Classroom Practices in Early Foreign Language Teaching in Denmark: On the Role of Quantity and Quality of Exposure to English inside the Classroom

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Abstract

This thesis is one out of three PhD projects in the “The younger, the better?”-project (Cadierno & Eskildsen, forthc.). The project as a whole, and therefore my thesis, investigates the role of an earlier starting age in foreign language learning. This became a relevant topic in Denmark in 2014 when the onset of English classes in Danish primary schools was lowered from 3rd to 1st grade.

The participants in the studies conducted in this thesis are 264 Danish Young Learners. About half of these students have started learning English in the 3rd grade, as it was usual before the 2014 school reform, the other half consists of the first generation of Danish Young Learners starting English lessons in the 1st grade. Data in the form of multiple-choice English tests and video-recordings of classroom interaction was collected during the Young Learners’ first two years of instructed English lessons.

Against this background, my thesis investigates the role of classroom practices in early English as a Foreign Language (EFL) teaching by posing the following research questions:

• Will there be differences between earlier (age 7) and later (age 9) starters of English language learning in their rate of learning and short-term L2 proficiency (i.e., after 2 years of instruction) with respect to the following language dimensions: receptive vocabulary, receptive grammar, and receptive phonological discrimination?

• What is the role of inside-school quantity and quality of exposure to and use of English in children’s rate of L2 learning and short-term L2 proficiency? To what extent is this variable a good predictor of faster rate of learning and higher level of short-term L2 attainment?

• How is intersubjectivity co-constructed in early English as a Foreign Language classrooms and how does this turn into learning moments and microgenesis?

The formulation of these research questions requires this thesis to adopt two strikingly different methodologies. Research questions 1 and 2 focus on the comparison of two groups of learners – early and late starters – in terms of short-term L2 proficiency and rate of learning, and the role the classroom plays in this. With 264 Young Learners (henceforth YL) participating in the project, the method chosen to investigate these questions is a quantitative analysis of multiple-choice L2 proficiency tests. This necessarily brings with it an adoption of cognitivist views of SLA.

Research question 3, on the other hand, asks for the practical methods teachers and students use to co-construct intersubjectivity in early EFL classrooms. This question can best be investigated by studying social interaction, and Conversation Analysis (henceforth CA) is the most robust method to do just that.
While I will later argue that this combination of methods leads to a more varied
description of early English teaching and learning in Denmark than only one of them
could have achieved, I have separated questions 1 and 2 and question 3 into two parts
according to the respective quantitative and qualitative focus, as they do require a
separate introduction, literature review, and discussion.

Part I comprises Chapters 4 to 7. In Chapter 4 I review what the phrase “the
younger, the better” actually means. While it often refers to the Critical Period
Hypothesis (Lenneberg, 1967) and thereby to ultimate attainment, researchers have
investigated the “age factor” not only in terms of ultimate attainment, but also with
regards to rate of learning, and individual learner factors. The literature review
presented in this chapter finds that while some studies conclude that the younger
is, in fact, better, most empirical research points at an advantage for later starters
in terms of short-term L2 proficiency and initial rate of learning, explaining this as
based on their higher cognitive development.

Chapter 5 reports on a longitudinal empirical investigation of Danish Young
Learners’ short-term L2 proficiency and rate of learning. Proficiency is measured
using three proficiency tests ( receptive vocabulary test, a receptive grammar test,
and a receptive phonetic discrimination test) at the beginning of the 1st, 2nd, and 3rd
year of instructed EFL. In line with research questions 1 and 2, Chapter 5 investigates
the role of the following variables:

- demographic variables: age, gender

- school factors: school type (public or private), English lessons per year, and
  individual classrooms

The results point at that younger might not necessarily be better for Danish Young
Learners of English as a Foreign Language, and as for the role of the classroom – it
is very small. To be more specific, the role of the individual variables as listed above
is:

**Age and gender** seem to be good predictors of both short-term L2 proficiency
and rate of learning. Older learners in this study seem to learn more, and faster than
younger learners. Where there are gender differences, boys are better than girls.

**School type and English lessons per year** are not good predictors of L2 profi-
ciency or rate of learning.

**Individual classrooms** on the same grade level were compared to each other, but
generally, there were no differences between them. For some tests, at most one pair of
classrooms was significantly different from each other, but not different from any other
classrooms, and not in more than one type of test. This is the most surprising result
of the study, considering that there is methodological freedom in Denmark and we
must assume that no two classrooms are taught in exactly the same way. I conclude
that the apparent low importance of school factors in predicting L2 proficiency can
be explained either by the limited hours of instruction the Young Learners have
received, i.e. that one cannot yet see the potential differences after only 60–120 hours
of instruction, or by other factors that have not been investigated in this thesis, such
as out-of-school use of English and socio-affective factors. Hannibal Jensen (forthc.-a)
and Fenyvesi (forthc.) explore these factors in their respective theses, which are also
part of the “the younger, the better?”-project. In Chapter 5 I also discuss why the results must be interpreted with caution, namely because the validity and reliability of both the tests and the school factors as predictor variables are questionable.

In Chapter 6, I categorized each item of the receptive vocabulary test by lexical field (“YL EFL topic” such as animals and colors, “classroom words” such as group and pencil, and “other”, which is everything else) and by their Danish-English cognate status, in order to obtain scores relevant for a Young Learner (YL) English as a Foreign Language (EFL) context from a test originally designed for L1 speakers of English. The individual scores of these lexical fields and the cognate status painted a much finer picture of Danish Young Learners’ receptive vocabulary through these main findings:

- Older learners do seem to have higher short-term L2 proficiency in the fields “YL EFL topic”, “classroom words”, and “other” than younger learners, but there does not seem to be an age difference in rate of learning in these categories.
- Boys only have significantly higher scores in the “other” category, not in “YL EFL topics” and “classroom words”.
- As for rate of learning and gender, there is no difference for early starters.
- Late start boys show a higher learning rate in the “other” category, but late start girls have a higher learning rate in the “YL EFL topics” category.
- Late starters score higher in cognates, but the rate of learning is higher for early starters.

I discuss that this scoring procedure is meaningful and fair when using an L1 test in an L2 context, as the detailed scores can be used to explain some of the factors that are left unexplained in the standardized analysis. Most significantly, while the analysis in Chapter 5 showed that boys are generally better than girls, the detailed analysis in Chapter 6 shows that boys are only better in the “other” category, which are items that are most likely only learned outside of the classroom and point at Danish boys using more meaningful English outside of the classroom than girls do, which (Hannibal Jensen, 2017) confirmed. Chapter 6 also finds girls to have an advantage over boys, namely in the “YL EFL topic” words, i.e. vocabulary items that are related to topics typically learned in YL EFL classrooms, such as animals and colors. This advantage for girls was not visible in the regular analysis as performed in Chapter 5. As in Chapter 5, school factors do not seem to play a significant role, which is surprising since I specifically divided the scores into scores for inside-school and outside-school scores, in order to find differences in the inside-school scores.

Chapter 7 discusses the findings and implications of Part I, i.e. Chapters 4 to 6. The implications are twofold, on the one hand, the analyses have implications for all stakeholders in teaching English to Young Learners, mainly teachers, curriculum designers, and parents. On the other hand, Chapters 4 to 6 raise methodological questions, mainly related to equity in YL assessment. This chapter concludes the quantitative Part I.

Part II is comprised of Chapters 8 to 13, which together address research question 3. In Chapters 8 and 9 I introduce and argue for the adoption of a bottom-up, emic approach to studying the meaning making practices that teachers and students engage
in the foreign language classroom. Specifically, I argue that Conversation Analysis is the most robust method for investigating the co-creation of intersubjectivity in institutional interaction.

Chapter 10 takes the results of Chapters 5 and 6 as point of departure, in that it investigates if and how Danish primary school teachers differentiate in the EFL classroom, seeing as students in the same classroom achieve strikingly different scores on the vocabulary test analyzed in Chapters 5 and 6. This study investigates if and how primary school teachers of English as a foreign language (EFL) to young learners in Denmark interact in everyday classroom interaction with students who – according to a receptive vocabulary test – differ vastly in their English skills. I selected four classrooms on the basis of how many “extreme” students they have, i.e. these classrooms have the highest number of students that belong to the top- or bottom-scoring 10% of all the participants in the project. These are two early start and two late start classrooms, one classroom of each age group is at a private school, the other at a public school. Using conversation analysis, I looked at how the highest- and lowest-scoring students claim or demonstrate L2 proficiency, epistemic displays, and willingness to participate. I also investigated the teachers’ methods to engage in interactions with these students, e.g. when nominating them as next speakers. I describe the practical ways in which the categories “strong” and “weak” student are co-constructed in interaction by both the teacher, the students in question, and their classmates. I find that while it is easy to spot the apparent highly proficient students, the weaker students are difficult to spot in the classroom. Being a strong student comes with benefits such as certain epistemic rights. In interactions with apparent weak students, the most salient practice is allowing the use of the L1 in classrooms that usually have an L2-only policy. Membership in either of these groups is often not co-constructed in the very interaction I examine, but that it must be based on previous interactions. I discuss that continuous re-assessment of the students that either do not stand out or are treated as one of the weakest students is a prerequisite for differentiation and goal-oriented teaching. Lastly, my analysis of EFL teachers’ successful interactional differentiation practices identifies practical ways for teachers to support weaker and stronger Young Learners of EFL.

Using Conversation Analysis, in Chapter 11 Sert and I investigate the methods participants in one early EFL classroom use to achieve intersubjectivity, despite using different languages. In this classroom the teacher consistently speaks English, while the students almost exclusively speak Danish, and neither teacher nor students orient to these divergent language choices as marked. We identified two sequential formats that help ensure student understanding in this classroom:

1. learner translations and reformulations for peer support in insert expansion sequences

2. expansions initiated by students requesting information or clarification that display partial or no understanding.

These learner translations and reformulations for peer support are initiated by the students themselves in Danish, following an instruction by the teacher in English, and are encouraged or rewarded by the teacher in English. We describe how this supportive environment co-constructed by the co-participants and not governed by top-down language policies leads to the creation of intersubjectivity and thus allows for the activity at hand to progress. Another sequential format that leads to the
achievement of these goals are expansions initiated by students requesting information or clarification (from the teacher), which displays partial or no understanding of the teacher’s instruction delivered in English. Even though the teacher then reformulates in English can intersubjectivity seen to have been re-established, e.g. in that the students use change-of-stake tokens. Our findings do not align with the findings of other conversation analytic studies of language use in the foreign language classroom. We conclude that the language choices made by the participants in the classroom co-construct L2 learning spaces (Eskildsen and Theodórsdóttir 2017) for learning-in-interaction, and that this emic analysis of actual language practices can be used to inform teacher education.

