

SECTION 6: COLLECTING DATA IN HIGHER EDUCATION

By the end of this section you will be able to:



Make decisions about the most appropriate data collection method for your project.



Extend your learning, explore what else could you do by doing your own research on alternatives to surveys and focus groups.

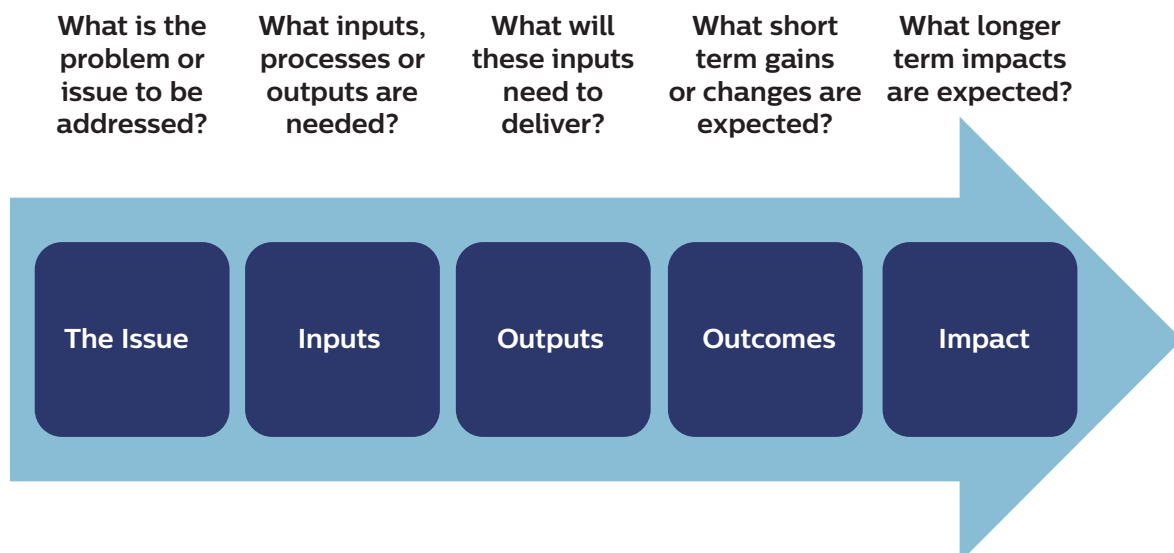


Apply your learning, review the case study to help you consider a 'real life' example associated to the content of this section.

Section 4 of this Guide discusses thinking critically about: rationale; research questions; governance; ethics; strategy and design. Section 5 introduces [secondary data analysis](#) which adopts the methodology and data collection used by others and covered data from a variety of secondary sources. This section focuses on designing new tools ([research instruments](#)) to collect and analyse new primary data for either research (new knowledge) or evaluation (decisions about process and impact).

The evaluation process

Any evaluation starts with a basic idea, issue or problem to be addressed or explored. You then decide what inputs (such as processes and resources) are required. Inputs need to be linked to delivering some outputs. These outputs can then be related to gains (or outcomes) that you anticipate occurring as a consequence. Finally, the longer-term sustainability (or impact) of the change is considered and consolidated, revised, scaled accordingly, as detailed in the 'logic chain' diagram below (adapted from The Magenta Book, 2011). This is the approach adapted by Liz Thomas and applied to [QAA Scotland Enhancement Theme activity](#). In order to evidence outcomes and impact, data will need to be collected using evaluation and research methods.



Evaluation resources

The [Scottish Framework for Fair Access](#) has produced a toolkit which aims to identify knowledge gaps, enhance evaluation and source the best available evidence relating to widening access. These resources are also transferable to a teaching and learning context.

The Office for Students has produced [guidance documents](#) for collecting evidence of impact. These relate to Outreach, Access and Participation and Financial Support and are based on work by the [Centre for Social Mobility](#). This is also complimented by [TASO](#), which has been created as a national body for supporting evidence and impact.

A checklist for working through robust practice, produced by Sheffield Hallam University, can be found here: [STEER Evaluation Checklist](#).

The TSEP [Student Engagement Evaluation Framework](#) (pp 32-34) written by Liz Thomas also provides a useful framework which can be applied to main areas of higher education.

The [Research Leader's Impact Toolkit](#) (AdvanceHE) resource covers 'evaluating', and includes useful indicators of success.

