

# **The younger, the better?: A usage-based approach to learning and teaching of English in Danish primary schools**

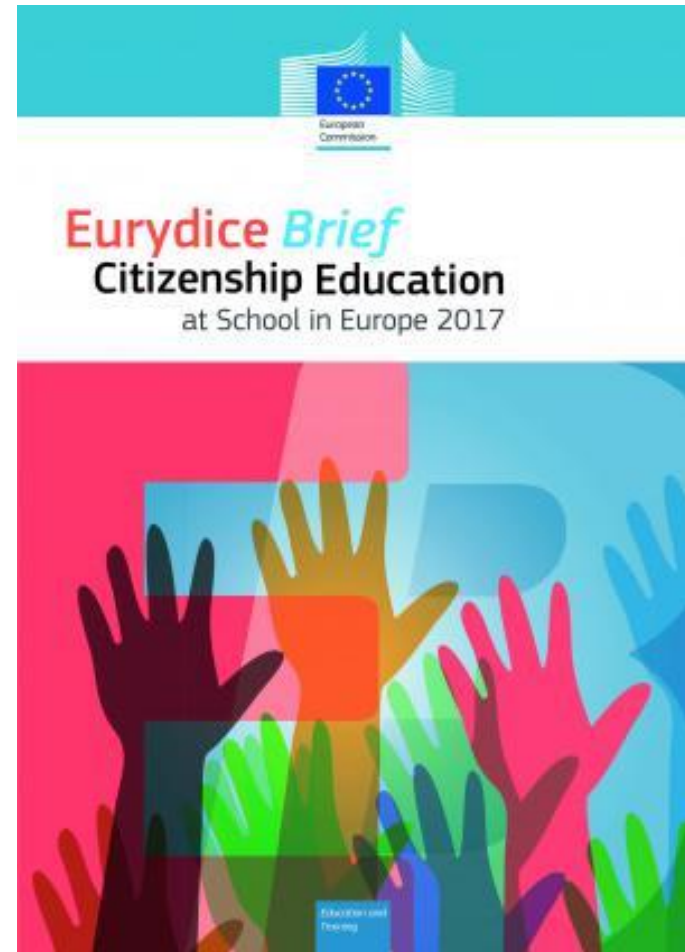
Teresa Cadierno  
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# Assumption

- "The younger, the better"
- In line with educational policies implemented across Europe



- Age at which children start learning FL (English) has dropped (Eurydice, 2017)



# Is this assumption true?: Role of age in L2 learning

## Naturalistic settings



The  
younger,  
the better

**Older learners:**

+ Rate advantage

**Younger learners:**

+ Ultimate attainment  
advantage

Hyltenstam (1992); Johnson and Newport (1989)  
Oatkowski (1980); Snow and Hoefnagel-Höole (1978)

## Instructed settings



**Older learners:**

+ Rate advantage

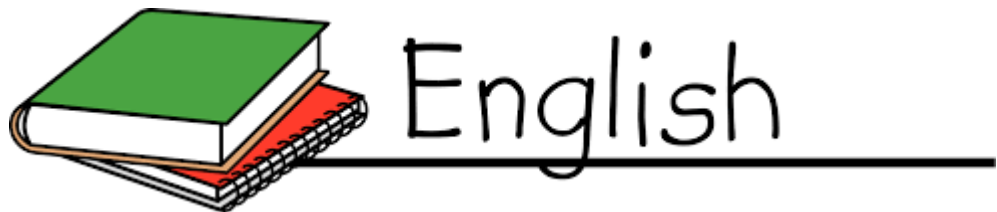
**Younger learners:**

÷ Ultimate attainment  
advantage

García Mayo (2003); Muñoz (2003, 2006, 2011);  
Pfenninger & Singleton (2017) ; Torras et al (2006)

# Motivation for study in DK

- Change in educational law - 2014
  - English from 3rd grade → 1st grade
- Unique opportunity to compare the development of English skills by early starters (ES) and late starters (LS) who started with L2 English instruction within the same year (i.e., 2014)



# The project

Financed by:

The Danish Council for  
Independent Research in  
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2014-2018  
(6.456.239 DKK)

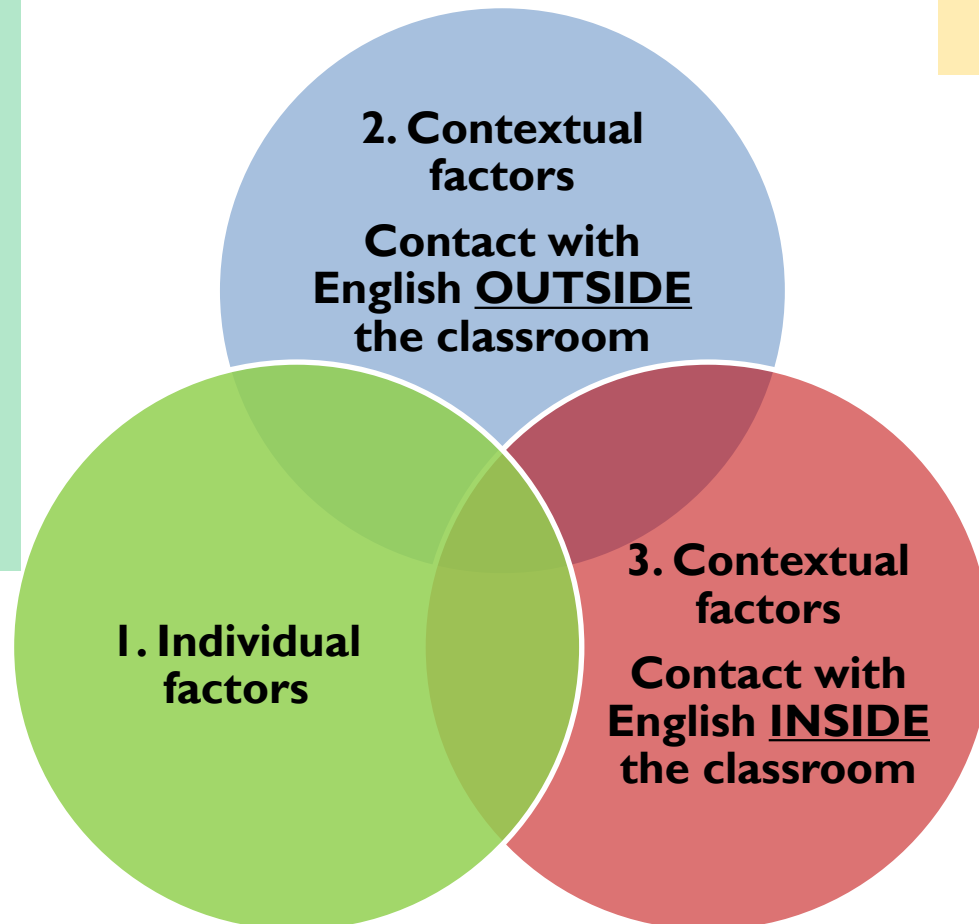
AGE FACTOR

## Research team

Teresa Cadierno  
Søren W. Eskildsen

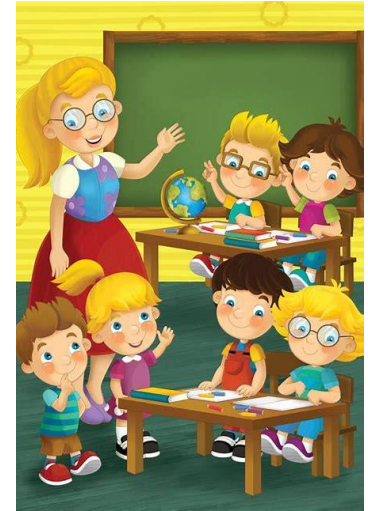
Mikkel Hansen  
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Maria Vanessa aus der  
Wieschen



# Participants

- 276 children
  - **ES:** 165
  - **LS:** 111
  - 139 boys and 137 girls
- 6 schools



