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

- Understand the importance of creating audit trails which demonstrate evidence-informed decision making in higher education.
- Extend your learning, complete the Critical Checklist for Using Evidence Effectively activity at the end of this section, in relation to a planned intervention or activity.
- Apply your learning, review the case study to help you consider a ‘real life’ example associated to the content of this section.

Analysis and synthesis

Think about how you know you are being sufficiently analytical.

One of the biggest problems when using any kind of evidence is moving from description to analysis to synthesis. Use the following exercise about levels of critique to sharpen your skills when analysing evidence.

Worked example:

<table>
<thead>
<tr>
<th>Situation</th>
<th>Level of analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>The cat sits on the mat</td>
<td>Purely descriptive - states what can be seen</td>
</tr>
<tr>
<td>The cat sits on the mat: we need to explore why it’s sitting there</td>
<td>Description plus limited critical analysis - what can be seen plus we begin to reason and question</td>
</tr>
<tr>
<td>The cat sits on the mat: having weighed up all available evidence, we can demonstrate an understanding of why it might be there</td>
<td>Extension of critical analysis into synthesis - what can be seen plus comprehensive reasoning of all available evidence</td>
</tr>
<tr>
<td>The cat sits on the mat: we perceive that the existing evidence does not explain adequately why it’s there. We need to devise further ways to help explain the significance of this situation</td>
<td>Synthesis moves towards more comprehensive critical evaluation; represents recognition of the limits of existing knowledge upon which to build new explanation(s) - what can be seen plus an evidence-informed approach acknowledging we need to examine gaps and maybe gather new evidence?</td>
</tr>
</tbody>
</table>

Task: identify ONE piece of evidence arising from a situation of your choosing and see if you can progress it in a similar way to the ‘cat’ above. Place the situations (or facts) in the left-hand columns in the diagram below and align with the corresponding levels of analysis in the right-hand columns. This can be very useful to complete when considering how to become more analytical.
## Situation | Level of analysis
--- | ---
 | Purely descriptive
 | Description plus limited critical analysis
 | Extension of critical analysis into synthesis
 | Synthesis moves towards more comprehensive critical evaluation; represents recognition of the limits of existing knowledge upon which to build new explanation(s)

### Reporting and Dissemination

It is really important to be systematic and thoughtful about how evidence and findings are reported. Considering who you are trying to influence, and why, is crucial at the outset. A well thought out communications plan can provide a useful way to keep on track with when and how to report evidence and it also ensures that it will maximise influence. Ask yourself some critical questions about what you are going to do with evidence you find:

1. Have you got a communications and information-sharing (dissemination) plan before you start any form of inquiry?
2. How and when are you going to produce outputs? For example, will you be writing any interim findings, summaries, extended report?
3. Internal dissemination by project team? Such as University committees, internal conferences, internal media communications
4. How to launch findings? For example, you could do a ‘soft launch’ at the end of the project at the host institution, if appropriate. If any of the work is sponsored, your funder might want a ‘harder’ official launch before anything else occurs
5. Publication of output? Where will anything be hosted as there are lots of options here, including:
   - a relevant website
   - external and internal project members to promote via own networks
   - newsletters, blogs, email promotion and face-to face-meetings
   - social media sites such as Twitter, Instagram, Facebook
   - promotion to practitioners via any established organisational networks
   - promotion to senior leaders either directly or via their identified network
   - conference presentations by project team or individuals
   - open access to raw data to allow continued analysis of the topic area by other researchers or those gathering further evidence.
6. Check for any embargos or any other restrictions on publication and/or data sharing?
Action plans and activity logs

Action plans and activity logs can provide detailed outlines of tasks required to accomplish a goal and should be considered as useful evidence of process. There are lots of freely available planning templates that can be downloaded but the easiest way is to create your own based on the following SMART principles:

- Be **Specific**
- Use **Measurable** processes
- Set **Attainable** targets
- Have **Relevant** goals
- Ensure **Timescales** are taken into account

Scenario modelling (forward thinking)

Scenario modelling (also known as scenario planning) is an evidence-informed process used to improve decision making when creating possible future directions. During the process, current driving forces and potential drivers of change are explored in depth and evidence is gathered to examine the strengths and challenges of each possible future.

Sayers (2010) constructed A Guide to Scenario Planning in Higher Education which provides lots of worked examples of how evidence can be used to construct forward-facing alternatives. She states:

> "Scenario planning does not claim to predict the future in entirety, it does increase awareness of the external environment and broaden the range of possible futures which are under consideration (and what policies and strategies would be best in each case.)"

> In straightforward terms, it helps organisations to ‘prepare for what we don’t think is going to happen’ (p 5).

You might consider using and documenting scenario-modelling processes, as outlined above. They can provide a low-risk approach in helping to develop some evidence-informed alternative versions of possible futures within specific contexts. These can be revisited as very useful forms of contributory evidence when making decisions at a later point.
Stakeholder engagement

Stakeholders are individuals (or groups) who affect, or are affected by, a project or strategy. There are many ways to identify stakeholders you might want to include when using evidence to inform organisational change. Using a template to consider level of influence within any specific context, along with level of interest, can identify the right people to help in any evidence-informed process or initiative.

