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LIVERPOOL



The global forum for
EAP professionals

BALEAP Conference 2025: Collaboration, Co-creation, and Community: The transformative potential of EAP

14th-17th April 2025



UNIVERSITY OF
PLYMOUTH

EAP in the Lab: experiments in writing physics



Overview

- Key questions
- Background/context PHYS106
- 4 EAP in the lab experiments
- Observations
- Models/patterns of collaboration
- Collaboration in your context

Key questions from our submission:

- What does effective collaboration in EAP look like in practice?
- What constitutes effective collaboration from different disciplinary perspectives?
- How are participation, voice and agency not only linked, but potentially re-aligned in the process of interdisciplinary collaboration?
- What tensions may exist between the desire for a standardised approach to collaboration and disciplinary concerns and agency?



UG Physics

What you'll learn

- How to explore and apply the fundamental principles of physics
- Numeracy skills
- Problem solving skills
- Ability to reason clearly and communicate well

Practical Physics 1: Module Aims

To provide a core of essential introductory laboratory methods which **overlap and develop from A-Level**; to introduce the basis of experimental techniques in physical measurement, basic probability/statistics, the use of computer techniques in analysis, and to provide experience in doing experiments, **keeping records and writing reports**; to complement the core physics program with experimental examples of material taught in the lecture courses.

Or, in a more condensed way...

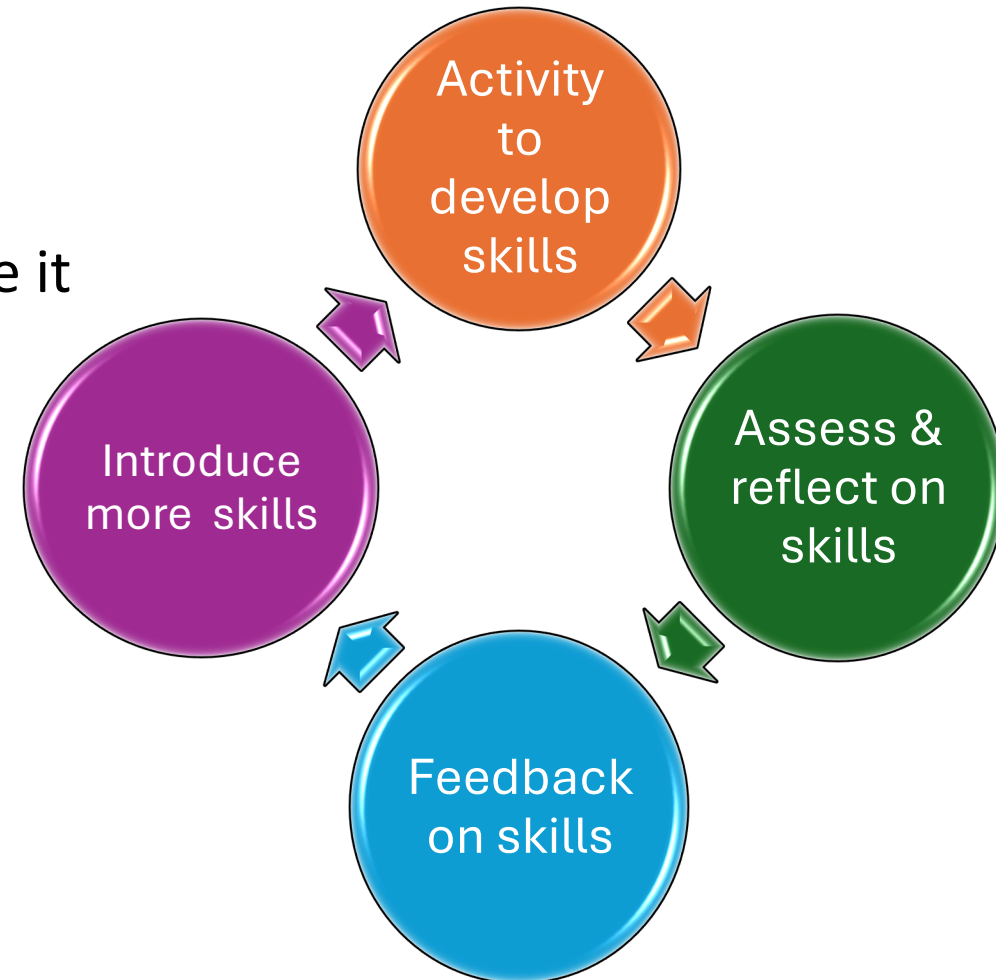
Become familiar with the lab environment

Be able to take and analyse data

- What data means
- What an uncertainty is and how to manipulate it

Communicate science

- Scientific reports
- Presentations



Who?

Module leader

Students

EAP tutor

Academics

PGRs

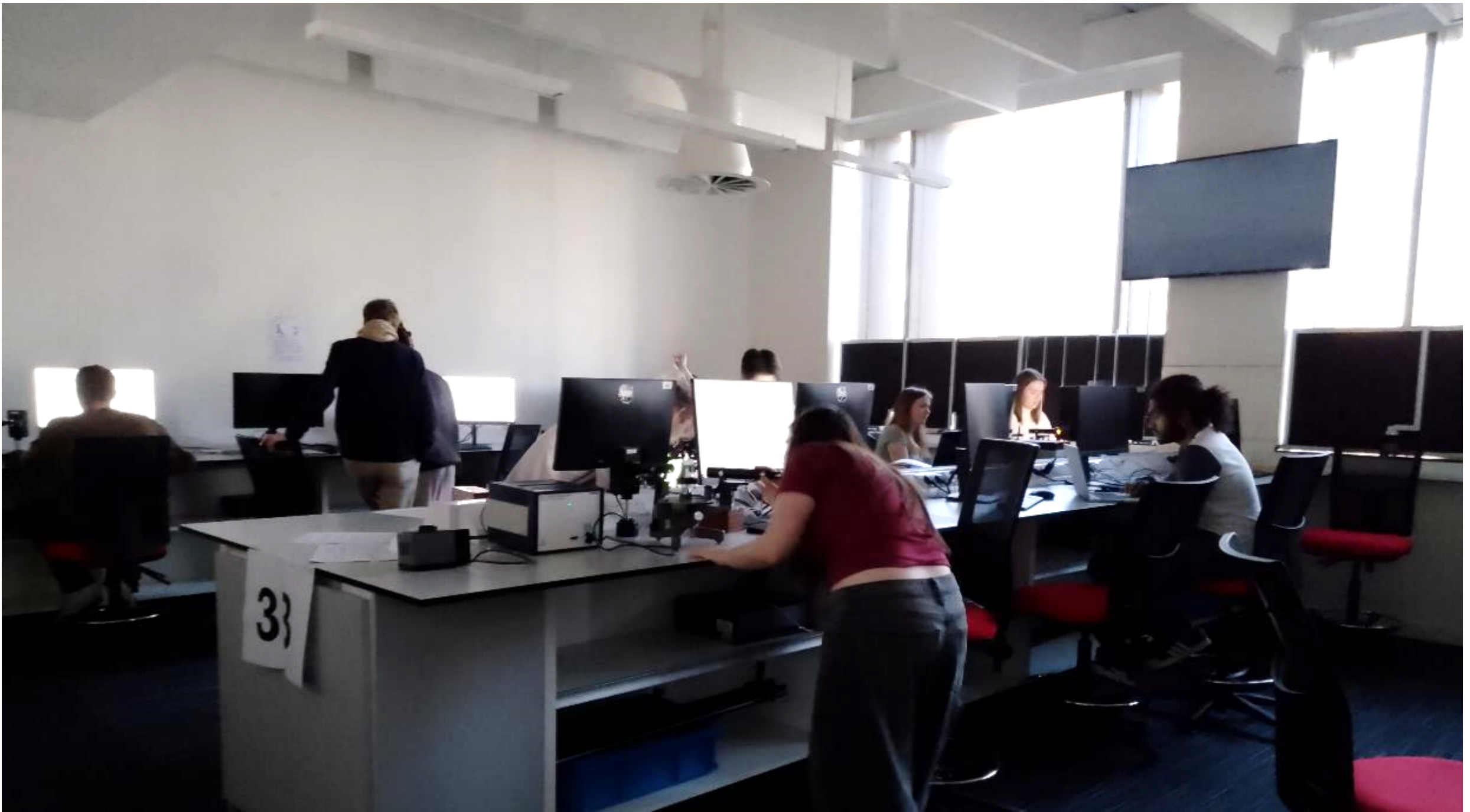
The lab coach team!

