

Language learning outcomes at the end of basic education and upper secondary education in Finland

16th EALTA conference

Transitions in Language Assessment

31st May 2019 - 2nd June 2019

University College Dublin

Raili Hilden, University of Helsinki

Raili.hilden@helsinki.fi

Juhani Rautopuro, University of Jyväskylä

Juhani.rautopuro@jyu.fi



Background



- Equality and equity are a societal concern, since individuals cannot develop their talent without support by living conditions
- Equal outcomes > equal opportunity to achieve them
- SES and parental education level and gender are well-established determinants of learning outcomes (Coleman ym., 1966; Husén, 1972; Bourdieu & Nice, 1990)
- Finnish girls outperform boys in most subjects (Vettenranta ym., 2017)
- Problems of equality acknowledged also at upper secondary education (Kalalahti & Varjo, 2012; Hotulainen ym., 2016).

Background



- Equality of genders, SES groups, regions and languages of school instruction are followed with national evaluations of learning outcomes (NELO) at certain intervals in several school subjects at the end of basic education
- Sample-based NELO's serve as tools for guidance by information (no league tables produced or published)
- Finnish Matriculation Examination at the end of upper secondary education (lukio, gymnasium) is the only high-stakes exam in the Finnish educational system
- One long syllabus language is mandatory (mostly English)

Research questions

- **RQ1. What kind of associations are detected between the level of language proficiency in English and Swedish at the end of basic education compared with the level at the end of upper secondary education?**
- **RQ2. What group-wise differences are detected between certain background variables (e.g. gender, parents' educational level) in both languages?**

Participants

- The data derive from two sources: The NELO 2013 English data comprised 3476 pupils at the age of 15 (Härmälä, Huhtanen & Puukko, 2014), and the FME tests of English was carried out by 1491 of the same students at the age of 18-19.
- The NELO 2013 in Swedish advanced syllabus was completed by 1679 basic education pupils (Hildén & Rautopuro, 2014), and 334 of them took the FME in this syllabus in 2015-2016 (Hildén & Rautopuro, 2017).
- Swedish and Finnish are official national languages, compulsory studies from grade 6

Instruments



- *Test1*. In NELO 2013 language ability was measured by a set of tests designed for listening, reading, speaking and writing. The listening and reading sections comprised ca 24-25 items in both skills and languages. Writing ability was displayed by a short and a longer task.
- *Test1*. FME measured the same subskills (except speaking), with different tasks, because the target level is higher (CEFR, 2001). The FME total score is based on the sum of item scores in each section.
- *Questionnaire 1*. In addition to language tasks, pupils' attitudes were mapped in NELO 2013 including questions about liking the subject, usefulness and self-esteem as a learner of English and Swedish. The NELO 2013 survey included several background variables, of which gender, parents' educational level and plans for future studies are addressed in this study.

Methods

- Various statistical methods
 - Descriptive statistics
 - Measures of association (chi-square, correlation)
 - Construction of scales (reliability)
 - Statistical modelling (linear regression)
- Standard setting
 - To set the standards between different proficiency levels for listening and reading, the Bookmark method was used (Cizek, 2011)
 - Items were assigned to Common European Framework levels by language experts and cut scores were determined for an appropriate number of levels



• Results

RQ1 What kind of associations are detected between the level of language proficiency in English and Swedish at the end of basic education compared with the level at the end of upper secondary education?



- In the English data, **listening and reading** skills had a statistically significant correlation with the FME total score ($p < 0,001$). The correspondence was stronger for listening than for reading, as almost half (48 %) of the successful students according to NELO 2013 achieved the highest categories of FME scale.
- In the English data, the correlations between subskills attained at the two assessments (NELO/FME) were **strongest for writing** (.48) and **reading** (.48) and weakest for listening

RQ1 What kind of associations are detected between the level of language proficiency in English and Swedish at the end of basic education compared with the level at the end of upper secondary education?

