaration form the centre coordinator is confirming that internal standardisation has taken place. There is space in the Production Log to provide comments on internal moderation, and it is expected that the supervisor will provide clear annotations and notes in support of their assessment that refer directly to the assessment criteria. Where a project has been sampled for internal moderation the centre coordinator should also provide clear annotations in support of their adjustments.

WHAT SUPPORT IS THERE TO HELP ME DELIVER INTERNAL STANDARDISATION?

There are a number of ways in which OxfordAQA can support you in delivering internal standardisation meetings:

- consult the professional development section of our website to find out when our free standardisation online training is taking place
- on e-AQA you will find example projects and commentaries on the TOLS service
- Go to oxfordaqaexams.org.uk/subjects/projects/ipq – ‘Ask a question about this specification.’ Enter your question and this will be passed to a subject specialist for a response.

QUICK GUIDE TO INTERNAL MODERATION AND SUBMISSION OF GRADES

INTERNAL MODERATION

The coordinator has to moderate the projects to ensure that all supervisors are working to the OxfordAQA IPQ standard.

Where the number of students entered is small, the coordinator can probably see all of the projects and make adjustments accordingly.

Where there is a large entry the Coordinator may need to sample work from several supervisors to ensure that the grading criteria has been applied consistently across the centre submission

There are many other different successful models that a centre might choose to employ to internally moderate the grades.

There is space in the production log to provide comments on internal moderation and it is expected that the supervisor will provide clear comments in support of their assessment that refer directly to the Assessment Objectives. Where a project has been sampled for internal moderation the Centre Coordinator should also provide clear annotations in support of their adjustments.

SUBMISSION OF GRADES AND PROJECTS

Entries will be made electronically by 21 February each year. Submission of grades is required by 31 March each year. After grades have been submitted sample projects will be requested by the IPQ moderator for external moderation of grading. This sample should be posted to the moderator as soon as the sample is requested.

Moderators will scrutinise a sample from each centre. The moderator regrades the work and compares his/her grades with those that you have provided, to check whether any changes are needed to bring the grading in line with our agreed standards. In some cases the moderator will ask you to send in more work.

Your students' work will not be returned to you after the assessment period.

WHAT SUPPORT IS THERE TO HELP ME WITH INTERNAL MODERATION AND SUBMISSION OF GRADES?

Go to oxfordaqaexams.org.uk/subjects/projects/ipq – 'Ask a question about this specification.' Enter your question and this will be passed to a subject specialist for a response.



OXFORD INTERNATIONAL AQA EXAMS
GREAT CLARENDON STREET, OXFORD, OX2 6DP
UNITED KINGDOM

enquiries@oxfordaqaexams.org.uk
oxfordaqaexams.org.uk