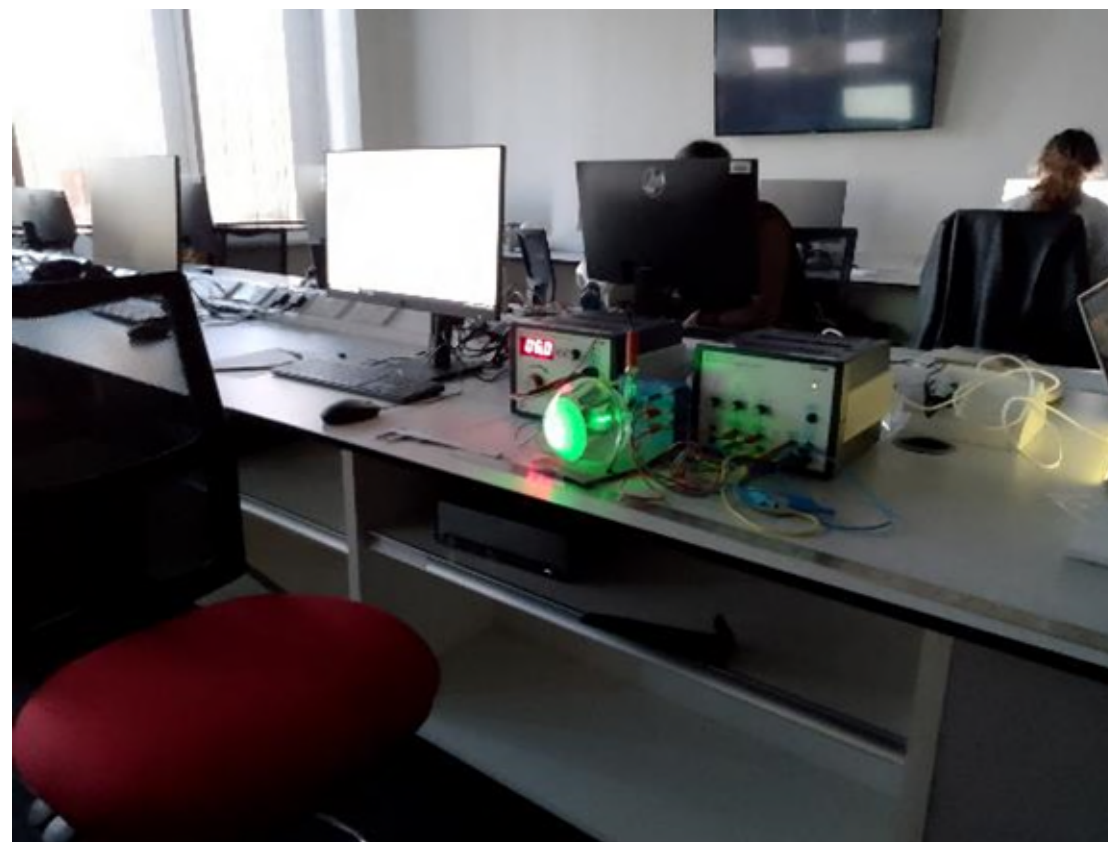
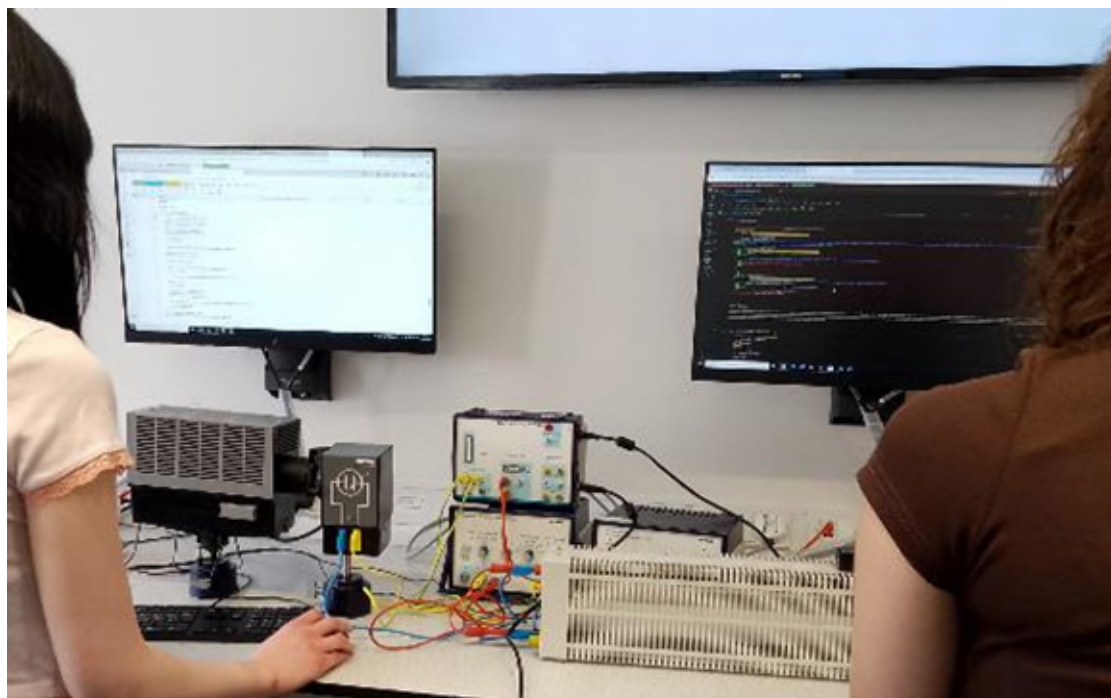


