



UNIVERSITY
of York

Building capacities to help students engage with their learning

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Context

- Large lectures
- Decreasing attendance
- Student feedback



Context

- Lecturers' pedagogical beliefs
- Developing practice



Action research project

1 Educational Adviser, 3 lecturers, small student focus group

“Start by trusting students. Ask them when and how they learn. Ask what barriers they face. Listen. Believe the answers.”

Jesse Stommel

Appreciative Inquiry (Cooperrider & Whitney, 2005)



Research questions

- What is the vision of a good lecture?
- What actions can be taken to make this vision come true?
- What can be learned from using a growth-based approach to action research for staff development?

Methodology

- Literature review
- Data gathering - interviews with lecturers, focus group with students.
- Analysis.
- Outputs from focus group shared with lecturers.

Working with participants to improve their use of active learning techniques.

Generate action plan,
Evaluate action research

Key themes from the data

- What they valued about lectures
- Cognitive load
- Ability to focus
- Novice versus experts
- Meta-cognition
- Silence and active learning

What students value about lectures and seminars

and lecture capture

High value seminar questions

"when (the problems set) are a lot shorter and a lot more ... cleverly written. They are THAT efficient they are kind of short. But you still get a lot out of them. That's when they can specifically go through each question."

5 likes, 2 replies

Add comment

Lecture capture

Students use lecture capture to complete 'missed notes'. If they don't understand something in lectures, they will focus on listening in the lecture, then take notes via lecture capture. This makes it even more important that the materials on screen are clear and large enough to follow, and any 'pointing' uses a cursor so it can be recorded.

6 likes, 0 replies

Add comment

Asking questions

They value anonymity in being able to pose open questions.

5 likes, 2 replies

Add comment

Question sheet

They would like a question sheet provided before lecture to help them focus.
"listening with intent", "challenge for yourself"

3 likes, 1 reply

Add comment

Socialising

They value the social aspect of being with friends in a lecture.

2 likes, 3 replies

Add comment

Solving problems

Regrouping - Being given a problem to solve halfway through the lecture - they found this effective.



3 likes, 0 replies

Add comment

Stories

Stories can help students to relate new information to other information. It also helps them to focus.

4 likes, 1 reply

Add comment

Responseware/voting

They would like to see this method used more in long lectures.



3 likes, 0 replies

Add comment

Personalising

They value the reframing or reformulation of information by the lecturer.



7 likes, 0 replies

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The human connection

“It’s a big part of the thing, seeing the actual lecture, and you can actually see someone is actually saying this, rather than a voice with a PowerPoint or something.”

Student

Cognitive load (Baddeley, 2012; Hodges, 2015; Kirschner et al, 2006)




Ability to focus





“...(My) two hours was Monday 4-6! So, it’s the worst possible time!!”

Lecturer



**“...it would make a big difference
having timetables more round the
needs of students than the
availability of the room.”**