The following stakeholder analysis template can be used when planning any evidence-informed process:

- **High Power, High Interest**: Become co-creators.
- **High Power, Low Interest**: Keep satisfied.
- **Low Power, High Interest**: Keep informed.
- **Low Power, Low Interest**: Monitor.

This results in four obvious combinations:

- Stakeholders identified with low power and low interest should be monitored.
- Stakeholders identified with high interest but low power should be kept informed.
- Stakeholders identified with high power but low interest should be kept satisfied.
- Stakeholders identified with high power and high interest should become co-creators.

‘Power’ in this context doesn’t necessarily relate to organisational hierarchy, it concerns those you consider have power in the particular area of change. For example, if you were collecting some form of student voice evidence around assessment then the President of the Students’ Association and the Director of Learning and Teaching might have more power than the Principal in this context.

Focused and differentiated recommendations

- When considering and/or auditing use of evidence, don’t forget to give some thought to how you feel the evidence should be used for change in a focused manner. A good way of doing this is to consider who you think might find the evidence of most use and how? Accessibility is often considered when planning how to disseminate findings, so things like executive summaries are used frequently to incorporate headline messages alongside consideration of methods of communication.
- Do also remember to provide focus alongside accessibility. For example, if you have some differentiated recommendations for practitioners, policymakers and students, then you can always draw attention to those audiences in any specific summary.
To summarise

- Do ensure that you consider how to audit your use of evidence throughout
- Don’t assume that complex information is always easy to analyse
- Do produce a stakeholder plan so that you can be rigorous about engagement
- Do think about planning the focus of any dissemination of findings

The Critical Checklist for Using Evidence Effectively at the very end of this section will help you to cover all the obvious things concerning questions to ask yourself about using evidence, types of evidence, thinking critically, existing data and collecting data. If needed, revisit each section throughout this Guide and access the activities and case studies to ensure that you can answer the checklist questions confidently and competently.

It is important to know why you need to plan and audit how evidence is used to inform decision making (either by yourself or others). Doing so will allow you to justify your reasoning and any changes in direction. It also assists in the capture of unintended outcomes.
Val - Programme Leader, Nudge University

As Programme Leader at Nudge, Val has developed a really good relationship with students at all levels and is known for being committed to authentic student engagement.

Recently, Val undertook a snapshot audit of how students are engaging on the current Programme and noticed that many of the students, who are part-time and mature learners, have not been using the University’s designated virtual learning environment (VLE). Indeed, the tracking tool on the VLE demonstrated really poor uptake across all modules, at all levels, beyond using the system to submit work electronically.

Given this shock, Val called together members of the Programme Team who were equally perplexed. Collectively, they assessed whether the pedagogy underpinning engagement was of a sufficient standard across the modules. There was uniform agreement that opportunities to engage were of high quality.

The Team therefore deduced that there must be a skills deficit, given the nature of the student demographic.

Val and the Programme Team met with the Technology Enhanced Learning Unit (TELU) and together they fashioned a set of scaffolded skills-based optional activities to address this shortfall in active VLE engagement.

Sessions were scheduled over lunchtimes and also created online to maximise flexibility. Disappointingly, the face-to-face sessions were cancelled due to lack of interest and the online versions received minimal attention.

In light of this process, Val and the Team met up to consider this ongoing lack of engagement and to identify next steps. At the end of this meeting, they were still grappling with attributing reasons for both lack of VLE take up and what they perceived to be indifference from the students about the skills sessions.
Consider the following questions and then see if you can reconstruct this case to have some improved outcomes for Val. 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 you think Val and the Programme Team end up feeling uncertain about what to do next?
- Are the assumptions made, about explaining lack of VLE engagement, valid considering the existing evidence?
- What further evidence, if any, should Val and the Team consider?
- How can Val learn from this experience so that the student experience isn't adversely affected in the longer term?


Digital glossary for this section

Data

Evidence
# A CRITICAL CHECKLIST FOR USING EVIDENCE EFFECTIVELY

## Using Evidence

1. Have you considered why gathering evidence is useful?
2. Does the proposed approach to gathering evidence help you?
3. Why is it often important to gather more than one source of evidence?
4. Have you considered how you will evaluate the evidence you found?
5. What impact do you hope the evidence might have?

## Types of Evidence

1. Which kind of evidence is most important to fulfil what you need to do?
2. Do you need to collect primary or secondary data, or both?
3. Is there a type of evidence that is valued most within your organisation?
4. What will you do if you can’t find any useful evidence?
5. Are forms of evidence always clear cut?

## Thinking Critically

1. How do you know that you have critiqued or gathered the best available evidence?
2. Does the evidence presented have organisational or contextual significance?
3. What assumptions underpinned your research questions or inquiry?
4. How do you know that your assumptions were correct?
5. How will any learning from the evidence be put into practice?

## Existing Data

1. Why was this data collected in the first place?
2. Have you looked at the data quite critically rather than accepted it as a ‘truth’?
3. Is there a shelf life for data and, if so, for how long?
4. Does data need to be accessible and when might restrictions be needed?
5. What are the limitations within single sources of data?

## Collecting Data

1. Do you need to collect data in order to answer a question?
2. Why is the process underpinning how data is collected so important?
3. Have you considered ethical issues fully before collecting any data?
4. Have you considered any impact on participants in addition to findings?
5. Have you considered how any unintended consequences will be reported?