The Independent Investigation Proposal Form Guidance

The Awarding Organisations (AO) have jointly written 12 exemplar Independent Investigation Proposal Forms to support and guide both teachers and their students. These exemplars are not aligned to any AO and can therefore be used by all teachers and students. However, in order to show how these titles link to a specification there are precise references to individual AO specifications in the 'How the title links to specification content' sections of these forms.

The main purpose of these 12 exemplars is to:

- explore a range of investigation styles
- outline different types of teacher guidance (general and specific)
- show examples of good practice (both the student and the teacher).

These exemplar proposal forms were not written to be representative of ‘perfect’ investigations. The Awarding Organisations wanted them to represent what students could potentially produce and show the range of support and guidance a teacher may give to their student to ensure they effectively plan their investigation.

The layout of the exemplars is as follows:

- A completed student Independent Investigation Proposal Form.
- The white ‘speech bubbles’ surrounding the completed proposal demonstrate teacher guidance to the student.
- Red text in the teacher guidance ‘speech bubbles’ indicates where the Awarding Organisations feel the teacher is giving specific guidance (which is not permitted).
- The blue boxes are Awarding Organisation guidance to the teacher, highlighting areas of good practice, things to consider, indications of specific guidance (not permitted by the teacher) and references to possible alternate guidance that may be offered.

Important to note for risk assessments and ethical considerations

Whilst specific guidance is not permitted by the teacher, the exception to this is with regard to risk assessments and ethical considerations. It is imperative that teachers ensure all students are able to conduct their investigations in a safe and appropriate manner. Therefore, a suitable risk assessment should be undertaken and any ethical considerations should be accounted for prior to the student embarking on fieldwork. Teachers are able to provide students with any relevant detail as part of the risk assessment. For the ethical considerations, teachers should provide students with any relevant detail to ensure their safety.
Exemplar Independent Investigation Proposal Form – No.1

AO comment (Title): It is considered malpractice to suggest a title for a student. Students should develop their own titles, with the teacher only offering generic guidance, which enables the student to maintain independence throughout the investigation. The teacher could ask more pointed questions, e.g. “what do you hope to achieve by mapping and analysing these glacial features? It might be clearer if you phrase it as an overall aim or question rather than simply saying what you are doing…”.

Unfortunately, what looks good and achievable on paper may be too much in reality. The formation and orientation of the corries you have described will take some time to complete by a single individual and would be best split into teams of two.

The measurements of moraines and orientations should be straightforward but sediment analysis can only be done on exposed sites because digging in these areas would require an auger (which is not permitted and would not produce the desired results in any case).

The analysis of data needs more explanation in terms of sampling strategies; How do you plan to undertake sediment analysis for instance? Try to look into the techniques and skills we have learnt in class/previous field-trips and decide which would be done on exposed sites, remember the time constraints we will have on the field-trip, as well as your access to the required equipment and the extra people required to collect all the data.

AO comment (Methodology): The teacher has rightly questioned the student’s planned data analysis and gives the student the opportunity to work out the right approach. The teacher has however given specific guidance on splitting the data collection into two teams of students and using a specific piece of equipment. This guidance does not allow the student to find a solution to the data collection issues independently. The teacher has missed an opportunity to question the breadth of the student’s methodology, which might improve the student’s ability to successfully collect the required data in the time available.

AO comment (Other): It is important that students don’t become too reliant on collecting data in large groups in case there aren’t enough students choosing investigations on a similar topic. Students will need to be reminded of the stages of the investigation where collaborative and independent work are permitted.

AO comment (Title): The student has chosen a very broad title to investigate, which creates challenges in terms of data collection and adhering to the recommended word count. The teacher has missed an opportunity to offer further guidance. The student’s title is self-limiting as it doesn’t include a statement, question or hypothesis that is open to evaluation.

The teacher inappropriately suggests a clearer title, but they are right to suggest a more limited investigation that is more achievable in the time available, and one that is more open to evaluation.

Although you have indicated that you will be concentrating on the cirques in your investigation title, you have also mentioned several other features such as moraines, U shaped valleys, truncated spurs and roches moutonnées…

Can you be clearer about why you are aiming to find these additional features? Your methodology seems to focus on the cirques so I’m not entirely sure how you are aiming to find these features.

I would suggest creating a title that better reflects the nature of your study as it is not absolutely clear what you are setting out to achieve, such as; ‘To what extent does geomorphological evidence prove the provenance of Glacial Extent in the Newlands Valley’. This however would need further breakdown within the hypothesis and sub questions, which were not well exemplified.

AO comment (Methodology): The teacher has highlighted the student’s planned methodology and indicates a good and achievable on paper investigation focus – indication of how the enquiry will enable the candidate to address their investigation title and explore their theme in relation to the chosen geographical area. It is my aim to find significant features within the valley including moraines, U shaped valleys, truncated spurs and roches moutonnées. These will along with sediment analysis help to show the direction of flow of the glacier and may even go to prove provenance.

The measurements of moraines and orientations should be straightforward but sediment analysis can only be done on exposed sites because digging in these areas would require an auger (which is not permitted and would not produce the desired results in any case).

The analysis of data needs more explanation in terms of sampling strategies; How do you plan to undertake sediment analysis for instance? Try to look into the techniques and skills we have learnt in class/previous field-trips and decide which would be done on exposed sites, remember the time constraints we will have on the field-trip, as well as your access to the required equipment and the extra people required to collect all the data.

AO comment (Methodology): The teacher has rightly questioned the student’s planned data analysis and gives the student the opportunity to work out the right approach. The teacher has however given specific guidance on splitting the data collection into two teams of students and using a specific piece of equipment. This guidance does not allow the student to find a solution to the data collection issues independently. The teacher has missed an opportunity to question the breadth of the student’s methodology, which might improve the student’s ability to successfully collect the required data in the time available.

AO comment (Other): It is important that students don’t become too reliant on collecting data in large groups in case there aren’t enough students choosing investigations on a similar topic. Students will need to be reminded of the stages of the investigation where collaborative and independent work are permitted.

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Can you be clearer about why you are aiming to find these additional features? Your methodology seems to focus on the cirques so I’m not entirely sure how you are aiming to find these features.

I would suggest creating a title that better reflects the nature of your study as it is not absolutely clear what you are setting out to achieve, such as; ‘To what extent does geomorphological evidence prove the provenance of Glacial Extent in the Newlands Valley’. This however would need further breakdown within the hypothesis and sub questions, which were not well exemplified.
Exemplar Independent Investigation Proposal Form – No.2

### Investigation title
Factors affecting variation in infiltration rates in the drainage basin of the River Taw in Devon.

### How the title links to specification content
Water and carbon cycles: 3.1.1.2 The Water cycle. The study is linked to “flows and transfers at hill slope and drainage basin scales”. It will focus on infiltration flows although other related flows and stores such as precipitation, interception and soil water will be considered.

### Planned investigation hypothesis or question /sub-questions
**Hypothesis:** “Infiltration rates in the River Taw drainage basin are affected by several interacting factors—soil type, slope angle and position and preceding weather”.