The research process



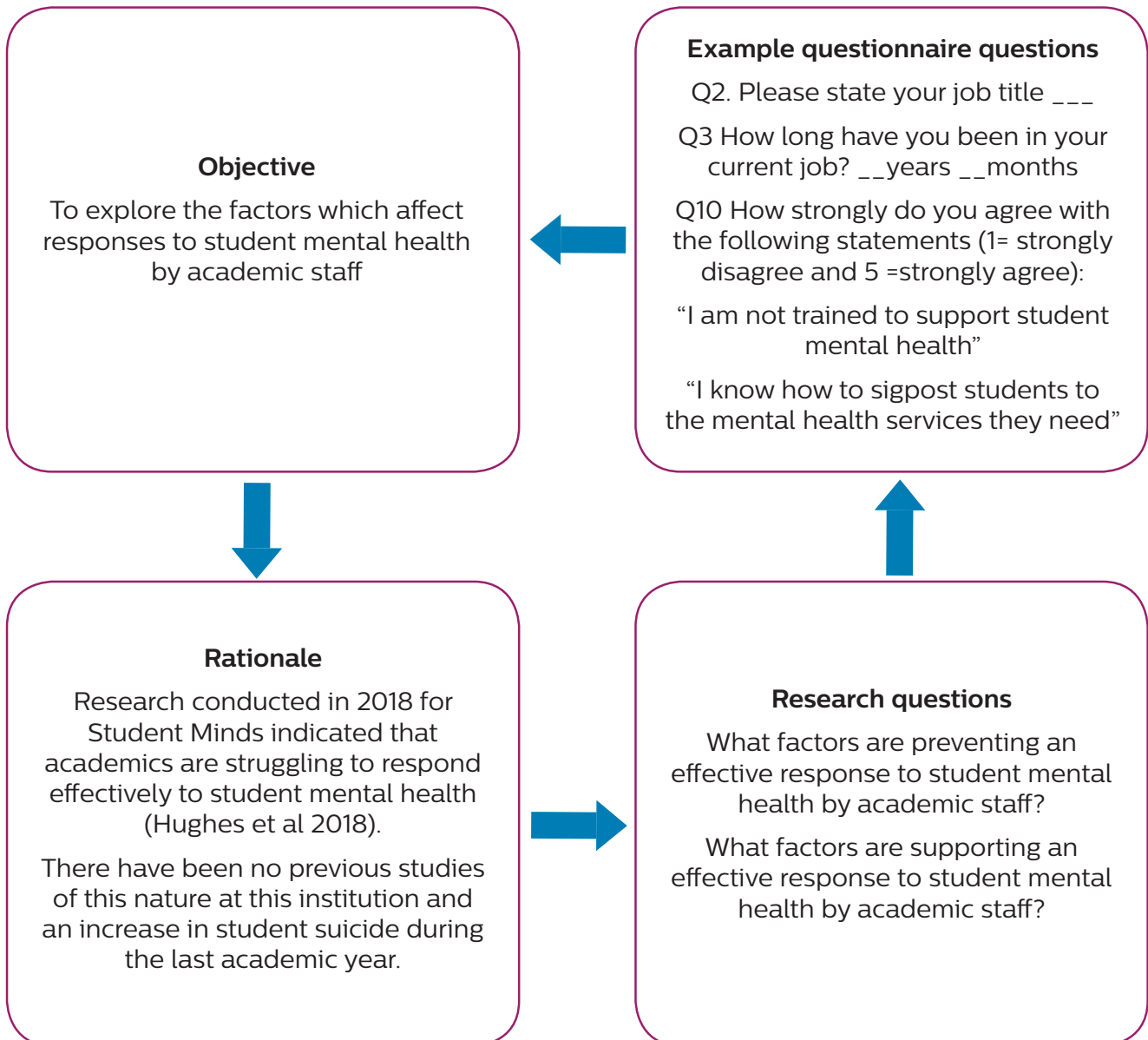
In Section 3 we suggest that data hierarchies exist in higher education. Some types of [data](#) carry more weight than others and are more likely to be used to inform decision making. As data is generated from a [method](#), it follows that certain methods are privileged over others and used more often. There are good reasons for using a method with known strengths.

The [Randomised Control Trial](#) is often viewed as a superior form of evaluation due to its underpinning empiricism and ability to evidence cause and effect using control groups. However, randomisation requirements may be impractical in 'real-life' contexts and the messiness of process and possible emergence of confounding variables may make this method unsuitable for measuring student experiences.

Size and reach within a cross section of the student population at a single point in time will mean that a survey method, using a questionnaire as the research instrument, will be a good choice. A survey can provide quantitative and qualitative data derived from [closed and open questions](#). Alternatively, focus groups can provide detailed qualitative data on a specific topic area. The researcher is able to analyse the spoken words and also reflect on social interactions, body language and group dynamics, and how any consensus is reached (or not).

Question mapping

It is important that any questions constructed by the researcher (for example, in a questionnaire or a focus group schedule) are based on a clear rationale AND linked to aims/objectives. This will create a logical process from analysis to [synthesis](#) once the data has been collected.



Five methods - what you should and shouldn't do

If you choose to do a survey with students or staff, then...