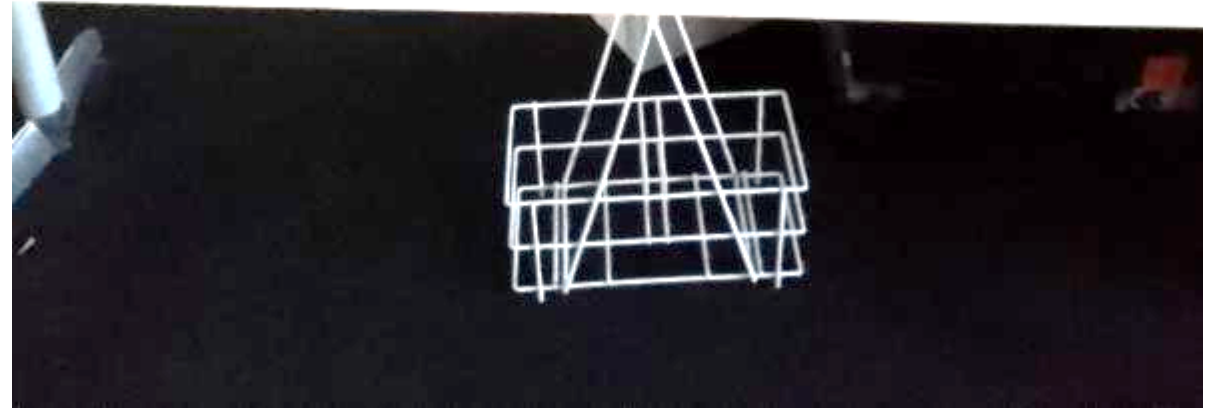
*like this, but with more science











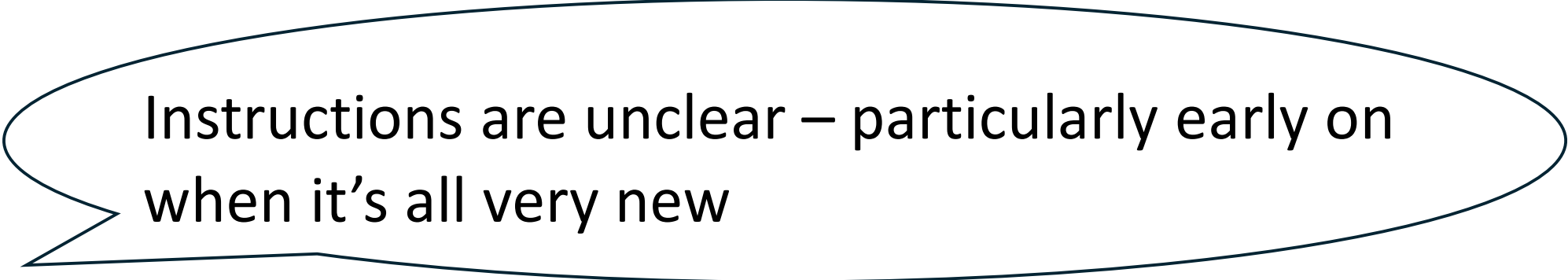
Building on experiment(s) in writing physics

0.1.0

- review writing mini-module with feedback and recommendations
- use student writing for needs analysis
- help module tutors and lab coaches design, create and deliver writing sessions
- design lab report writing activities as a 'toolkit' for lab coaches to use with students rather than a 'course' delivered by an EAP tutor
- give feedback on lab coach assessment feedback to students

Experiment 1: Lab scripts

Students say:



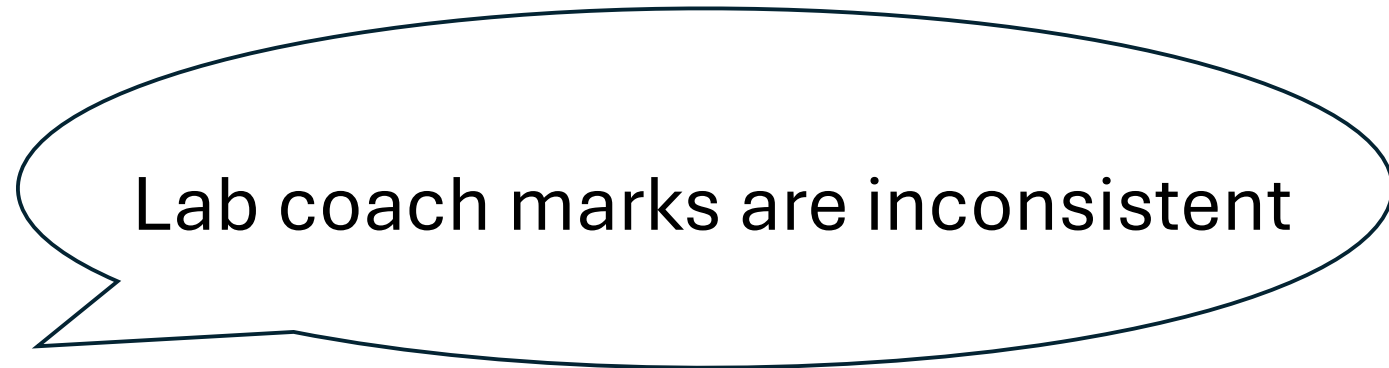
Instructions are unclear – particularly early on
when it's all very new

What are we doing?

- Rewritten lab scripts which are hopefully clearer
- Piloting and revising in lab coach training

Experiment 2: Assessment feedback

Students say:

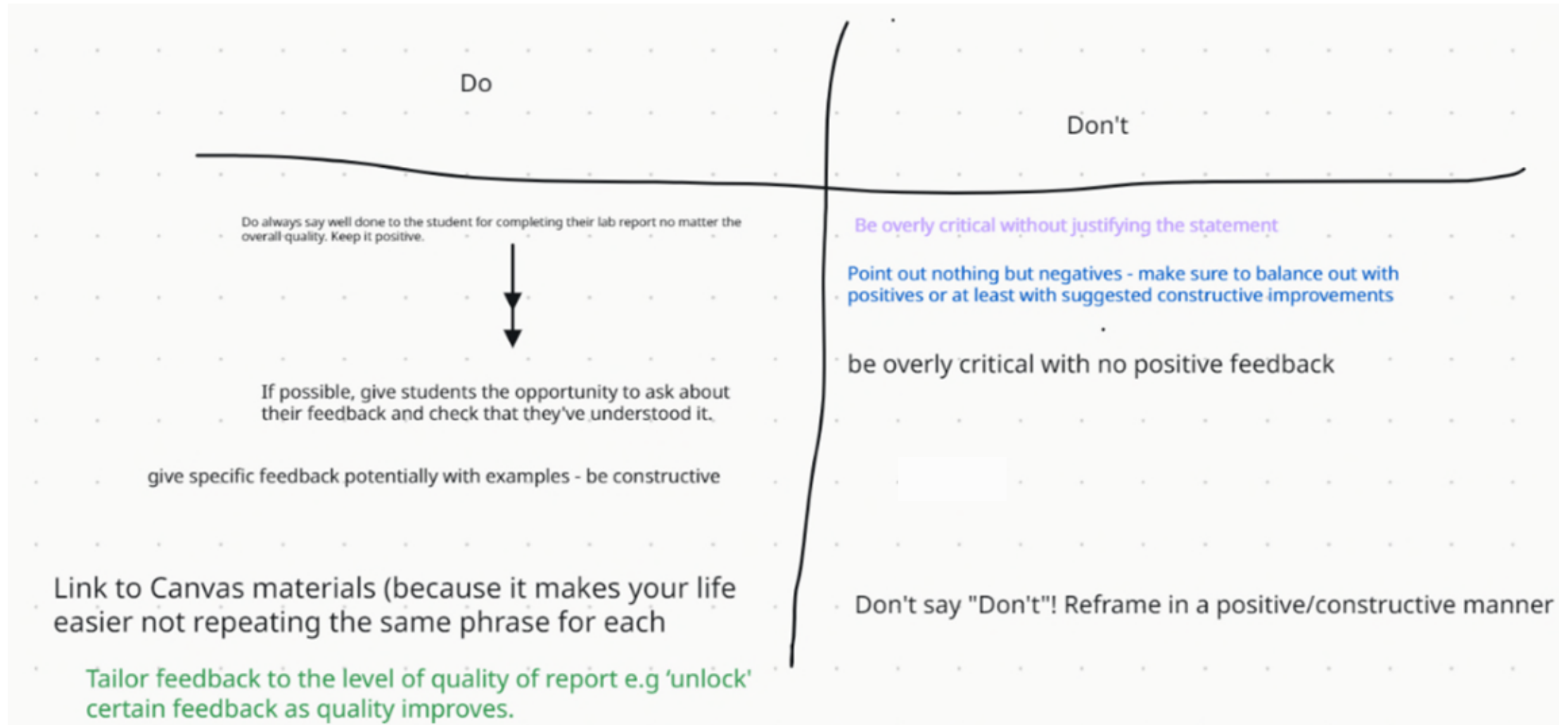


Lab coach marks are inconsistent

What are we doing?

- More rigid feedback mechanisms ensuring consistency
- Piloting and revising in lab coach training
- Following up via staff-student liaison committee, module evaluation
- Reviewing assessment feedback given to students

Experiment 2: Assessment feedback summary



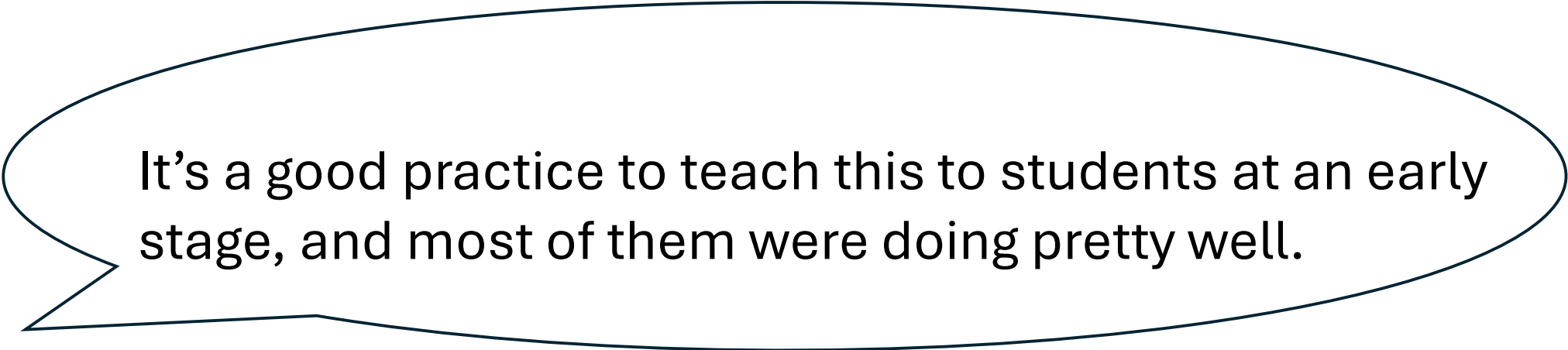
Experiment 3: Abstracts

What are we doing?

- More focus on process – how to build an Abstract
- Using authentic Abstracts written by staff
- Piloting and revising materials in lab coach training
 - Prep task, worksheet and supplementary notes for LCs and students
- Following up with lab coaches after they deliver the session
- Reviewing materials for next year
- Reviewing assessment feedback given to students

Experiment 3: Abstracts

Lab coach feedback:



It's a good practice to teach this to students at an early stage, and most of them were doing pretty well.

Experiment 3: Abstracts

Lab coaches' feedback themes:

Usefulness of session + reasons why

Usefulness of specific activities

Student engagement or lack of

Possible reasons for lack of engagement

How they overcame lack of engagement

Timeliness of the session

Delivery of the session

Suitability and accessibility of example texts

Materials and suggestions for improvements

Experiment 3: Abstracts

Lab coach feedback:

A suggestion might be to deliver the content of the session during one of their lectures and ask the lab coaches to spend more time with them on their own abstracts. The choice of three abstracts as examples was good, but they felt like they also needed an example one from an actual lab session.

Experiment 3: Abstracts

Lab coach feedback:

To improve in future, I think some of the abstracts chosen were a little high level (esp conference proceedings one) - we had most useful discussion about the ones the students found accessible as the ones with higher jargon seemed to intimidate the students past looking for the structure as soon as they decided they didn't understand the content - the more general journal paper was much better received.

Experiment 3: Abstracts

Lab coaches say:

The other point of improvement would be perhaps moving this later - for example, in my undergrad, I did not write an abstract until 6 months in and they focussed on having us understand more basic structure (e.g. graph formatting, discussion structure) which I think lend themselves nicely to writing an abstract so perhaps better suited as a task towards the end of their learning than the start? (Maybe for when they write their first/second full report rather than the log book, for example)

For Lab Coaches aiming for AFHEA

As Lab Coaches, you'll be **co-designing** the material

Absolutely key for PHYS106!

Hands on activity

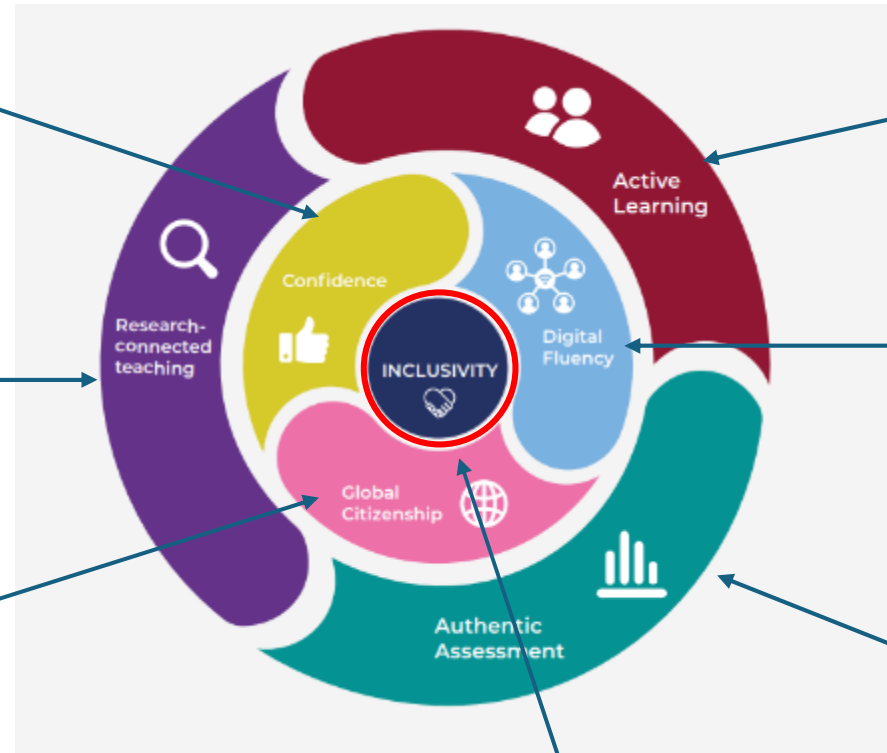
A lot of this will come from you
How do the activities link to you?