**Sub-hypotheses:**
1. The higher the percentage of clay in the soil the lower the infiltration rate.
2. Steep slopes and upper slopes have higher infiltration capacity than gentle slopes and lower slopes;
3. A change in weather conditions affects rates of infiltration.

### Investigation focus – indication of how the enquiry will enable the candidate to address their investigation title and explore their theme in relation to the chosen geographical area.

The area selected for field study is part of the drainage basin of the River Taw, between Little Torrington and Merton. The enquiry will consider three factors which influence infiltration rates in an upland river basin. By selecting hillslopes with the same geology and similar vegetation it should be possible to focus on the factors of slope, soil type and preceding weather. By carrying out 4 different transects, equally spaced within the drainage basin, from valley floor to summit, there should be a representative sample of the drainage basin.

### Planned methodology – indication of qualitative and /or quantitative techniques including primary and, if relevant, secondary data collection techniques, indication of the planned sampling strategy or strategies.

A slope will be chosen which leads down to a river. The slope selected will have uniform geology and vegetation. Four transects will be completed with equidistant sites, 50 metres apart. The base and summit of the slopes will be included. Sampling strategy: systematic line sampling, working in a group with 3 other students.

#### Primary data collection (at each site):
- Measure angle of slope using a clinometer.
- Take a sample of topsoil to test soil texture and moisture levels. Place in a polythene bag with a sealed top.
- Before inserting the infiltration ring, undertake a soil moisture test at each site to check whether there is a correlation between percentage moisture and infiltration rates.
- Use a trowel to cut a circle in the ground, and insert a home-made infiltration ring or infiltrometer. Hammer in to a depth of 10 cm. Ensure the tube is vertical. Disturb the soil and vegetation as little as possible.
- Using a jug, pour in water, up to the top of the tube and record how many millimetres the water has fallen after one minute. Fill up the tube and record the drop in the 2nd minute etc. Record infiltration rates for at least 10 minutes.
- Identify any site factors that may lead to anomalies.

#### Secondary data collection:
- Research information about the rocks and other sediments in the drainage basin eg British Geological Survey’s site Geology of Britain.
- Obtain weather data for two weeks before starting the fieldwork using the Met Office archive.

### Teacher’s approval and comments
Your theme for investigation is approved although you are advised to review the number of variables to be considered. Think more carefully about whether the data you collect is suitable for testing each sub-hypothesis. Please ensure that you check access arrangements and consider potential risks as part of a risk assessment.

### Teacher’s signature

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Your proposed investigation is firmly based on the specification content. You have made these links clear in your own words as well as giving the specification reference.

You need to be more specific about the area chosen for study, making sure that the transect routes are accessible. Most of the land is private so you may be limited to footpaths, unless you get permission from farmers to use their land.

You’ve stated that you’re planning to collect data as part of a group. This is a good idea but please remember that you must fully take part in the primary data collection. This is important so that you can access the mark scheme when discussing the implementation of your chosen methodologies in your written report.

The methods of data collection are appropriate. The equipment needed is easily available and your sampling strategy is suitable. Be realistic about how much data you can collect in the time available. Is the sample size appropriate?

How will you ensure that your data collection methods will work? Bear in mind the potential problems of access mentioned earlier. You will also need to consider the practicalities of collecting large volumes of water from the river at different sites.

You should complete a risk assessment to help ensure that your data collection is undertaken safely.

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AO comment (General): The teacher has provided appropriate general guidance throughout. Teachers should advise students on health and safety considerations, the use of equipment and potential ethical concerns.
Exemplar Independent Investigation Proposal Form – No.3

AO comment (Title & Hypothesis): This investigation has an interesting people-environment focus, but unfortunately the teacher has missed an opportunity to give important advice about the title and investigation hypothesis. The student may collect a lot of data but without a specific point and the hypothesis or question section doesn’t offer any further refinement. It would be better if the teacher guided the student to reflect on the Planned investigation hypothesis or question section and devise a title, hypothesis or question that is testable or answerable and therefore open to evaluation. This is important to reaching the higher levels of the mark scheme.

Investigation title
The development of Micro-HEP stations in the Lake District National Park and the impacts on rivers and the community

How the title links to specification content
I’m looking to investigate how human factors affect the hydrological cycle (Key Idea 5.3, p.42), which helps me assess the costs and benefits of an alternative to fossil fuel (Key Idea 6.6, p.48).

Planned investigation hypothesis or question/sub-questions
The development of Micro-HEP schemes is helping to develop areas of Lake District and reduce carbon emissions for the Park.
Micro-HEP schemes are a viable option for renewable energy within the upland areas.

Investigation focus – indication of how the enquiry will enable the candidate to address their investigation title and explore their theme in relation to the chosen geographical area.
That Micro-HEP stations have few potential impacts on river regimes and systems in upland areas and do not impact upon events such as flooding. Firstly they help reduce the use of fossil fuels, unsightly wind turbines and other more intrusive forms of energy, although they still have costs and benefits that need to be explored. The use of HEP allows isolated communities and people develop economically and rely less on alternative forms of power generation including diesel engines and gas canisters.

Planned methodology – indication of qualitative and/or quantitative techniques including primary and, if relevant, secondary data collection techniques, indication of the planned sampling strategy or strategies. Mapping HEP stations on an OS map of the lake district National Park. Visit several sites to include: Church Beck Coniston, River Liza Ennerdale and Glenderaterra Beck Threlkeld. Photographic evidence of changes. Interview local people about changes, as well as the Lake District National Park on policy and river data. Short field investigation on impacts to river.

Teacher’s approval and comments
Excellent ideas here and the cross-topic nature of your study offers a truly interesting insight into the benefits of HEP in locations that have issues associated with rural isolation or access. I do have concerns about the scope of the study and the sheer scale of your methodology – you should consider carefully whether this is achievable in the time available?

AO comment (Methodology): The teacher is right to ask the student for more information about their planned methodology and by phrasing the feedback as questions they are enabling the student to independently respond and decide the best course of action. There may be a concern that the student intends to collect mainly secondary data. The short field investigation is somewhat ambiguous and needs greater clarity. The teacher correctly asks for more information about the practicalities of carrying out the programme of data collection within the time available and queries whether the scope of the study is too broad and unrealistic.

I have reservations about your field investigation which needs more thought and planning. However as long as you do not lose focus on the ideas I do not see this as a major hurdle. Unfortunately I can only make sure what you are doing applies to the specification and that the aims are achievable, which I feel they are as long as the timescales are considered and you have sufficient data from all three sites, as well as past data for comparison and to aid your analysis.

AO Comment (Focus): The student has chosen a theme that is closely linked to the specification content, making relevant connections between two key ideas.

I suggest you tie down your two investigation hypothesis better and consider the implications for the environment in more detail.

Candidate name

Candidate number

Examination Series

Centre name

Centre number

Investigation title
The development of Micro-HEP stations in the Lake District National Park and the impacts on rivers and the community

Planned investigation hypothesis or question/sub-questions
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Investigation focus – indication of how the enquiry will enable the candidate to address their investigation title and explore their theme in relation to the chosen geographical area.
That Micro-HEP stations have few potential impacts on river regimes and systems in upland areas and do not impact upon events such as flooding. Firstly they help reduce the use of fossil fuels, unsightly wind turbines and other more intrusive forms of energy, although they still have costs and benefits that need to be explored. The use of HEP allows isolated communities and people develop economically and rely less on alternative forms of power generation including diesel engines and gas canisters.