- In the Swedish data, the evidenced **reading** skill in NELO 2013 was the best predictor of the **FME total score**, followed by writing and listening skills. The explanation rates of these skills vary from 26 % to 32 %.
- In the Swedish data, the correlations between subskills attained at the two assessments (NELO/FME) were strongest for **writing** (.48) and **reading** (.44) and weakest for listening (.17)

Table 1. The percentages of FME scores in English and Swedish by gender

		English		Swedish	
		Boys (n = 647)	Girls (n = 841)	Boys (n = 90)	Girls (n = 244)
FME	Improbatur	1,2	1,4	5,6	2,0
Category	Approbatur	6,6	9,5	6,7	7,4
	Lubenter	14,7	21,6	28,9	14,8
	Cum laude	26,0	24,5	30,0	25,8
	Magna	26,0	20,2	12,2	29,9
	Eximia	19,2	16,9	12,2	16,8
	Laudatur	6,3	5,8	4,4	3,3



Figure 1. The percentages of FME scores in English by proficiency levels in NEMO

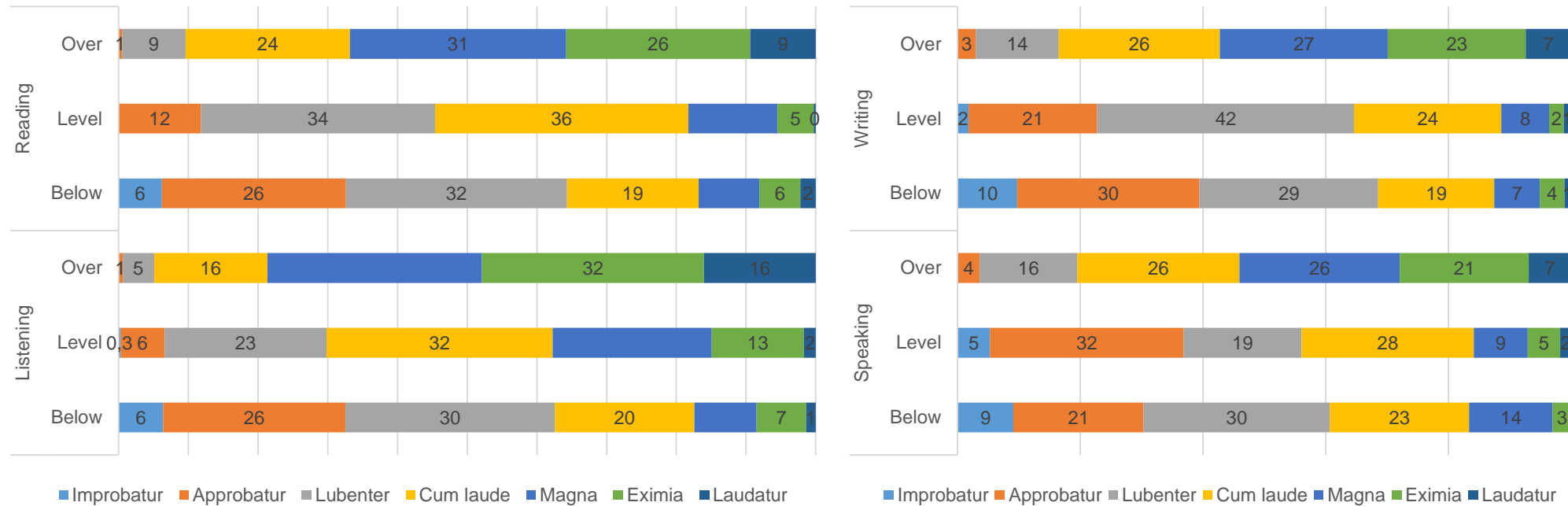
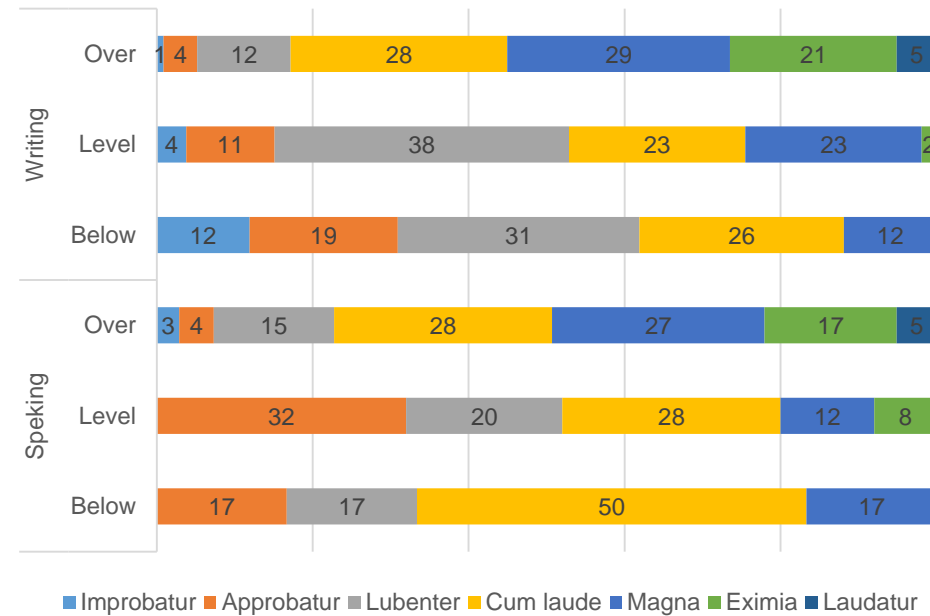
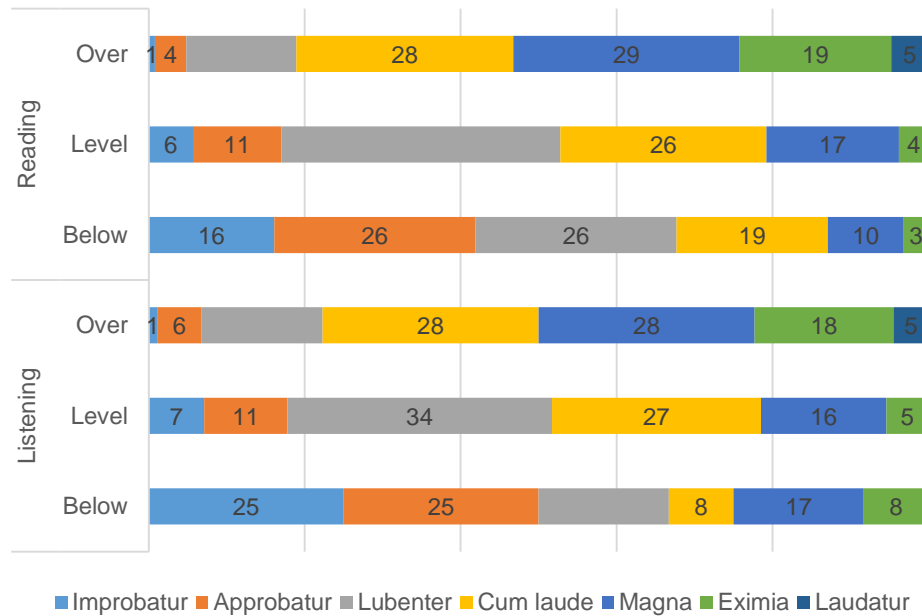