Lecturer

Novices versus experts





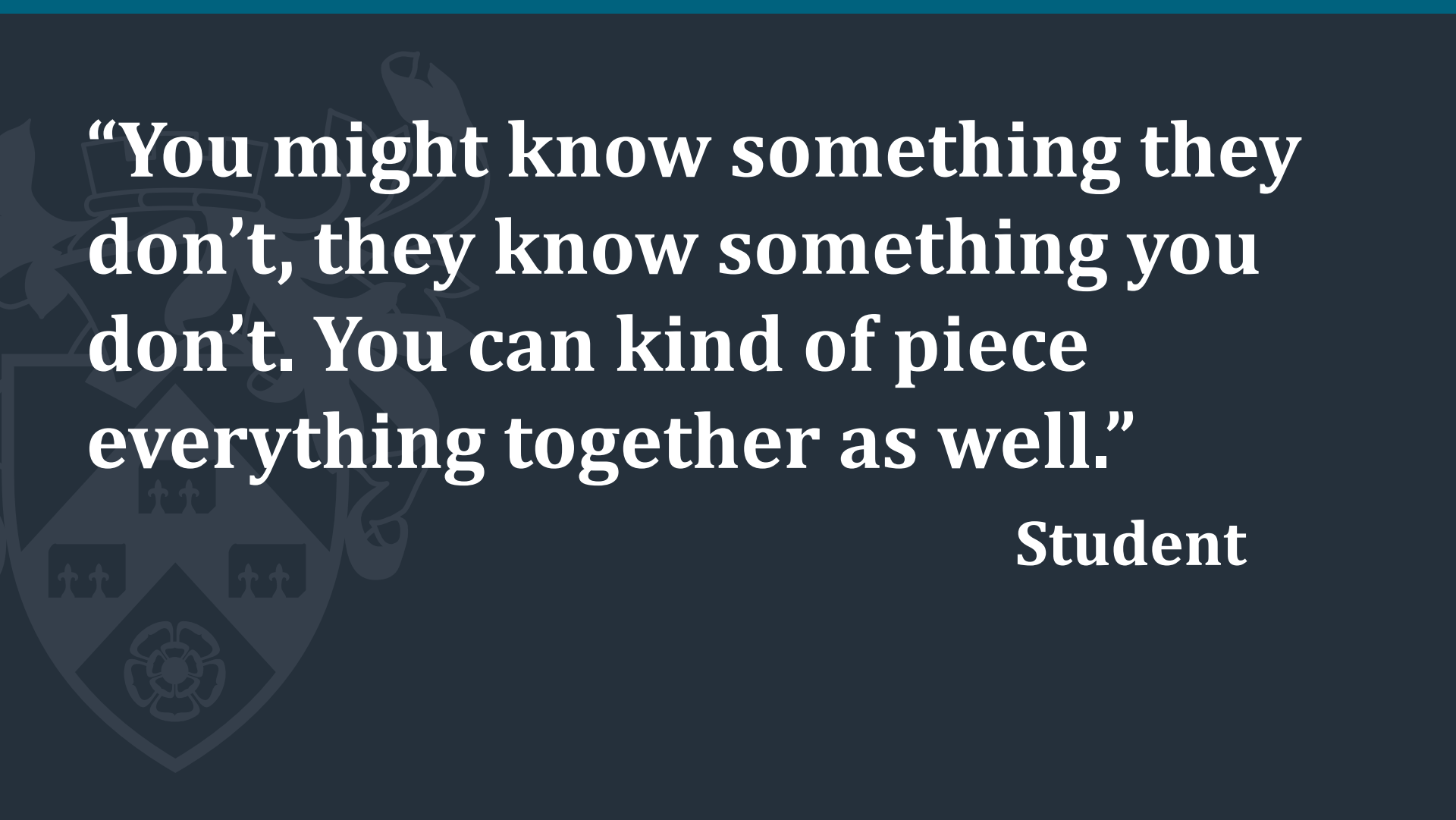
“I asked him a question once. He was just basically like, “You just know it.”

Student,

about a graduate teaching assistant.

Meta-cognition





“You might know something they don’t, they know something you don’t. You can kind of piece everything together as well.”