Python and excel, use of digital
notebooks, the list goes on

Team work
Diverse groups
Problem solving

Communicating ideas is key everywhere

Inclusive learning materials
Suitable support from staff



Experiment 4: Students marking

What are we doing?

- A writing exercise
 - Students mark an example report
 - Students use the same rubric used to assess their reports
 - Collaborate with peers
- Survey students on
 - Self-reported confidence in writing a lab report
 - Understanding of marking expectations
 - Peer collaboration

Experiment 4: Students marking

Confidence

Devlin and Rintoul, 2025

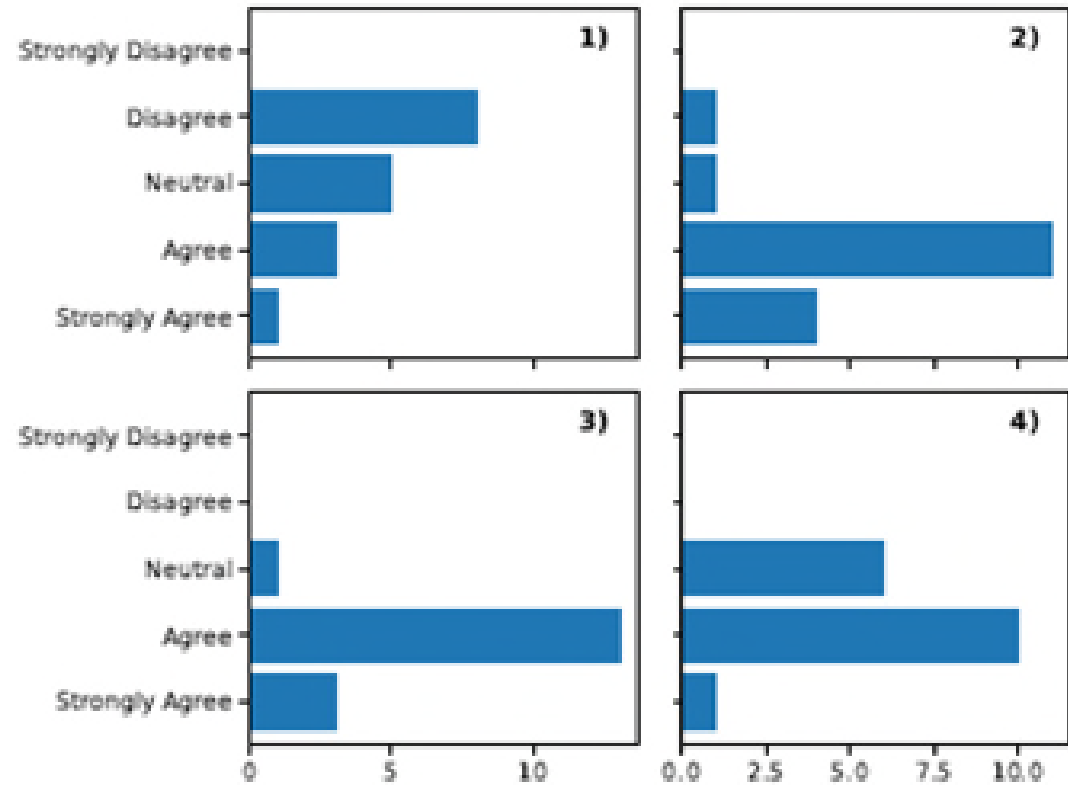


Figure 1. Confidence: 1) Before completing this task, I felt confident about writing a full report. 2) Completing this task has improved my confidence in writing a full report. 3) Reading example work made me feel confident that I can complete my assessed work correctly. 4) Completing the task made me feel more confident in linking theoretical principles to experimental results.

