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UNIVERSITY OF TECHNOLOGY

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Genre recognition and production:
a comparative study of L1 and ESOL speakers

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NFEAP 2018

Key questions

1) What does a genre diagnostic test tell us about our 1st year students' writing abilities?
2) What are the differences in results (if any) between L1 and ESOL speakers?

Background:
1. Diagnostic test
2. Our students

Results:
1. Recognition
2. Production
3. Examples

Discussion / conclusion
1. Student strategies
2. Theory
3. Final thoughts

Background 1. Diagnostic test

- Artemeva & Fox (2010) study – replicated
- **Setting**:
  - First year composition
  - Canadian Engineering students
  - Exploring student prior genre knowledge
- **Test:**
  - 5 example texts – different genres
  - Students identify and justify
  - Students reproduce a technical report based on material

Background 1. Diagnostic test

Artemeva & Fox (p. 479):

”When students initially engage in the discourse of a new discipline, their antecedent genre knowledge may or may not be relevant, and **if they can draw on it, then it may ease their transition to the new discipline** and further motivate them. On the other hand, if such knowledge hinders their transition to and engagement with the new discipline, it may undermine their confidence and cause them to devalue and marginalize their prior knowledge.” (our bold type)

Background 1. Diagnostic test

Genre Diagnostic Texts

Text A

Renewables? Not quite

Renewable energy might not be as 'renewable' as it first appears, according to experts.

Speaking at the Financial Times Energy Conference in February, and reported in New Scientist magazine, Supratik Guha, a senior semiconductor scientist at IBM, warned that the metals needed to make solar panels more efficient were extremely rare.

One of these metals, indium, is present at concentrations of only 0.25 parts per million in the Earth's crust, and demand for the element has pushed prices to $1,000 per kilogram.

Speaking at the same event, Paul Adcock, director of research and technology at UK fuel-cell manufacturers Intelligent Energy, warned of the future challenges posed by fuel cells' reliance on platinum - a metal that is even less abundant than indium.

But there are signs that engineers are beginning to think laterally about the use of renewable technologies.

Part A, Identification/Motivation

Text A

Source type:	
Why?	

Text B

Source type:	
Why?	

Background 2. Our students

	Elec eng	Chem eng	Informatics
No. of students	62	14	36
No. of female sts	10%	50%	42%
High school background	84% technology / science	71% technology / science	44% social science Rest v. varied
Straight to uni?	82%	64%	50%
Language used	English	Swedish	Swedish

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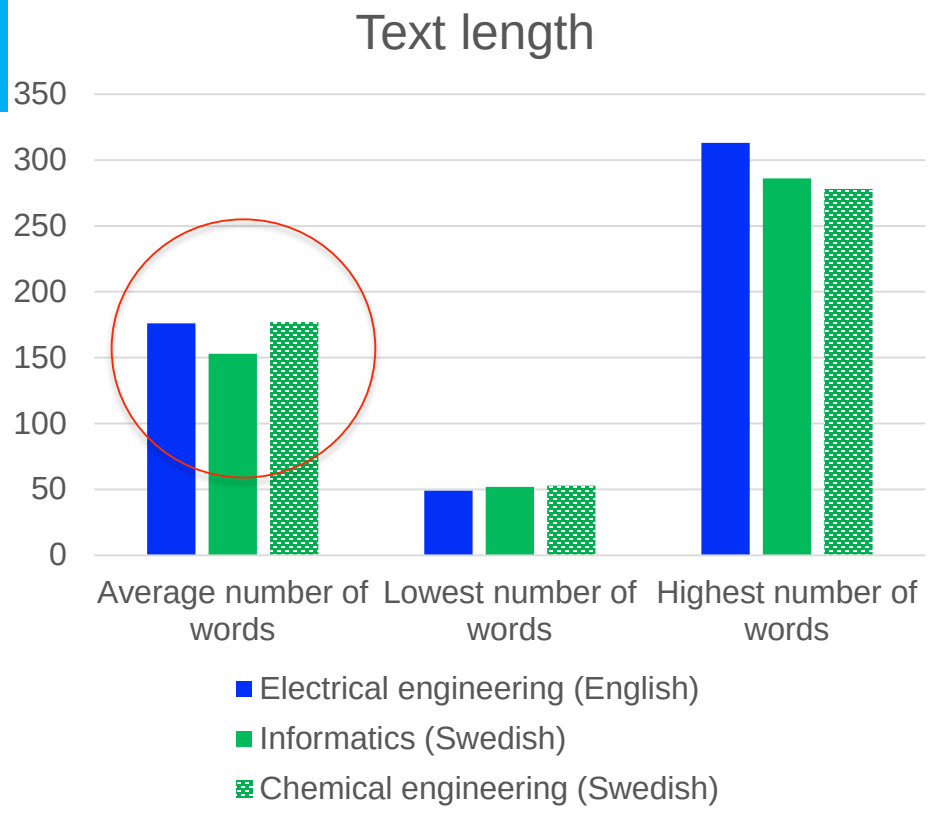
Results 1. Recognition