In Chapter 12, Eskildsen and I conduct a conversation analytic study to investigate how teacher gestures in the pursuit of intersubjectivity are a crucial part of the co-construction of learnables and teachables in YL EFL classrooms. More specifically, we investigate how the participants in the a classroom co-construct a student’s task as producing a certain gesture-talk connection, and that this gesture-talk connection is continually re-indexed as a learnable/teachable by both the teacher, the student, and his classmates, which is noticeably absent when not produced. The study not only contributes to the growing body of research on the effective use of gestures in the YL FL classroom, but also has implications for teaching English to Young Learners. The microgenetic study demonstrates that FL learning is a slow, usage-based process, and raises the question of how YL EFL classrooms can use the limited time allocated to early English more effectively.

Chapter 13 discusses the three empirical articles in relation to four issues: language choices, pursuits of understanding, embodied repair/explanations, and differentiation. This concludes Part II.

The final Chapter 14 discusses the results and implications of this anthology as a whole.
Resumé

Denne afhandling udgør et ud af tre ph.d.-projekter i “Jo yngre, jo bedre”-projektet (Cadierno & Eskildsen, forthcoming). Projektet, og dermed min afhandling, undersøger rollen af en tidlig sprogstart i skolen, som blev relevant i dansk kontekst i forbindelse med folkeskolereformen 2014, og som medførte at engelsk nu indføres i første klasse i folkeskolen, fremfor i tredje klasse.

Deltagerne i projektet er 264 danske folkeskoleelever. Omkring halvdelen af dem har begyndt engelskundervisning i tredje klasse, som det var sædvanligt før folkeskolereformen. Den anden halvdel af eleverne i projektet er del af den første generation af elever som starter med engelsk i første klasse. Datamaterialet består både af resultater fra multiple-choice sprogtests og videooptagelser fra elevernes respektive første to års engelskundervisning.

Min ph.d.-afhandling undersøger klasseværelsespraksissers rolle i tidlig fremmedsprogsundervisning ved at besvare tre forskningsspørgsmål:

- Kan man se forskelle mellem elever der introduceres til engelsk tidligere (dvs. i første klasse) og senere (dvs. i tredje klasse) efter 2 års undervisning med hensyn til deres sprogfærdighed og læarningshastighed målt på receptivt ordfordråde, receptiv grammatikforståelse, og receptiv fonologisk færdighed?
- Hvilken rolle spiller kvaliteten og kvantiten af den eksponering og brug af engelsk i elevernes sprogfærdighed og læarningshastighed med hensyn til receptivt ordfordråde, receptiv grammatikforståelse, og receptiv fonologisk færdighed? I hvilken grad er denne variabel egnet til at forklare læarningshastighed og sprogfærdighed?
- Hvordan skabes intersubjektivitet af deltagerne i tidlig engelskundervisning og hvordan fører det til læringsmomenter og mikrogenese?

Den måde forskningsspørgsmålene er formuleret på forudsætter brugen af to markant forskellige metodologier. Forskningsspørgsmålene 1 og 2 sammenligner to grupper lærere – én med tidligere sprogstart og én med senere sprogstart – med hensyn til deres sprogfærdighed og læarningshastighed, og betydningen af klasseværelset. Eftersom der sammenlignes 264 elevers sprogfærdighed og læarningshastighed er en kvantitativ analyse den mest passende. Dette kræver at jeg tager udgangspunkt i en kognitivistisk sproglæringsteori.

Derimod beskæftiger forskningsspørgsmål 3 sig med de praktiske metoder lærere og elever bruger for at skabe intersubjektivitet i tidlig engelskundervisning. Dette spørgsmål kræver derimod en interaktionel tilgang, og konversationsanalyse er den mest robuste metode til sådan en analyse.

Selvom jeg senere vil argumentere for at kombinationen af disse metoder fører til en mere varieret beskrivelse af tidlig engelskundervisning i Danmark end kun én af metoderne kunne opnå, har jeg delt forskningsspørgsmålene op i to dele (Del 1
omhandler forskningsspørgsmålene 1 og 2, og Del II forskningsspørgsmål 3), idet de kræver separate indledninger, er baseret på forskellige teori og empiri, og dermed også kræver en separat diskussion.

Del 1 består af kapitlerne 4 til 7. Kapitel 4 danner grundlag for de to empiriske artikler i kapitler 5 og 6, idet den beskriver hvordan frasen “jo yngre, jo bedre” bruges i forskning om tidlig fremmedsproglæring. Frasen bliver tæt brugt i sammenhæng med en “kritisk periode” for sprogindlæring (Lenneberg, 1967), dvs. i forhold til ultimativ tiltegelse af fremmedsproget. Forskningssagenstanden i litteraturen er dog ikke kun ultimativ tiltegelse, men også læringshastighed og individuelle faktorer. Mens nogle studier peger på at yngre faktisk er bedre, viser de fleste empiriske undersøgelser af tidlig fremmedsprogsindlæring at elever med en senere sprogstart faktisk har højere sprogfærdighed og læringshastighed, som tit begrundes i en højere kognitiv udvikling af de ældre lærere.

Kapitel 5 er den første ud af to kvantitative forskningsartikler og afrapporterer udviklingen af danske indskolingselevers engelsk sprogfærdighed og læringshastighed. Sprogfærdighed undersøges ved hjælp af tre tests i begyndelsen af elevernes første, andet, og tredje år med engelskundervisning: en receptivt ordforrådstest, en receptivt grammatikforståelsestest, og en receptiv fonologisk færdighedstest. Med baggrund i forskningsspørgsmålene 1 og 2 belyser kapitel 5 rollen af følgende variabler:

- demografiske variabler: alder, køn
- skolefaktorer: skoletype (folkeskole eller privatskole), antal engelsktimer per år, og individuelle klasser

Fundene peger på at yngre ikke nødvendigvis er bedre i tidlig engelskundervisning i Danmark, og at rollen af klasseværelset er meget lille. Helt konkret er rollen af de enkelte undersøgte variabler følgende:

**Alder og køn** lader til at være god årsagsvariable af både sprogfærdighed og læringshastighed. Elever som først blev introduceret til engelsk i 3. klasse ser ud til at lære både mere og hurtigere endd elever med en tidligere sprogstart. Hvor fundene viser kønsforskelle, så er det drengene der klarer sig bedre end pigerne.

**Skoletype og antal engelsktimer** kan ikke siges at være årsagsvariable over sprogfærdighed eller læringshastighed.

**Individuelle klasser** på samme klasses trin blev sammenlignet, men der lader ikke til at være nogle forskelle mellem dem. I nogle tests er der et enkelte par klasser som statistisk set er forskellige, men de klasser som udgør dette par er ikke forskellige fra nogen andre klasser, og derudover er de kun forskellige i én af de tre tests. Det er det mest overraskende fund, idet der er metodefrihed i Danmark og man burde antage at ingen to klasser bliver undervist på præcist samme måde.

Jeg diskuterer at den tilsyneladende ubetydelige rolle af skolen som årsagsvariable af sprogfærdighed og læringshastighed kan forklares enten af eleverne har fået ret få timers undervisning i lobet af de to år, dvs. at man ikke kan se eventuelle forskelle mellem klasserne efter kun 60–120 timer. En videre forklaring kunne være at grunden til ligheder mellem klasserne ligger i faktorer som jeg ikke har undersøgt i min afhandling, såsom brugen af engelsk udenfor skolen og følelsesmæssige (affektive) faktorer. Hannibal Jensen (forthc.-a) og Fenyvesi (forthc.) undersøger disse faktorer i deres respektive afhandlinger.

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I kapitel 5 diskuterer jeg derudover at fundende skal tages med forbehold, idet validiteten og reliabiliteten af både de udførte tests og skolefaktorerne som årgagsvariable er usikker.

I kapitel 6 har jeg delt stimulusordene i den receptive ordførrådstest op efter tema ("YL EFL topics", dvs. temer fra tidlig engelskundervisning såsom dyr og farver, “classroom words” såsom “pencil” og “group”, og “other”, som er alle ord som ikke passer til de første to kategorier). Derudover blev stimulusordene kategoriseret efter om de er kognater i dansk og engelsk eller ej. Jeg argumenterer for at opdelingen efter både tema og kognatstatus fører til kontekstrelevante testresultater selvom testen blev udviklet til engelsk modersmålstandende, for det første fordi der kan analyseres hvad præcist bestemte grupper (fx. drenge) er bedre til end andre, og for det andet fordi der kan beregnes sværhedsgraden af hver eneste ord ud fra hvor mange børn har svaret rigtigt. Fundene viser at:

- Undersøgelsen peger i retning af elever med en senere sprogstart opnår højere resultater i både “YL EFL topic”, “classroom words”, og “other” end elever med en tidligere sprogstart, men der lader ikke til at være nogen aldersforskell med henhold til læringshastighed i disse kategorier.
- Drenge er kun signifikant bedre end piger i “other” kategorien, ikke i ”YL EFL topics” eller ”classroom words”.
- Når man udelukkende kigger på resultaterne af elever med en tidligere sprogstart er der ikke nogen forskel i læringshastighed mellem drenge og piger.
- Drenge med en senere sprogstart lærer “other” ordene hurtigere end piger på samme alderstrin, til gengæld lærer disse piger “YL EFL topics” hurtigere end jævnaldrende drenge.
- Elever med en senere sprogstart får bedre resultater i kognater end elever med en tidligere sprogstart, men de yngre elever lærer kognater hurtigere end de ældre.

I kapitel 6 argumenterer jeg for, at denne måde at score testen på er meningsfuld og fair når man bruger en test, som blev udviklet til engelsk modersmålstandende af alle aldré for at teste danske børns fremmedsprogfærdighed. Fundene kan forklares nogle faktorer som ikke kunne forklares i en almindelig analyse som det blev gjort i kapitel 5. Særligt interessant er at mens kapitel 5 viste at drenge generelt er bedre end piger, kunne den detaljerede analyse i kapitel 6 vise at drenge kun er bedre i “other” kategorien, dvs. ord som sandsynligvis kun læres udenfor skolen, hvilket hænger fint sammen med Hannibal Jensen (2017), som viser at danske drenge bruger mere meningsfuld engelsk udenfor skolen end piger gør. Derudover viste den detaljerede analyse at piger faktisk er bedre til noget end drenge er, nemlig “YL EFL topic” ordene, dvs. ord som er relateret til de temer der typisk læres i skolen, såsom dyr og farver. Ligesom i kapitel 5 finder analysen i kapitel 6 at skolefaktorerne ikke har den store betydning. Det er overraskende, eftersom jeg specifikt har delt ordene op efter skole- og undenfor-skolen-ord, i først og fremmest at finde forskelle mellem enkelte klasser i deres “skoleord” scores.

Jeg diskuterer fundene og implikationerne af Del 1 i kapitel 7. Der er implikationer for målgrupper: for det første har analyserne implikationer for lærere, fagpersoner...
med ansvar for pensa, og forældre; for det andet har fundene metodologiske implicationer, nemlig med henhold til retfærdighed i bedømmelsen af unge sproglærernes sprogfædighed. Dette kapitel konkluderer Del 1.

