Informing EAP listening assessment: Students’ processing and strategy needs during lecture listening

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English for Academic Purposes (EAP) lecture listening

EAP listening

- The EAP listening construct shares many characteristics with the general listening construct;
- BUT there are also (proportional) differences (Goh & Aryadoust, 2014)

Lecture listening

- Lectures are a vital language event to learn the subject matter at university (Crawford-Camiciottoli, 2007; Lynch, 2011)
- BUT lecture listening is cognitively demanding, with reduced context (Taylor & Geranpayeh, 2011)
Lecture listening

Why research EAP lecture listening?

1. Limited insights into the construct

So far, EAP listening research has:

a) focused primarily on identifying broad academic listening skills

b) only to a limited extent examined what specific cognitive processes might be involved in L2 academic lecture listening (Field, 2011; Goh, 2013)
Lecture listening

Why research lecture-listening?

2. Methodological shortcomings of needs analysis studies on EAP listening
   a) Limited in their needs analysis methodologies
      E.g., questionnaires only (Ferris & Tag, 1996a/b, Ferris, 1998; Powers, 1986; Kim, 2006)
   b) Yield conflicting results
      E.g.,
      |--------------------------------|---------------|-------------|
      | Engaging in discussions        | ✗             | ✓           |
      | Note-taking                    | ✓             | ✗           |
      | Raising questions              | ✗             | ✓           |
   c) Not informed by theoretical listening processing models
This study

Overall aim

• To gain more insights into EAP lecture listening
• Specifically, the cognitive processes and strategies involved

Methodology

• Sequential mixed-methods design; qualitative → quantitative (Creswell & Plano Clark, 2011)
• Informed by a review of the literature on second language/academic listening
Lecture-listening comprehension processing models

Five language comprehension processing models are used to characterise listening processes, sub-skills and strategies:

- Field (2013) Cognitive processing listening model
- Khalifa and Weir (2009) Cognitive processing reading model
- Aryadoust, Goh and Kim (2012) L2 academic listening model
- Young (1994) Lecture structure model
- Vandergrift and Goh (2012) L2 listening comprehension cognitive model
## Research design

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Research design

Phase 1: Lecture discourse analysis
- Target situation analysis
  - 5 lectures

Phase 2: Stimulated recall interviews
- Present situation analysis
  - 7 students

Phase 3: Semi-structured interviews
- Target, present, learning-centred situation analysis
  - 5 lecturers + 3 students
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Phase 4: Data interpretation validation
- Expert review
- 4 researchers

Phase 5: Questionnaires & IELTS listening test
- Target, present, learning-centred situation analysis
- 205 students
Research questions

**RQ1:** What real-time processing problems do EFL undergraduates experience when listening to lectures in their degree programme? *(Phase 2)*

**RQ2:** What do lecturers perceive to be the academic listening needs of EFL undergraduates? *(Phase 3)*
Methodology

Method

• Stimulated recall interviews with students
• Semi-structured interviews with lecturers

Participants

• 7 female students
  o BA English Language and Literature at a Saudi Arabian university
  o Levels of study: two Y1, three Y2, two Y4
  o IELTS listening scores: 15-35 out of 40 (M=22.57, SD=8.46)
• 5 female lecturers
  o Three literature lecturers, two linguistics lecturers
  o Teaching at various levels of study
Methodology

Recall procedure

• Listen to recorded lectures; provided with all original lecture written materials (e.g., ppt, poem, handbook); allowed to take notes
• Give an oral or written summary after listening
• Re-listen to a lecture segment
• Recall of comprehension and thought processes after each segment

Interview

• Interview guide with questions based on the findings from Phases 1 & 2 of the study
Methodology

Data analysis

• Transcriptions of the recorded recalls & interviews
• Coding framework: Comprehension processing model based on the literature
• Two coders with inter-coder agreement:
  o 82% (recalls)
  o 93% (interviews)
Findings

• **Recalls:**
  7 different cognitive processes
  22 different processing sub-skills
  5 strategies