## Design of study + English proficiency measures

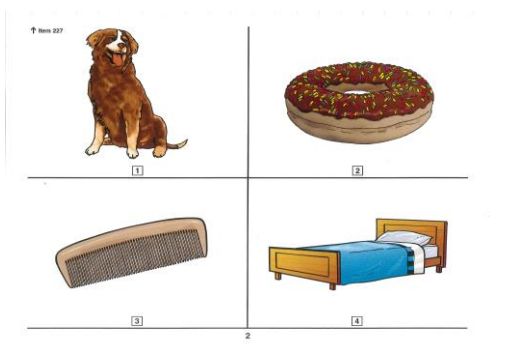
	2014 Wave 1	2015 Wave 2	2016 Wave 3	
<b>Early starters (ES)</b>	<b>Grade 1</b>  Receptive vocabulary Receptive grammar	<b>Grade 2</b>  Receptive vocabulary Receptive grammar  Phonetics	<b>Grade 3</b>  Receptive vocabulary Receptive grammar  Phonetics	
<b>Late starters (LS)</b>	<b>Grade 3</b>  Receptive vocabulary Receptive grammar	<b>Grade 4</b>  Receptive vocabulary Receptive grammar  Phonetics	<b>Grade 5</b>  Receptive vocabulary Receptive grammar  Phonetics  <b>ORAL PRODUCTION</b> Interview Picture description	
All individually administered				

# English proficiency measures



## Receptive vocabulary

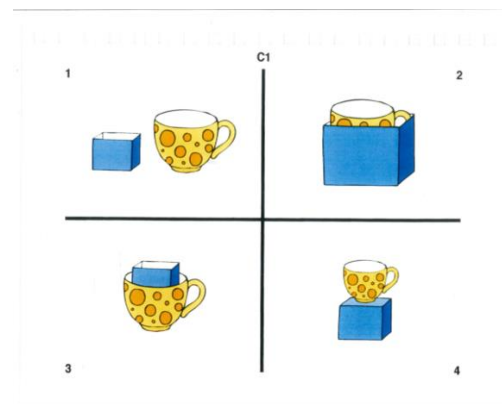
- Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4) (Dunn & Dunn, 2007): recognition of 228 items



*dog*

## Receptive grammar

- Test for Reception of Grammar, TROG-2 (Bishop, 2003): receptive knowledge of 20 English phenomena (e.g., negation, reversible *in* and *on*)



*The cup is in the box*



# English proficiency measures: Phonetic discrimination task

Discrimination of 7 minimal pairs

free vs. three  
sink vs. think  
these vs. ds  
sue vs. zoo  
log vs. lock  
ice vs. eyes  
luck vs. lock



- Instruction: "Du kommer til at høre en dame sige to ord efter hinanden. Du skal lytte godt efter om damen siger det samme ord to gange eller om det er to forskellige ord hun siger"

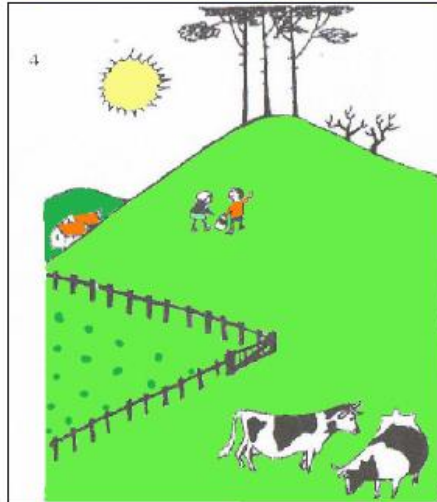
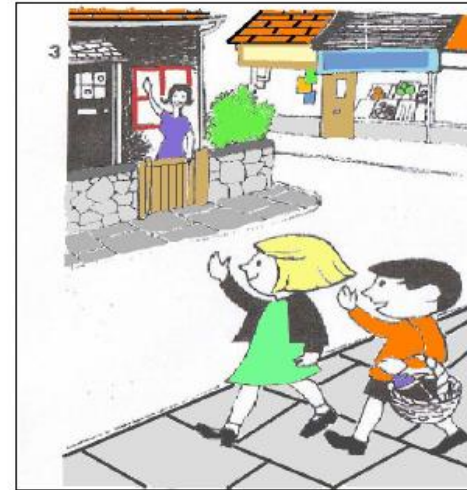
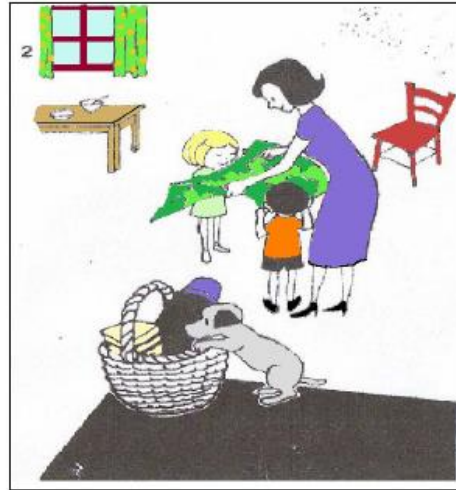
# Oral production task:

## Interview



1. Hi, my name is X. What's your name? Ah, nice name
2. How old are you?
3. Do you have any brothers or sisters?
4. Are your brothers or sisters older or younger than you?
5. If child has brothers and sisters: does your brother/sister go to this school?
  
6. Who are your **best friends**?
7. Tell me about (the name of the first friend mentioned)
8. Does (friend's name) like playing football?
9. What do you and (friend's name/s) like doing together?  
Tell me about it.
  
10. Did you (activity mentioned in last question) **last** weekend?  
What else did you do last weekend?
11. And what are you going to do **next** weekend ?
12. And what are going to do **this afternoon** after school?

# Oral production task: Dog story

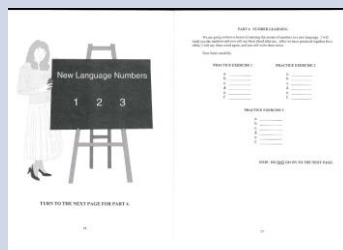


# Other measures for both age groups

2016  
Wave 3

Oppgave	Point
1. a. 3-5	1 0
b. 7-2	1 0
2. a. 2-8-6	1 0
b. 6-5-4	1 0
3. a. 6-2-5-8	1 0
b. 2-4-1-7	1 0
4. a. 9-5-1-4-8	1 0
b. 5-8-2-1-6	1 0
5. a. 4-7-8-1-6-3	1 0
b. 7-5-9-8-6-4	1 0
6. a. 6-1-7-6-2-3-8	1 0
b. 9-3-8-6-5-1-2	1 0
7. a. 5-3-8-7-2-1-6-4	1 0
b. 2-4-9-5-7-1-6-3	1 0
8. a. 1-6-4-5-9-7-2-8-3	1 0
b. 4-5-2-3-6-8-9-7-1	1 0
Purvis score (Max = 10)	

Oppgave	Right answer	Point
1. a. 8-1	(8-6)	
b. 3-9	(8-2)	
2. a. 3-8	(8-5)	1 0
b. 7-4	(8-2)	1 0
3. a. 4-8-3	(8-6-4)	1 0
b. 3-6-8	(8-6-5)	1 0
4. a. 5-2-9-6	(8-9-2-5)	1 0
b. 8-3-4-9	(8-4-3-8)	1 0
5. a. 4-7-1-5-3	(8-3-1-7-4)	1 0
b. 9-2-7-8-8	(8-3-7-2-9)	1 0
6. a. 1-8-6-8-5-2	(8-5-9-6-8-1)	1 0
b. 3-4-6-8-7-1	(8-7-9-6-4-8)	1 0
7. a. 8-2-5-4-3-2	(8-3-4-5-2-8)	1 0
b. 4-1-5-8-7-2-9	(8-2-8-5-1-4)	1 0
8. a. 6-8-9-5-2-8-2	(8-6-2-1-5-9-8-6)	1 0
b. 3-2-1-8-7-5-9-4	(8-9-5-7-3-1-2-5)	1 0
Baglin score (Max = 10)		
Total score (Max = 20)		



Language aptitude tests - memory



Digit forward/backward  
MLAT-E Number learning

Parent's data:

SES (education, income)

Use of English at work and outside work

Perceived English proficiency

# Some results

Does younger mean better? Age of onset, learning rate and short-term L2 proficiency in young Danish learners of English———

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[cambridge.org/bil](https://cambridge.org/bil)

Research Article

A multi-factor study of the development of English receptive skills by young Danish children

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# Role of the following set of factors in children's development of receptive vocabulary and grammar

- **Child-specific factors** (questionnaire filled out by children)
  - Age of onset and gender
  - FL classroom anxiety (FLCA)
  - English competence beliefs (ECB)
  - Attitudes towards English lessons, class activities and English language
  - Learners' motivation
  - Language aptitude
  
- **Environmental factors** (questionnaire filled by parents + child)
  - ☐ **Children's contact with English outside the classroom:** Audiovisual material, videogames, English music, reading, writing, speaking English
  
  - ☐ **Home-related factors:** parental SES, parents' knowledge of English and their use of English in their daily lives

## Appendix I. Psychological factors included in children's questionnaire

Factor	Source	Questions / statements
FL classroom anxiety (FLCA)	Heinzmann (2013)	1) To what extent do you like to say something aloud before the whole class in English? 2) I am afraid of making a mistake when I speak English. 3) I am afraid of giving a wrong answer in the English lessons.
EFL-competence belief (ECB)	Wigfield et al. (1997)	1) How good are you at English? 2) Are you good at learning something new in English lessons? 3) If you think about all the children in your class, from the weakest to the best in English, how good do you think you are yourself?
Attitudes toward English lessons	Dörnyei (2010)	1) How much are you looking forward to English lessons? 2) To what extent could you imagine having more English lessons?
Attitudes toward different activities in English lessons	Enever (2011)	1) To what extent do you like to sing in English when you have English lessons? 2) To what extent do you like to listen to music in English...? 3) To what extent do you like to write in English...? 4) To what extent do you like to read in English...? 5) To what extent do you like to speak in English...?
Attitudes toward English language	Olshtain et al. (1990)	1) I think it is fun to listen to someone speaking English. 2) English sounds irritating. (reversed) 3) It is fun to learn new words in English. 4) I like to say words in English aloud.
Reliance on External authorities	Dörnyei (2010)	1) I would like to learn English because my parents say I have to. 2) I would like to learn English because the teacher says I have to.
English as Lingua Franca	Heinzmann (2013)	1) I learn English because many people in the world speak English. 2) I learn English because then I can talk to people from all over the world.
Precursors to Ideal L2-self	Dörnyei (2010)	1) When I grow up, I will surely be good at speaking English. 2) I think I will be good at reading books in English when I grow up. 3) I would like to live in an English-speaking country. 4) I would like to have friends in English-speaking countries.