Experiment 4: Students marking

Understanding

Devlin and Rintoul, 2025

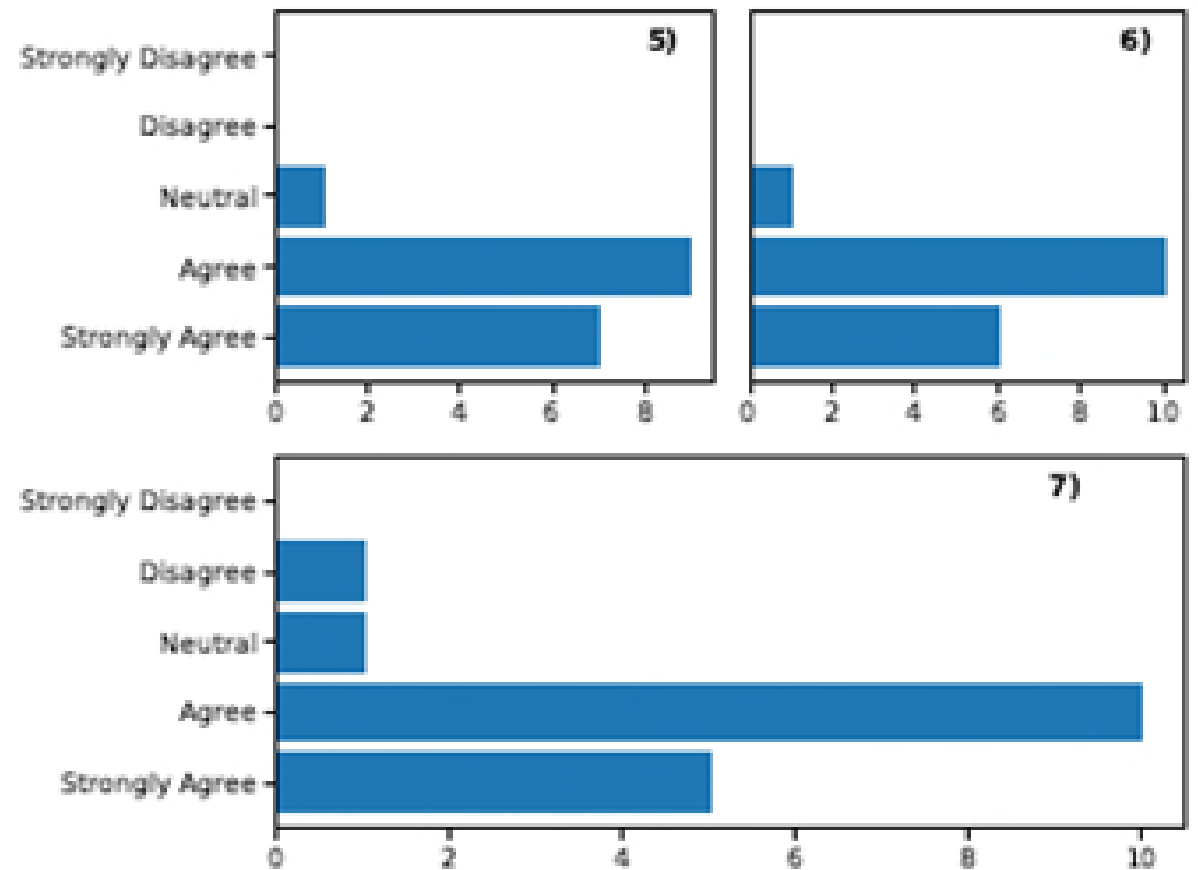


Figure 2. Understanding: 5) Completing the task helped me to understand how to structure my report. 6) Completing the task helped me to understand what information to put in each section of my report. 7) Grading with the rubric helped me to understand the strengths and weaknesses of my own writing.

Experiment 4: Students marking Collaboration

Devlin and Rintoul, 2025

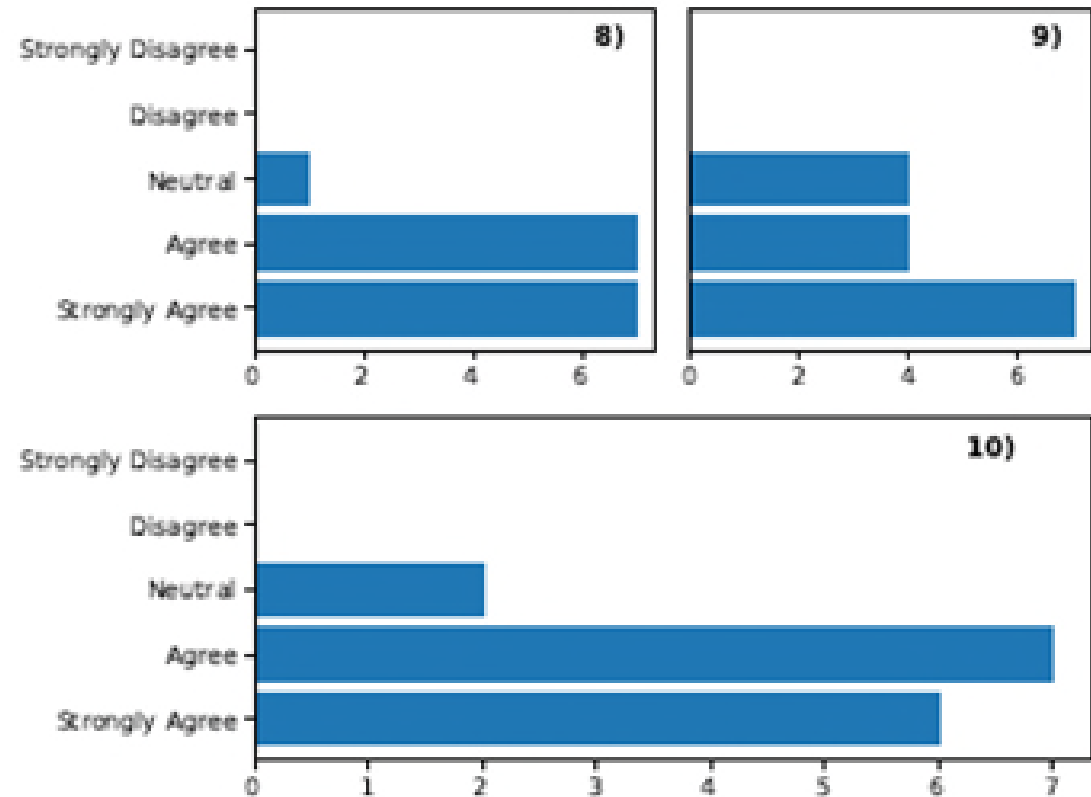


Figure 3. Paired work: 8) Conversations with my partner helped me to understand the relevance of the worksheet to the assessed work. 9) Conversations with my partner during the session has helped to build my confidence in completing future writing tasks. 10) As a result of working with a partner, I would feel more confident completing future writing tasks alone.

Experiment 4: Students marking

List up to three challenges you faced in working with a partner.

Students say:



They weren't really engaged

Experiment 4: Students marking

List up to three benefits you gained in working with a partner

Students say:



having them explain parts to you can do the same



explaining parts to them can help your own understanding.

Experiment 4: Students marking

List up to three challenges you faced in working alone

Students say:

You can't confer with someone else

It's entirely opinion based and your opinion is subject to change

Sometimes someone else's input is valid

I work better by myself

I can reflect more on my own work

There's no disagreements

Key questions from our submission:

- What does effective collaboration in EAP look like in practice?
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Discipline-specific approaches to Academic Literacy Instruction

Co-operation

Collaboration

Team-teaching

Dudley-Evans and St John, 1998; Wingate, 2015

Levels of integration

Tibbetts and Chapman,
2023, p36

Table 1.1 Increasing levels of integration

| Type | Extra-curricular | Additional | Curriculum-linked | Curriculum-integrated |
|----------------------|---|---|--|---|
| Location | Outside department | Outside timetable | Timetabled | Timetabled, credit-bearing |
| Delivery | EAP teachers | EAP teachers | Subject lecturers EAP teachers | Subject lecturers EAP teachers |
| Collaboration | None | Some input from subject lecturers | Equal contribution to design and delivery | input/advice from EAP teachers |
| Focus | Grammar, lexis, style, structure, referencing | Literacy conventions, genres, text features | Literacy conventions, genres, text features, argumentation | Literacy conventions, genres, text features, language for the creation of meaning and knowledge |
| Materials | Unspecific texts | Texts/tasks from the discipline | Texts/task directly linked to classroom content | Texts/task directly linked to classroom content |
| Participation | Exclusive/ Remedial | Semi-inclusive | Semi-inclusive | Fully inclusive |

Adapted from Wingate (2015: 60).