Planned methodology – indication of qualitative and/or quantitative techniques including primary and, if relevant, secondary data collection techniques, indication of the planned sampling strategy or strategies. Mapping HEP stations on an OS map of the lake district National Park. Visit several sites to include: Church Beck Coniston, River Liza Ennerdale and Glenderaterra Beck Threlkeld. Photographic evidence of changes. Interview local people about changes, as well as the Lake District National Park on policy and river data. Short field investigation on impacts to river.

AO comment (Focus): The student has chosen a theme that is closely linked to the specification content, making relevant connections between two key ideas.

Teacher’s approval and comments
Excellent ideas here and the cross-topic nature of your study offers a truly interesting insight into the benefits of HEP in locations that have issues associated with rural isolation or access. I do have concerns about the scope of the study and the sheer scale of your methodology – you should consider carefully whether this is achievable in the time available?

Teacher signature

Date
**AO comment (Title):** The teacher does well to query inconsistencies and the need for greater independence from the student. Importantly, the teacher does not provide the answers. It is important that students are encouraged to think of investigations that go beyond their previous fieldwork experiences. Unfortunately, the teacher has missed an opportunity to offer further guidance on the title and planned hypothesis/questions. The student’s title is self-limiting as it doesn’t include a statement, question or hypothesis that is open to evaluation.

**AO comment (Focus):** The teacher has provided general guidance that enables the student to pinpoint relevant spec content. However, the student should outline how the title links to the spec content in their own words, rather than simply detailing an area of the specification. The guidance on ‘perceptions’ is sound advice, which encourages the candidate to reflect on their sub-questions and methodology.

**AO comment (Methodology):** The teacher appropriately asks a specific question about the data collection sites, which could be interpreted as a leading question and the teacher should outline how the student should address this. The student should outline how the title links to the specification content in their own words, rather than simply detailing an area of the specification. The guidance on ‘perceptions’ is sound advice, which encourages the candidate to reflect on their sub-questions and methodology.

**AO comment (Methodology):** The teacher acts as ‘facilitator’ by providing generic guidance about manageability. But specific guidance is provided about using ‘Output areas’ for the student’s own investigation, undermining the student’s independence. In addition, the student should outline how the title links to the specification content in their own words, rather than simply detailing an area of the specification. The guidance on ‘perceptions’ is sound advice, which encourages the candidate to reflect on their sub-questions and methodology.

### Exemplar Independent Investigation Proposal Form – No.4

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**Investigation title**

*People's perceptions of Shrewsbury*

**How the title links to specification content**

Paper 2, Diverse Places

**Planned investigation hypothesis or question/sub-questions**

1. Is Shrewsbury a good place to live?  
2. How are there differences in perceptions between local people and visitors?

**Investigation focus – indication of how the enquiry will enable the candidate to address their investigation title and explore their theme in relation to the chosen geographical area.**

A report has named Shrewsbury as the 8th Happiest Place in the UK. I will use this as a basis for my research and look up how happy is worked out. I might also look to see if secondary data, e.g. Census and IMD shows spatial differences in happiness. I will think about published data and try to find it if it has any limitations.

Part of Diverse Places is lived experience of place, so I will focus research in this area to help me understand the geographical background to the issue.

**Planned methodology – indication of qualitative and/or quantitative techniques including primary and, if relevant, secondary data collection techniques, indication of the planned sampling strategy or strategies.**

Questionnaires, interviews and a smileometer. Stratified transect in different parts of the town, along roads. Secondary data will be selected information from the census (2011) and I will use GIS to present this.

**Teacher’s approval and comments**

You have devised an innovative methodology and have clearly considered the research you need to undertake... but at the moment you should consider whether your title and research questions fit closely enough with your investigation focus and methodology. “People’s perceptions of Shrewsbury” is a fairly all-encompassing title; what precisely are you investigating?

**Teacher signature**

**Approved:**

**Not approved:**

The census data is going to be very important. Remember how we talked about using Output areas as design frameworks when we looked at our urban fieldwork? Using ArcGIS Online will allow you to get that data visually, but can you also use the software to perform any statistical analysis? Look again at the mark-scheme for this area of the investigation. You should think about creating the opportunities for high quality analysis.

**AO comment (Methodology):** The teacher does well to query inconsistencies and the need for greater independence from the student. Importantly, the teacher does not provide the answers. It is important that students are encouraged to think of investigations that go beyond their previous fieldwork experiences. Unfortunately, the teacher has missed an opportunity to offer further guidance on the title and planned hypothesis/questions. The student’s title is self-limiting as it doesn’t include a statement, question or hypothesis that is open to evaluation.

**AO comment (Focus):** The teacher has provided general guidance that enables the student to pinpoint relevant spec content. However, the student should outline how the title links to the spec content in their own words, rather than simply detailing an area of the specification. The guidance on ‘perceptions’ is sound advice, which encourages the candidate to reflect on their sub-questions and methodology.

**AO comment (Methodology):** The teacher inappropriately asks a specific question about the data collection sites, which could be interpreted as a leading question and the teacher should outline how the student should address this. The student should outline how the title links to the specification content in their own words, rather than simply detailing an area of the specification. The guidance on ‘perceptions’ is sound advice, which encourages the candidate to reflect on their sub-questions and methodology.

**AO comment (Methodology):** The teacher acts as ‘facilitator’ by providing generic guidance about manageability. But specific guidance is provided about using ‘Output areas’ for the student’s own investigation, undermining the student’s independence. In addition, the student should outline how the title links to the specification content in their own words, rather than simply detailing an area of the specification. The guidance on ‘perceptions’ is sound advice, which encourages the candidate to reflect on their sub-questions and methodology.

**AO comment (Methodology):** The teacher does well to query inconsistencies and the need for greater independence from the student. Importantly, the teacher does not provide the answers. It is important that students are encouraged to think of investigations that go beyond their previous fieldwork experiences. Unfortunately, the teacher has missed an opportunity to offer further guidance on the title and planned hypothesis/questions. The student’s title is self-limiting as it doesn’t include a statement, question or hypothesis that is open to evaluation.
Exemplar Independent Investigation Proposal Form – No.5

AO Comment (Title and hypothesis): The student has chosen a suitable title that is well linked to the specification but the teacher is encouraging the student to think about elaborating on the links between the atmosphere and human activity. Strong background research will enable the student to explore this link in full. It is important to encourage students to undertake secondary research independently.

You have chosen a suitable geographical area for your study and your title is well focused. There is plenty of opportunity for primary data collection but remember that it is important to give your investigation context – particularly as we have not covered the concept of microclimates in class. We have plenty of journals, books and magazines in the department so that you can source any relevant material.