Student

Silence and active learning





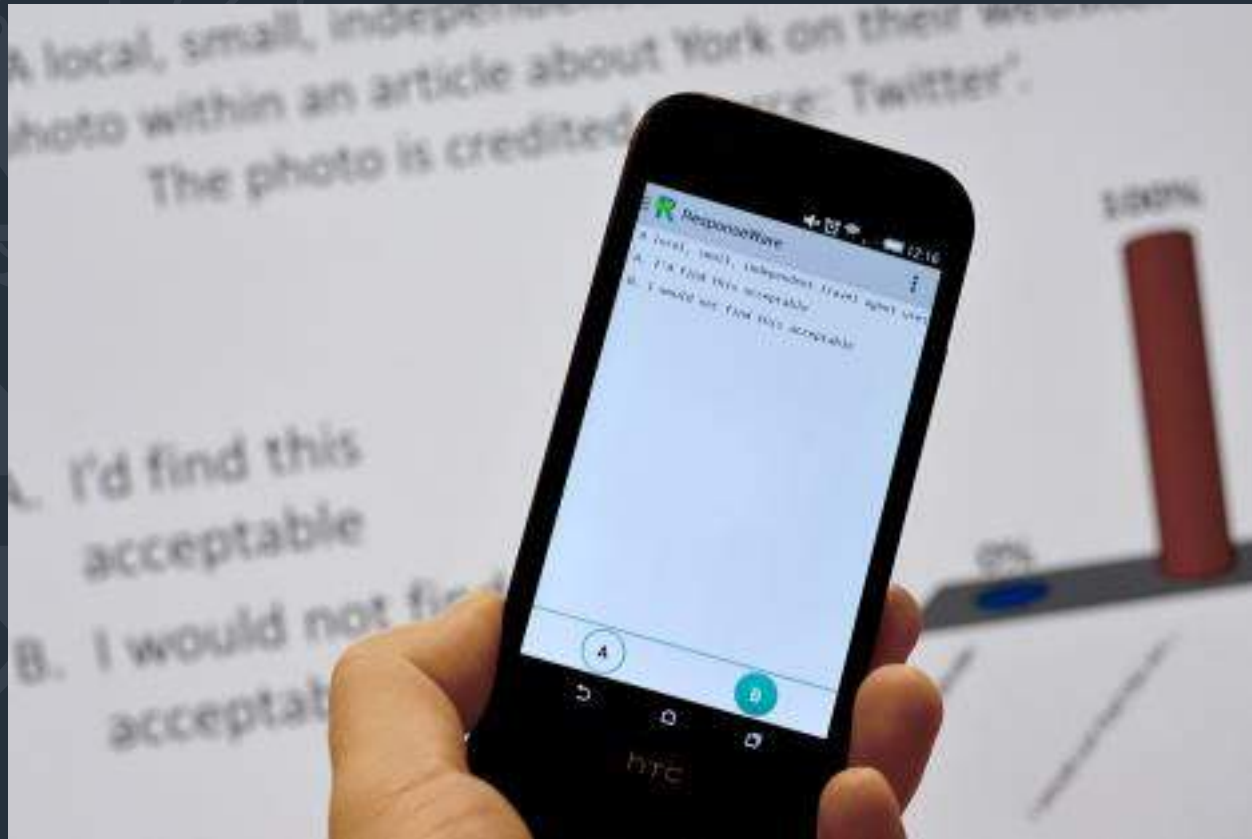
“Getting blood out of stone.”

