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Essential Skills: Research Seminar

Trawsnewid Addysg, Trawsnewid Bywydau
Transforming Education, Transforming Lives

www.uwtsd.ac.uk

Session Objectives

In this session you will:

- Distinguish between summary and synthesis.
- Compare and contrast multiple sources.
- Identify agreements and disagreements in research.
- Evaluate the quality and relevance of evidence.
- Construct a balanced academic argument.

This session will help you to develop your reasoning skills that will be used extensively in the workplace.

Session Schedule

Time	Activity
15 mins	Starter: Which source would you trust?
30 mins	What is synthesis?
15 mins	Research comparison note making
10 mins	Break
45 mins	Building an argument workshop
5 mins	Reflection

Critical Analysis

Which Source Would You Trust?



Mental Health Blog



NOVEMBER 3, 2025
Podcast: How to Find Hope When Bipolar Steals It Away
Rebuilding hope when bipolar disorder leaves you hopeless is explored on this podcast episode. Listen Now! Gabe Howard Stars!

READ MORE →

Source A – Personal Blog



NEWS

Home | UK | World | Business | Culture | Politics | Health | Tech | InDepth | BBC

UK | England | N. Ireland | Scotland | Alba | Wales | Cymru | Isle of Man | Guernsey

Poverty and technology leading to record levels of slavery in UK



Source B – News Article

Walter Int J Educ Technol High Educ (2024) 21:15
<https://doi.org/10.1186/s41239-024-00448-3>

International Journal of Educational Technology in Higher Education

RESEARCH ARTICLE

Open Access

Embracing the future of Artificial Intelligence in the classroom: the relevance of AI literacy, prompt engineering, and critical thinking in modern education

Yoshija Walter^{1*}

Source A – Peer-reviewed journal article

Which source would you use in an assignment and why?

Remember your critical analysis

Move beyond:

- "The journal is best."

Ask:

- Why?
- Who wrote it?
- What evidence supports it?
- Is there bias?

Summary vs Synthesis

The aim of the session today is to move you forward to use of your reading to develop an argument.

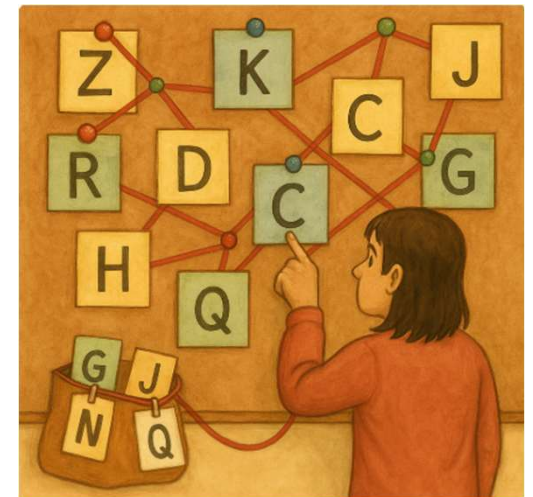
First, we must push past summary and towards synthesis.

Summary =

What the authors say

Synthesis =

What the sources say together



Summary vs Synthesis

Example - Social Media and Learning

Source A suggests social media allows students to collaborate and share information.

Source B finds that social media can distract students and reduce concentration.



Summary

Source A highlights the benefits of social media for communication and collaboration, while Source B emphasises the potential for distraction.

Synthesis

These studies suggest that social media is neither entirely beneficial nor entirely harmful for learning. Its impact appears to depend on how students use the technology, with purposeful academic use supporting collaboration while excessive use may negatively affect concentration.

Notice:

The synthesis creates a balanced conclusion based on both sources.

Summary vs Synthesis

Summary

- Author A says...
- Author B says...



Synthesis

Author A says...
Author B says...
Therefore...

Or

Together these sources suggest...

Or

While both sources agree that..., they
differ in their views on...
This indicates that...

Summary vs Synthesis

Article 1 and 2 are both focused on leadership.

Work in pairs to read and summarise both articles.

Look out for:

- Point of agreement
- Points of disagreement
- Unique ideas
- Draft a synthesis point.

Article 1

 frontiers | Frontiers in Psychology

Participative Leadership: A Literature Review and Prospects for Future Research

Qiang Wang¹, Hong Hou^{2*} and Zhibin Li³

Article 2

Participative or Directive Leadership Behaviors for Decision-Making in Crisis Management Teams?

Small Group Research
2022, Vol. 53(5) 692–724
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DOI: 10.1177/10464964221087952
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Share and compare

Share your findings and points with your tutor and class.

What did we all find? What differences do we have?

Research Comparison Notemaking

Research Comparison Note making

Good academic writing starts with good academic note-making.