AO Comment (Methodology): The teacher guides the student to think about the viability of undertaking complex data collection and recording on an individual basis. It is permissible for students to work together to collect primary data as long as all secondary data collection, presentation and analysis is completed independently. The teacher provides some good general guidance on the importance of considering a sampling strategy very carefully. However, advice on using multiple transects is too specific. Any such comments would need to be taken into consideration at the marking stage and would need to be disclosed on the marking sheet submitted with the moderated sample.

Are you aware of any other data sources that could be used to compliment/support your findings? Think back through all the different data sources we have discussed in class. Is there any historical data available to support your theory?

Remember that it is also good practice to complete a risk assessment, particularly if you are going to be collecting data alone in a busy town centre. Try and research the kinds of issues that could be included on this risk assessment.

AO Comment (Focus): The teacher is also encouraging the student to think in greater depth about some elements that have been identified e.g. clear definitions of ‘built up’ and ‘coastal areas’ during the study. Advising the candidate to consider the meteorological conditions is giving very specific guidance on how to improve the reliability of the data collected. Any advice should be general e.g. ‘Can you think of any factors that might impact the reliability of your data and your conclusions?’

AO Comment (Teacher approval): The teacher is giving important advice on secondary research that will provide the context for the investigation. However, the instruction to complete a pilot study is too specific and is leading the student to re-think the methodology. Advice previously given on considering group work is more general and therefore permissible.

AO Comment (Teacher’s approval and comments): Although your title is suitable and well-linked to the specification, this proposal requires further work so that you may consider any sources of secondary research that could support your study. You will also need to plan a pilot study to iron out any potential problems with your data collection strategy.

Consideration needs to be given to how you will define built-up and coastal areas. Can you think of ways in which these could be defined effectively?

Will you need to consider the meteorological conditions under which you collect your data e.g. winter high pressure and how these conditions could impact your data collection and conclusions?
The methods of data collection are generally realistic and relevant to the investigation title. The mix of primary and secondary sources is commendable, and although much of the information is qualitative data there are opportunities for quantitative approaches.

However, some of the proposed techniques are repetitive, in particular the subjective surveys of landscape evaluation, shopping, building condition, crime etc. You may wish to consider combining some of the indices. You state that some extended interviews will take place. How will these be organised? How many?

Have you considered how you will use the data collected in the extended interviews? You may wish to refer to the notes you made when you learned about the opportunities and limitations of qualitative techniques.

What sampling strategies will you use - random, opportunistic, systematic, stratified?

You should consider if your proposed methodology will allow you to effectively compare the results from your different surveys. How will you ensure that your samples are representative?

Have you ensured that the secondary sources identified in your investigation focus are reflected in your planned methodology?

AO comment (Methodology): The teacher prompts the student to consider how the number of techniques could be reduced to ensure manageability. However, the teacher should have avoided directing the student to specific techniques.

The teacher helpfully suggests that the student should fully consider sampling strategies but again provides specific guidance by pointing the student to the relevant, secondary data collection techniques, indication of the planned sampling strategy or strategies.

Primary data collection: (The same methods will be carried out in the two places.)

- Landscape evaluation based on objective observation. The EQS will have indices or bi-polar scores combined with photos of the worst/best images. 35 evaluation surveys will be completed in each place.

- Physical condition of buildings/index of decay. 10 surveys will be completed for each place.

- Shopping survey. This will look at shopping quality and street appearance.

- Crime perception questionnaires – aimed at residents. 20 questionnaires will be completed selecting a full range of ages.

- Other questionnaires will collect data about different aspects of quality of life or from different groups. Some extended interviews will also be carried out.

- Services surveys: eg libraries, post-offices, pubs, doctors surgeries etc.

- Transport index: frequency, length and cost of public transport.

Secondary data:

- Neighbourhood Statistics for house prices and population pyramids for the 2 areas by postcode.

- Services Index: using Google Earth estimate distances to major supermarkets, schools, free cash points, computers etc.

AO comment (Approval): The teacher has provided general guidance to prompt the student to consider the manageability of their investigation. Reference to both levels of deprivation and quality of life is not considered specific guidance in this instance as these have already been identified by the student as the focus of the study. The teacher is not undermining the student’s independence here.

AO comment (Focus): The teacher has confirmed that the investigation is linked to the specification and that the enquiry is feasible. The question which prompts the student to research comparisons between the two areas before starting the investigation is useful. However, by providing an example, the teacher is giving specific guidance which directs the student to look at the relative sizes of population.

Investigation title

To what extent does quality of life vary between the inner city area of Davenport and the outer suburban area of Chaddlewood in Plymouth?

AO comment (Title): The teacher has confirmed that the investigation is linked to the specification content in Changing places. However, you should also outline how your title links to the specification in your own words as well as detailing the area of the specification.

How the title links to specification content

Changing places: 3.2.2.1 – Relationships and connections.

Investigation focus – indication of how the enquiry will enable the candidate to address their investigation title and explore their theme in relation to the chosen geographical area.

The study will look at how quality of life is different in an inner city place compared with an outer suburban place in Plymouth. The boundaries of the two places will be defined according to Census output areas so that secondary data can be easily compared with primary field data. Quality of life will include several criteria to reflect housing standards and the environmental conditions in which people live.

Aspects of quality of life to be considered will include: built environment, access to service provision, crime and safety, traffic noise and safety, social belonging and community cohesion. These aspects will be different for different groups of people.

AO comment (Links): Appropriate general guidance has been given to prompt the student to briefly describe the links between the investigation and the specification.

Planned investigation hypothesis or question / sub-questions

There are significant differences in the quality of life between the inner city area of Devonport and the outer suburban area of Chaddlewood in Plymouth.

Investigation focus – indication of how the enquiry will enable the candidate to address their investigation title and explore their theme in relation to the chosen geographical area.

The study will look at how quality of life is different in an inner city place compared with an outer suburban place in Plymouth. The boundaries of the two places will be defined according to Census output areas so that secondary data can be easily compared with primary field data. Quality of life will include several criteria to reflect housing standards and the environmental conditions in which people live.

Aspects of quality of life to be considered will include: built environment, access to service provision, crime and safety, traffic noise and safety, social belonging and community cohesion. These aspects will be different for different groups of people.

AO comment (Approval): The written approval comments are appropriate. The teacher has also accurately informed the student that he/she does not need to amend their proposal form as their title and focus have been approved.

You are very different. Have you considered researching comparisons between them in more detail before you start, for instance the relative sizes of population?

AO comment (Focus): The teacher has confirmed that the investigation is linked to the specification content in Changing places. However, you should also outline how your title links to the specification in your own words as well as detailing the area of the specification.

Your investigation proposal is based on the specification content in Changing places. However, you should also outline how your title links to the specification in your own words as well as detailing the area of the specification.

The scale of your enquiry is suitable and you should be able to collect both primary and secondary data for the two places you have identified.

AO comment (Approval): The written approval comments are appropriate. The teacher has also accurately informed the student that he/she does not need to amend their proposal form as their title and focus have been approved.

The two places chosen for study are very different. Have you considered researching comparisons between them in more detail before you start, for instance the relative sizes of population?

AO comment (Focus): The teacher has confirmed that the investigation is linked to the specification content in Changing places. However, you should also outline how your title links to the specification in your own words as well as detailing the area of the specification.

