



An intervention to adapt the lecture format using technology enhanced learning



WARWICK
THE UNIVERSITY OF WARWICK

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Presentation: 30 mins Questions: 10 mins

An intervention to adapt the lecture format using technology enhanced learning

“Nearly everyone I know feels that some quality of concentration they once possessed has been destroyed. (.....) My time does not come in large, focused blocks, but in fragments and shards.”

“I now feel under-equipped if I walk out of my apartment without my mobile phone, but I used to.....”



Project Outline

The research project

- **Aim:** To help our students, with English as an additional language understand the academic lectures.

What we did:

- We changed the structure of 6 business lectures.
- Each lecture was divided into 10 minute sections.
- Through the lecture we gave the students vocabulary quizzes and content-based quizzes to complete using their mobiles.

Warwick International Foundation Program (IFP) Course structure

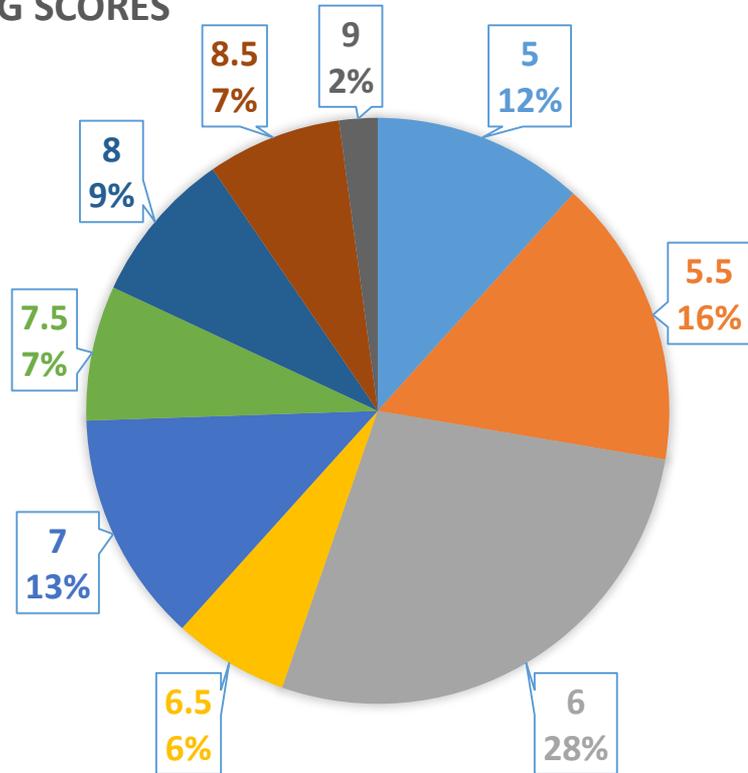
Business and Economics: 23 contact hours per week, only 5 hours of English.

Business 5 hours 2 lectures 3 seminars	Applied Economics 5 hours 2 lectures 3 seminars	Business Maths and Stats 5 hours 2 lectures 3 seminars	Inquiry and research skills 3 hours 3 seminars
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English: 5 hours (English for Academic Purposes (EAP) and
International English Language Testing System (IELTS))

Context: English IELTS levels

LISTENING SCORES



~56% of the students in the business lectures have 5-6 in their IELTS listening at the beginning of the programme.