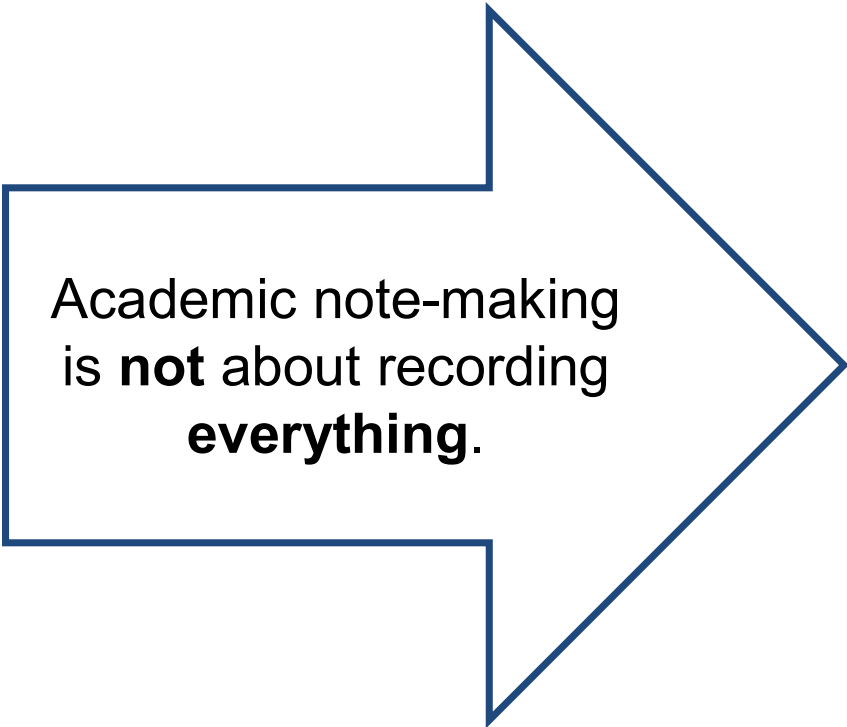
What are the **mistakes** that students often make?

- X Copying quotations
- X Highlighting everything
- X Writing large amounts of information
- X Recording what authors say without evaluating it

As a result, when they begin writing assignments they struggle to:

- Compare sources
- Identify themes
- Develop arguments
- Write critically

Research Comparison Note making



Academic note-making
is **not** about recording
everything.

It is about identifying:

- Key ideas
- Useful evidence
- Strengths
- Limitations
- Connections between sources

The Research Comparison Table

Source	Main Claim	Evidence Used	Strengths	Limitations	Useful for my assessment?



Column 2 - Main Claim

Aim to identify the author's key argument

Avoid copying whole paragraphs X

Instead write:

One concise sentence ✓

For example: "Democratic leadership improves employee engagement."

The Research Comparison Table

Source	Main Claim	Evidence Used	Strengths	Limitations	Useful for my assessment?



Column 3: Evidence Used

Aim to find what evidence within the article supports the claim

For examples: Research study, Statistics, Case study, Survey data, Literature review

Such as "Survey of 450 employees."

The Research Comparison Table

Source	Main Claim	Evidence Used	Strengths	Limitations	Useful for my assessment?

Column 4: Strengths

Aim to detail **why this evidence may be useful**

For examples: Large sample size, Recent research, Relevant topic, or, Peer-reviewed source

An example note:

"Recent study with large participant group."

The Research Comparison Table

Source	Main Claim	Evidence Used	Strengths	Limitations	Useful for my assessment?

Column 5: Limitations

Aim to make a clear note about **what might reduce the usefulness of this source.**

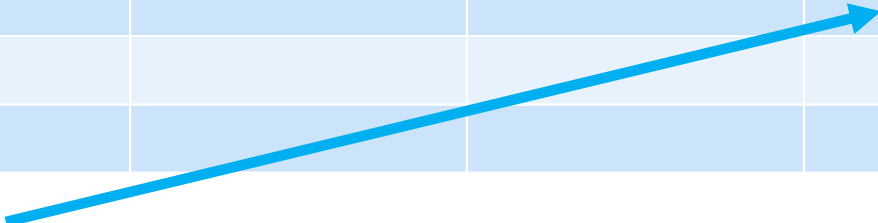
For example: Small sample, Outdated research, Limited context, Possible bias

Example note:

"Only examined office-based organisations."

The Research Comparison Table

Source	Main Claim	Evidence Used	Strengths	Limitations	Useful for my assessment?



Column 6: Useful for My Assessment?

Ensure that you note how you could use this source.

For example: Supporting an argument, Providing evidence, Presenting an alternative viewpoint, Critiquing another source

Example:

"Useful when discussing employee motivation."

The Research Comparison Table

Download a copy of the note-making table.

Think about when you will use this to help you organise your notes in future.

Source	Main Claim	Evidence Used	Strengths	Limitations	Useful for my assessment?

Developing an argument

Building an Academic Argument

Democratic leadership is good because employees are happier.

Weak Academic Writing

Stronger Academic Writing

Research suggests democratic leadership can improve employee engagement (Author A). However, other studies indicate it may slow decision-making processes (Author B). Therefore, its effectiveness may depend on organisational context.