Del II indeholder kapitlerne 8–13, som tager udgangspunkt i forskningsspørgsmål 3. Kapitlerne 8 og 9 argumenterer for brugen af en emisk, data-dreven metode i analysen af meningsskabelsesprocesser som lærere og elever indgår i i fremmedsprogsklasseværelser. Mere specifikt, så argumenterer jeg for at konversationsanalyse er den mest robuste metode til at analysere fællesskabelsen af intersubjektivitet i institutionel interaktion.

Kapitel 10 tager udgangspunkt i fundene fra kapitlerne 5 og 6, idet den undersøger i hvorvidt lærere i indskolingen differentierer i engelskundervisningen, eftersom forskellige eleverne i samme klasse opnår meget forskellige resultater i den receptive ordførdådstest.

Artiklen undersøger om og hvordan engelsklærere i indskolingen interagerer med elever som – ifølge den receptive ordførdådstest – er meget forskellig fra hinanden. Jeg har valgt fire klasser på basis af hvor mange ”ekstreme” elever der går i de klasser. Dvs. i disse klasser er der flest elever hvis resultater lærer til de bedste eller dårligst 10% ud af alle testede elever. De fire klasser er to med tidligere og to med senere sprogstart, deraf er hver én på en folkeskole og én på en privatskole.

Jeg bruger konversationsanalyse for at se hvordan de højest- eller lavest-scoredende elever hævder eller demonstrerer fremmedsprogsfærdighed, epistemiske displays, og villighed til at deltage. Derudover undersøger jeg også hvilke metoder lærere bruger for at engagere disse elever i interaktion, fx. når der skal findes en villig næste-taler. Jeg beskriver de praktiske metoder gennem hvilke kategoriene ”god” og ”dårlig” elev bliver etableret af både lærere, de pågældende elever, og andre elever i interaktionen. Fundene viser at mens det er nemt at få øje på de tilsyneladende gode elever, er det svært at opdage mindre gode elever i interaktionen. At være en god elev giver fordele i klasseværelset, såsom at få lov til at være ”hjælpelærer”. I interaktioner med de svageste elever er den mest åbenlyse praksis at lærere båder taler dansk, mens de samme lærereellers opretholder en sprogpoltik der går ud på at både læreren og resten af eleverne skal tale engelsk. At være medlem af den ene eller den anden gruppe lader ikke altid til at være skabt i præcist de data jeg undersøger, men lader til at være baseret på tidligere interaktioner. Artiklen identificerer praktiske metoder lærere af tidlig engelskbruger til at støtte både de svageste og de højst-præsterende elever i deres læring. Fundene bekræfter at en løbende evaluering af såvel de elever som ikke skiller sig ud fra resten af klassen, såsom dem som i en tidligere undervisningsforløb ikke har præsteret er en uundværlig forudsætning for at differentiering og målstyret undervisning kan lykkedes.

Den anden konversationsanalytiske artikel præsenteres i kapitel 11 og er sammenforfattet med Olcay Sert. Vi undersøger de praktiske metoder deltagerne i tidlig engelskundervisning i et klasseværelse bruger for at skabe intersubjektivitet på trods af at de taler forskellige sprog. I dette klasseværelse taler læreren udelukkende engelsk, mens eleverne næsten kun taler dansk, og hverken læreren eller eleverne orienterer til dette som værende mærkeligt. Vi identificerer to sekventielle formater som er med til at skabe forståelse i dette klasseværelse:

1. eleverne hjælper hinanden ved at oversætte og omformulere lærerens engelsk tale til dansk i indskuds-ekspansioner
2. elever initiere ekspansioner i hvilke de beder om information eller forklaringer og viser hvad de ikke forstår

Oversættelserne og omformuleringerne på dansk for at hjælpe klassekammeraterne er initieret af eleverne efter læreren har givet instruktioner på engelsk. At eleverne støtter hinanden i at skabe fælles forståelse er både opmunret og belønnet af læreren på engelsk. Vi beskriver hvordan deltagernes samskabelse af dette støttende miljø af fremfor overholdelse af en top-down sprogpolitik fører til intersubjektivitet og dermed til progressonen af den igangværende aktivitet. Det andet sekventielle format som kan bruges til at opnå disse resultater er ekspansioner initieret på dansk af elever som beder læreren om informationer eller forklaringer med henhold til instruktioner læreren gav på engelsk lige før. Selvom læreren genforklarer det på engelsk kan intersubjektivitet ses som skabt, eftersom eleverne giver udtryk for det fx. ved hjælp af tilstandsskiftemarkører. Fundene stemmer ikke overens med andre konversationsanalytiske undersøgelser af sprogvalg i fremmedsprogsundervisning. Vi argumenterer for at de sprog deltagere vælger at bruge i klasseværelset samskaber fremmedsprogslæringsrum (Eskildsen and Theodórsdóttir 2017) for sprogøvelse i interaction, og at den emiske analyse af sprogbrugspraksisser kan bruges til at informere læreruddannelsen.


Endeligt, diskuterer kapitel 13 de tre forskningsartikler med henblik på de fire temaer som blev addresseret i artiklerne: sprogvalg, efterstræbelse af forståelse, kropssliggende forklaringer, og differentiering. Det er det sidste kapitel i Del II.

Det sidste kapitel 14 diskuterer fundene og implikationerne af den samlede antologiske afhandling.
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In the three years that I have worked on this thesis I was lucky enough to have the support of many people. First of all, I want to thank my supervisor Søren Wind Eskildsen for guiding me throughout these years. Thank you for trusting me with this project, even though you’ve known me from when I was your BA and MA student. I truly appreciate the freedom and support you have given me to make this PhD my own, even if this meant that I went further away from the overall “The younger, the better” project. You have always defended my decisions; I think I might have been close to giving up at times, hadn’t I known that you always have my back. Academically, you are an inspiration to me. I don’t know to to say this in a less weird way, but attending your talks feels like being front row at a rock concert, and I’ve never missed an opportunity to introduce myself as your PhD student at conferences.

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<td>AoA</td>
<td>Age of Acquisition</td>
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<td>CA</td>
<td>Conversation Analysis</td>
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<tr>
<td>CPH</td>
<td>Critical Period Hypothesis</td>
</tr>
<tr>
<td>CS</td>
<td>Code-Switching</td>
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<tr>
<td>DIU</td>
<td>Designedly Incomplete Utterance</td>
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<tr>
<td>EFL</td>
<td>English (as a) Foreign Language</td>
</tr>
<tr>
<td>EM</td>
<td>Ethnomethodology</td>
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<tr>
<td>EMCA</td>
<td>Ethnomethodology (and) Conversation Analysis</td>
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<td>FL</td>
<td>Foreign Language</td>
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<tr>
<td>FPP</td>
<td>First Pair-Part</td>
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<tr>
<td>L1</td>
<td>1st Language</td>
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<td>L2</td>
<td>2nd Language</td>
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<tr>
<td>SLA</td>
<td>Second Language Acquisition</td>
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<tr>
<td>SPP</td>
<td>Second Pair-Part</td>
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<tr>
<td>TYTB</td>
<td>“The Younger, The Better?”-project</td>
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<td>YL</td>
<td>Young Learners</td>
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Transcription Conventions

TEA: current speaker
tea: participant embodying an action
. pause of less than 0.1 seconds
2.4 pause of less than 2.4 seconds
[ ] beginning and end of overlapping talk
- indicates a sudden cut-off
= indicates that there is no pause between two utterances
: :: :::: preceding sound is prolonged, more colons mean longer sounds
underline speaker used emphasis

LOUDER louder than surrounding talk
.
falling intonation
?
rising intonation,
 rising intonation, not as strong as ?
( ) (guess) inaudible speech, transcriber’s best guess
/ai pʰi: ei/ phonetic transcription
<slower> slower than surrounding talk
> faster< faster than surrounding talk

TEA: w+ord word while TEA produces talk, SAM

sam: +raises LH raises his left hand (LH)
sam: +raises LH---> the action continues over the next lines

sam: +raises LH--> (5) the action continues until line 5
sam: +raises LH--->> the action continues until (after) the end of the transcript

TEA: wor+d word indicates where an action that has

sam: -->+ started in a previous line ends

TEA: wo#rd word indicates the moment where screengrab

3.1 was taken

fig #3.1 #3.1 refers to the figure number

TEA: word in Danish more or less free translation of

Danish original

translation


Chapter 1

Introduction

1 The Younger, the Better?

As a result of the Danish government’s effort to improve standards in the Danish public school, the onset of English classes has been lowered from third to first grade, effective August 1, 2014 (EMU, 2016). The government justifies this amendment by claiming that Danish children are motivated to learn English at a young age as they are exposed to this language in various media. Moreover, they underline that proficiency in English is crucial with regards to the ongoing internationalization and globalization (UVM, 2013). Implicit in the latter statement is the assumption “the younger, the better”. While “the younger, the better” seems to be a common catchphrase used to describe early foreign language learning, the actual relationship between age and foreign language learning is subject to an ongoing discussion. What is more, it is unclear what “better” refers to; it might be rate of learning, ultimate attainment, or motivation.

The age span with which “Young Learners” are classified varies heavily in the literature (G. Ellis, 2013), but it might be an age span corresponding roughly with the critical period (Lenneberg, 1967). The Critical Period Hypothesis (CPH) suggests that one is no longer able to achieve native-like competence of a language if one does not start learning it as a child, since several language functions are assigned to certain parts of the brain around certain ages, i.e. during childhood and up until puberty, they cannot be successfully learned after the process of lateralization is complete (Lenneberg, 1967). Especially the acquisition of a native-like accent is said to be very difficult after this period (Scovel, 1988). This theory has since been both supported and criticized by empirical research, but regardless of which stance one takes, one cannot regard “age” as the sole factor that leads to automatic acquisition, as language learning is influenced by a variety of contextual, individual, and socio-affective factors, as evident in the differences between child L1 and child L2 learning (e.g. Krashen, 1981, 1985). In other words, “even if the CPH is correct, one cannot expect any substantial proficiency after several years of FLES ([foreign language in the elementary school]) (typically less than an hour a day), as many parents have come to realize” (DeKeyser & Larson-Hall, 2005, p. 101). Recent studies have argued that the language learner’s age is not the dominating factor in successful SLA and shown older learners to be more successful at learning EFL than younger learners (García Mayo & García Lecumberri, 2003; Muñoz, 2006b), in terms of listening, speaking, reading, and grammar (Cenoz, 2003), native-like pronunciation (García Lecumberri & Gallardo, 2003a), and learning strategies (Victori & Tragant, 2003). Factors that do seem to have an influence are social (Hewitt, 2009), motivational (Muñoz & Tragant, 2001), and educational (Hattie, 2009). Seeing as ‘age’ is related to several other factors,
what is needed is “not to call for early programs of any kind, but to adapt programs very thoroughly to the age of the learner” (DeKeyser & Larson-Hall, 2005, p. 101).