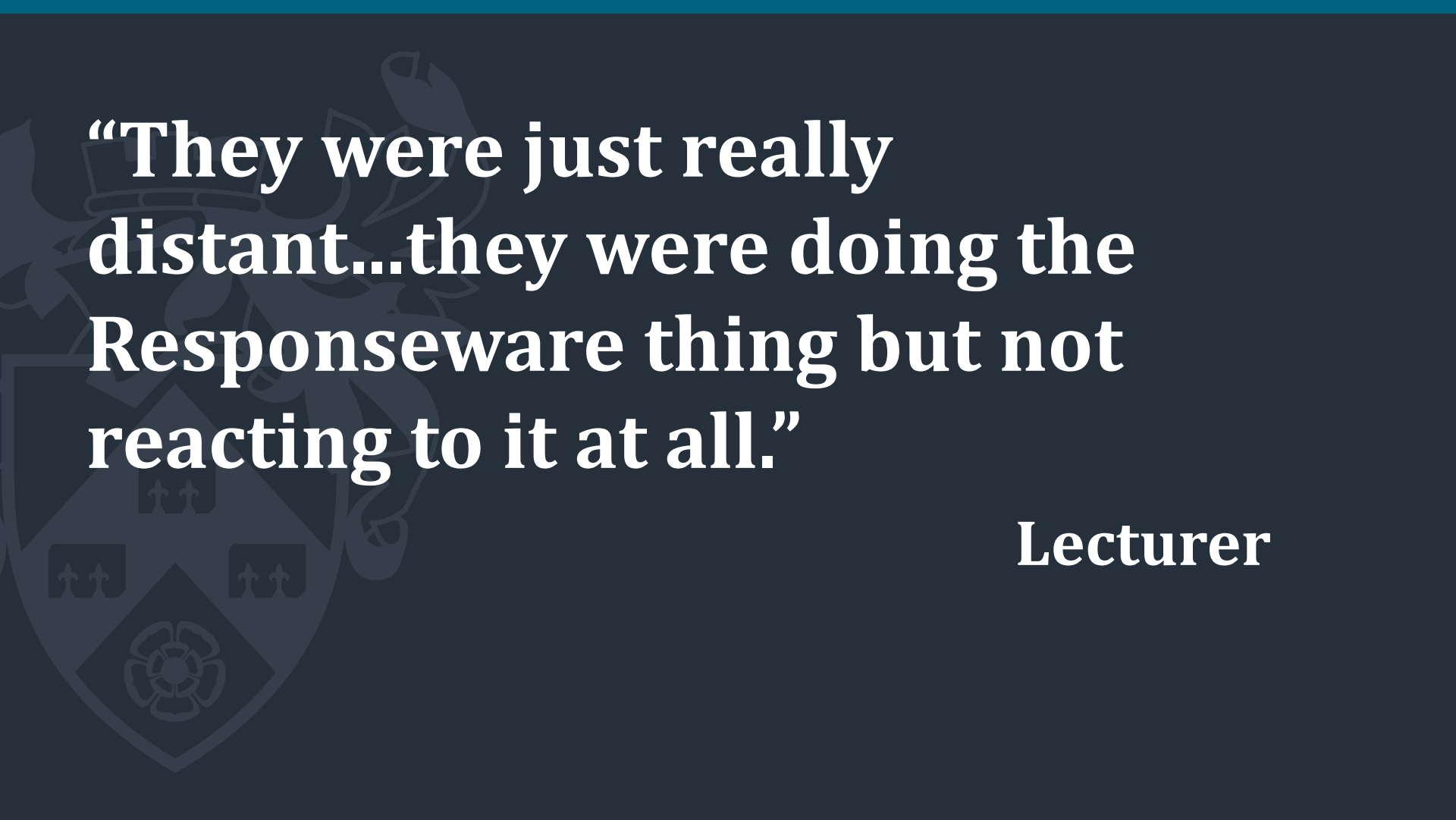
Lecturer

“I almost tried everything, going back to really basic questions...they don't want to be the first one helping you, basically!”

Lecturer

Voting tool – Responseware





**“They were just really
distant...they were doing the
Responseware thing but not
reacting to it at all.”**

Lecturer

A good lecture

It turns out that both the lecturers and the students want a **human connection** and **feedback** while they are sharing the same space.



Insights shared

- Cognitive load
- Narrative versus Mathematical subject matter
- Hygiene factors
- What first years need – pedagogical approaches
- Experts versus novices
- The human connection

Original Methodology

- Literature review
- Data gathering - interviews with lecturers, focus group with students.
- Analysis.
- Outputs from focus group shared with lecturers.

Working with participants to improve their use of active learning techniques.

Generate action plan,
Evaluate action research

Revised Methodology

- Literature review
- Data gathering - interviews with lecturers, focus group with students.
- Analysis.
- Outputs from focus group shared with lecturers.

Working with participants to improve their use of active learning techniques.