~72% Chinese students

Vocabulary sizes of Business students

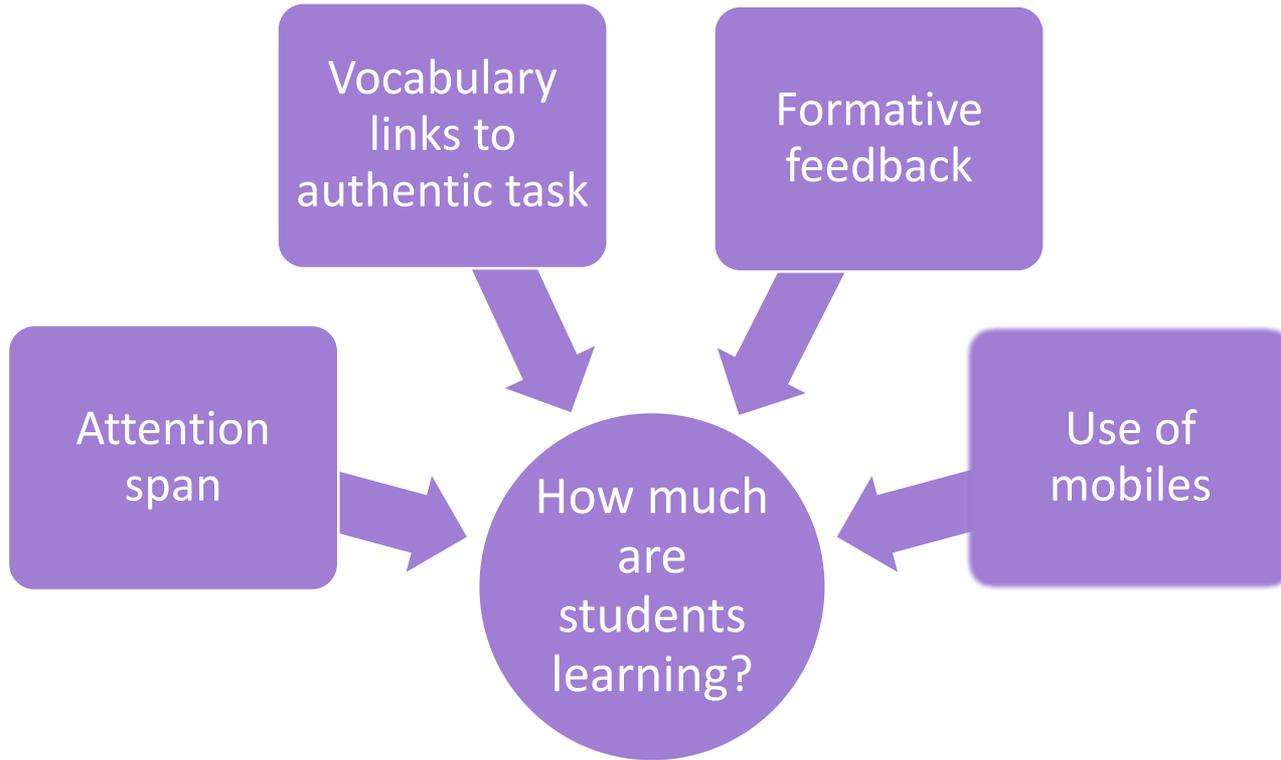
B&E1	B&E2	B&E4
3,100	3000	4,400
4,100	4600	3,700
3,600	3100	3,700
3,900	3700	3,500
3,500	3200	2,700
2,400	3800	3,300
3,400	4100	3,600
3,200	2200	3,400
3,700	2800	3,600
3,000	2800	4,100
3,300	2600	3,700
1,800	3100	3,900
2,800	2400	3,400
3,400	3200	3,200
2,800		

Project drivers: EAP/English specialist perspective

“Initial studies using the test indicate that undergraduate non-native speakers of non-European backgrounds need a vocabulary size of around 5,000- 6,000 word families to successfully cope with study at an English speaking university.”
(Nation, 2012)

Nurmukhamedov’s studies (2017) suggest that for TED talks 8,000 word families provided 98% lexical coverage.

Project drivers



Project Aims

1. Increase the students' learning gain from lectures
2. Increase the students' independent study skill strategies
3. Increase English language proficiency and vocabulary sizes
4. Raise awareness for subject teachers around the English proficiency levels of our students. (CPD perspective: this impacts on pedagogy)