2 Teaching English to Young Learners

The development of child to adult is a process, involving several developmental stages, i.e. the cognitive abilities of a 1st grader differ greatly not only from those of an adult, but also from those of a 3rd grader. Drawing both on Piaget’s stages of cognitive development 1936 and Egan’s layers of cognitive development 1988 as well as interviews with early English teachers, Curtain and Dahlberg (2010) describe several differences between younger and older learners. They separate young learners into three groups: primary students (Kindergarten and Grades 1 and 2), intermediate students (Grades 3, 4, and 5), and early adolescent students (Grades 6, 7, and 8). Of interest for the present thesis are the differences between the first two groups, as the two groups studied here fall into these groups. Primary students, according to Curtain and Dahlberg (2010) are mostly still in Piaget’s preoperational stage. Curtain and Dahlberg (2010) claim that children in this stage learn new vocabulary and concept best in pairs of binary opposites. Preferred ways of learning in this stage are through “dramatic play, role-play, and use of story” (Curtain & Dahlberg, 2010, p. 19). Importantly, according to Curtain and Dahlberg (2010), children in this stage have short attention spans, and therefore need to be engaged in a variety of activities. What is more, teaching these children successfully requires structure and regular routines. Intermediate students, which is the group this thesis’ older learners fall into, share some of the characteristics of the primary students, but also show signs of higher cognitive development (Curtain & Dahlberg, 2010). Like the younger learners, these learners like to learn new vocabulary and concepts as binary opposites, but Curtain and Dahlberg (2010) point out that older learners are able to bring “vocabulary and functional chunks” (p. 21) together to form more complex structures. Cognitive maturity over the younger learners can be seen in older learners’ ability to understand cause and effect, work in groups, and approach language learning systematically (Curtain & Dahlberg, 2010).

As for the main differences between Danish Young Learners with start 1st and 3rd grade, Tollan and Beckmann state that the younger learners “can neither read, write, nor sit still” (2014, p. 35, original in Danish). They further discuss that while early and late starters are alike in some points, namely that both groups are initially motivated and want to learn English, late starters soon seem to realize their weaknesses which makes uninhibited participation more difficult. Tollan and Beckmann (2014) further report on successful early Content and Language Integrated Learning in 1st and 2nd grade at a Danish school. The school finds that EFL for Young Learners can be successful, if done in an immersion-like context, specifically by teaching music and arts in English. The study stresses that early English teachers should have an English teacher education, so that they would be able to use English as a medium of instruction and thereby function as a role model. Moreover, this study recommends “team teaching”, i.e. having two English teachers per class, for successful EFL teaching for learners in 1st and 2nd grade.

EFL teachers, then, face the challenges of adapting their classroom practices to the age-related physiological and physical characteristics of the students (Curtain & Dahlberg, 2010; Enever, 2014), as “offering another language at an early age is not

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1See more on who can teach English in Denmark in Chapter 2.
Teaching English to Young Learners

inherently advantageous, but can only be effective if teachers are trained to work with very young children, classes are small enough, the learning material is adequate and sufficient time is allotted in the curriculum” (Edelenbos, Johnstone, & Kubanek, 2006a, p. 14). There are a variety of traditional and alternative methods used in EFL teaching today, ranging from the partially outdated methods Grammar Translation Method, Direct Method, and Audiolingual Method (Spiro, 2013) to the most commonly practiced language teaching approach today, Communicative Language Teaching. Communicative Language Teaching focuses on facilitating communicative competence (Spiro, 2013). Enabling the students to convey meaning in an authentic and appropriate way is the main focus, while grammar is not overtly discussed. Task-based instruction is an approach rooted in Communicative Language Teaching. Tasks, in this context, are meaningful activities in which problems that can be related to the real world are to be solved while learning the communicative language needed to do so (Skehan, 2003). While these methods are well-researched and documented in contexts with adult learners and older children (Pinter & Zandian, 2013), there is little research on good young English learner classroom practices, resulting in a variety of very different approaches being used today (Copland, Garton, & Burns, 2014). Concrete suggestions for classroom practices often come from handbooks for teachers, while research-based evidence, such as Mourão’s (2014) investigation of the benefits of child-initiated play in the classroom, and Carless’ (2007) study on task-based instruction with young EFL learners, are rather rare. The European Commission (Edelenbos et al., 2006a) proposes methods for good practice in early English classroom practices. Among other suggestion, they highlight that tasks and topics in class should be personalized and meaningful, i.e. related to the children’s surroundings. Young learners should receive much language input, especially since one of the goals of early EFL classes is comprehension preceding production. Moreover, teachers should focus on facilitating communicative and usage competence, and provide students with corrective error feedback (Copland et al., 2014).

Early English teaching methods have been investigated to some extent in Denmark, even though the school reform has been passed only recently. Pedersen, Hattesen Balle, and Olsen (2016) observed and video-recorded EFL lessons in four early start classrooms (start in 1st or 2nd grade) over one year. On the basis of these observations, they designed pedagogical experiments to identify the most meaningful ways to use tasks in communicative language teaching for Young Learners. Specifically, they were interested in bridging the gap between simple memorization of new vocabulary items and actually learning how to use them in meaningful communication. Moreover, they wished to design tasks for Young Learners that would enable them to know why they are learning what they are learning (and how this relates to the previous and subsequent tasks), and that would allow them to take ownership of what is being learned. They present several recommendations for meaningful early English classes, based on longitudinal observations and evaluations of the pedagogical experiments. They stress that learning needs to be meaningful for Young Learners, which can be seen in children turning meaningless tasks into their own meaningful activities. They find that meaningfulness can also be created through explicit learning goals2. Meaning, according to Pedersen et al. (2016), can also be created by building on what Young Learners already know, i.e. games, imitation, and stories. What is interesting with regards to the otherwise strong focus on oral language skills in the Danish national Common Objectives (EMU, 2016) is that Pedersen et al. recommend working

---

2I will explain goal-oriented teaching and learning in Denmark in Chapter 2.
Chapter 1. Introduction

not only on speaking and listening, but also on reading and writing. While this goes
against Tollan and Beckmann’s assumption that Young Learners cannot read or write
2014, as far as the empirical evidence presented in Pedersen et al. (2016) is concerned,
reading and writing do seem not only possible, but also meaningful as they enable
Young Learners to take ownership of their learning. Taking the stance that language
learning and language use cannot be separated, Pedersen et al. (2016) stress that the
focus of teaching English to Young Learners should be on enabling the children to
communicate both inside and outside of school.

While there have been previous Danish studies on YL EFL classroom practices, to
my knowledge the present thesis is the largest Danish study on this topic. Against this
background, this thesis is interested in investigating the relationship between class-
room practices and foreign language learning in instructed EFL teaching in Danish
primary school.

3 Research Questions

• Will there be differences between earlier (age 7) and later (age 9) starters of
English language learning in their rate of learning and short-term L2 profi-
ciency (i.e., after 2 years of instruction) with respect to the following language
dimensions: receptive vocabulary, receptive grammar, and receptive phonologi-
cal discrimination?

• What is the role of inside-school quantity and quality of exposure to and use
of English in children’s rate of L2 learning and short-term L2 proficiency? To
what extent is this variable a good predictor of faster rate of learning and higher
level of short-term L2 attainment?

• How is intersubjectivity co-constructed in early English as a Foreign Language
classrooms and how does this turn into learning moments and microgenesis?

4 Structure of this Thesis

This thesis is structured in two parts, and each of these parts is comprised of several
chapters.

The first part is concerned with research questions 1 and 2. Focusing primarily on
the measureable outcomes of instructed foreign language learning, this part comprises
an analysis of the project’s young learners’ receptive vocabulary, receptive grammar,
and receptive phonological discrimination, and an article in which I explore a context-
sensitive scoring procedure for the receptive vocabulary test used in this study.

The second part is concerned with the socio-interactional processes of language
learning in the classroom and aims to answer research question 3. The articles in this
part take the stance that the co-creation of intersubjectivity in interaction is where
language learning happens.

It might seem unusual to combine these fundamentally different methods, and to
structure the parts in this order, i.e. presenting the results of learning before showing
how language is learned in Danish primary schools. However, this order is intentional,
in that it is representative of the Social Turn in Second Language Acquisition (Block,
2003), and hopefully makes clear that “it is as important to investigate what learners
are doing in various learning activities and settings as it is to investigate what they
actually learn in these settings” (Mondada & Pekarek Doehler, 2004, p. 515).
Tying these two parts together is the so-called “glue chapter”, in which I describe the context for this thesis and discuss the two parts. I also tried to combine insights from both methods in Chapters 6 and 10. In Chapter 6 (Part I) I argue for the inclusion of the local social context in traditional SLA assessment, and in Chapter 10 I draw on scores obtained in a receptive grammar test to investigate how this proficiency is related to differentiation practices in the classroom.

Articles

This anthology includes five articles, two of them in the quantitative part, the other three in the qualitative part. The titles, authors, and publication status of the articles are listed below:

Article 1 (Chapter 5)

**Author** Maria Vanessa aus der Wieschen  
**Title** The Development of Danish YLs’ EFL Proficiency  
**Status** not submitted

Article 2 (Chapter 6)

**Author** Maria Vanessa aus der Wieschen  
**Title** Context-sensitive Scoring Procedure for the Receptive Vocabulary Test PPVT-4 For Danish Young Learners of English as a Foreign Language  
**Status** not submitted

Article 3 (Chapter 10)

**Author** Maria Vanessa aus der Wieschen  
**Title** Teaching EFL to Young Learners in Denmark: the case of interactional differentiation  
**Status** submitted

Article 4 (Chapter 11)

**Authors** Maria Vanessa aus der Wieschen, Olcay Sert (Department of Foreign Language Education, Hacettepe University)  
**Title** Divergent Language Choices and Maintenance of Intersubjectivity: The Case of Danish EFL Young Learners  
**Status** submitted

Article 5 (Chapter 12)

**Authors** Maria Vanessa aus der Wieschen, Søren Wind Eskildsen  
**Title** Embodied and occasioned learnables and teachables in early EFL classrooms  
**Status** submitted
Chapter 2

School in Denmark

1 The Danish School System

While it is mandatory for children in Denmark to receive education, the Constitutional Act of Denmark gives the individual child’s parents or guardians the right to decide where the child should receive this education.

§ 76: All children of school age shall be entitled to free instruction in primary schools. Parents or guardians making their own arrangements for their children or wards to receive instruction equivalent to the general primary school standard shall not be obliged to have their children or wards taught in a publicly provided school. (Folketinget, 2013)

As a result, there are two main types of school: public (folkeskoler) and private (frie grundskoler) schools. According to the Danish Ministry of Education, about 81% of school-aged children go to public schools, and about 16% to private schools (UVM, n.d.-a). Unlike in many other countries, private schools are not necessarily more prestigious than public schools, and private school tuition in Denmark is inexpensive and sometimes even free. Private schools are usually smaller than public schools, with averagely around 200 students in private schools and 450 in public schools (UVM, n.d.-a). The major difference between private and public schools is that private schools are based on various pedagogical and religious ideologies that might be very different from the mainstream ideology of public schools (UVM, 2017e). Another difference is that while there is a central schedule for each school year that states how many lessons of which subject public school students are to receive and what they need to learn by when, private schools are free to choose in which grades they offer the individual subjects and with how many hours of instruction (UVM, 2017e). Furthermore, not all private schools are required to offer the centralized school leaving certification which is compulsory at the end of the 9th grade in public schools (UVM, 2017e). However, with regards to the amount of lessons and the final examination, the freedom of private schools is not unlimited in that the education offered in private schools has to be “just as good as” in public schools (UVM, 2017b).