Sharing with whole department, demo of active learning techniques

Interview with lecturers

Generate action plan, Evaluate action research

What students value about lectures and seminars

and lecture capture

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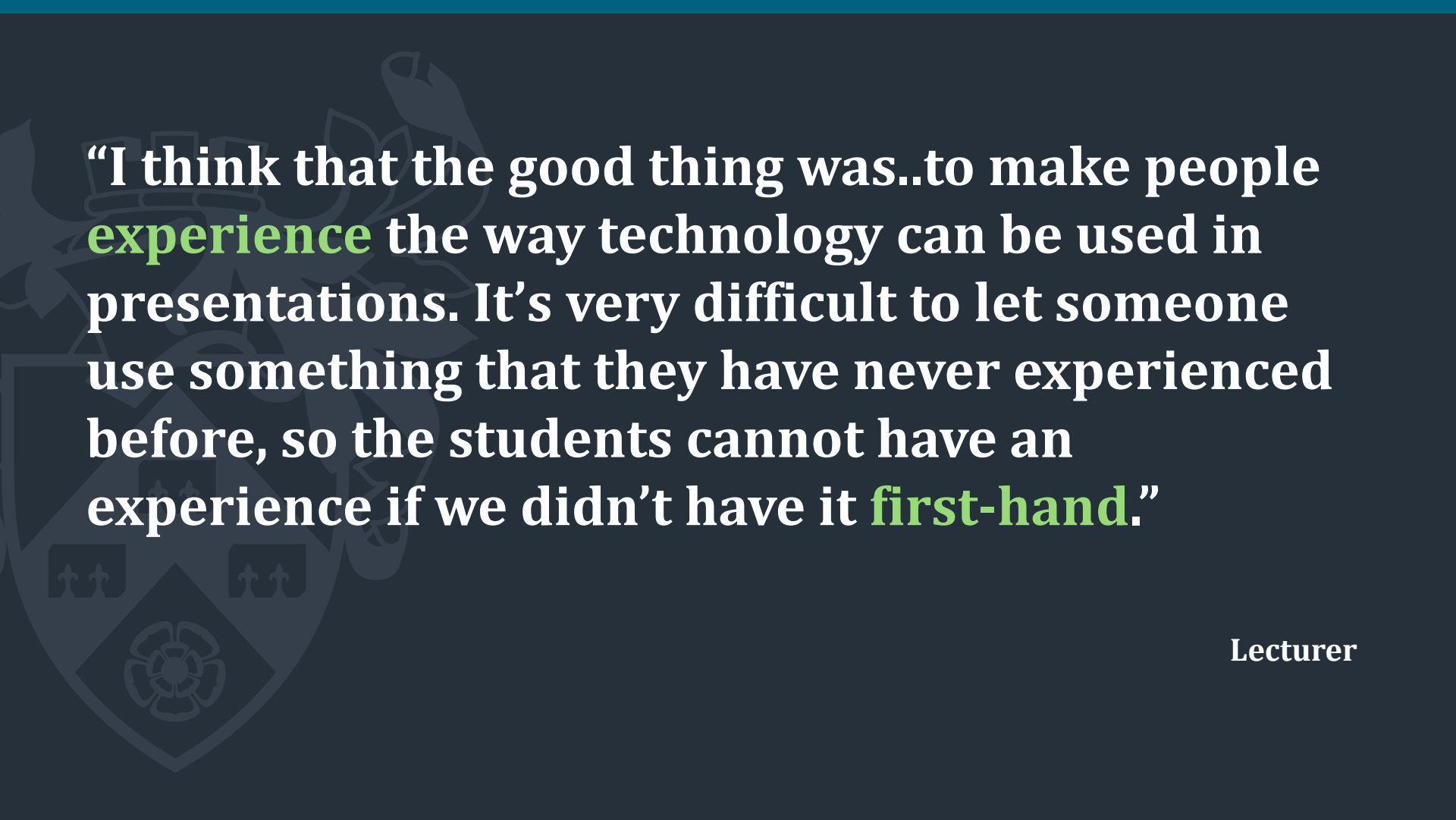
Feedback from away day

“I talked to people I had never talked to before during lunch...so that was really good.”

Lecturer

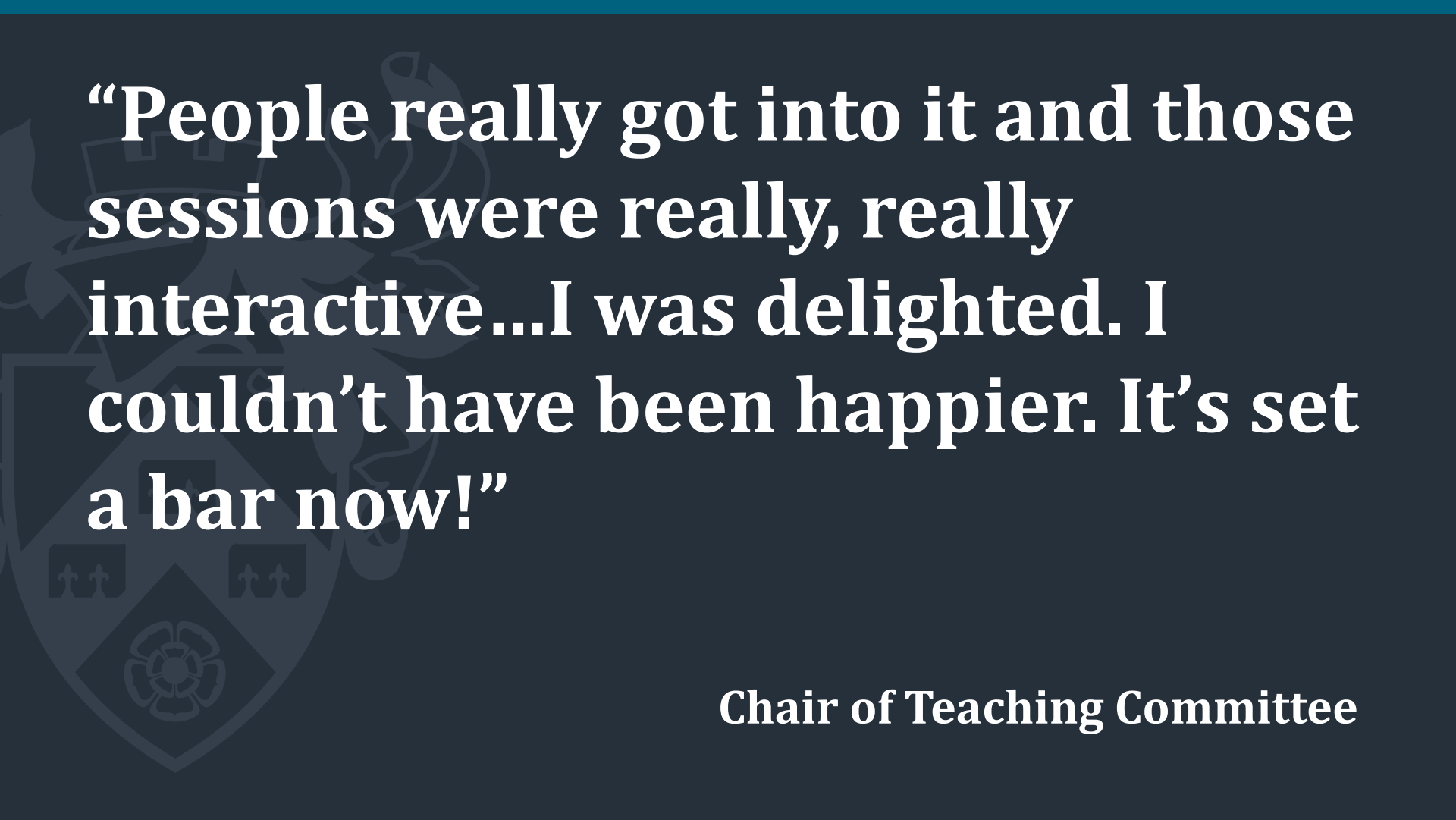
The teaching away day has been very inspiring for lots of our colleagues. So we should definitely have a September Surgery in the Department.