You will not need to amend your proposal form as I have approved your investigation title and focus. However, you should give further consideration to your methodology before you begin your enquiry.

Please remember that you cannot continue to collaborate once your primary data collection is complete.

AO comment (Links): Appropriate general guidance has been given to prompt the student to briefly describe the links between the investigation and the specification.

You’ve explained that you would like to collect data with another student for safety reasons. This is a good idea and I can suggest a suitable partner who has a similar investigation focus.

You will not need to amend your proposal form as I have approved your investigation title and focus. However, you should give further consideration to your methodology before you begin your enquiry.

Approval: ☑

Not approved: ☐

AO comment (Methodology): The teacher prompts the student to consider how the number of techniques could be reduced to ensure manageability.

The teacher helpfully suggests that the student should fully consider sampling strategies but again provides specific guidance by pointing the student to the different strategies available. Instead, the teacher could have referenced work undertaken in the classroom to encourage further thinking. For example: ‘What sampling strategies will you use? You could refer to the work completed in class about the usefulness of different sampling strategies.’

Generic guidance is given to prompt the student to think of flaws in their proposed data collection and to consider the omission of Census data, the use of which, is specified in the investigation focus. The teacher has also provided appropriate guidance regarding group data collection.

AO comment (Methodology): The teacher prompts the student to consider how the number of techniques could be reduced to ensure manageability. However, the teacher should have avoided directing the student to specific techniques.

The teacher helpfully suggests that the student should fully consider sampling strategies but again provides specific guidance by pointing the student to the different strategies available. Instead, the teacher could have referenced work undertaken in the classroom to encourage further thinking. For example: ‘What sampling strategies will you use? You could refer to the work completed in class about the usefulness of different sampling strategies.’

Generic guidance is given to prompt the student to think of flaws in their proposed data collection and to consider the omission of Census data, the use of which, is specified in the investigation focus. The teacher has also provided appropriate guidance regarding group data collection.
Your title is clear and relevant to the specification content. In your focus, you have provided a clear rationale for the area chosen for study. The location is ideal as an example of sand dune succession and should exemplify the characteristics identified.

The methods of data collection are quite ambitious and are likely to produce a large amount of information. Will all the primary data collected link to the focus of your study? For instance the microclimate data is not really relevant. Your secondary information will be useful in supporting your primary data.

You appear to be uncertain about some methods. Do you intend to complete them all?

You haven’t included any information about sampling in your proposal. Have you considered what type of sampling might be appropriate for each method? Do you have a clear idea how much data you will need to collect for each method? How will you ensure that there is adequate coverage of the dune system?

The feedback regarding coverage of the dune system is also specific. It is fine to ask generally about the type of sampling and whether it is representative, but not to ask about specific data sets or methods.

AO comment (Methodology): The teacher has provided general guidance prompting the student to think about the feasibility of collecting large amounts of data as well as the importance of ensuring that primary data is relevant to the focus of the investigation. This is followed by a comment that directs the student to consider whether his/her methodology will provide him/her with the necessary data to answer the key focus of the investigation. The teacher’s questioning of the microclimatic data is considered specific guidance. Instead there could be a general questioning of the relevance of each technique. The teacher could have asked: ‘Have you considered whether all the data collection methods are feasible? Which methods might produce less helpful results?’

The feedback regarding coverage of the dune system is also specific. It is fine to ask generally about the type of sampling and whether it is representative, but not to ask about specific data sets or methods.

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The feedback regarding coverage of the dune system is also specific. It is fine to ask generally about the type of sampling and whether it is representative, but not to ask about specific data sets or methods.
Exemplar Independent Investigation Proposal Form – No.8

AO Comment (Title and hypotheses): The teacher has given general guidance regarding the focus of the proposed title and the need for greater clarity in terms of the objectives of the investigation. However, telling the student to cut down on the number of sub-questions is too specific. The advice on manageability is more general and asks the student to think through the process to decide, independently, what is feasible. Students should link titles directly to the specification but advising that a student uses previous fieldwork to inform their investigation compromises independence. Students can use previous studies as secondary sources of information and data but this decision must be taken independently.

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AO Comment (Methodology): Suggesting a particular sampling strategy constitutes specific guidance and should have been avoided. The teacher should encourage the student to consider the sampling techniques available and to select and justify the most appropriate. The teacher gives sound guidance to the student on further considering how they intend to collect data on spending habits and perceptions. Encouraging students to think of how they will analyse data will allow them to refine their data collection methods effectively.

AO Comment (Teacher approval): The teacher is suggesting that the student needs to refine their methodology as the investigation currently lacks focus and not all sub-questions are well linked to the investigation title. The teacher successfully avoids telling the student which questions to re-think and does not give specific advice on suitable methodologies. The suggestions made will guide the student to think for himself/herself how to tighten the focus.

Exemplar Independent Investigation Proposal Form – No.8

AO Comment (Title and hypotheses): The teacher has given general guidance regarding the focus of the proposed title and the need for greater clarity in terms of the objectives of the investigation. However, telling the student to cut down on the number of sub-questions is too specific. The advice on manageability is more general and asks the student to think through the process to decide, independently, what is feasible. Students should link titles directly to the specification but advising that a student uses previous fieldwork to inform their investigation compromises independence. Students can use previous studies as secondary sources of information and data but this decision must be taken independently.

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AO Comment (Teacher approval): The teacher is suggesting that the student needs to refine their methodology as the investigation currently lacks focus and not all sub-questions are well linked to the investigation title. The teacher successfully avoids telling the student which questions to re-think and does not give specific advice on suitable methodologies. The suggestions made will guide the student to think for himself/herself how to tighten the focus.
**Exemplar Independent Investigation Proposal Form – No.9**

**AO Comment (Title and hypothesis):** Although the title is appropriate there is a lack of coherence to the sub-questions. There are too many strands to the enquiry, not all are relevant to the title itself. The teacher tries to make the student think about the range and order of the sub-questions but offers guidance that is too specific by suggesting re-ordering of questions. Directly suggesting that OS maps be used is also too specific. General advice would be to ask the student to think of ways to accurately locate the study area.

### Candidate name. | Candidate number
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#### Centre name

**Investigation title:** How successful will management of The Hinge at East Head be in the prevention of potential floods in West Wittering?

**How the title links to specification content.** This investigation relates to the impacts of human activity on coastal processes and landforms. The specification asks us to consider both positive and negative impacts and I am hoping that this investigation will allow me to consider potential benefits and costs of the flood prevention scheme.

**Planned investigation hypothesis or question/sub-questions.** I have four key questions for this investigation, (1) What is the potential flood risk to West Wittering? (2) How will coastal processes and landforms be affected by the adaptive management strategy? (3) What are the proposed management strategies? (4) To what extent is conservation a consideration with respect to this SSSI?

**Investigation focus – indication of how the enquiry will enable the candidate to address their investigation title and explore their theme in relation to the chosen geographical area.** The Hinge, a shingle spit formed by longshore drift, has been subject to a number of management strategies over recent years – some more successful than others. It is an SSSI, an AONB and is important for recreation and flood prevention. If The Hinge is breached it could have a serious impact on local flooding. I live in West Wittering so have good knowledge of the area and the proposed plans. The focus will be how effective the current management strategy will be at preventing flooding in the area in the face of a changing climate, higher tides and more frequent storms. It is likely that there will be disagreement regarding the potential successes and failures of the current adaptive strategy, depending on the points of view of different stakeholders.