Moreover, Danish teacher education is not mandatory for teachers at private schools. However, regardless of whether they teach at a mainstream or alternative school, all teachers in Denmark are free to choose how they want to teach (“metodefrihed”).

2 Danish Pre-Service and Continuing Teacher Education

In order to become a teacher in Denmark, one has to take a 4-year professional Bachelor’s Degree Program in Education at a University College (UVM, n.d.). Teachers specialize in (two or) three subjects, of which one typically is Danish or maths (UVM,
n.d.). To become an English teacher (“undervisningskompetence”), one has to choose between teaching English to Young Learners (1st–6th grade) or older learners (4th–10th grade) (UFM, 2015). However, it is possible to obtain qualification to teach from 1st to 10th grades, by taking the compulsory modules for teaching English to older learners first and then taking a “young learners” course on top of this (Winther, 2015). Moreover, it is possible for teachers that already have completed their teacher education to become qualified English teachers through continuing education (“kompetencer svarende til undervisningskompetence”), or through experience by teaching English and receiving their respective school’s principal’s approval, possibly with help from a university college (Danmarks Lærerforening, Skolelederforeningen, Børne- og Kulturchefforeningen, & KL, 2014).

3 Classes taught by qualified English teachers

In practice, not all classes in Danish schools are taught by teachers with specialized qualification in the respective subject; in the school year 2015/2016 55.6% of teachers at Danish public schools have taught at least one subject for which they do not have the specialized qualifications (undervisningskompetence eller tilsvarende kompetencer) (UVM, n.d.-b). In the same survey from early 2016, the Danish National Agency for IT and Learning (UVM, n.d.-b) found that only 83.2% of all lessons and 84.2% of English lessons in Danish public schools are taught by teachers with specialized qualification through pre-service or continuing education/experience/school principal’s approval (undervisningskompetence og tilsvarende kompetencer) (UVM, n.d.-b). If we take a closer look at the individual grades we can see a positive relationship between grade and teacher qualification (undervisningskompetence), while only 60.9%, 65.7%, and 71.6% of English lessons in 1st, 2nd, and 3rd grade respectively were taught by specialized English teachers in the school year 2015/2016, the percentage is 93.6%, 94%, and 92.7% for 8th, 9th, and 10th grades (UVM, n.d.-b). The difference between lower and higher grades is much more salient in English than e.g. in Danish or maths (UVM, n.d.-b), which might be due to schools suddenly having to find staff to teach English in 1st-3rd grades following the school reform. Almost one third of the teachers who have taught English in Danish schools in the school year 2015/2016 (3133 out of 11217) did not have specialized qualifications as English teachers (UVM, n.d.-b). In the same period, 2722 (24% of) teachers who did have specialized qualifications for teaching English did not teach English (UVM, n.d.-b).

Through interviews with teachers I found that many teachers who teach English even though they are not qualified for this feel very uncomfortable doing so. Most teachers have — without me specifically having asked about this — expressed that they have very little time to prepare both for teaching English to Young Learners in general, and to prepare the individual lessons. When I arranged dates for classroom observations with unqualified English teachers, three have told me that they are very uncomfortable with me being there due to their very low language competences (self-evaluation), two of them even asked me if I would rather come to visit their German class, as they are much better at German (self-evaluation). What is surprising about this is the high status they give foreign language proficiency with regards to how comfortable they feel at teaching English, while their lack of knowledge of and competences in language-teaching pedagogy is not mentioned as a challenge. These findings are different from other Danish studies of early English teaching, e.g. Søgaard and Andersen (2014), who found that teachers generally have positive attitudes towards teaching English to younger learners, even though they have to spend
time and energy on finding suited teaching materials and planning lessons. However, the difference between the teachers interviewed in their study and the teachers interviewed by me as part of the TYTB project is that the schools in Søgaard and Andersen (2014) voluntarily participated in a pilot study on earlier English before the school reform had come into effect, while the public schools in this thesis had to start teaching early English because of the school reform.

4 The 2014 School Reform

4.1 Common Objectives and teaching instructions

The Danish Ministry of Education has developed national Common Objectives (“Fælles Mål”) for all subjects that all public schools have to orient to (EMU, 2016). The Objectives for English describe the competences, knowledge, and skills students are expected to have acquired at certain points of their education, i.e. by the end of 4th, 7th and 9th grade. The Common Objectives specify three competence fields young learners have to have reached by the end of 4th grade: oral communication, written communication, and culture and society (EMU, 2016). Each of these fields is expressed in knowledge and skill goals. For oral communication, for instance, these goals are summarized under the categories listening, conversation, presentation, focus on language, communication strategies, and learning strategies. These categories are further divided into ‘phases’, which roughly correspond to school years, i.e. there are four phases for young learners until the end of 4th grade. Two things stand out in this list of goals. The first is the clear focus on oral communication; there are 48 goals for this competence, as opposed to 22 for written communication and 20 for culture and society. The second thing that clearly stands out is the way these goals are formulated, namely as can-do statements, “the learner can do” or “the learner knows”(EMU, 2016), i.e. the focus is on goals for the learners, not for the subject.

The curriculum (“læseplan”) also underlines this focus on the learner and on oral communication (EMU, Danmarks læringsportal, 2017a). Teaching English from 1st-4th grade is to be done in much the same way as Edelenbos, Johnstone, and Kebanek (2006b) recommend. More specifically, the recommendations in EMU, Danmarks læringsportal (2017a) are:

- English classes should build on what students know and can do in Danish
- Activities should be mainly oral, and playful
- Students should learn to construct meaning by connecting language and actions
- The topics should cover both facts and fiction
- The medium of instruction should be English
- Teachers should adapt their language to the students’ age
- Teachers should use gestures and body language

4.2 Goal-oriented teaching

The “instructions” (“vejledning”) for the subject English recommend “goal-steered teaching” (“målstyrede undervisning”) as the way to work towards students achieving the objectives (EMU, Danmarks læringsportal, 2017b). This proactive way of teaching is done as an iterative process in five steps (Rasmussen & Rasch-Christensen,
Typically, there are six to ten units with two to four knowledge/skill pairs per school year (Sandahl & Laursen, 2015). The first step before a new unit is for the teacher to break down the knowledge and skills goals from the Common Objectives into smaller goals (“læringsmål”) for one unit. These smaller goals are not described in the Common Objectives, i.e. it is up to the teacher to define these. Next, the teacher conducts a pre-evaluation of where each student and the class on average stands in relation to these goals (Helmke, 2013; Rasmussen & Rasch-Christensen, 2015). The third step is for the teacher to identify signs of learning (“tegn på læring”) that make learning visible for both the students and the teacher. These signs are something “the students do by communicating, demonstrating, or creating” (Sandahl and Laursen (2015, p. 28), my translation). The fourth step is then to teach. As the focus is on the individual student and their goals, differentiation is a prerequisite for teaching (Rasmussen & Rasch-Christensen, 2015). The fifth step in this iterative process is then to evaluate the students’ learning, making use of the previously developed signs of learning (Rasmussen (2015), Sandahl and Laursen (2015).

The school reform of 2014 has a clear focus on objectives/goals (“mål”), as evident in the obligatory Common Objectives (“Fælles Mål”), and the detailed descriptions of goal-steered teaching (“målstyret undervisning”) as the most adequate teaching method to reach these Objectives (EMU, Danmarks læringsportal, 2017b). As a consequence of this, teacher education in Denmark now requires teachers to learn goal-steered teaching (as knowledge and competence goals of their teacher education); as part of the general teacher education (“grundfaglighed”), they have to know that goal-steered teaching is one of the ways to plan teaching, and goal-steered teaching is included as one of the obligatory competences in the individual subjects (UFM, 2015). However, since there is methodological freedom in Denmark, teachers do not have to practice goal-steered teaching, they decide how to work towards the Common Objectives. In that sense, teaching English in Danish primary schools can be described as at least goal-oriented, and preferably goal-steered. I have described goal-steered teaching as a 5-step process, which might have given the impression that these steps are done one after the other. In the next section I present a case study how several of these steps overlap or co-occur.

Classroom displays for goal-oriented teaching

Primary school classrooms look different from classrooms of older learners or adults. I have looked at the use of one specific classroom display over time (aus der Wieschen, 2015). The display in question is a combination of the text of a song called “Today is” and a list of the seven days from Monday to Sunday, which can be seen in Figure 1. The “Today is” song goes:
4. The 2014 School Reform

Figure 1: Classroom display with the title “Days of the week”, the seven days, and the question “What is today?”

Today is [...].
Today is [...].
All day long, all day long.
Yesterday was [...].
Tomorrow will be [...].
Let’s have fun!
Let’s have fun!”

Figure 2: “Today is” sung in January 2015

Figure 2 is a collection of four screenshots from a recording of this classroom singing the “Today is” song in January 2015. Green faces indicate which students appear to look at the display that the teacher is pointing at, red faces mean that it seems as if these students look somewhere else. In a Conversation Analytic study (aus der Wieschen, 2015) I found that the teacher teacher orients to the display as a resource for learning, in that he directs the students’ gaze to the weekdays. All students look at the display most of the time (even though there are a few who are
Chapter 2. School in Denmark

Figure 3: “Today is” sung in May 2015

not looking exactly in the moment the screenshots in 2 were taken), even when the song is sung for a second time right after the first time. The teacher also makes noticeable pauses from singing when pointing, as to direct the students’ attention to him.

The screenshots in Figure 3 are taken from a recording that was made over 4 months after the first recording. The first thing that has noticeably changed between the two lessons is that the class now only sings the song once instead of twice, which is why there are only half as many screenshots in Figure 3. What became apparent in the Conversation Analytic study (aus der Wieschen, 2015) is that the teacher now does not point at the poster constantly anymore, and he does not look at the students all the time, but does things unrelated to the singing (starting up the computer, looking for things in his bag) instead. Furthermore, fewer students look at the display than did in January. In (aus der Wieschen, 2015) I argued that classroom displays can function as a tool for “epistemic status checks” (Sert, 2011, 2013, 2015), as teachers can see which students rely on looking at them.