• **Interviews:**
  7 different cognitive processes
  41 different processing sub-skills
  8 strategies
Findings

E.g.,

Lower-level cognitive listening problems/needs

• Input decoding process

  a. Recognising a known word in a speech stream

    When she [the lecturer] personified it with a human being who was running, but in fact that is not so. **But the first time I did not understand [recognise] the word, and then I remembered it ... It’s personification ... because I forgot this word.** (P1/Literature)

  b. Recognising words’ pronunciation in a speech stream

    **It is very important ... to understand every single word that we’re saying** and **to recognise it [word] and pick up on the sounds.** (L3)
Findings

• Lexical search process

a. Linking an aural word to its written form (spelling)

Textbook:
girl walking forth one morning hand-in-hand with her still smaller brother, to go and seek martyrdom in the country of the

Notes:

* little girl
* divorce
* walk with her brother.
* Martyr → person who sacrefice himself.

I feel there was something that wasn’t clear ... Surprisingly, they jumped to discuss ‘martyr’, and she asked, ‘Who is a martyr’? What does ‘martyr’ mean? They explained its meaning, a person who sacrifices himself ... I understood the meaning, but is this martyr are there with them? ... I do not know what the relationship of this [martyr] is with Theresa and her brother. (P2/Literature)
Findings

b. Accessing word meanings (non-technical words)

’Sometimes I use very sophisticated words, but it’s what the occasion necessitates.’ (L4)
Findings

Higher-level cognitive listening problems/needs

• Creating a text level representation process
  
a. Ending up with a coherent meaningful construction of what has been heard

I feel the poem [analysis] is confusing, it moves from one thing to another, I feel it is disconnected. (P1/Literature)
Findings

b. Following overall lecture structure and recognising speech transitions

They are expected to know **that this is an introduction, this is a body and this is the conclusion** of our lecture. (L4)

When I’m explaining ... **I notice that I do transition** ... I think it helps them stay with me as I’m moving from one point to another. (L1)
Findings

• Creating an intertextual representation process
  a. Linking aural input to written material (e.g. slides)

Lecturer: “Let’s take it one by one”

2- Minimal Responses

• Minimal responses: They are monosyllabic utterances such as “yeah” and “huh” associated with cooperative language use.

Initially, she [the lecturer] stated the first type [of minimal responses], one syllable and then talked about it, then what is the second type [that] deals with two syllables? She did not discuss it or give examples on it. (P3/Sociolinguistics)
Findings

b. Making connections between aural input and written materials (e.g., slides)

If I have PowerPoint, ... then I have my main points. Then ... those will be our focal points for discussion....’ (L1)
Findings

Strategy use problems/needs

a. Late use of *directed attention* strategy

Yes [I lose concentration], *because of dwelling too much on certain areas, then you lose focus and when you pay attention again they’ve moved on from the point they were dwelling on ...* in terms of understanding? I understand fully. In terms of concentration I faced a very hard time trying to concentrate. (P7/Literature)

b. Listening to a 50- or 100-minute lecture and giving it undivided attention

Sometimes in a lecture I need your attention for at least 50 minutes, like in one sitting. Then you can space out for like a couple of minutes, but I want you to come back to me for another 15 minutes and listen. (L3)
Conclusions

EAP lecture-listening construct:

Lecture-listening processing model
(Cognitive and Metacognitive Strategies)

- Pre-listening preparation
- Directed attention
- Comprehension monitoring

- Inferencing
- Elaboration
- Fixation
- Prediction
- Translation
Some implications for EAP assessment

1. **Lower-level processing sub-skills needs**
   Recognising rhetorical questions, recognising key words, understanding technical terms, formulaic expressions, mid- and low-frequency words, and complex grammatical structures

2. **Extensive higher-level processing needs in EAP lecture listening, esp. textual & intertextual representation**
   - length of input
   - multiple inputs within one task
   - integration with other skills
   - metacognitive control

3. **Diagnostic testing: target specific sub-skills**
Thank you for your EAP listening!

Any questions?

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