Survey Do	Survey Don't
Use simple language and question construction	Avoid asking ambiguous, leading or double-barrelled questions
Pilot your survey to see how long it takes to complete, and whether the questions make sense and are in a logical order	Optimum survey length is 13 minutes to complete. Don't include too many questions or questions that are too complicated to answer
Make the survey easy to access (including for mobile devices if online)	Access links to anonymity . Don't create a generalised/open link if you want to track respondents from existing data or send personalised reminders to encourage completion
Vary questions types to include open (qualitative data) and closed (quantitative data) questions	Remember to plan for how all questions will be analysed. Don't add questions without a clear rationale
Promote the survey via known contracts/trusted sources to increase your response rate	Survey fatigue is an important consideration. Don't plan a survey without understanding your sample and their involvement in other data collection

You could use a Survey Research Design Checklist when designing your student surveys, such as <https://blogs.shu.ac.uk/steer/files/2018/09/SRDC.pdf>

If you choose to do a focus group with students or staff, then...

Focus Group Do	Focus Group Don't
Create a comfortable and welcoming environment for the data collection	The role of the moderator is important. Don't underestimate the skill required to encourage participation and deal with uncomfortable situations such as disagreement
Use a focus group to explore views and opinions AND how the group interacts during the discussion	An audio transcript can provide evidence of spoken interactions. Don't ignore visual aspects such as participant body language when reacting to silences or dominant voices. Making reflective notes during or directly after the session will help
Make the data collection engaging. Consider an activity (making lists, ranking/rating, storytelling, and game playing) to help generate discussion	Testing your focus group activity in your research environment will allow you to develop your confidence as a moderator. Don't assume that a pilot is unnecessary, so build this time into your project plan
Limit the number of participants to fewer than 10. Be prepared to adapt your activity if you have fewer than expected so the session is still engaging	Focus groups may last longer than an interview with a single respondent because there are multiple voices in the discussion. Don't plan for any less than an hour in length
Be strategic about who you invite to your focus group. Do you want a group with similar or divergent views? How will you access them?	Trust is a crucial element of a successful focus group. Don't invite participants that will unsettle others and close down discussions. Consider any power dynamics and conflicts of interest

Plan your focus group carefully. Think through different ways of engaging your participants. There are some ideas for engaging focus groups at: <https://blogs.shu.ac.uk/steer/2019/05/01/thinking-pedagogically-about-qualitative-research-in-he/> Survey and focus groups are useful approaches, but what else could you do?

Other research methods that are well suited to research in higher education include:

Interviews



...qualitative data collected from discussions with individual participants using a schedule of questions. Participant responses are interpreted through analysis.

Observations



...direct eyewitness accounts of behaviour and activity as it happens. Researchers can either observe as a participant or a non-participant.

Documentary analysis



...qualitative comments from documentary sources will not have been collected for research purposes but can be rich secondary sources of data if you can find a way to gather and sort the information you need for analysis. Always check you have permission for analysis.

Action research



...links research with practice such that the researcher constructs a process of change for practitioners and collects data through interviews or observations.

Experimental research/ evaluation



...creates controlled conditions or comparator groups such that cause and effect can be explored.

In depth case studies



...can gather evidence for causal, or at least associative, impact assessment concerning what works