Outline of Intervention

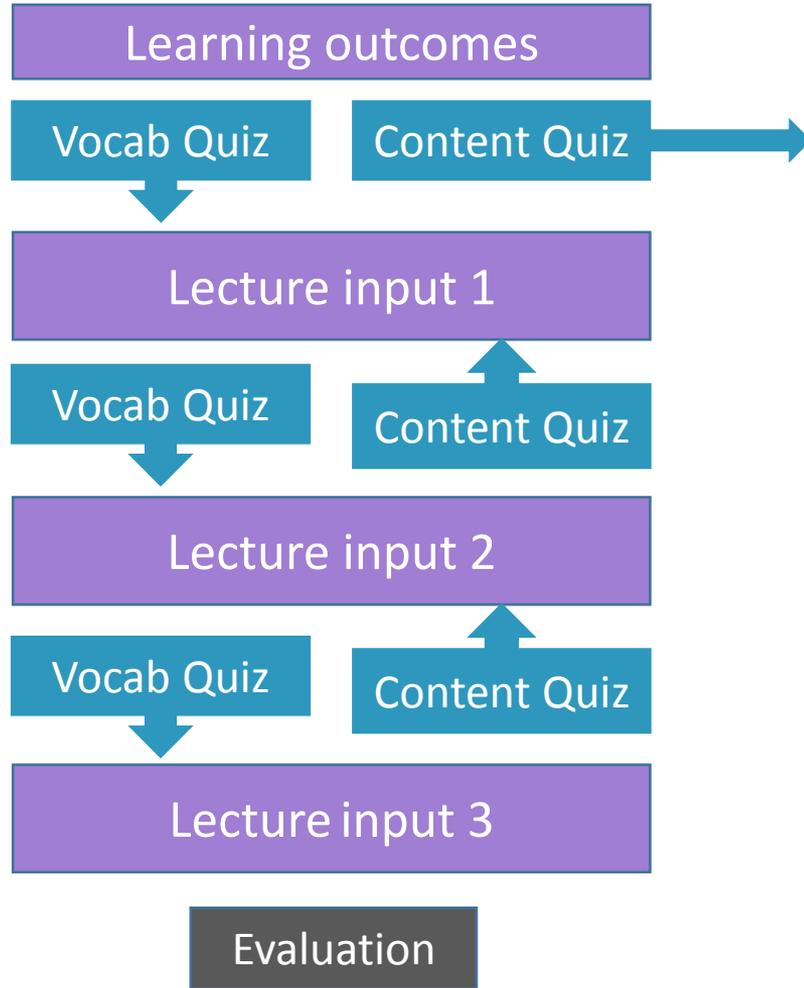
Pre-lecture:

- Divided the lecture up
- Identified vocabulary likely to be above the understanding of those students with IELTS 5- 6
- Provided definitions for vocabulary
- Pre exposure to lecture slides with vocabulary and definitions

Outline of Intervention

During the lecture:

- Hard copies of vocabulary and definitions circulated
- Lecture delivery in 10 mins sections with interspersed vocabulary quizzes and content quizzes
- Students self select the most appropriate quiz
- Instant student feedback on the quizzes



Lecture slides

Questions

4. If managers are overstretched and have too much work, they will need to _____ tasks to employees.

- accountable
- delegate ✓
- eliminate
- function
- hinder
- overstretched
- elevate
- rivalry

5. The _____ of a marketing manager is to organise the advertising for a company.

- hinder
- eliminate
- rivalry

Vocabulary Quiz



Responses 30

Content Quiz (Last lecture)



Ratio (Part 1) (4)

1. Which is the most accurate ratio for liquidity?

- Current ratio
- Acid Test ratio ✓

2. Stock is not included in the acid test ratio because

- it is difficult to turn into cash quickly ✓
- stock levels vary over the year
- business have many different types of stock

3. An ideal acid test ratio is

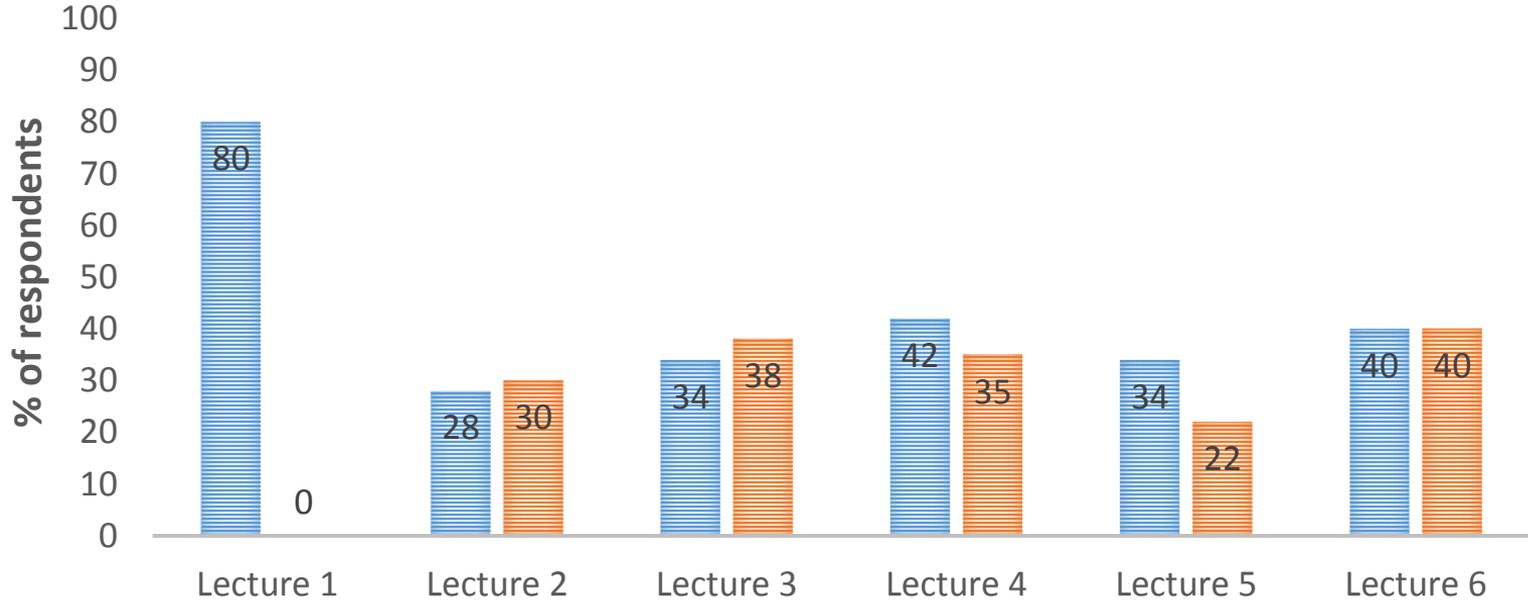
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Vocabulary focus

