SECTION 5: EXISTING DATA SOURCES IN HIGHER EDUCATION

By the end of this section you will be able to describe the sources of data which currently exist in higher education.

To extend your learning, complete the mapping activity of data sources which exist within your institution.

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

Where can you find existing data?

Secondary data analysis allows researchers to use data which they have not collected themselves but will help answer their research question. It is useful to explore what secondary (existing) sources are available to you before you embark on any new (primary) data collection. This could save you time and resources, provide some insight into previous findings, add to your rationale for conducting your project, or provide sources which can eventually be triangulated.

The diagram below provides an overview of the type of research and evaluation which takes place within a higher education institution and examples of existing data sources which may exist (Austen 2018, 2019).

Student learning analytics	▪ student attendance data, VLE use, attainment data
Student surveys	▪ NSS, UKES, PTES, Welcome/Induction Survey, Career Readiness Survey
Student evaluations	▪ module/course/programme evaluations, Student Representatives' feedback
Reflections and pilots	▪ staff reflections on practice, local pedagogic research, module/course/programme reviews
Evaluations of process/impact	▪ evaluation of access to HE activity, evaluation of differential student outcomes activity
Student research	▪ UG and PG research which explores the institution or wider community
Staff research	▪ research contracted by funders or scholarship activity which explores the institution or wider community

When you engage with evidence, you should always ask yourself these critical questions:

WHY? Why was the data collected? The reason may be different to your own line of inquiry and this may create bias that you will need to acknowledge.

WHO? Who collected and now stores the data? You will need to explore whether they have permissions to share this with you for your intended purpose.

HOW? How was the data collected? The methodology and the sample will create some parameters for the analysis that you will need to work within.

WHAT? What are the limitations of the data? You will need to assess the inherited limitations of the secondary data source AND the limitations of carrying out your secondary data analysis.

To find out more about some of these data sources, and how they could be used, have a look at:

Sector data	HESA (Higher Education Statistical Agency): publish data on all aspects of the UK higher education sector
	Office for Students: provide advice and guidance on Teaching Excellence Framework data
	Unistats: compares UK higher education course data
Student analytics	JISC: includes guidance and services to explore data collection and analysis
	QAA Scotland webinar by Bart Rientes: The Power of Learning Analytics to Unpack Learning and Teaching: A Critical Perspective
Student Survey Data	HE Data Landscape Tool: 13 individual data guides on key data sources, collections and applications
	QAA Scotland webinar by Alex Buckley: Making Sense of Surveys

It will take some time to find out what data already exists within institutions, so build this into your project planning. If you are planning a project, complete the typology below and map out the existing data sources in your area of interest.

If you are not yet working on a project, choose a topic of interest or work through the illustrative example below:

Research question:	Is the current academic timetable supporting a positive learning experience for students on Nursing courses?

Student learning analytics	
Student surveys	▪ NSS Q16: "The timetable works efficiently for me" filter for BSC Nursing (Adult), BSC Nursing (Child)
Student evaluations	
Reflections and pilots	
Evaluations of process/impact	
Student research	
Staff research	

Finding new secondary sources: thinking outside the (NSS) box

You should give some thought to where you might find useful evidence. Can you be creative, gather insightful data and save some time and resource? To make the most of the range of evidence available to you, you will need to think outside of the (NSS) box.

Sometimes data and evidence already exists... but it's not called data, or it hasn't been analysed in a way that allows you to easily add to your evidence base, or its isn't what you (or colleagues) would usually engage with.

For example, **qualitative** comments from documentary sources (such as a recent course or programme review) will not 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.

Always check you have permission for **analysis**. Section 4 discusses ethical considerations in more detail.

Consider the following examples and suggested further reading:

Data type	Such as...	Useful resources
Social media commentary	Student comments posted on Twitter or Instagram	Townsend L & Wallace, C University of Aberdeen: Social Media Research: A Guide to Ethics
Official documents	Minutes of meetings (e.g. staff/student committees led by Student Representatives, Students' Association forums) or external examiner reports	Coffey, A (2014) Analysing Documents in The SAGE Handbook of Qualitative Data Analysis
Student-led Teaching Award nominations	Student-led award nominations for teaching excellence or support	Lubicz-Nawrocka & Bunting (2019) Student perceptions of teaching excellence: an analysis of student-led teaching award nomination data, Teaching in Higher Education, 24:1, pp63-80 QAA Scotland, Feedback from Assessment project: Student-Led Teaching Award Nomination Data
Assessment	Using student assessment grades to show learning gain (impact)	Higher Education Pedagogies Journal, Learning Gain in Higher Education (2018, 3:1)

What other information could you access and use as data within your institution? (Make sure you ask yourself the 'Why? Who? How? What?' questions above for these new secondary sources of data.)

You may decide that your **analysis** of these secondary sources provides enough evidence for decision making...

But... you may now realise that more data is required to explore an area in detail or to access voices within the populations which are not currently represented. Section 6 discusses collecting new data.

