Changing to Teaching and Learning in English

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Benefits of a second language

– Many benefits of using a second language (English) in higher education
Benefits of a second language

– Language of academic publication
– Many textbooks are in English
– Develops local teachers’ competence
– Can use visiting lecturers in teaching
– Prepares local students for study abroad
– Overseas students can participate
– Job market

(Airey 2003:12)
Benefits of a second language

– But are there any negative effects?

– What happens to physics teaching and learning when Swedish students are taught in English?
Overview

Three topics:

1. Learning in English
2. Teaching in English
3. Disciplinary differences
Very few international studies have examined **content learning outcomes** of learning in L2 at university level.


– All find negative correlations.
Klaassen’s (2001) study of Dutch engineering masters students perhaps most interesting.

- Found a negative correlation

But:

- Disappeared after a year

- Klaassen suggests that students had adapted to English-medium instruction
Research background

Quote:

“My achievements in the English-medium masters programme are entirely my own credit and are unrelated to the performance of the lecturers in this programme”

Klaassen (2001:182)
Research background

Leads to new questions:

– What is it specifically that students initially find problematic?

– How do the students compensate for the language switch?
Research background

– Do all students have this strategic ability or are certain groups disadvantaged by second-language teaching?

– Can the lecturers do anything to help their students cope with the language shift?

– Etc, etc.
The study:
- Parallel courses in English and Swedish
- Videoed two lectures – one in each language
- In total 22 students at two universities
- Each student interviewed individually ~ 1.5 hrs
- Selected video clips used to stimulate recall

Bilingual learning outcomes

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Learning patterns

– Students report no difference in their learning when taught in Swedish or English

– However, during stimulated recall students do report a number of important differences
Results – learning patterns

When taught in English

– Students ask and answer fewer questions

– Students who take notes have difficulty following the lecture

– The success of these students appears to depend on doing extra work outside class

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Students adapted their study habits…

- Only asked questions after the lecture
- Stopped taking notes in class
- Read sections of work before class
- Simply used the lecture for mechanical note-taking

Airey and Linder (2006; 2007)
Recommendations

The following are seven recommendations for lecturers based on my results and my own experience:

1. Discuss the fact that there are differences when lectures are in a second language.

2. Create more opportunities for students to ask and answer questions in lectures.

3. Allow time after the lecture for students to ask questions.
Recommendations

4. Ask students to read material before the lecture.

5. Exercise caution when introducing new material in lectures.


7. Give as much multi-representational support as possible.

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8. Consider using other teaching methods than lectures.
Use seminars/problem solving sessions
Group work
Clickers
Flip the classroom, with lectures online
Overview

1. Learning in English
2. Teaching in English
3. Disciplinary differences
Studies of lecturing in English

Vinke (1995)

Questionnaire to 131 lecturers

Recorded 16 engineering lecturers when they taught in both English and Dutch
Lecturers noticed very little difference

Reduced redundancy, lower speech rate, less expressiveness, clarity and accuracy of expression (Vinke, Snippe, & Jochems, 1998:393)

Lecturers report an increase in preparation time needed for English-medium teaching
Research Background

Klaassen (2001)

Examined the relationship between lecture intelligibility, language competency and pedagogical approach.

Findings

Student-centred lecturing much more important than the lecturer’s language competence.

Suggests a threshold level of TOEFL 580 (approximately equal to level C1 on the Common European Framework)

Below this level language training may be necessary.

Klaassen (2001:176)

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Research Background

Lehtonen and Lönnfors (2001)

Questionnaire (n=43)
Interviews with university teaching staff (n=9)

Findings

Similar to Vinke (1995).
Problems of pronunciation.
Uncomfortable correcting students’ English.
• Thøgersen & Airey (2011)
  – Same lecturer gives same science lecture 5 times
    » English (2)
    » Danish (3)
  – Authentic data
  – Measured articulation rate (sps) and mean length of runs
Research Background

Articulation rate [normalised]

Adapted from Thøgersen & Airey (2011)
Results:

– The same lecture section takes longer (21.5%)
– Lecturer speaks more slowly in English

However:

– Disciplinary content is very similar
– Similar pattern to the students
Swedish study

1. Ten-minute mini-lecture in Swedish on a subject they usually teach

2. Ten-minute mini-lecture in English on the same subject

Interviews
Articulation rate in syllables per second [normalised]

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Three types of lecturer

1. Structured no change in English
   
   Two options:
   - lecture is longer
   - the end of the lecture is cut off

2. Structured works differently in English
   
   Three options:
   - Choose to miss out some content
   - Cover all content but have less redundancy
   - Cover all content but in less depth

3. Free structure
   
   - presents different information (but probably would in L1)
   - shorter

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Tentative conclusions

1. Lecturers probably need more time to do the same job in English

2. Most lecturers can probably rationalize and ’work more effectively’ (Pedagogical effects?)

3. Lecturers who tend to be less structured (more student centred?) may have problems changing to English. (cf Klaassen 2001)
   - Places greater demands on language ability.
   - May be pragmatic to change style to a more structured approach.

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Overview

1. Learning in English
2. Teaching in English
3. Disciplinary differences
Disciplinary differences and language

Kuteeva & Airey (2014)
Show a disciplinary bias in attitudes to English language use based on Bernstein’s knowledge structures

Least objection to English
Natural sciences

Most objection to English
Humanities and Arts

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English language PhD theses

Salö (2010:24)

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Teaching in English

Adapted from Bolton & Kuteeva (2012)

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Summary

Nordic students and teachers appear to cope with English medium instruction.

Issues with:

Reduced interaction
A language threshold (mostly lecturers)

These findings may be very different for other language groups

Different disciplines view language differently
Summary

Different disciplines view language use differently.

English language use may be seen as deeply problematic by some disciplines.
Choosing the medium of Instruction

Depends on learning goals—why is English being used?

1. Language learning goals
2. Pragmatic choice to deal with diversity
3. Other reasons

If #2 then diversity brings its own problems
Level, type of language, expectations etc.