# Questionnaire

5. HØRE MUSIK



\_\_\_\_\_

6. SKRIVE



\_\_\_\_\_

15. ORD



\_\_\_\_\_  
SLET IKKE  
SJOVT

\_\_\_\_\_  
MEGET SJOVT

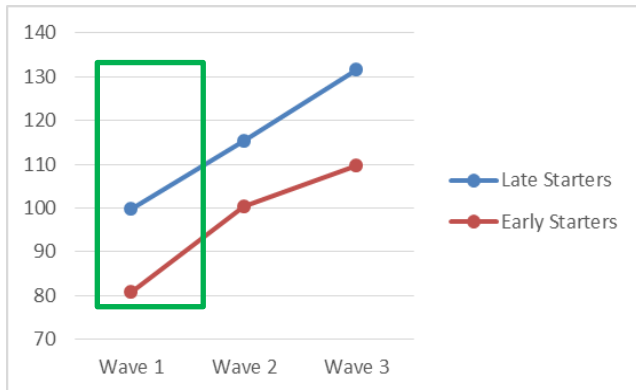
16. TALE



\_\_\_\_\_  
SLET IKKE

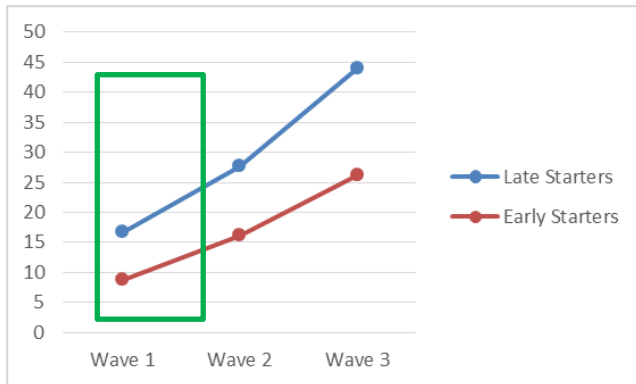
\_\_\_\_\_  
MEGET





PPVT

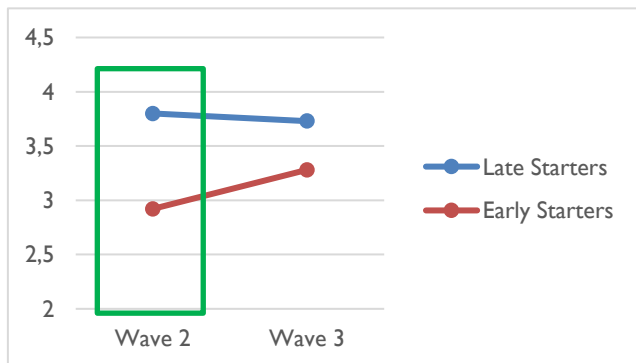
LS obtained significantly higher scores than ES in the 1st wave of data collection in all tests



TROG

**Starting point for L2 English learning is NOT the same for the two age groups:**

- Probably due to accumulated contact with English outside the classroom
- Support from studies showing that children can and DO learn aspects of the L2 BEFORE instruction (De Wilde & Eyckmans, 2017; Lefever, 2010; Kuppens, 2010)



PHON

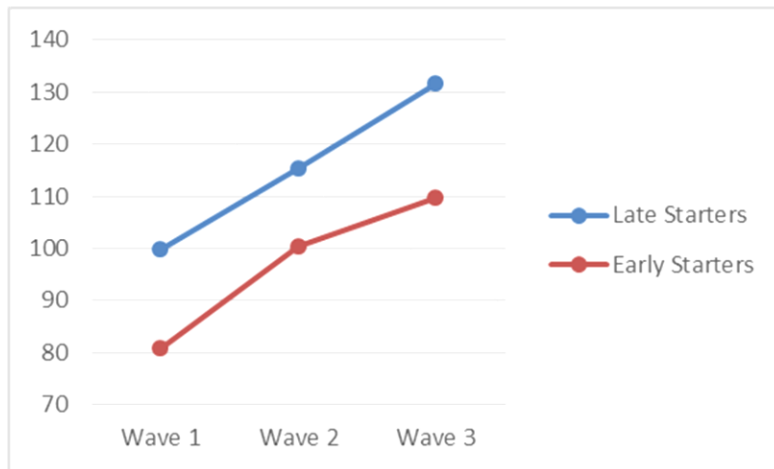
# Child-specific factors: AGE OF ONSET

LS advantage

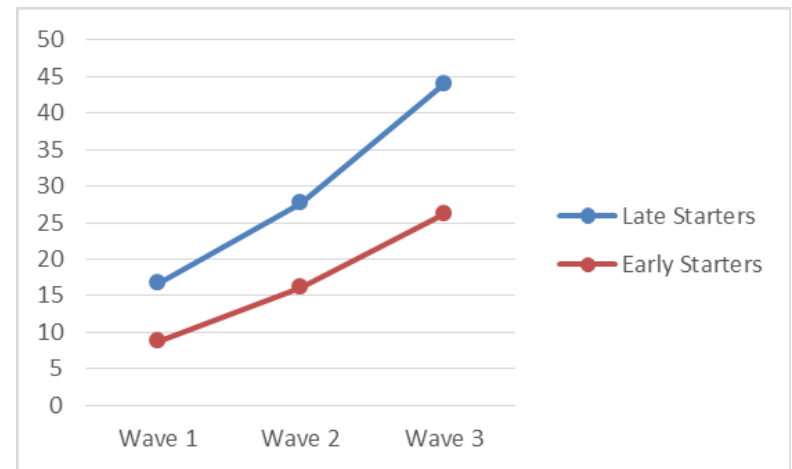
- Age of onset: LS > ES
- Age of onset x Wave → rate advantage for LS