Building an Academic Argument

Claim



Evidence



Evaluation



Conclusion

To build a solid and supported academic argument.

You need to include four parts to your paragraph.

Claim

What is your main point?

Evidence

What research supports your point?

Evaluation

How strong is the evidence? What are its strengths and limitations?

Conclusion

What can reasonably be concluded?

Step 1 - Claim

What is a Claim?

A claim is the point you are trying to make.

Think of it as: What am I arguing?

A claim should be:

- Clear
- Relevant
- Debatable
- Supported by evidence

Weak Claim - Leadership is important.

Problem: This is too obvious and there is nothing to discuss.

Better Claim - Democratic leadership can improve employee engagement.

Strength - A point that can be explored and supported.

Stronger Claim - Democratic leadership appears to improve employee engagement because employees are more involved in organisational decision-making.

Strength - This provides a position and a reason

Step 2 - Evidence

What is Evidence?

- Evidence is the research used to support your claim.

Academic arguments should not rely on:

- Personal opinion
- Assumptions
- "Common sense"

Instead use:

Journal articles
Books
Research studies
Statistics
Case studies
Reports

Weak Example

Democratic leadership improves engagement because people like being involved.

Stronger Example

Wang et al. (2022) found that democratic leadership increased employee engagement and organisational commitment among workers because employees felt ownership over decisions.

Step 3: Evaluation

What is Evaluation?

- Evaluation is the stage students often miss.
- This is where critical thinking happens.

Evaluation asks:

- How useful is this evidence?
- How strong is this evidence?
- What are its limitations?

Example – Wang et al. (2022) found higher levels of employee engagement under democratic leadership. However, the study focused primarily on office-based organisations and may not be applicable to high-pressure environments requiring rapid decision-making.

Read the example – can you spot the claim? Evidence? The evaluation?

Step 4 – Conclusion

What is a Conclusion?

The conclusion answers:

- So what?

It explains what the evidence means overall.

Weak Conclusion

Therefore democratic leadership is the best leadership style.

Strong Academic Conclusion

Overall, the evidence suggests that democratic leadership can improve employee engagement and participation. However, its effectiveness may depend on organisational context, particularly where rapid decision-making is required.

BUILDING AN ACADEMIC ARGUMENT

A 4-STEP PROCESS

Clear thinking
 Strong evidence
 Critical evaluation
 Well-supported conclusions

1 CLAIM What is your main point?	Make a clear, focused claim. State the point you are trying to argue. Your claim should be: ✓ Clear ✓ Relevant ✓ Debatable ✓ Specific	EXAMPLE “Democratic leadership can improve employee engagement because employees are more involved in decision-making.” TIP: Avoid obvious or overly broad claims (e.g., “Leadership is important.”)
2 EVIDENCE What research supports your point?	Use credible evidence to support your claim. Evidence can come from: • Journal articles • Books • Research studies • Statistics and data • Reports • Case studies	EXAMPLE “Wang et al. (2022) found that employees working under participative leaders reported higher levels of motivation and organisational commitment.” TIP: Always reference your sources accurately.
3 EVALUATION How strong and reliable is the evidence?	Analyse and evaluate the evidence. Consider: • How reliable is the source? • What are its strengths? • What are its limitations? • Does it apply to all contexts? • Do other researchers agree or disagree?	EXAMPLE “However, the study focused mainly on office-based organisations and may not apply to high-pressure environments requiring rapid decisions.” TIP: Critical evaluation shows you are thinking beyond simply describing the evidence.
4 CONCLUSION What can reasonably be concluded?	Bring the argument together. Explain what the evidence means overall and answer “So what?” ✓ Synthesize the evidence ✓ Acknowledge limitations ✓ Offer a balanced conclusion ✓ Link back to your claim	EXAMPLE “Overall, the evidence suggests that democratic leadership can improve employee engagement in many organisational settings, but its effectiveness depends on the organisational context.” TIP: Avoid absolute statements. Use balanced and evidence-informed conclusions.

THE FLOW OF ACADEMIC ARGUMENT

CLAIM → EVIDENCE → EVALUATION → CONCLUSION

Good academic writing is not about having the most sources, it's about using them well.

Think critically. Write clearly. Support your ideas.

Strong arguments are built with clear reasoning, credible evidence and critical thinking.

Download and save the
‘Building an Academic Argument’
poster from Moodle.

Make a plan for using the four-step
 process going forward.

Personal Progress Padlet

There are **no formal assessments** within 'Essential Skills' classes but you are encouraged to keep your Personal Progress Padlet.

Note down in your Personal Progress Padlet:

- What have you learnt today?
- How will you use this new skill?

Traffic Light *it*



	<i>Where is your learning at ?</i>
Red	I have misunderstood some of the topics. (write down 2 questions that you need help with)
Amber	I have understood most of the topics so far (write down 1 question and 1 key theme you have understood)
Green	I have understood the topics so far (write down 2 key themes from the lesson to show your understanding)