In terms of the 5-step proactive teaching process, this can be described as follows. The teacher has selected some goals for a unit. I have not asked him which goals these are, but this activity fits nicely into “presentation”, “focus on language”, and “learning strategies”, as the goals of the first phase of these include being able to sing simple songs, imitate common phrases, and learning language by repeating phrases rhythmically. The teacher may have chosen to connect this to learning the days of the week. The most obvious sign of learning, is of course for students to sing the song. Now, since the whole class is singing together, it is difficult to evaluate each individual student. However, we can see in the decrease of the teacher’s pointing and the students’ gaze at the display both what level of help the teacher evaluates them to need, and to what extent students rely on the visual aid or know the song by heart. To this end, the classroom display is a tool for eliciting signs of learning and doing evaluation, and the continuous evaluation and demonstrations of learning are done at the same time.

On a side note, this classroom is a 3rd grade at a private school, i.e. the teacher can choose to follow the Common Objectives and choose to do goal-oriented teaching. The very fact that there are “English” classroom displays in this classroom and that they are being used is surprising. This classroom stands out because it always has a variety of meaningful English displays. These range from handmade turkeys on which the students wrote what they are thankful for around Thanksgiving over self-portraits, most likely something done as part of English class (see Figure 4), to home-made drawings that do not seem to have been made in and for class, which nevertheless are in English, as one student’s handlettered quote “a smile is the best makeup any girl
The 2014 School Reform

Figure 4: Classroom displays made by students

Figure 5: Weekdays and labels for today and tomorrow

can wear”.

The 1st grade taught by the same teacher also has many classroom displays, but they are different. Taking the “Today is” song as an example, the 1st grade classroom has a different and much smaller display (see Figure 5). The difference in size of the two displays is a great example of meaningful classroom displays: 1st graders are still in the process of learning how to read, even in Danish, so a big display to read while singing (as the 3rd grade has) is not meaningful in a 1st grade classroom.

Most classrooms, as I have seen in my visits to the project’s schools, only have Danish or maths displays, and those classrooms that do have English displays rarely use or update them (see Figure 6 for examples), as far as I could tell from my limited visits. I will describe the individual schools in more detail in the next chapter.
Chapter 2. School in Denmark

(a) Colors, handmade

(b) English alphabet

**Figure 6:** Classroom displays made/printed by teachers
Chapter 3

Participants

1 The Schools

In this section I will describe the six schools that participated in the project. I will outline how and why the six schools were selected, and give a brief description of each of the six schools. The names of the schools and classrooms have been anonymized.

1.1 Selection of Schools - Initial, Additional, Exclusion

The school selection process was heavily dependent on finding schools where both the principal and all parents of at least one first grade and one third grade were willing to participate in the study and schools signing to a legally binding contract for the duration of the project. Our initial sample of classrooms consisted of six 1st and six 3rd grades, one each from six public schools in the same city.

At the time of sampling, we did not consider that a major difference between 1st and 3rd grades in public schools is – apart from the age of their students – that 1st graders have (at least) one English lesson a week, while 3rd graders have (at least) two. To ensure a smoother statistical analysis, we added four 1st grades with two weekly lessons, and three 3rd grades with two weekly lessons. These seven classroom are from three private schools, which, however, are not in the same city as the public schools. The reason why we chose private schools is that they are allowed to offer more or fewer lessons than public schools. As not all private schools make use of this right to deviate from official recommendations, we had to expand our search for classrooms to other cities.

Table 1: English lesson per year by school and starting grade

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<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>f1 Halfdan Rasmussen skole</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>f2 Bjarne Reuter skole</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>f3 Thomas Winding skole</td>
<td>30</td>
<td>30</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>f4 Ole Lund Kragelund skole</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>p1 Hanne Kvist realskole</td>
<td>57</td>
<td>57</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>p2 Benny Andersen friskole</td>
<td>28</td>
<td>30</td>
<td>30</td>
<td>60</td>
</tr>
</tbody>
</table>

During the first year, we removed one private and two public schools from our sample, as it turned out that these schools deviated from the principle on the basis of which they were chosen (i.e. public schools offering considerably more or fewer lessons than they are supposed to and the private school offering just as many lessons
Chapter 3. Participants

as public schools). As a result, our final sample consists of four public schools with one first and one third grade each (one of the public schools has two 1st grades) and two private schools, one with two 1st grades, the other one with two 1st and two 3rd grades. All 15 classrooms are beginner classrooms, i.e. they did not have any formal English classes prior to the beginning of data collection. That is, the classrooms that make up our corpus differ in onset age of learning, age, school type, and amount of weekly lessons, but all have in common that they had their first English classes in fall 2014. The names of the schools have been changed to fictional names, and schools have been given a code ID mainly for use in my statistical analysis (f1–f4, p1–2), where ‘f’ stands for folkeskole (public school) and ‘p’ for privatskole (private school). Note that the numbers presented in Table 1 are numbers that were reported by the school, but the actual number of English lessons held may deviate from the reported numbers for various reasons (sickness of teacher, national holidays, other school events on same day as planned English lessons, etc.).

1.2 Profile of Schools – Educational Objectives and Teaching

The six schools are unique each in their own way. In this section I want to give a brief description of the schools based on field notes from my visits there and information that can be found on the schools’ official homepage.

Halfdan Rasmussen skolen (f1)

Halfdan Rasmussen skolen is a public school in the center of one of Denmark’s largest cities. The school is rather large with 600-650 students and two or three parallel classes per year from grades 0 to 9.

Information on Website

Educational Objectives The school has four main educational objectives, which they summarize as: knowledge, communication, active citizenship, and innovation. Knowledge is the central goal here which is supported by the other three. With regards to knowledge, the school wants all students to become as knowledgeable as they possibly can in all subjects. Communication is seen both as a means and a goal, and the school is aware of the fact that its students will have to communicate in many different ways throughout their entire life. Therefore, the school emphasizes training of both oral and written communication skills. By active citizenship the school means that in this globalized world it wants its students to know where they come from, i.e. their cultural, historical, religious, and social background, which is why these topics are dealt with in various subjects and projects. Innovation, to the school, is a way to sustain the students’ creativity, fantasy, and ability to think outside the box, which the school finds to be important in relation to the students’ education, their future work life, and their personal life. To sum up, the school stresses that knowledge is the main aim, but that communication skills, active citizenship, and the ability to think innovatively are just as important, as these will prepare the students for their adult life in a globalized world.

English The school has a department with a contact person for each year to help identify and support students with special educational needs. Apart from having a psychologist to help with learning disabilities, and IT solutions for dyslexic

\footnote{I cannot reference the schools’ websites as this would compromise their anonymity.}
children, the school focuses on making sure no child is left behind in these three subjects: Danish, maths, and English. With regards to English, the school offers short extra lessons for groups of students. What is notable on the website is that while ‘Danish’, ‘maths’, ‘dyslexia’, and ‘psychologist’ each are the names of the heading of the respective short paragraph explaining what exactly the department has to offer with regards to helping students who require additional assistance, the heading for the paragraph about extra English classes is ‘other’.

**Teaching** The school says that lessons have to be planned in a way that is individualized, meaningful for the students, actively includes them, and supports both their academic and social development. The school furthermore defines that good teaching is clear, structured, and varied, fosters curiosity, active participation and engagement, and happens in a safe and supportive environment. Moreover, the school states that teaching evaluations are crucial.

**Bjarne Reuter skolen (f2)**

Bjarne Reuter skolen is a rather large school with 750 students located in the outskirts of one of the biggest cities in Denmark. About 10% of the school’s students visit the center for children with autism spectrum disorder, which is part of the school.

**Information on Website**

**Educational Objectives** The main values of the school are openness, community, well-being, and security. On their website it says that the school’s values are based on the Folkeskole Act (UVM, 2005). Given that Bjarne Reuter skolen has a special autism disorder spectrum center at the school, it is no surprise that one of the main foci of this school is inclusion, and one of the ways they ensure inclusion is by having a pedagogue in every classroom. In general, they wish to help all students develop all of their competences. With regards to the students’ academic development, the school stresses that they use the visible learning approach. There is special focus on helping the students develop social understanding and tolerance so that they can become part of a community. The school also wants to make sure the students know about the existing values and the cultural and historical background. What is interesting here is that while Halfdan Rasmussen skolen formulated this educational objective as helping the students know where they personally come from as individuals, Bjarne Reuter skolen’s formulation seems to assume that there is only one set of values and only one cultural and historical background.

**English** There is no information about early English to be found on the school’s public website.

**Teaching** Teaching takes place in a safe and motivating environment that supports both creative and academic development. Classes should be project-based and experimental. The school uses a combination of traditional paper-based and digital teaching materials, and every classroom has a smartboard. There are clear rules in every classroom.
Chapter 3. Participants

Thomas Winding skolen (f3)

Thomas Winding skolen is a school with 400-450 students located in a small satellite town near one of the largest cities in Denmark.

Information on Website

There is no information about early English, the school's educational objectives, or teaching values on the public website.

Ole Lund Kragelund skolen (f4)

Ole Lund Kragelund skolen is a small school with 200-250 students located in a small satellite town near one of the biggest cities in Denmark.

Information on Website

Educational objectives

The school has three main values on which their educational objectives are based: well-being, academic success, and respecting that all children are individuals. What is noteworthy is that while the other public schools exclusively use the word ‘students’, Ole Lund Kragelund skolen calls the students ‘children’ on their website. Similarly, they stress that teachers and pedagogues are ‘adults’. As adults, they have to form a positive relationship with the students and show them that they like children, as the school sees these relationships between children and adults as a prerequisite for the development of the children’s self-worth. The school stresses that all children are unique, and that one of the school’s missions is to recognize and develop the unique talents and potential the individual children have. The school is a place for children to grow, to develop their knowledge and fantasy, to provide them with knowledge, qualifications, and skills, to teach them responsibility, and help them understand their local, national, and global environment.

English

The school is currently working on trying out different ways for evaluation, such as students evaluating in how far they have achieved their learning goals. The school suggests using e.g. portfolios and logbooks in these four subjects: Danish, maths, nature, and English. This is very interesting, as Danish and maths are regarded the most important subjects in terms of e.g. the hours allocated to these in the Danish curriculum, and adding English to this list reflects that the school finds it to be valuable, or at least more valuable of evaluation than e.g. the other mandatory foreign language, German.

Teaching

Ole Lund Kragelund skolen tries to have all teachers teach only those subjects that they are qualified to teach through their teacher education. Teachers practice differentiated instruction and base their teaching on the many intelligences and the different learning styles each individual child has. Moreover, they focus on the children’s strengths rather than their weaknesses. Good student work is to be presented to the class or even the entire school, success is to be celebrated. Teachers are supposed to use as little time as possible on giving instructions to the whole class, instead, most of the lesson is to be spent with varying activities that as many students as possible participate in. At least half of the teaching time is to be based on cooperative learning and workshops. Moreover, learning and learning goals have to visible and meaningful to the students at any time. What is more, the school says that one of the special things about teaching at this school is that they do many udeskole activities (activities outside of the classroom, e.g. in nature).
1. The Schools

Hanne Kvist realskolen (p1)

Hanne Kvist realskolen with its 500-550 students is a large private school in one of the larger cities of Denmark. While it follows the guidelines for public schools so strictly that it can offer the standard national exams, it still has a specific set of values that make it a private school; Hanne Kvist realskolen describes itself as being based on ‘Christian Danish culture’. Regular reports that evaluate in how far the private school is “just as good as” public schools are made publicly available.