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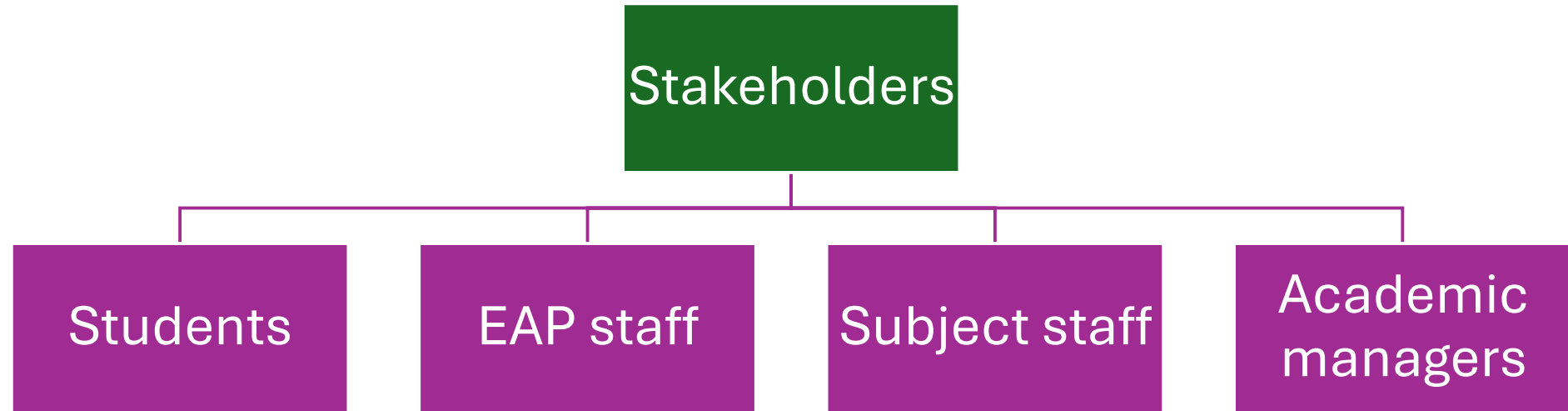
CEM (Sloan and Porter, 2010)

Contextualisation – the degree to which the content of in-sessional workshops mirrors the content of degree courses

Embedding – the extent to which the in-sessional workshops and EAP staff are part of the degree programme structure and team

Mapping – enables timeliness of delivery and flexibility in the type of in-sessional support offered, e.g. workshops or one-to-one tutorials.

CEM

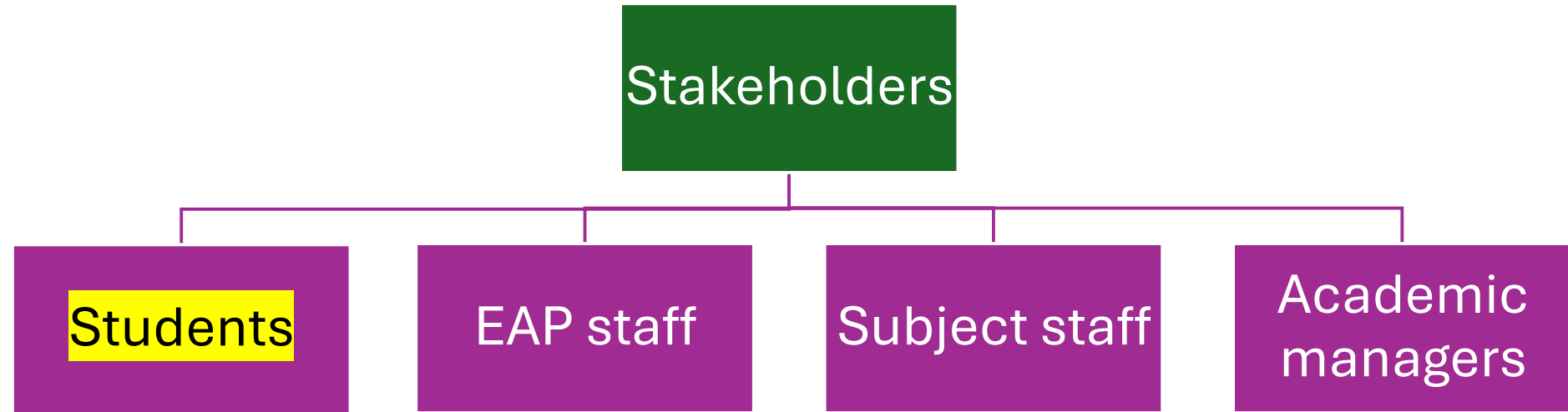


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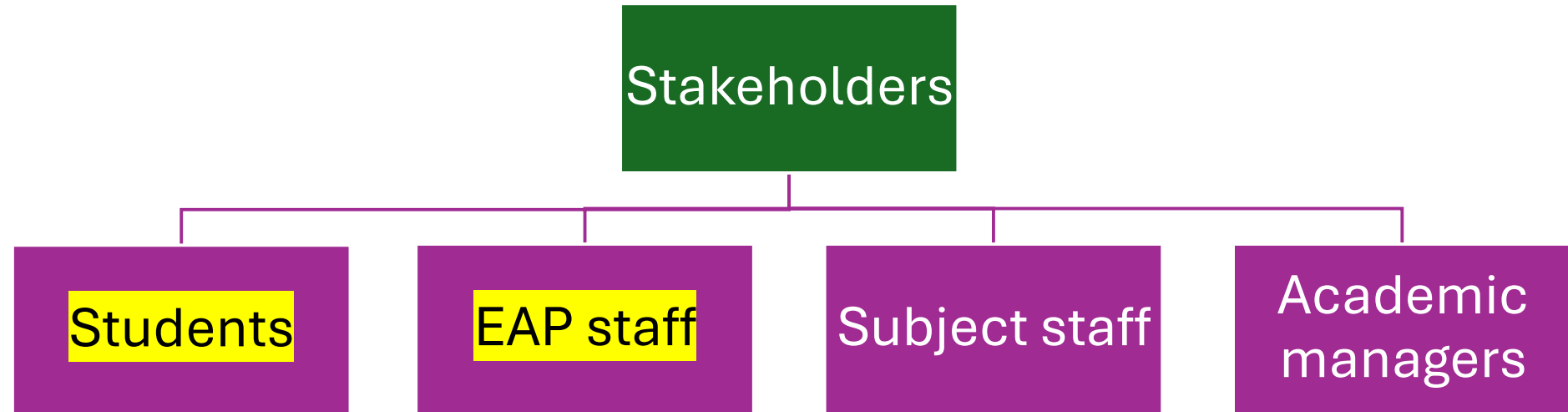
CEM Model as a Balanced Scorecard for Optimising Academic Skills Provision