1. When choosing the vocabulary focus was on general academic language.
2. The task-type used, only requires receptive understanding of vocabulary. (Closed-cloze question type). The idea was to focus on English as a means of helping students understand lecture content.
3. Rejected words where the meaning could be deduced from the context.

PARTICIPTION RATES

Vocab quizzes Content quiz



Time to complete: 1- 3 mins
Results: 60%+ scores on quizzes

Our observations during quizzes

- Silence!
- Various activities happening:
 - making lecture notes
 - using printed sheets to help complete quizzes
 - using online dictionaries to complete vocab quizzes



Key Findings: Student evaluations of the intervention

Did you learn the words before the lecture? 74%

To what extent did learning the words and definitions before the lecture help you understand the content of the lecture? 3.97 out of 5

Which quiz(zes) did you complete? Vocab only 19% Content only 19% Both 58%

To what extent do you think completing the quizzes helped you understand the content of the lectures? 4.13 out of 5

Would you like us to do this type of activity again? Yes 71% Maybe 19%

Do you think these type of lectures would be useful for your Applied Economics lectures? Yes 74% Maybe 16% No 11%

Focus Groups

“I felt I learned more in these lectures. I liked the change of pace and activity.”

“The lecture slides before the lecture were very useful and helped me understand and remember the vocabulary.”