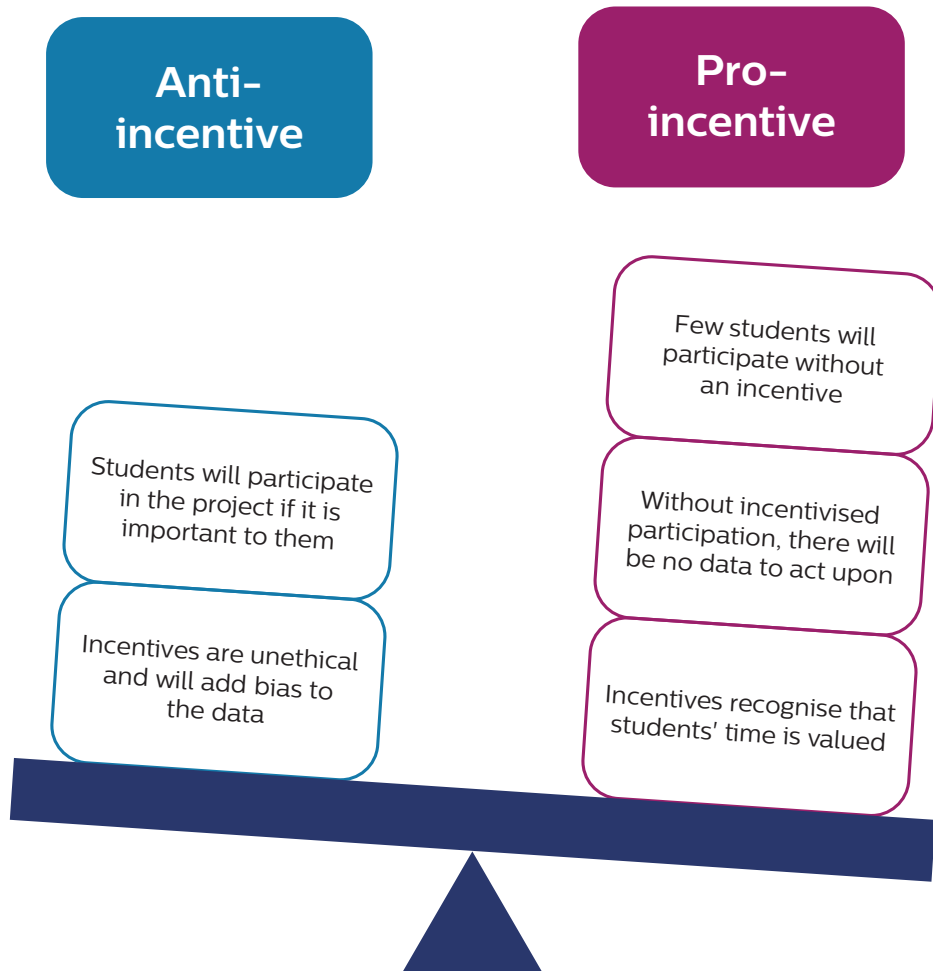
Longitudinal reviews



...such as via the use of Appreciative Inquiry (Cooperrider and Whitney, 2000) as a basis for initiating, examining and potentially attributing positive change over time.

Incentives

It is increasingly common for research in higher education to offer incentives to students, and sometimes staff, to encourage participation. There is a debate to be had, at the point of design, about the necessity for incentives which can include cash, gifts, vouchers, credit, lottery prize draws and charitable donations.



Choose what is the most appropriate for your data collection. Be honest about the use of incentives in any reporting, including your rationale and acknowledgement of any associated limitations. [Head \(2009\)](#) explores this in more detail and suggests that practical, methodological and ethical issues need to be considered before offering incentives, especially payment to research participants.



6.1 Evidence Essentials Six

A good grasp of how the data has been generated (either by yourself or others) will allow you to think critically about how it can be used within an evidence base. Adopting a mixed methods approach will allow for the strengths of one method to compensate for any limitations in another.



6.2 Case Study: Collecting data

To apply your learning, review the case study below and answer the questions to help you consider a 'real life' example associated to the content of this section.

Jules - Digital Services Manager at University of Enlightenment

The University of Enlightenment has a very good relationship with the local Students' Association and has been approached by a Students' Association Officer to address why the University has not yet introduced lecture capture across the institution.

This matter has been referred to Jules, as Digital Services Manager, who has been tasked with sourcing kit, appraising technical functionality and providing associated costs.

The Students' Association is pushing for a tight deadline for completion of this work as introducing lecture capture is identified as a key objective within their current local manifesto.

Jules contacts various suppliers, checks with the technical team, arranges some demonstrations and trials with the Digital Services Team and finally arrives at an options appraisal with key recommendations and an implementation plan appended. This is viewed by the Team as a thorough piece of work.

The report is sent to the PVC for Student Experience, Director of Learning and Teaching and CEO of the Students' Association as a precursor piece of evidence to inform their implementation meeting.

Jules receives an email communication from the PVC and Director of Learning and Teaching expressing dissatisfaction with the quality of the report and comments are made such as 'this is completely devoid of any pedagogic principles' and 'academic staff will not buy into this process as it is far too transactional'.

As a result, the work around lecture capture is further delayed and Jules also receives frustrated messages from the Students' Association CEO, who assumed that Enlightenment would go ahead with roll-out of lecture capture within the next teaching period. A sense of disillusionment prevails within the Digital Services Team.





Case Study Critique: Existing Evidence

Consider the following questions and then see if you can reconstruct this case to have some improved outcomes for Jules. There is an alternative, refashioned version in Appendix A which provides one approach to producing an evidence informed enhancement of this situation. Before accessing this alternative, see if you can do any better.

- What are your immediate thoughts about the case study situation? Why do Jules and the Digital Services Team end up feeling disillusioned?
- Can you identify further steps Jules could have taken to prepare this report more effectively?
- What should Jules now prioritise?
- How can Jules learn from this experience so that it does not get repeated at Enlightenment?

Notes



References and Further Reading

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Digital glossary for this section

[Analysis](#)

[Anonymity](#)

[Data](#)

[Method](#)

[Pilot](#)

[Questions](#)

[Research](#)

[Response Rate](#)

[Survey Fatigue](#)

[Synthesis](#)

[Randomised
Control Trial](#)