Embedding

- *Is the in-sessional provision visible in the timetable?*

Alexander *et al*, 2017, balanced scorecard

CEM



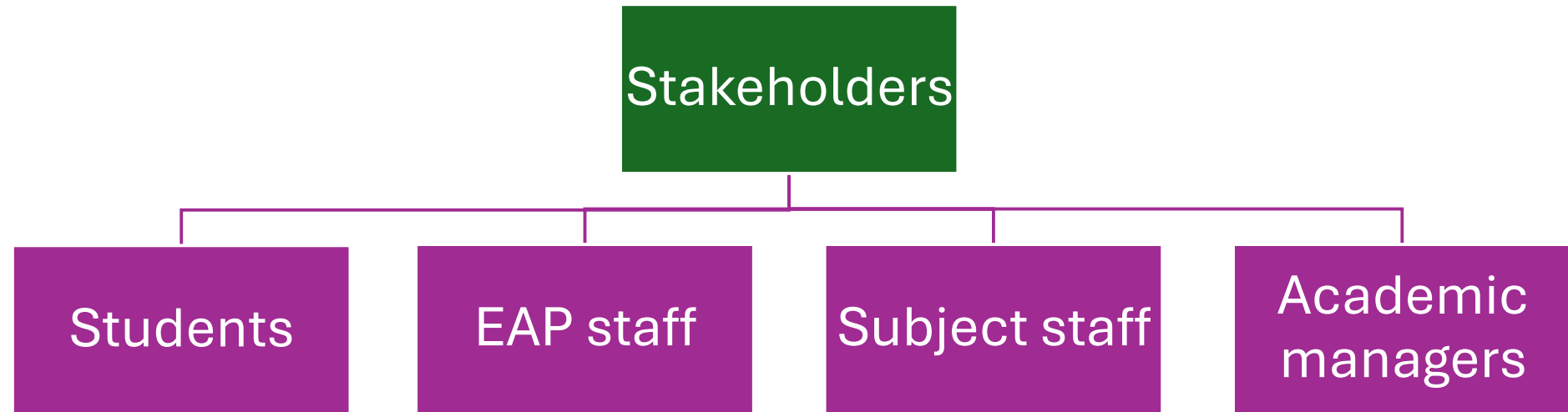
CEM Model as a Balanced Scorecard for Optimising Academic Skills Provision

Embedding

- *Is the in-sessional provision visible in the timetable?*
- *Do they participate in joint marking of subject coursework?*

Alexander *et al*, 2017, balanced scorecard

CEM

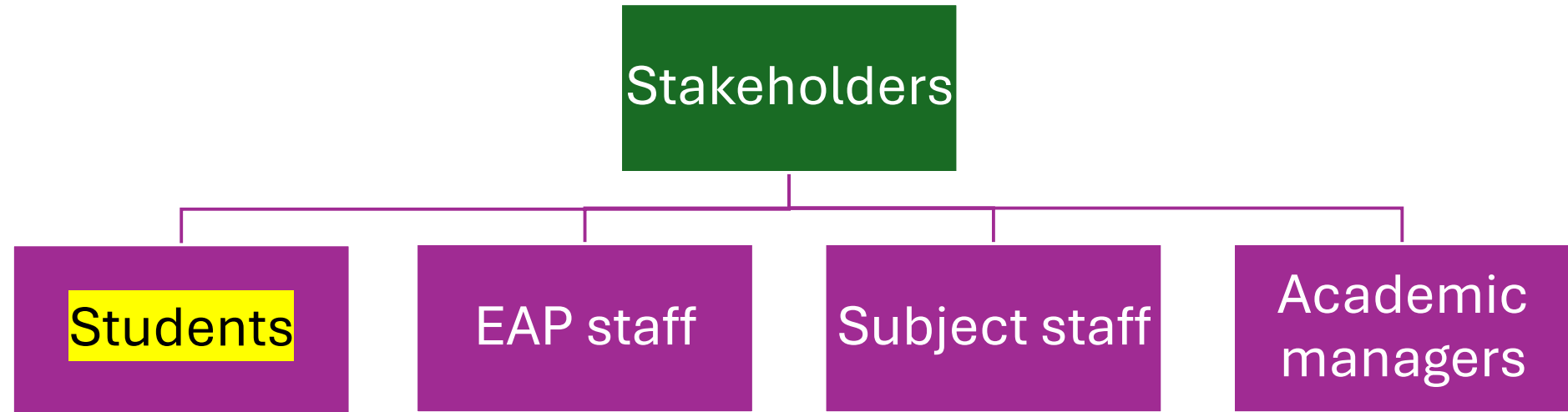


CEM Model as a Balanced Scorecard for Optimising Academic Skills Provision

Branding and Communication – ‘The Model has been expanded to include a fourth element, communication, to give students clearer information about the content of the in-session provision. These four elements are the drivers for student engagement; by focusing on each one in turn, institutions can assess which aspects of in-session provision might require strategic enhancement.’

Alexander *et al*, 2017, balanced scorecard

CEM

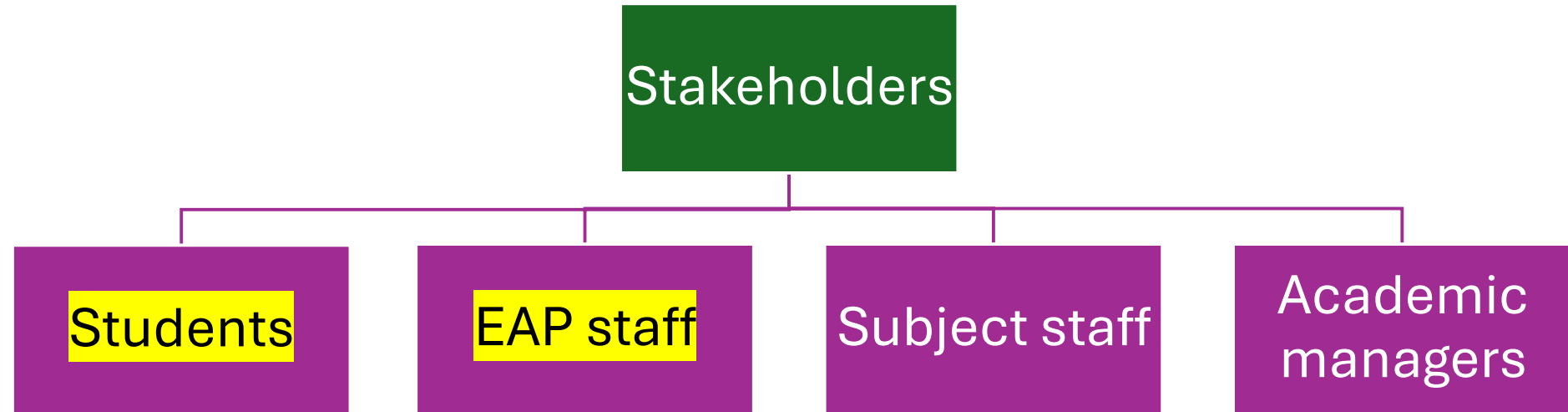


CEM Model as a Balanced Scorecard for Optimising Academic Skills Provision

Branding and Communication –

- *Do students recognise and value the in-sessional brand?*

CEM



CEM Model as a Balanced Scorecard for Optimising Academic Skills Provision

Branding and Communication

- *Do students recognise and value the in-session brand?*
- *Do EAP staff advertise the brand and relate this explicitly and consistently to the content of in-session workshops?*

Policy and Practice

'In-sessional English Discipline-Specific provision and departments – steps towards successful collaboration'

Who?

Module/programme leads

Language Centre/In-sessional tutors

Students

Language Centre management

How?

request, meet, discuss needs, provide course info, access to VLE, attend induction, ongoing liaison, committees

Policy and Practice

'In-sessional English Discipline-Specific provision and departments – steps towards successful collaboration'

Who?

Participants

How?

Processes

Transitivity = Who does what to who?

Dynamism → agency

What can this tell us about participation, voice and agency interdisciplinary collaboration?

Thompson, 2006

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Key questions in your context:

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References

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Thank you

Charlie.Devlin@liverpool.ac.uk

Jeni.Driscoll@liverpool.ac.uk