- Not given genres beforehand
- Few issues with recognition and justification on the whole
- Sometimes a tendency to overgeneralize e.g. “elementary school text” “informative text” “argumentative text” “fact text” “article” “essay”

  - unawareness of genre types

  - teachers’ /non-/use of ‘proper’ labels (cf. Nesi & Gardner 2012:59)

Results 2. Production



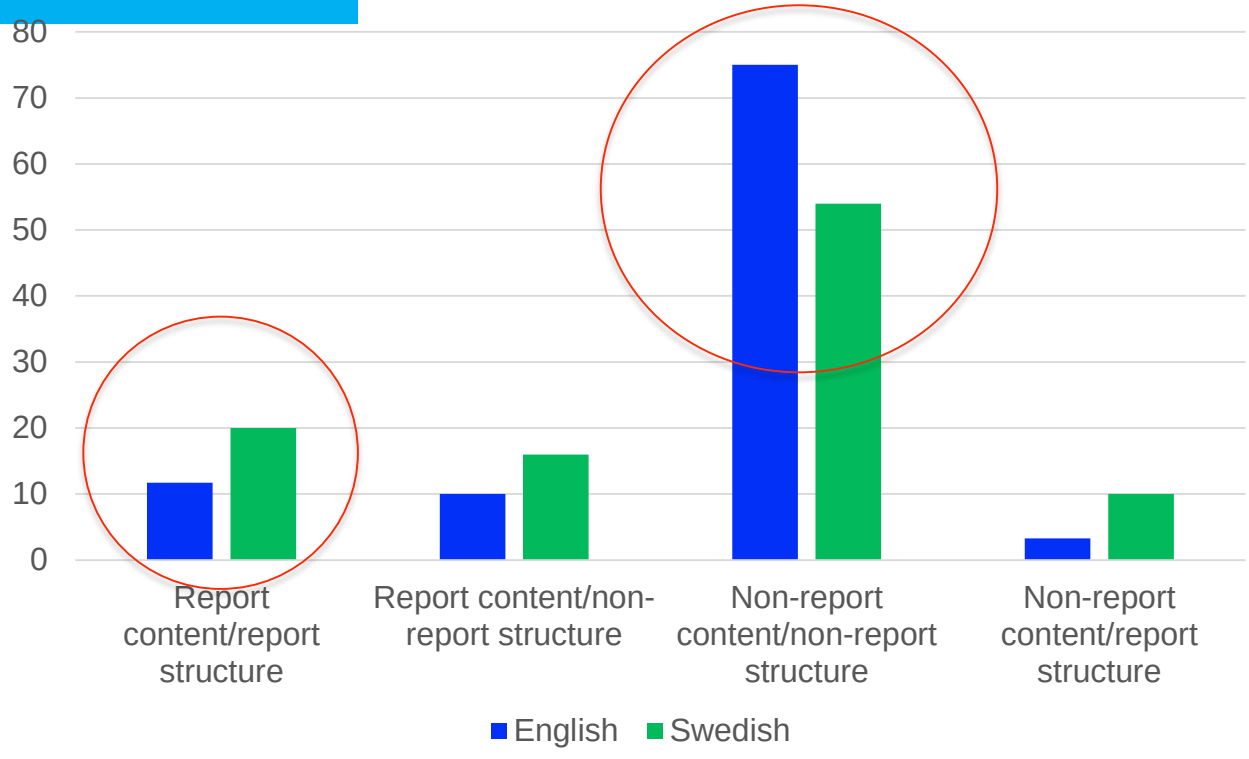
Expectation: Swedish texts would be longer