**Planned methodology – indication of qualitative and/or quantitative techniques including primary and, if relevant, secondary data collection techniques, indication of the planned sampling strategy or strategies.** Primary data collection will include questionnaires of visitors and a variety of stakeholders. Areas perceived to be under threat will be mapped using secondary data from the Environment Agency. To measure the effect on landforms, I will measure the rate of longshore drift and construct beach profiles and long profiles across the spit. I will interview local stakeholders to find out about their views on the proposed management strategy. Various websites relating to the area will also be considered, as will local media in order to collect secondary data about perception. Collecting data for longshore drift, beach transects and beach profiles will be group data collection activities, all other data collection will be individual.

**Teacher’s approval and comments**

You have chosen an appropriate title and study area for your investigation and show good understanding of the methodologies that you will use to collect and analyse your data. You have the makings of an excellent investigation here so bear in mind some of the points that we have discussed regarding your sub-questions. Some of these are very descriptive in their nature. You will need to do re-consider in order to sharpen the focus of this investigation and ensure that it is manageable for you.

**Teacher approval:**

Approved: ☐

Not approved: ☐

**Date**

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* AO Comment (Methodology): The teacher gives advice regarding possible ways in which data collection methods (e.g. interviews) could be enhanced. The suggestion that the student should use particular coding methods to analyse this data is too specific and should have been avoided. Sound general advice is given regarding managing independence within a group work scenario. Students should carefully consider the health and safety implications of any fieldwork undertaken and the teacher is right to remind the student of the importance of undertaking a thorough risk assessment before embarking on fieldwork.

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* AO Comment (Focus): The teacher succeeds in staying away from guidance that is too specific by discussing ideas already mentioned by the student such as climate change and the ideas of different stakeholders. The advice is given to encourage the student to keep focused on the investigation title throughout.

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* AO Comment (Methodology): Consider whether you can see a clear narrative through this investigation? Do your sub-questions form a clear and logical sequence? Could you consider re-ordering your keys questions so that (2) follows (3)? How will you measure the extent to which conservation is being considered within the project? You will need to give this some further thought.

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* AO Comment (Focus): You show excellent awareness of what data needs to be collected to address each of your sub-questions. There are plentiful opportunities to collect both quantitative and qualitative data. If you are completing interviews, have you thought about whom will you speak to and how could you present and analyse this data effectively? Could you use one of the coding methods that we have seen during lessons? Interviews can be difficult to conduct so it would be good to read about how to create effective interview questions. Make sure that you research this thoroughly.

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* AO Comment (Methodology): Focusing on a management strategy currently underway is an ambitious choice but you have wisely chosen an accessible, local area to undertake your fieldwork. There are good opportunities to make effective use of maps to locate your study area. There will be plenty of opportunities to collect appropriate data if fieldwork visits and data collection strategies are well-planned.

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* AO Comment (Focus): Your plan is well focused on the impacts of human activity on coastal processes and I am sure that you will be able to make good use of your local knowledge to develop your investigation. There is considerable scope for geographical discussion relating to coastal processes and climate change so you will need to be careful to remain focused on your investigation title throughout.

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* AO Comment (Methodology): You mention the points of view of various stakeholders. Have you considered who the most important stakeholders are and how you might go about securing access to them?
Exemplar Independent Investigation Proposal Form – No.10

AO comment (Title): The first and last sentence in the teachers comments are general guidance as the student is encouraged to be clear in their wording. The targeted nature of the questions picking up on individual wording in the title begins to give much more directed guidance however this does not reword the title or take any independence away from the student. What it does encourage, is for the student to plan.

Centre name | Centre number
--- | ---
Investigation title
To what extent have homeowners in Victoria Road Salford, made their homes more energy efficient?

How the title links to specification content
4.c mitigation strategies to cut global greenhouse gases including: energy efficiency and conservation
4.c adaptation strategies to reduce vulnerability of human populations at risk: including what future homes and transport will look like following adaptation throughout the 21st century.

Planned investigation hypothesis or question/sub-questions
I am looking to do my primary data collection at a local level, specifically on Victoria Road in Salford. I want to look specifically at how people have adapted their homes to make them more energy efficient such as Smart Metres, loft insulation, light bulbs, double glazing etc.

Sub-hypotheses
• Loft insulation is the most effective strategy for energy efficiency in the home.
• Individual behaviour influences energy efficiency more than expensive strategies.
• Local funding positively encourages people to make their homes more energy efficient.

Investigation focus – indication of how the enquiry will enable the candidate to address their investigation title and explore their theme in relation to the chosen geographical area.
I want to examine how individual homeowners have made their homes more energy efficient, either by what they have done physically to their home or by their behaviours e.g. turning lights off. I have chosen my local area, the street I live on as some people have started to modify their homes and I wanted to look at why, how much this costs and whether people’s behaviour has changed in their own home and if so why?

Planned methodology – indication of qualitative and/or quantitative techniques including primary and, if relevant, secondary data collection techniques, indication of the planned sampling strategy or strategies.
To collect qualitative primary data for my investigation I plan to interview homeowners in my street, 6 households in total as I think this will represent a sufficient sample to show what people have done or not done to make their homes more energy efficient and the reasons for this. I want to do semi-structured interviews and I will test my questions on two people to ensure they are clear and I will make any changes to these from feedback. I will look at homeowners who have modified their homes and those that haven’t to ensure there is no bias in my data. I am planning to give each household in my street a questionnaire to complete about their homes and I am looking to use both open questions and closed questions where the data could be tabulated, graphed and analysed in more of a quantitative style.
For secondary data I will look at local government strategies on energy efficiency and the funding available to help homeowners. I will research people’s electricity usage (quantitative data) before and after they made their homes more energy efficient.

Teacher’s approval and comments
Your investigation is clearly linked to the specification however it would be good to see it embedded in a strong geographical context such as climate change: make sure you do some reading. You have chosen an appropriate scale for data collection and with a little refinement and sharpening up in your methodology to include sampling you have a potentially ‘rich’ source of local information.

Teacher signature

AO comment (Focus): The teacher has given the student general guidance on the focus of their investigation. The teacher is not giving specific guidance as they are re-quoting what the student has included in their title. This indicates to the student that their focus is perhaps too vague and they need to think about how their methodology and data collection will provide them with enough evidence to answer their title.

AO comment (Teachers approval): The teacher’s comment indicates areas of the proposal form that the student needs to revisit and ‘refine’ or ‘sharpen’ therefore encouraging them to take ownership. The student needs to plan carefully and the teacher’s comments can be used and critically reflected on in the students’ evaluation. This can show how their investigation evolved as the student became more ‘expert’ in their topic area. The teacher has given specific guidance (in red) as the student has been directed to climate change and linking their investigation to this topic area.