Information on Website

Educational Objectives The school states their primary objectives, apart from teaching, to be Christian Danish and to educate the students to be respectful and tolerant towards other people and their opinions. Moreover, they wish instill a sense of duty in the children and teach them responsibility. The school is a place for learning, but also a place for personal development. All children are to be acknowledged and respected as valuable individuals with their unique character traits and opinions. Teaching tolerance and mutual respect is but one way to socialize the students so they can become members of a community. Hanne Kvist skolen wants their students to get as much as possible out of their education, on an intellectual, social, and emotional level.

English The school has chosen to implement some of the changes that came with the school reform of 2014. Amongst these voluntarily implemented changes is the earlier onset of English classes. However, what makes this school different from public schools is that they have chosen to give more lessons in language classes. As a result, their first grades have two lessons a week while first grades in public schools only have one lesson. The school still has an outdated version of Common Objectives from 2004 on their website. Moreover, they have an outdated subpage on their website devoted to explaining the benefits of lowering the onset of English classes to 3rd grade (from 5th grade). Their arguments at the time were that the students are ready for earlier English lessons as they already know English from their free time and everyday life. They describe the English classes as classes without a course book and state that reading is not a priority, whereas listening and acting is. Activities are supposed to be related to topics the students can relate to such as family or school. The teachers’ job is to create lessons so engaging and fun that the children are motivated to speak English. As children are good at imitating, the school has decided that the medium of instruction should be English, and that there should be a lot of exposure in the form of media made for children in English-speaking countries. The teachers are to encourage the students to guess the meaning of words they don’t understand, and to use gestures or facial expressions in order to communicate if they are not able to say what they want in English. What is more, the school has an English room in which all English teaching is supposed to take place. This is a room decorated with things from or about Great Britain and the USA, and all objects in this room have labels with the English word on it. I describe this room – the “English flat” – in Section 2 below. It is interesting to note that the school has also devoted a subpage to describing the school in English. On this page they describe the educational objectives of the school and explain which subjects are taught in which grades.

Teaching Priding itself in its long history and in being a private school, Hanne Kvist skolen does not have to implement all new trends in pedagogy. However, they
stress that they are very modern in that they implement new teaching methods, use
new tools and place high value on IT. Their teaching is always up-to-date, engaging,
and of high quality.

**Benny Andersen friskolen (p2)**

Benny Andersen friskolen is a large private school with just under 500 students located
in a small (satellite) town located an around half an hour drive away from one of the
largest cities in Denmark. The school voluntarily follows the Common Objectives,
which is being confirmed by reports on a regular basis. These reports are made publicly
available. The schools describes itself as modern, dynamic, and innovative, and as an
at least ‘just as good’ alternative to public schools.

**Information on Website**

**Educational Objectives** Benny Andersen skolen’s main goal is help the stu-
dents become the talented individuals they are, which is why they focus on supporting
the children both in their academic and in their personal development. Another ob-
jective of the school is to prepare the students for their future as members of a society
that is based on freedom and democracy. This is done for instance by teaching stu-
dents to respect boundaries and values – both those of other people and their own.
The school wishes to create a safe, happy, and compassionate environment for the
students to develop their personal, creative, and academic competences. They expect
their students to take responsibility with regards to their academic education, that
is, they expect them to be open and dare to learn new things and to strive to be
academically successful. The school also values creativity, which becomes apparent
in their many school projects and cultural activities throughout the year.

**English** The school has decided to teach English from 1st grade on. This is
done as a 3-year trial, after which they evaluate whether they still want to continue
by comparing the 1st graders’ proficiency after the 3rd grade with the proficiency of
those who started in 3rd grade, also at the end of the 3rd grade. The reason why they
lowered the starting grade is partially because they want to follow the government’s
recommendations, and partially because they have noticed problems with starting in
the 3rd grade. They explicate that while they found all 3rd graders to be motivated,
many 3rd graders do not dare speak English in class which is a big challenge for
the teachers as they strive for active participation of all students. By starting in
1st grade Benny Andersen skolen hopes to increase the number of students actively
participating in class, as they are more likely to dare speak in class. As a result, the
school hopes for better pronunciation and intonation, higher receptive vocabulary
skills, and higher linguistic self-confidence.

**Teaching** There is no publicly available information about the general teaching
methods. With regards to early English, the school only wants actual English teachers
to teach, the medium of instruction is supposed to be mainly English, and the classes
should be oral and playful. The teacher has to look out for signs of motivation, such
as students being curious, striving to learn more, using English words, and being able
to understand English words.
2 English teams

In many schools teachers are organized in teams according to the subjects they teach. In this section, I will report on the efforts of two English teacher teams that specifically created a space for early English teaching and learning. The two schools are the private schools of this project, i.e. Hanne Kvist realskolen and Benny Andersen friskolen.

2.1 “English flat” at Hanne Kvist realskolen

The English team at Hanne Kvist realskolen has created an “English flat”, i.e. a home for early English teaching (see Figures 1 and 2). Teachers can choose to hold classes there or in the classroom, some teachers hold parts of their lesson in the “English flat” and the rest of the lesson in the classroom.

My impression was that the English teachers are very proud of this room, and that the children enjoy being there. The design of the room allows for teachers and students to sit or stand in more constellations than the traditional classroom allows for, where students sit at individual desks, facing the teacher who is in front of the blackboard. Almost every item is this room has a label with the English word for it on it, which seems quite curious in a room for Young Learners, i.e. students who can not yet read everything, and I have not seen these labels used, but that does not mean that they are never used.

2.2 English team room at Benny Andersen friskolen

Benny Andersen friskolen has an entire floor dedicated to staff rooms; this is where the regular staff room for teachers is, as well as a kitchen, meeting rooms, and an English team room. To my knowledge, English is the only subject that has a dedicated team room. From ethnographic observations I learned that the early English teachers have attended a workshop on teaching English to Young Learners, and the teachers continue to develop ideas together in this room. The room has a table for meetings, and communal boxes with teaching materials, sorted by topics (see Figure 3).

The materials include worksheets for teachers to copy, flash cards, realia such as toy food and animals, lyrics to songs, and books to read in class. Everything is neatly organized and color-coded. Another thing that makes this room an “English team” room are English teacher jokes, e.g. a printed version of the “The Italian who went to Malta” story.
Chapter 3. Participants

Figure 1: Everything is labeled in the “English flat”
2. English teams

(a) A seating area where “Paddington Bear” greets the students

(b) A connected bigger area with room for dancing

Figure 2: Two connected rooms in the “English flat”
FIGURE 3: Communal boxes with YL EFL teaching materials
Part I
Chapter 4

Introduction to Part I

1 The Younger, the Better?

“The younger, the better” is the argument commonly used to justify lowering the starting age for learning the first foreign language in school in many countries (KL, 2013). As the phrase “the younger, the better” is commonly used with reference to the Critical Period Hypothesis (Lenneberg, 1967), much research focuses on ultimate attainment. However, rate of learning and socio-affective factors are also common variables when investigating the age factor. As García Lecumberri and Gallardo (2003b) put it: “the CP [(Critical Period)] is not synonymous with the influence of age per se, but it is instead one of the possible aspects of age as a factor” (García Lecumberri & Gallardo, 2003b, p. 116). This chapter reviews some of the studies that have investigated the factors age, exposure to the FL, and individual differences.

1.1 Age

The vast majority of empirical studies on the “age factor” have adopted a quantitative approach, i.e. they investigate the statistical relationship between age and FL learning. To do this, studies often compare two groups, e.g. early and late starters, and measure their language proficiency (over time), using mainly quantitative tests, which are often specifically developed for the studies.

Enever (2011a) reported on results from the longitudinal ELLiE project (Enever, 2011b; ELLiE, 2011). Young learners from Croatia, England, Italy, the Netherlands, Poland, Spain, and Sweden were tested for three years (years 2-4 of FL learning) with regards to their listening, reading, and oral production skills. The longitudinal study found that “[t]he average ELLiE learners have approached A1 level in their oral and aural skills” (Enever, 2011a, p. 142). However, there were large variations in proficiency between individual learners, which may have come from “many factors, such as motivation, the teacher, the school, parents and exposure to the foreign language” (Enever, 2011a, p. 141).

Cenoz (2003) investigated the interaction of age and amount of instruction of English as a third language in the Basque Country. Their study compared three groups of Basque EFL learners, which have received the same amount of instruction (600 hours), but differed in age of acquisition (henceforth AoA) (4, 8, and 11 years). The study made use of a test battery comprised of:

- another story telling task “related to the learners’ class activities” (Cenoz, 2003, p. 83), which differed for the different age groups
- a three-part listening comprehension task
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- a cloze test with 34 blanks
- a three-part reading comprehension/grammar test
- a written letter composition task of maximum 250 words

The study found that age was positively correlated with test scores, i.e. the older the learner, the better the test scores. (Cenoz, 2003) speculates that this advantage for older learners may be related to cognitive maturity and type of input (older learners were taught using more traditional approaches).

Miralpeix (2006) compared the oral and written vocabulary production of two groups of Catalan-Spanish bilingual young learners of EFL. The groups have had the same amount of instructed EFL (726 hours), but differed in their age of onset (8 and 11). This study was part of the “BAF project” (Muñoz, 2006c, 2006b). At the age of testing, the learners of the two groups were on average 16.3 and 17.9 years, respectively. Oral data was collected through an interview, a picture-elicited storytelling task, and a role-play; written data was collected through a composition task and a cloze test. The study found that there were either no differences between the groups (in the role-play) or that the later starters outperformed the earlier starters (in storytelling).

Mora (2006) compared oral fluency of the same two groups of Catalan-Spanish bilingual young learners of EFL as Miralpeix (2006) using the data from the same storytelling task. The study measured fluency using 13 measures, and found differences between early and late starters in 4 of these measures, where late starters outperformed early starters in three of these measures. Mora concluded that “the oral competence of the EFL learners in this study did not benefit from an early start” (Mora, 2006, p. 86).

Together, these studies indicate that an earlier Age of Acquisition might not necessarily better, and that the age factor cannot be meaningfully studied without considering other factors, such as quantity and quality of exposure to the foreign language, and individual learner factors.

1.2 Exposure to the foreign language

Exposure to the foreign language is often studied in terms of quantity, i.e. the time-span over which the foreign language has been learned, or the intensity (e.g. lessons per week) at which English is formally learned.