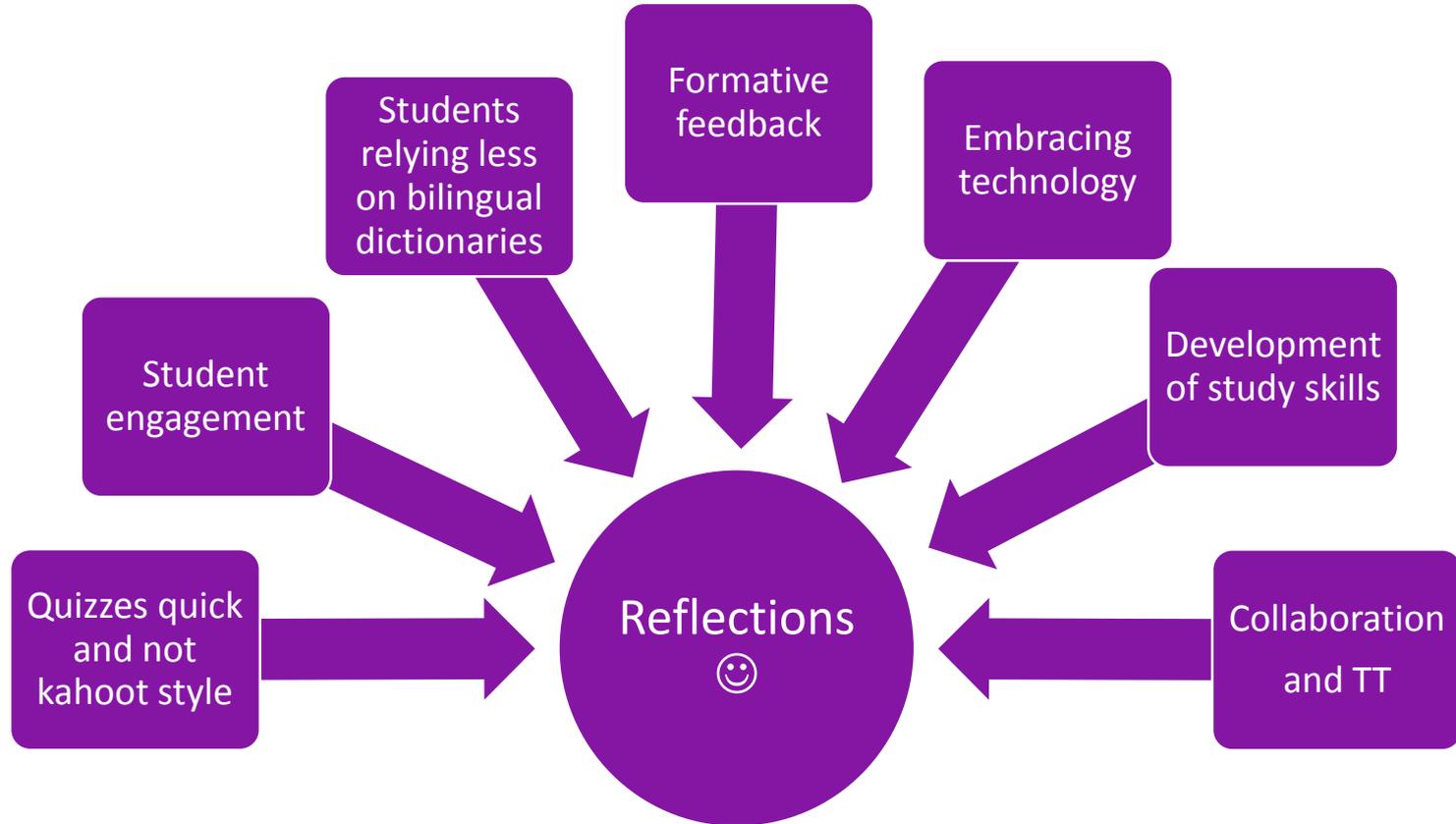
“The intervention gave me time to refocus and time to learn the vocabulary so I understand the content better.”

“I think this lecture format would be useful for my other subjects- especially maths.”

“It would be useful to hear the sentences being read instead of me reading the sentences.”

“I think Chinese students on the Foundation Programme find it hard to read and listen at the same time. When I read the slides, I cannot hear what you are talking about. I need to time to read the slides.”

Reflections: what we liked.....

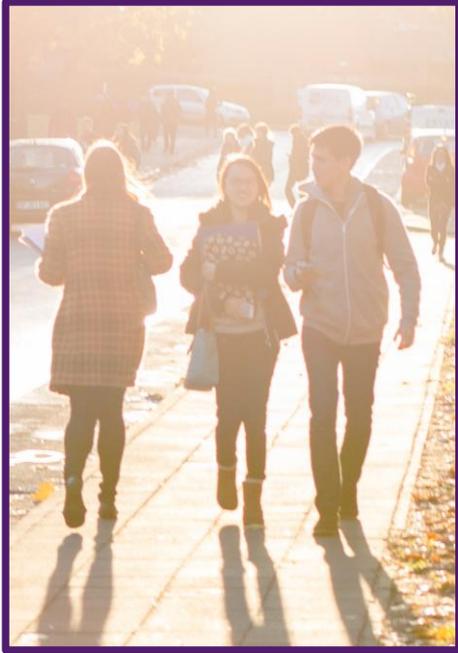


Reflections: what we didn't like.....

1. Mismatch of skills: Listening in lectures and reading for quizzes
2. The pre lecture learning was inconvenient for students
3. We didn't know how many students were not doing either of the quizzes
4. We don't know why some students weren't engaging with quiz

What next?

1. Continued focus on lectures
2. Use of podcasts (with written text) for flipped learning element. Ease of use for students and focuses on listening skills.
3. Adding listening element to vocabulary quizzes during lecture.
4. Does the intervention have a wider application beyond Anna's lectures?
5. Methods to incentivise engagement. (e.g. explicitly sharing of purpose and reasons for intervention, private measuring of personal learning, peer learning, building confidence)



Thank you for listening.

Any questions?

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