

SUPA
2026

Examining Feedback Literacy in First-Year Labs



A Proposal

Promising – needs development ✓

*Good
luck!*

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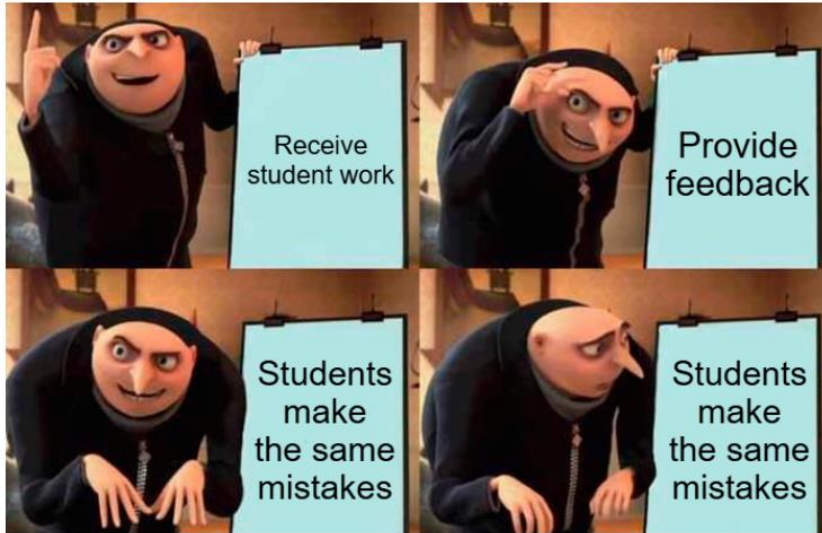
Dr. Labrosse & Prof. Croke

SUPA Meeting, 2026



Has this ever happened to you?

Sound familiar?



*You are
not alone!*

Both students AND teachers report dissatisfaction with the feedback process in higher education.

Carless & Boud, 2018

Feedback in Higher Education

*This is
the gap!*

The Problem

Both students and teachers report widespread dissatisfaction with the feedback process in higher education.

Students often receive comments but don't know how to act on them — the loop stays open.

Carless & Boud, 2018

The Response

A recent call in education to increase **feedback literacy** in students — repositioning them as **active agents** in the feedback process, not passive recipients.

Students need tools to seek, interpret, and act on feedback purposefully.

Carless & Boud, 2018; Zhan, 2022

What is Feedback Literacy?

key term!



“

Feedback literacy — “students’ capacities and dispositions to engage with feedback to improve their future performance or learning strategies”

— Zhan, 2022, p. 1088

Feedback Literacy Components (Zhan, 2022)

Eliciting

Actively seeking feedback from instructors and peers

Processing

Making sense of and judging feedback received

Enacting

Taking concrete action in response to feedback to change future work

Appreciation

Developing a positive disposition towards feedback — seeing it as valuable for learning

Readiness to Engage

Being prepared and willing to engage with negative and critical feedback

Commitment to Change

Enthusiasm in the feedback process — following through on feedback and embedding changes into future practice

*The 6
dimensions*



Good
examples!

Physics & Astronomy Feedback Research

Xiao, Wang & Jiang (2026) in *Sustainability*

Active Learning in University Physics for Sustainable Higher Education: Effective Components, Mechanisms, and SDG-Aligned Competency Pathways – A Multidimensional Review

Kay, Hardy & Galloway (2018) in *Physical Review Physics Education Research*

Learning from Peer Feedback on Student-Generated Multiple Choice Questions: Views of Introductory Physics Students

Donovan (2014) in *Assessment & Evaluation in Higher Education*

Closing the Feedback Loop: Physics Undergraduates' Use of Feedback Comments on Laboratory Coursework

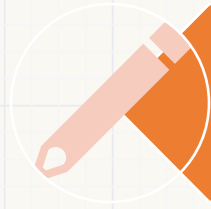
Research Question

KEY
QUESTION

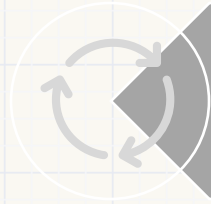


How does the introduction of feedback literacy initiatives into first-year physics and astronomy laboratories impact student learning?

Why Labs?



Feedback on written
scientific communication



Iterative in nature



Staff often note lack of feedback
uptake

*Good
question*

Pedagogical Intervention

01

Instruction

Metacognition & Feedback Literacy

- Overview of relevant research + explicit instruction on how to provide and receive peer feedback.



02

Exemplars

Learning from Examples

- Samples of past student work shared to clarify assessment expectations.
(Carless & Chan, 2017)

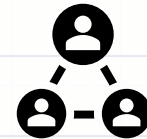


03

Peer Feedback

Active Review Practice

- Students review each other's work, benefiting both reviewer and reviewee.
(Nicol et al., 2014)



Nice
scaffolding

Research Methods

Mixed
methods
= stronger!

Quantitative

Metacognitive Awareness Inventory

Schraw & Dennison, 1994 · 52 items · 8 categories

Feedback Literacy Scale

Zhan, 2022 · 24 items · 6-point scale · 6 dimensions

Performance comparisons

before & after intervention

Qualitative

Surveys

student perceptions of feedback process

Interviews & focus groups

depth of engagement with feedback

Metacognitive Awareness Inventory (MAI)

Schraw & Dennison (1994) — 52-item validated scale

Knowledge of Cognition

Declarative Knowledge

Procedural Knowledge

Conditional Knowledge

Regulation of Cognition

Planning

Information Management

Monitoring

Debugging

Evaluation

8
categories
total

Feedback Literacy Scale (FLS)

Zhan, 2022 — 24-item validated scale

Capacity for...

Eliciting

Processing

Enacting

Disposition in terms of...

Appreciation of Feedback

Readiness to Engage

Commitment to Change

*Both
capacity
& attitude*

Takeaways



1

Feedback literacy in physics and astronomy programmes and labs is an exciting, under-explored area with real impact potential for student learning.



2

The Metacognitive Awareness Inventory and Feedback Literacy Scale are two validated tools to help gauge feedback literacy.



3

Stay posted — we'll be sharing results as this study gets underway! (results pending — we have not yet solved feedback literacy, but we are trying)

References

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Nice