Outcome: English texts slightly longer

Hypothesis: Swedish use of compound words could explain difference

Results 2. Production

High concentration of non-report content & structure across both languages



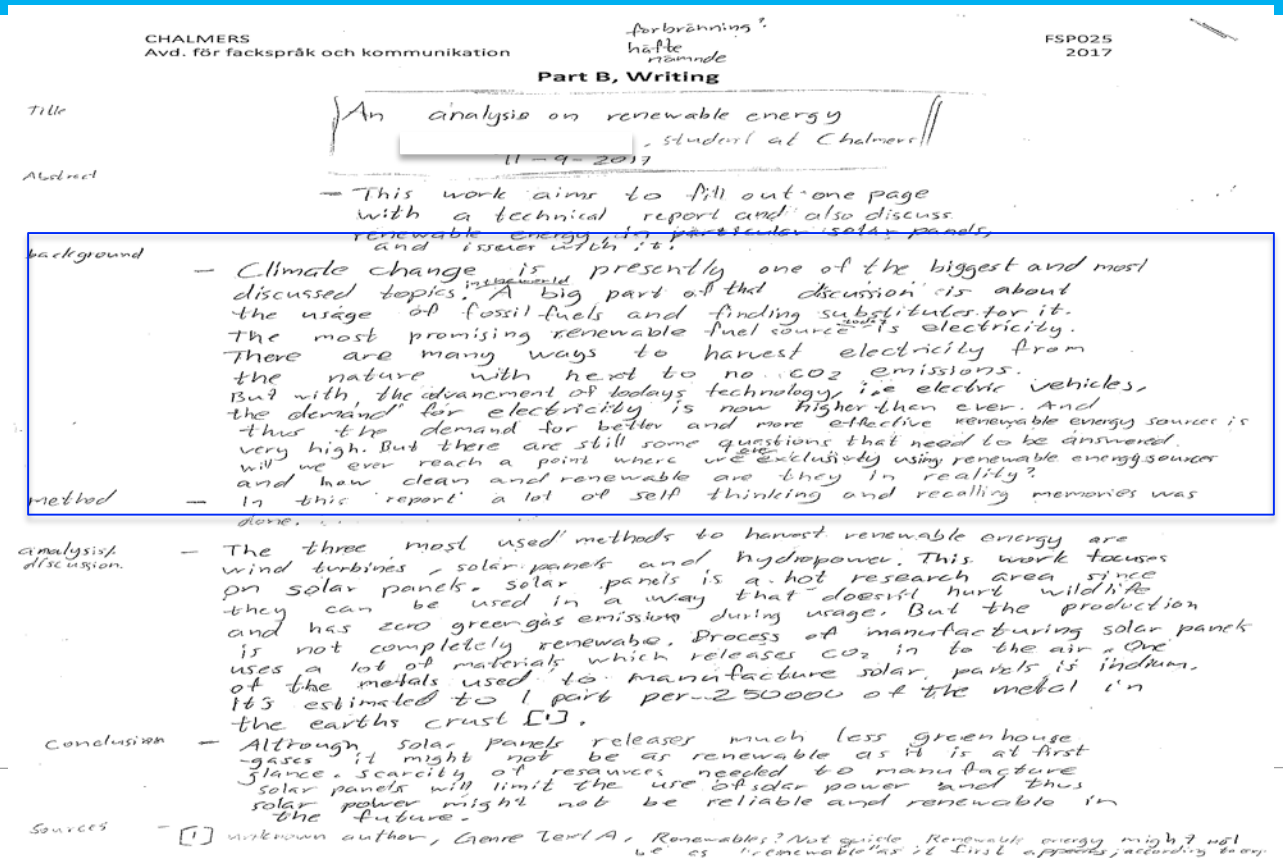
Results 2. Production

Technical report

- Narrowly defined
- Purpose driven
- Logical presentation of information
- Reader awareness
- Appropriate use of technical vocabulary (+ definitions / explanations)
- Reader cues e.g. headings / paragraphing / bulleted lists