The initial advantage of LS increased significantly in waves 2 and 3

LS ES



PPVT



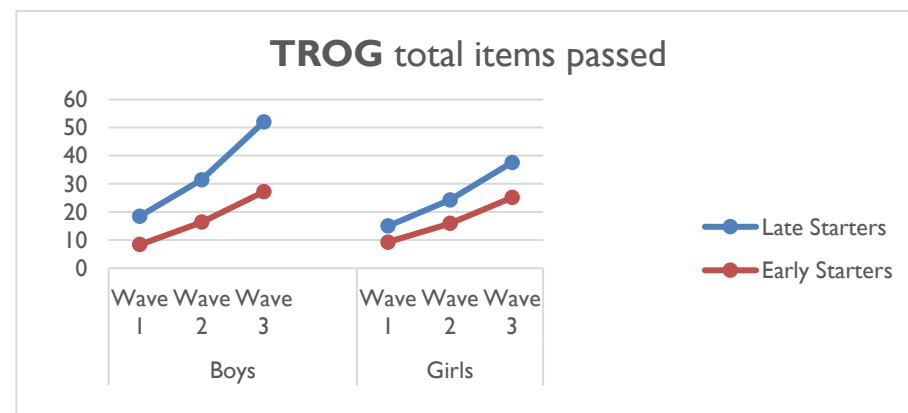
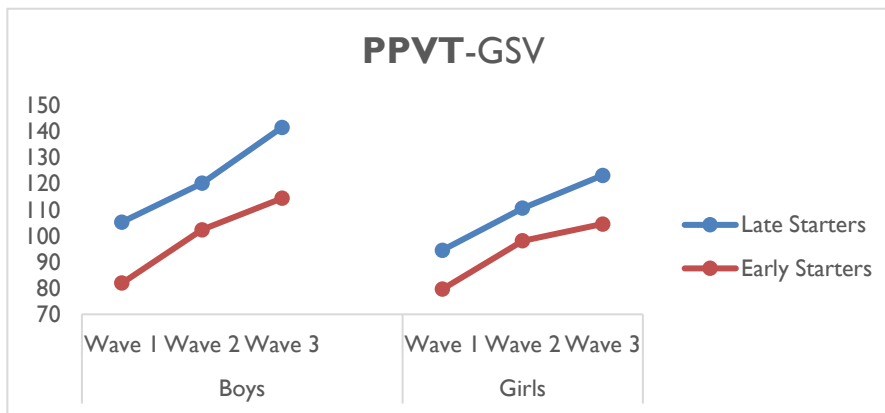
TROG

# Child-specific factors: GENDER

Boys' advantage

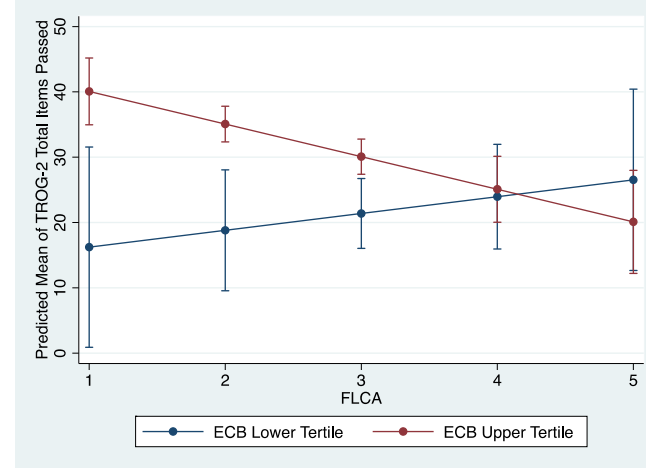
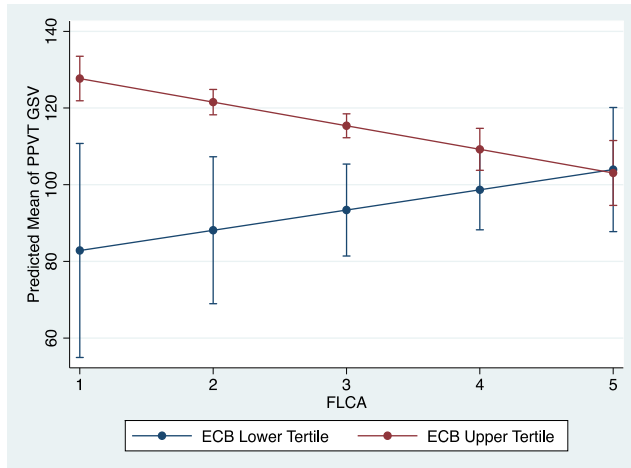
- PPVT: Gender x Wave → more rate advantage for boys
- TROG-2: Gender x Starting grade → LS boys have higher scores indep. of wave