Figure 2. The percentages of FME scores in Swedish by proficiency levels in NEMO



• Results: RQ2

What group-wise differences are detected between certain background variables (e.g. gender, parents' educational background) in both languages?



- In the English data, boys surpassed girls with a statistically significant difference ($p < 0,01$).
- The impact of parents' educational level on FME English total score was statistically significant ($p < 0,001$).
- No significant differences were detected between subskills according to the levels of parents' educational background in the two tests
- No significant differences were detected between the attainment of subskills according to gender in the two tests
- In the Swedish data, girls performed in average better than boys in the FME.
- Parents' educational level did not have any impact on FME Swedish total score.
- The school grade at the end of basic education was a statistically significant predictor of FME success in both languages. The explanation rate in English was 29 %, and in Swedish 24 %.

Discussion



- The results of this study corroborate the validity of the national evaluation of learning outcomes at the end of basic education as predictors of later success measured by a large-scale high-stakes exam at the end of upper secondary level.
- persistent group-wise differences in the outcomes at both points of time = a challenge with regard to equality.
- A number of further analyses need to be carried out to determine the impact of NELO subskills on the various subskills evidenced in respective sections of FME in both languages.

Thank you for your attention!



Raili Hilden, University of Helsinki
Raili.hilden@helsinki.fi
Juhani Rautopuro, University of Jyväskylä
Juhani.rautopuro@jyu.fi