(Artemeva and Fox, 2010, 494)

Results 3.Example (report content / report structure)



CHALMERS
Avd. för fackspråk och kommunikation

FSP025
2017

Part B, Writing

förbränning?
häfte
nämnde

Title: An analysis on renewable energy
, student at Chalmers
11-9-2017

Abstract — This work aims to fill out one page with a technical report and also discuss renewable energy in particular solar panels, and issues with it.

background — Climate change is presently one of the biggest and most discussed topics in the world. A big part of the discussion is about the usage of fossil fuels and finding substitutes for it. The most promising renewable fuel source is electricity. There are many ways to harvest electricity from the nature with next to no CO_2 emissions. But with the advancment of todays technology, i.e electric vehicles, the demand for electricity is now higher then ever. And thus the demand for better and more effective renewable energy sources is very high. But there are still some questions that need to be answered. will we ever reach a point where we exclusivly using renewable energy sources and how clean and renewable are they in reality?

method — In this report a lot of self thinking and recalling memories was done.

analysis/ discussion — The three most used methods to harvest renewable energy are wind turbines, solar panels and hydropower. This work focuses on solar panels. solar panels is a hot research area since they can be used in a way that doesn't hurt wildlife and has zero greengas emissions during usage. But the production is not completely renewable. Process of manufacturing solar panels uses a lot of materials which releases CO_2 in to the air. One of the metals used to manufacture solar panels is indium. It's estimated to 1 part per 250000 of the metal in the earths crust [1].

conclusion — Although solar panels releases much less greenhouse gases it might not be as renewable as it is at first glance. scarcity of resources needed to manufacture solar panels will limit the use of solar power and thus solar power might not be reliable and renewable in the future.

sources — [1] Unknown author, Genre Text A, Renewables? Not quite. Renewable energy might not be as "renewable" as it first appears, according to engy

Results 3.Example (report content / report structure)

Title

Background:

Climate change is presently one of the biggest and most discussed topics in the world. A big part of that discussion is about the usage of fossil fuels and finding substitutes for it. The most promising renewable fuel source today is electricity. There are many ways to harvest electricity from the nature with next to no CO2 emissions. But with the advancment of todays technology, i.e. electric vehicles, the demand for electricity is now higher than ever. And thus the demand for better and more effective renewable energy sources is very high. But there are still some questions that need to be answered. will we ever reach a point where we are exclusively using renewable energy sources and how clean and renewable are they in reality?

Method:

In this report a lot of self thinking and recalling memories was done.

Results 3.Example (non-report / non-report)

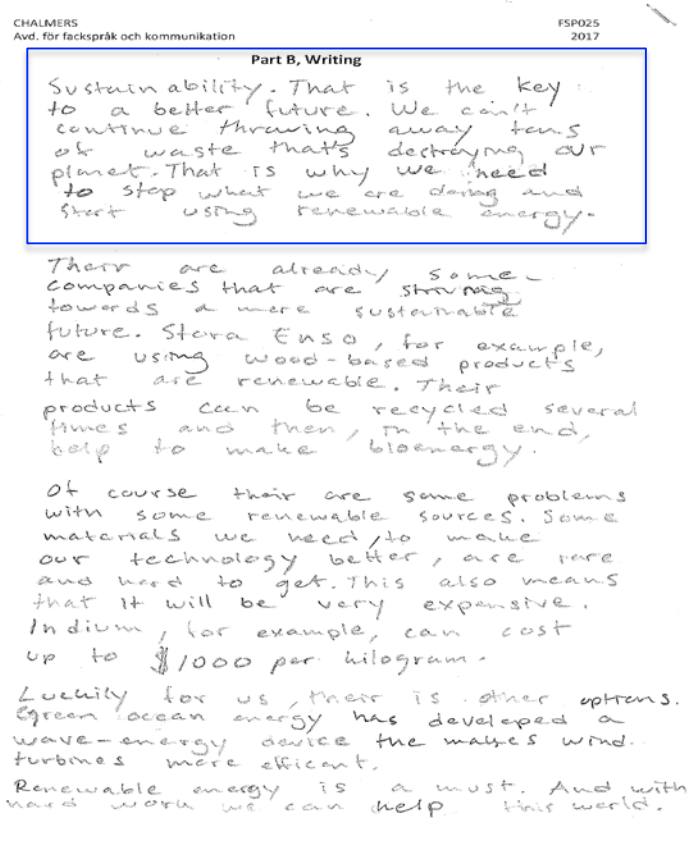
Sustainability. That is the key to a better future. We can't continue throwing away tens of waste that's destroying our planet. That is why we need to stop what we are doing and start using renewable energy.