I have had a lot of really positive feedback about the awayday over the last 10 days, so thank you for that.



“I think that the good thing was..to make people **experience** the way technology can be used in presentations. It’s very difficult to let someone use something that they have never experienced before, so the students cannot have an experience if we didn’t have it **first-hand.**”

Lecturer



“People really got into it and those sessions were really, really interactive...I was delighted. I couldn’t have been happier. It’s set a bar now!”

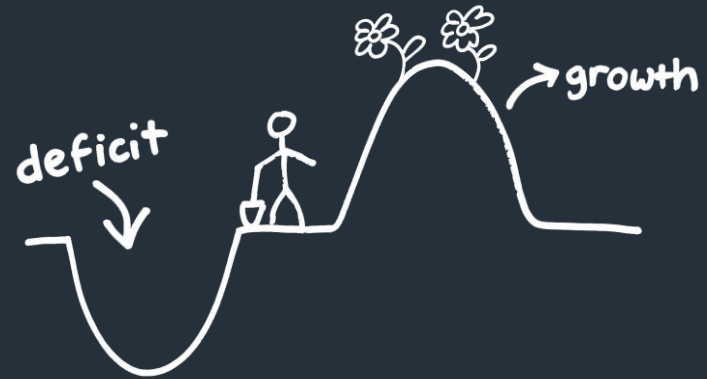
Chair of Teaching Committee

Action plan

- Cognitive load
- Narrative versus Mathematical subject matter
- Hygiene factors
- What first years need – pedagogical approaches
- Experts versus novices
- Wireless mouse pointers, breaks
- Timetabling of subjects based on type
- Timetabling density
- Tutor workshops, student inductions on how to learn in HE
- Breaks in lectures, peer assisted learning, GTA workshops
- New staff induction, further action research cycle planned.

What can be learned from using a growth-based approach to action research for staff development?

- Doing action research **with** lecturers ✓
- Growth approach ✓
- Big investment of time
- Potentially greater impact than any other kind of staff development you'll do



Further impact since AR

- Wireless mouse pointers for ALL teaching staff in the University
- Timetabling and learning spaces discussions
- Follow up inductions and surveys, Years 1-3
- Follow up student focus group, further recommendations and actions
- Fabio Arico guest lecture on self-efficacy and use of voting systems
- Second away day – presentations by other teaching staff and a GTA
- Students being organised into peer groups, fixed seminar groups
- Part of Faculty project on student engagement in large group teaching
- Staff presenting at external conferences



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