AO comment (Methodology): The teachers’ guidance is general as they have used a series of questions to encourage the student to reflect on their ideas / plans. Whilst there is direct reference to sampling the teachers comment prompts the student to go back and independently decide on how to refine their techniques rather than telling them specifically what to do for each one. The teacher gives specific guidance in red as he / she directs the student away from conducting a questionnaire per household, due to the volume of data this could potentially generate.

Your title on initial reading seems straightforward however as you read around this topic it will help you to have a clear focus and route for your investigation. What do you mean by energy efficiency? Think about the wording of your title – what exactly is it you are going to be investigating?

You have discussed two main primary data collection techniques; do you think this will provide sufficient information / data to answer your title?
Sampling needs to be more explicitly discussed so that you are clear how you will ‘test’ your data collection techniques. What is it you want to find out and how will this help to answer your title?

The questionnaire per household is not manageable. This has the potential to generate too much data for analysis; how will you deal with this?
Have you provisionally looked at the secondary data you mention here? Is this information available?

You have discussed two main primary data collection techniques; do you think this will provide sufficient information / data to answer your title?
Sampling needs to be more explicitly discussed so that you are clear how you will ‘test’ your data collection techniques. What is it you want to find out and how will this help to answer your title?

The questionnaire per household is not manageable. This has the potential to generate too much data for analysis; how will you deal with this?
Have you provisionally looked at the secondary data you mention here? Is this information available?

Your investigation needs careful planning and this proposal form helps to think through the initial stages. You need to go back to your plan and focus ensuring that you know how your investigation will break down and what it is you are looking for. Think about what data is most important and most tightly linked to your title and the most effective ways to collect this.

I am pleased to see your data collection is at a local level. Why have you chosen to look at energy efficiency? How does this fit with the topic in the specification? You could link this to climate change in your introduction.

Ensure that you are careful and consistent with wording e.g. resident / homeowner.

Do you have a clear idea, what information / data you would collect for each of these sub-hypotheses?

I think you need to carefully reflect on your investigation focus to ensure it will actually provide you with enough evidence to answer your question. As you have stated ‘to what extent’ in your title you will need to make a value judgment on this, so think about this in selecting your data collection techniques.

Your investigation has definite links to the specification but it would be better explained in your own words as well as the specification sections identified.

Think about the wording of your title – what exactly is it you are going to be investigating?

Your investigation needs careful planning and this proposal form helps to think through the initial stages. You need to go back to your plan and focus ensuring that you know how your investigation will break down and what it is you are looking for. Think about what data is most important and most tightly linked to your title and the most effective ways to collect this.

I think you need to carefully reflect on your investigation focus to ensure it will actually provide you with enough evidence to answer your question. As you have stated ‘to what extent’ in your title you will need to make a value judgment on this, so think about this in selecting your data collection techniques.

The teacher has given the student general guidance on the focus of their investigation. The teacher is not giving specific guidance as they are re-quoting what the student has included in their title. This indicates to the student that their focus is perhaps too vague and they need to think about how their methodology and data collection will provide them with enough evidence to answer their title.

I think you need to carefully reflect on your investigation focus to ensure it will actually provide you with enough evidence to answer your question. As you have stated ‘to what extent’ in your title you will need to make a value judgment on this, so think about this in selecting your data collection techniques.

The teacher’s guidance is general as they have used a series of questions to encourage the student to reflect on their ideas / plans. Whilst there is direct reference to sampling the teachers comment prompts the student to go back and independently decide on how to refine their techniques rather than telling them specifically what to do for each one. The teacher gives specific guidance in red as he / she directs the student away from conducting a questionnaire per household, due to the volume of data this could potentially generate.
Exemplar Independent Investigation Proposal Form – No.11

AO comment (Title):
The teachers’ comment begins and ends with general guidance however the section highlighted in red is specific guidance. Here the teacher is directing the student towards specific wording in their title and giving them a clear suggestion about what to consider.

Your title has a clear location for fieldwork however will you look at the whole of Sheringham? You will need to have a clear idea what you mean by ‘sufficiently resilient to coastal erosion’ as you plan your investigation and break your title down further. In using the word sufficiently you will need to find a way to measure this so that you can make a judgement as you gather evidence.

Investigation title
The coastal management strategies at Sheringham are sufficiently resilient to coastal erosion.

How the title links to specification content
2.a. influence of geomorphic processes at the coast
4.a. coastal landscape that’s being managed, management strategy being implemented and the reason for it

Planned investigation hypothesis or question/sub-questions
My primary data collection will take place at the coast in Sheringham, Norfolk. This stretch of coastline in North Norfolk, has a number of coastal management techniques being used and it is a safe and accessible area to collect my data.

Sub-questions
• How effective are current coastal management strategies in preventing erosion?
• How much coastal erosion has taken place at Sheringham over the last 50 years?
• How have the coastal management techniques slowed down coastal erosion in Sheringham?

Investigation focus – indication of how the enquiry will enable the candidate to address their investigation title and explore their theme in relation to the chosen geographical area.
Sheringham suffers from serious erosion and as this area has a strong local community and is an important tourist area there have been a number of management strategies put in place such as a sea wall, rock armour and groynes. I am interested to find out if the coastal management strategies are working and stopping erosion on this stretch of coastline.

Planned methodology – indication of qualitative and/or quantitative techniques including primary and, if relevant, secondary data collection techniques, indication of the planned sampling strategy or strategies.

Primary data collection techniques
• Beach width and angle
• Wave height and energy (frequency)
• Annotated field sketches of cliffs, beach and coastal defences
• Cost benefit analysis
• Measure the strength of the coastal defences
• Interview local council / Environment Agency to discuss coastal erosion and management strategies

Secondary data collection techniques
• Rates of erosion at Sheringham for the last 50 years
• Maps of coastal management strategies / plans
• Local council coastal defence plans / shoreline management plans

Teacher’s approval and comments
You have an interesting and valuable investigation outlined here. You have some terminology in the title e.g. ‘sufficiently resilient’ that you need to have a clear understanding of from your reading as this will help you refine your data collection techniques. It is not about the volume of data you collect but the skill in deciding what to collect and why so that your investigation is manageable in the time you have available. Make sure you get to know the ‘geography’ of Sheringham as this will help you make sense of your findings from primary data collection.

Teacher signature

AO comment (planned investigation):
The teacher has given significant feedback in this section suggesting that the student needs to be clear on what they are collecting. Particular aspects of the teacher’s feedback go beyond general guidance (highlighted in red) where he / she directs the student to a particular approach e.g. Hudson’s equation. The teacher alerts the student to the lack of focus on quantitative / qualitative techniques without giving specific guidance on his / her listed techniques.

Your investigation needs careful planning and this proposal form helps to think through the initial stages. You need to go back to your title and focus ensuring that you know how your investigation will break down and what it is you are looking for. Think about what data is most important so that you do not end up collecting too much. The most effective way is to plan what you will collect, how it will be collected and how the data will be analysed.

AO comment (Methodology):
The teacher has given significant feedback in this section suggesting that the student needs to be clear on what they are collecting. Particular aspects of the teacher’s feedback go beyond general guidance (highlighted in red) where he / she directs the student to a particular approach e.g. Hudson’s equation. The teacher alerts the student to the lack of focus on quantitative / qualitative techniques without giving specific guidance on his / her listed techniques.