LS ES



# Child-specific factors: FLCA and ECB

- FLCA: the higher FLCA, the lower L2 proficiency
- ECB: the higher ECB, the higher L2 proficiency
- FLCA x ECB



Anxiety trumps over English competence beliefs

# Environmental factors

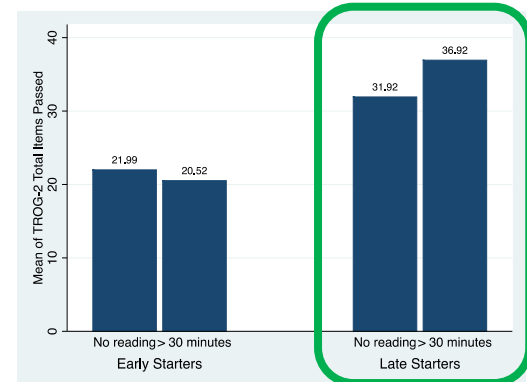
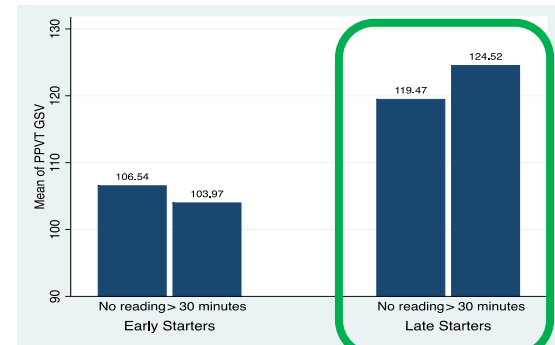
**Audiovisual  
material:  
Beneficial for ES**

**Reading:  
Beneficial for LS**

## Audiovisual x Starting grade



## Reading x Starting grade



# Environmental factors: SES

- Main effect of **yearly income**
- Same as Højen et al. (2019)



Even in DK with one of the lowest degree of income inequality in the world (OECD, 2016), income predicts L2 proficiency

# Pedagogical implications

- **Lack of support for "the younger, the better" view** → No advantage for introducing English earlier in school BUT longitudinal data needed
- **Promote low anxiety classroom environment** → important for teachers to specifically address the students' attitude towards feedback and create a classroom environment where errors are seen as part of the learning process and where negative feedback is not taken as an evaluation of the person as a whole but as an opportunity to get the necessary feedback to improve in their L2, i.e., an incremental mindset.
- **Increase teachers' awareness of:**
  - the facilitative role of watching audiovisual material from the start of English instruction
  - promoting reading in later years when children have reached a more advanced level of LI literacy
- Important role of **raising children's and parents' awareness** of the opportunities for language learning outside the school and integrating these out-of-classroom activities into the FL classroom

# Further data collection:

## Different grades, same amount of instruction years

	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Spring 2021	Spring 2022	Spring 2023
ES	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
LS	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9		



# Future data collection:

## Same grade, different amount of instruction years

	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Spring 2021	Spring 2022	Spring 2023
ES	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
LS	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9		