There are already some companies that are striving toward a more sustainable future. Stora Enso, for example, are using wood-based products that are renewable. Their products can be recycled several times and then, in the end, help to make bioenergy.

Of course there are some problems with some renewable sources. Some materials we need, to make our technology better, are rare and hard to get. This also means that it will be very expensive. Indium, for example, can cost up to $1000 per kilogram.

Luckily for us, there is other options. Green Ocean energy has developed a wave-energy device the makes wind turbines more efficent.

Renewable energy is a must. And with hard work we can help this world.



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2017

Part B, Writing

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Results 3.Example (non-report / non-report)

Sustainability. That is the key to a better future. We can't continue throwing away tens of waste that's destroying our planet. That is why we need to stop what we are doing and start using renewable energy.

Dramatic, emotional language

Personal pronouns

Background:
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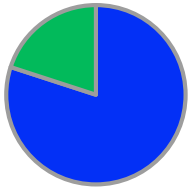
Discussion 1. Student strategies

Electrical engineering:

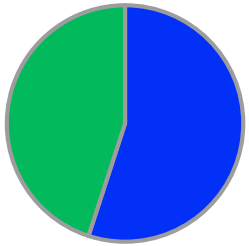
wrote as they had done in upper secondary

Electrical Engineering (English)



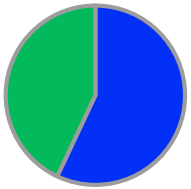
- Had experienced technical report
- Had NOT experienced technical report

Informatics (Swedish)



- Had experienced technical report
- Had NOT experienced technical report

Chemical Engineering (Swedish)



- Had experienced technical report
- Had NOT experienced technical report

Discussion 1. Student strategies

Used structure I had used before; more like a scientific report with headings, table of contents

Used the text that I thought was a technical report as a model

I had forgotten what a report should look like exactly, so I wrote as formally as possible and included a title.

I had learnt a template but it didn't work when I had to use facts from different texts

Tried to structure the text so that the reader can read easily

A technical report should include technical concepts

Discussion 2. Theory

- Similar results as Artemeva & Fox study (recognition / production)
- Students use prior knowledge in various ways; some break down prior knowledge into useful strategies and repurpose it, while others use the same strategies/known genres regardless of tasks (Reiff & Bawarshi (2011)
- Writers of L1 and L2 use similar writing strategies (Dalton-Puffer et al, 2010; Apelgren & Holmberg, 2018)

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Discussion 3. Final thoughts

1) *What does a genre diagnostic test tell us about our 1st year students' writing abilities?*
   - ✓ recognize ? produce

2) *What are the differences in results (if any) between L1 and ESOL speakers?*
   - Similar results for L1 and ESOL (both recognition / production)

Background:
1. Diagnostic test
2. Our students

→

Results:
1. Recognition
2. Production
3. Examples

→

Discussion / conclusion
1. Student strategies
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References

Apelgren, B.-M. & Holmberg, P. (2018). *På spaning efter progression En studie av textstruktur i gymnasieelevers uppsatser på svenska och engelska.* Stockholm: Skolverket.

Artemeva, N. and Fox, J. (2010). Awareness Versus Production: Probing Students' Antecedent Genre Knowledge. *Journal of Business and Technical Communication* 24(4), 476-515. DOI: 10.1177/1050651910371302.

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Reiff, M. J. and Bawarshi, A. (2011). Tracing Discursive Resources: How Students Use Prior Genre Knowledge to Negotiate New Writing Contexts in First-Year Composition. *Written Communication* 28(3), 312-337. , NDOI: 10.1177/0741088311410183.