Evidence Essentials Five

There is a vast amount of data available which could help explore almost any area of higher education. Sometimes this data landscape can be overwhelming. Start any project with a set of clear aims and objectives and a question that you want to answer. Ask yourself "What do I want to find out about this chosen area?" Then ask critical questions of your proposed data sources.

Case Study: Thinking Existing Evidence

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.

Alex and Taylor, student complainants, University of Datadwelling

Alex and Taylor have complained anecdotally to their Class Rep about a specific module they both sat recently on their programme. They believe it was too difficult to understand. They feel that the tutor, who is also the Programme Leader, marks too harshly and that the module content and delivery was significantly different to what they have experienced elsewhere on the programme.

They asked the Class Rep to raise these issues on their behalf before the module was considered at the Departmental Assessment Board. They didn't feel empowered to discuss this directly with the Programme Leader, so the Class Rep drew attention to their complaint with some trusted tutors prior to the Board.

Information that went to the Board included: numbers of students enrolled on the module; first-time pass rates; spread of attainment by classification; and an external examiner's report. There was also a set of qualitative information that could be gleaned from the standard module evaluation questionnaires.

Module metrics presented at the Board aligned with other modules on the programme at the same level. For example, 62% of students on this module obtained 60% or more as an overall average which was broadly consistent with other programme modules. There was a 3% failure rate, but that was accounted for by students failing to complete both of the two compulsory assessment tasks.

The external examiner fed back that the marking process was in line with the validated description, and was consistent with standards attained in similar modules at other institutions.

The external examiner also praised the intellectual challenge posed by the module and by the well-designed assessment elements that focused on learning and development rather than on tick-box approaches to meeting criteria on assessment grids.

At the Board, the trusted tutors raised the issue of the informal complaint received from the two students through the advocacy role of the Class Rep. Whilst preserving the complainants' anonymity, they did confirm that neither student needed to retake the module as a consequence.

In light of the metrics, external examiner feedback, that the students had both passed, and that their concerns had not been raised within the module process, the complaint was disregarded.

Following the Board, the Programme Leader expressed dissatisfaction with the way the complaint had been aired and was upset that the students didn't feel able to discuss this beforehand.

Despite pressure, the trusted tutors resisted naming the students concerned to the Programme Leader and they relayed the Board's decision to the Class Rep who then notified Alex and Taylor of the outcome, whom both felt very disgruntled, frustrated and ignored.

Case Study Critique: Existing Evidence

Consider the following questions and then see if you can reconstruct this case to have some improved outcomes for Alex and Taylor. 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 Alex and Taylor feel frustrated?
- How much awareness did the students and the Programme Leader appear to have about each other's motives in this interaction?
- What is the dominant view underpinning the use of data at the University of Datadwelling?
- Should this be challenged, and if so, how?
- What assumptions have you made about the Departmental Assessment Board?
- Was the approach initiated by Alex and Taylor, via the Course Rep and trusted tutors, appropriate in this case study?
- How could emerging data have been used at an earlier stage within the module to potentially diffuse or prevent this conflict?

Notes

References and Further Reading

Austen, L (2019) Using Evidence for Enhancement
https://blogs.shu.ac.uk/steer/2019/01/16/using-evidence-for-enhancement/?doing_wp_cron=1556880565.4775419235229492187500#

Austen, L (2018) 'It ain't what we do, it's the way that we do it' – researching student voices, WonkHE, 27 Feb 2018
http://wonkhe.com/blogs/it-aint-what-we-do-its-the-way-that-we-do-it-researching-student-voices/

Coffey, A. Analysing Documents in Flick, U. (2014) The SAGE Handbook of Qualitative Data Analysis (online),
https://methods.sagepub.com/book/the-sage-handbook-of-qualitative-data-analysis/n25.xml

Jones-Devitt, S and LeBihan, J (2018) Use and abuse of the student voice: leaders' responsibilities for making positive use of student evaluations of teaching in Higher Education York: AdvanceHE.

Langan, A M and Harris, W E (2019) National student survey metrics: where is the room for improvement? Higher Education (Online April 2019)

O'donovan, B, Price, M and Rust, C (2004) Know what I mean? Enhancing student understanding of assessment standards and criteria Teaching in Higher Education, 9(3): pp325-335.

Lubicz-Nawrocka, T and Bunting, K (2019) Student perceptions of teaching excellence: an analysis of student-led teaching award nomination data, Teaching in Higher Education, 24:1, pp63-80
www.tandfonline.com/doi/abs/10.1080/13562517.2018.1461620

QAA Scotland (2018) What does Student-Led Teaching Award nomination data tell us about student perceptions of 'good' feedback?
www.qaa.ac.uk/scotland/focus-on/feedback-from-assessment

Townsend L and Wallace, C (2016) University of Aberdeen: Social Media Research: A Guide to Ethics
www.gla.ac.uk/media/media_487729_en.pdf

Various (2018) Special edition of the Higher Education Pedagogies Journal, Learning Gain in Higher Education (2018, 3:1)
www.tandfonline.com/toc/rhep20/3/V1?nav=tocList

Digital glossary for this section

Analysis	Primary Data	Secondary Data
Data	Qualititive	Triangulation
Evaluation	Research	