Your investigation has definite links to the specification but it would be better explained in your own words as well as the specification sections identified.

AO comment (Focus):
The teacher’s guidance is general and encourages the student to continue his / her ‘expert’ in their topic area.

Your focus is generally fine although I do think it could be a bit clearer as you are potentially looking at a lot. As you are reading around this topic revisit this section and think through what it is you want to look at and what data you are going to collect to explore this.

The teacher has given significant feedback in this section suggesting that the student needs to be clear on what they are doing, you will need to carry out primary data collection techniques - of coastal defences - mentioned measuring the strength and size of the defences and potential risks e.g. tide times, unstable surfaces (cliffs) and slipping risk (rocks).

With your sub-questions, these should be testable questions which enable you to break your title down. Could some of these be included in your introduction to set the scene of your investigation?

You have potentially identified a large area of coast for your primary data collection, think about what is manageable in the time period you have available and where exactly you will collect your data and why?

It is positive that you have considered safety when planning your investigation. This will however need further consideration by looking in more detail at potential risks e.g. tide times, unstable surfaces (cliffs) and slipping risk (rocks).

You have listed a wide range of primary data collection techniques - however I am not sure all of them are relevant for your title and sub-hypotheses. Whilst you have clearly considered primary and secondary data, you have not indicated qualitative / quantitative techniques. You have mentioned measuring the strength of coastal defences – don’t forget to look up Hudson’s equation and collect data so that you can calculate the resilience of the rock armour.

Due to the type of fieldwork you are doing, you will need to carry out a risk assessment.

It is important with your methodology to think about how you will analyse the data collected to ensure it is manageable and relevant.

AO comment (Investigation focus):
The teacher’s comment begins and ends with general guidance however the section highlighted in red is specific guidance. Here the teacher is directing the student towards specific wording in their title and giving them a clear suggestion about what to consider.

Your investigation has definite links to the specification but it would be better explained in your own words as well as the specification sections identified.

AO comment (Investigation focus):
The teacher’s comment begins and ends with general guidance however the section highlighted in red is specific guidance. Here the teacher is directing the student towards specific wording in their title and giving them a clear suggestion about what to consider.

Your investigation has definite links to the specification but it would be better explained in your own words as well as the specification sections identified.
### Exemplar Independent Investigation Proposal Form – No.12

**AO comment (Title):**
The wording in the teachers comment gives the student some aspects to think about and reflect on without giving him / her specific guidance on any changes to make to their title. The comments encourage the student to be clear on his / her meanings; however the scale of investigation comment is specific guidance as it removes independence.

**Investigation title**
To what extent do young people feel engaged with their local area in Cambridge?

**How the title links to specification content**
When people live in a place or visit a place they can have or develop an emotional attachment to it. I think what people do in a place for example where they walk, activities they do etc. forms their attachment. I also want to look at how far people engage in a place and why that is.

**Planned investigation hypothesis or question/sub-questions**
For the local area I am defining this as the Romsey Ward – Mill Road area in Cambridge, this includes schools, a youth centre, park, boxing club, shops and cafes as I am hoping this will give me enough access to young people for the purpose of data collection.

My sub-questions for investigation are:
- What activities 14 – 18 year olds do in their local area?
- How positive do young people feel about their local area?
- How and why do young people behave differently in a local area?

**Investigation focus – indication of how the enquiry will enable the candidate to address their investigation title and explore their theme in relation to the chosen geographical area.**
The focus of my investigation is looking at young people in Cambridge identifying how they engage in their local area and why they do or do not engage. As a young person I feel more comfortable in some areas than others and I know that different people will take part in different activities in their local area and I wonder why that is? I have referred to young people and for this I am narrowing this down to 14-18 year olds.

**Planned methodology – indication of qualitative and/or quantitative techniques including primary and, if relevant, secondary data collection techniques, indication of the planned sampling strategy or strategies.**
As I am looking at what people do in their local area and how they feel about it, qualitative techniques would work better. I plan to do a survey (and then map) of all the activities in Romsey Ward Cambridge which are available to young people. I would like to interview small groups of young people to look how they feel about their local area and how they behave. I am planning to give a questionnaire to approximately 20 young people to find out what they do in the local area, how they feel and behave. I am going to trial my questionnaire and interview questions on two friends to make sure they are clear and I will get helpful responses for my analysis. The questionnaire sample of 20 should be sufficient to represent the views of young people and I will make sure I have males, females and a mix of age groups.

For secondary data I want to collect maps showing the distribution of activities in Romsey Ward, and collect any census data about the number of young people in the ward. I will get in touch with places that young people use such as Romsey Mill and see if they have any data on the activities people engage with.

**Teacher’s approval and comments**
You have the beginnings of a really interesting investigation, if you take these ideas and plan in greater depth following a period of background reading and some initial research I think your ideas will come together much more clearly. Can I suggest that you do some thinking and resubmit your proposal form having read through the comments and feedback given so that you are very clear on what you investigating and how you are going to do it.

**Teacher signature**

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**AO comment (Methodology):**
The teachers comments are general guidance , whilst they do mention the student’s interviews and questionnaires they do not give any suggestions about how to make the data collection methods more manageable or how to refine these.

The teacher has clearly indicated to the student that their data collection is overly ambitious and that he / she needs to be clearer in the methodology and its relevance. The guidance is general as the teacher does not suggest any pathways forward apart from the student doing some reading and giving more depth and detail to the plan. The teacher could perhaps alert the student to planning for their analysis as he / she do not seem clear on this.

**AO comment (Focus):**
Much of what the teacher has written in the feedback is specific guidance. The student is drawn to very specific wording in the focus and asked to elaborate on this, define the terms and link this to the data collection. The teacher needs to be more of a facilitator, asking questions about the student’s investigation so he / she has ‘food for thought’ and can go away and research further thus retaining independence.

**AO comment (Planned investigation)**
The teachers comment above in red is specific guidance as they alerting the student to a particular type of place boundary / data source.

**AO comment (Planned data collection):**
It is really good to see this written in your own words as you have thought this through however you need to be explicit in your links with the specification content.

I am pleased to see that you have defined what you mean by ‘local area’. Can you get hold of data at this local level? Do you remember we talked about super output areas in class? This might even be too small for that.

The purpose of your sub-questions is to break the title down; do you think yours do this? What is it you want to find out and how will you find it out?

The data collection techniques you have identified are sound for a qualitative methodology. You need to ‘flesh out’ and be much clearer on the actual data you will collect and how this links back to your sub-questions as well as your title. Your data collection needs to be manageable for example your interviews and questionnaires could generate lots of data / information – how will you manage this and how will you analyse it? For secondary data, these are sensible ideas. Have you researched whether this data is currently available?

It is really important to do an overall plan for your investigation, which you have started to complete already through this proposal form. It all starts from unpacking your title through the key terms used and working out what it is you want to investigate and how you will do this. Sometimes less is more, so good quality, manageable data collection that allows you to go into detail is preferable to collecting lots of data which can be difficult to work out what to use.