Álvarez (2006) compare rate and route of acquisition of child and adult Catalan-Spanish bilingual EFL learners (part of the BAF project, Muñoz, 2006b) in terms of oral narrative development, and found that both young and adult foreign language learners transit through 9 stages in oral narrative development. The lowest stage is narratives done in the learner’s L1 instead of L2, followed by stage 2, which is characterized by a minimal morphosyntactic structure, i.e. mainly nominal content words. The stages increase with the level of morphosyntactic skills, and the final stage 9 is the most sophisticated, characterized by learners being able to produce narratives without any assistance, and more complex and varied morphosyntactic skills. These stages “confirm the general developmental pattern summarised in Ellis (1994): silent period, syntactic development, morphological development” (Álvarez, 2006, p. 148). Álvarez (2006) compared three age groups while keeping the number of instructional hours constant. One group was comprised of 90 EFL learners with age of onset 8, another group were 90 EFL learners with age of onset 11, and the third group were 45 EFL learners with age of first exposure as adults (18 or older).
After 200 and 416 hours of instruction, the study found that the older the learner, the higher the stage. However, adults did not seem to improve as much after the first 200 hours as the school-aged groups. The two groups of school-aged learners (AoA 8 and 11) were compared a third time after 726 hours, and the study found that the youngest group’s rate of learning was so high that they almost caught up with the older school-aged learners. The study concluded that “advancing the age of first exposure to the foreign language does not by itself guarantee a higher level of attainment at the end of compulsory schooling. In order to achieve a higher level in foreign language attainment, it would be necessary both to advance the age of first exposure and to increase the amount of exposure” (Álvarez, 2006, p. 153).

Fullana (2006) reported on the oral proficiency tasks of the BAF project (Muñoz, 2006b). Learners differed in onset age (8, 11, 14, and 18+ years) and were tested three times (after 200, 416, and 726 hours of instruction). Oral proficiency was measured through a same-different (AX) discrimination task (Beddor & Gottfried, 1995, cited in Fullana, 2006) and a word imitation task. As for the AX discrimination task, the youngest learners scored lower than the other age groups with regards to both vowel contrasts and consonant contrasts. However, after 726 hours age differences became insignificant for vowel contrasts, and after 416 for consonant contrasts, i.e. the younger learners had caught up. Comparing the Basque young learners to a control group of native speakers of British English, the study finds that the Basque learners do not reach native-like levels. As for the imitation task, neither age of onset nor hours of instruction were conclusive predictors of “accent scores”.

García Lecumberri and Gallardo (2003b) investigated sound perception and pronunciation of Basque-Spanish bilingual EFL young learners in relation to instructed FL exposure. The participants differed in age of onset (4, 8, and 11 years), but each had around 6 years of exposure by the time of the test. As for sound perception, the study used two minimal sound discrimination tasks, one for consonant sounds, one for vowel sounds. The older group scored higher than the two younger groups both in consonant and in vowel discrimination. With regards to pronunciation (i.e. foreign accent and intelligibility), children were asked to do a picture story description task ‘Frog, Where Are You?’ (Mayer et al., 1969). The oldest group (age of onset 11) outperformed the two younger groups (age of onset 4 and 8) as they had a less marked foreign accent and were more intelligible.

Muñoz (2003) investigated communicative oral and auditory skills of Catalan-Spanish bilingual young EFL learners. The study compared two groups that differ in age of onset (8 and 11 years) and intensity of exposure (i.e. lessons per year), but were tested after the same amount of exposure, i.e. after 200 and 416 hours of instructed EFL. After 416 hours, the younger group was the same age as the older group was after 200 hours. The study employed an oral interview and a listening comprehension test. As for productive skills in the interview, the older group outperformed the younger group. With regards to listening comprehension, the older learners seemed to perform better as well, but the differences between the groups were not significant. The study suggests that there might be factors other than age that lead to differences in the measured proficiency, such as L1 proficiency, cognitive maturity and curriculum differences. Muñoz (2006a) investigated the data from Muñoz (2003) further by looking specifically at accuracy orders and rate of acquisition in morphological acquisition. She found that older learners had a faster rate of acquisition and higher accuracy percentages.

García Mayo (2003) investigated the role of length of exposure to the FL on performance in a grammaticality judgement task. The study was executed in the Basque
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Country, and participants were two groups of Basque-Spanish bilinguals learning English as a third language, one group of 30 participants with age of first exposure at 8-9 years, the other group of 30 participants at 11-12 years. Both groups have had the same amount of exposure and type of instruction. Grammaticality judgement performance was tested twice. At the time of the first test, both groups have had 396 hours of instruction, and the younger group was as old as the older group was at onset of exposure. At the time of the second test, both groups have had 594 hours of instruction. The study found that for both groups, “the longer the exposure to the L2, the more native-like L2 performance becomes” and older learners “behave in a more target-like fashion” (García Mayo, 2003, p. 104).

Lasagabaster and Doiz (2003) investigated the written EFL production of three groups of Spanish-Basque bilinguals. The groups have had a similar amount of exposure to the FL, but differed in their starting age, which was 4-5, 8-9, and 11-12 years, respectively. Written production was elicited with a letter composition task and analyzed using both “holistic, quantitative and descriptive evaluating systems” (Lasagabaster & Doiz, 2003, p. 142). As for the descriptive evaluation systems, the study found that different age groups make different errors. Using the holistic and the quantitative evaluation approaches, the oldest learners achieved the highest, and the youngest learners the lowest scores. The study concludes that “those students who are at a more advanced cognitive stage take advantage of the school learning experience in general, and the writing experience in particular” (Lasagabaster & Doiz, 2003, p. 154).

M. R. Torras, Navés, Celaya, and Pérez-Vidal (2006) investigated written EFL proficiency of Catalan-Spanish bilingual young learners of EFL. The participants had different ages of onset (8 and 11) and amounts of instruction at the test times (200, 416, and 716 hours). Written data was elicited using a short composition task and analyzed in terms of fluency, lexical complexity, and grammatical complexity. The results showed that compositions are better after more hours of instruction, and that older learners outperform younger learners in all of these measurements.

Mihaljević Djigunović (2015) reported on a series of studies on Croatian young learners’ FL learning (Mihaljević Djigunović and Vilke (2000), Vilke and Vrhovac (1993a, 1993b), Vrhovac (2001); cited in Mihaljević Djigunović (2015)). This project followed Croatian YLs of English, French, German, and Italian for the first 8 years of primary education, with FL instruction starting in 1st grade. They also followed a control group that was introduced to the FL in the 4th grade. The two groups did not only differ in age of onset, but also hours of instruction. The early starters had 5 weekly lessons in 1st and 2nd grade, 4 in 3rd-4th, and 3 lessons from 5th grade on. The late starters only had 2 weekly lessons in 4th grade and 3 lessons from 5th grade on.

This is different from the research design in e.g. the BAF project (Muñoz, 2006c) and does not allow for the variables age and amount of exposure to be evaluated separately. The cited studies find that by the end of 8th grade, the early starters, who have also had significantly more lessons, outperformed the late starters in “pronunciation, orthography, vocabulary, and reading” (Mihaljević Djigunović, 2015, p. 4) as well as a C-test (see e.g. Klein-Braley, 1985 for a description of C-tests). The older learners on the other hand scored higher in “grammar tests that required explicit knowledge of the grammatical system” (Mihaljević Djigunović, 2015, p. 4).

In a Danish context, Tollan and Beckmann (2014) compared early starters (start in 1st grade) with late starters (start in 3rd grade). They tested these groups cross-sectionally in 4th-6th grade, in each of these grades there were both early and late start learners. However, the groups did not only differ in AoA. The first two years of EFL in the early start classrooms were taught in a CLIL-context (music and arts
1. The Younger, the Better?

were held in English), with two English teachers teaching at the same time (“team teaching”). Tests were conducted to measure the typical four dimensions of language learning: listening, speaking, reading, and writing. The study finds that there is an advantage for the early starters; they are said to have gained one year by starting two years earlier, and their receptive skills are significantly higher than the late starters’ (Tollan & Beckmann, 2014).

while the studies reviewed in the previous section pointed at earlier not necessarily being better, some of the studies reviewed in this section point at the conditions under which earlier can potentially be better, namely when early starters have many weekly lessons (Mihaljević Djigunović, 2015; Tollan & Beckmann, 2014). However, when given more hours of instruction, older learners can perform better as well (M. R. Torras et al., 2006). Keeping amount and intensity of exposure to the FL equal, a few studies have shown that younger starters can catch up with older starters (Fullana, 2006; Álvarez, 2006), but most studies find older starters to outperform younger ones (García Mayo, 2003; Lasagabaster & Doiz, 2003; García Lecumberri & Gallardo, 2003b; Muñoz, 2003, 2006a; M. R. Torras et al., 2006).

1.3 Individual Differences

The studies reviewed above often ascribe differences between groups to not only age and quantity and quality of exposure to the FL in school, but also to individual differences. These differences between learners include attitudes (of the learners, their parents, and their teachers) towards the FL, motivation, out-of-school exposure, and learning strategies. While I do not measure individual differences in this thesis, it is important to mention them here, as they will help put the results of Chapters 5 and 6 into perspective. The two other PhD projects in the TYTB project investigate some of these factors (Hannibal Jensen, forthc.-a; Fenyvesi, forthc.).

Basca and Csíkos (2016) investigated the role of individual differences, i.e. “language learning aptitude, motivation, attitudes, the use of listening strategies, beliefs about language learning and listening anxiety” (Basca & Csíkos, 2016, p. 263), in the development of listening comprehension of 150 Hungarian young learners (grades 5 and 6). 5-point likert-scale questionnaires were used to measure individual factors, and several tests were used to measure language aptitude and listening comprehension. The study found interaction effects between individual factors, and found language aptitude and parents’ education to be the strongest predictors of listening comprehension, which is in line with other research cited in this study (Csapó & Nikolov, 2009; Kiss & Nikolov, 2005).

Cenoz (2003) investigated differences in attitudes and motivation of Basque young learners (AoA 4, 8, and 11) after 600 hours of instruction in English as a third language. The study used an attitude questionnaire that asked about the young learners attitudes towards Basque, English, and Spanish, and a motivation questionnaire that investigated the young learners’ “desire to learn the language, effort and attitudes towards learning the language” (Cenoz, 2003, p. 84). The study found that “younger learners tend to present significantly more positive attitudes and are more motivated than older learners” (Cenoz, 2003, p. 90) after the same amount of instruction. Cenoz (2003) argues that this may be related to type of input and teaching methods, while younger learner classrooms are oral-based and employ drama and storytelling, the classrooms of older learners tend to focus on more traditional grammar and vocabulary learning.

Mihaljević Djigunović and Lopriore (2011) reported on the individual learner differences that were investigated over four years as part of the ELLiE project (Enever,
2011b; ELLiE, 2011), using smiley questionnaires and oral interviews. Young learners in this study came from Croatia, England, Italy, the Netherlands, Poland, Spain, and Sweden. The study finds that while young learners generally had positive feelings about the foreign language, as time progressed some students’ attitudes became more negative. Relating individual differences to proficiency, the study finds that “[s]ignificant differences were established in language achievements between those YLs that started with more positive attitudes to FLL, higher motivation and a more positive self-concept, and those with a less favourable profile” (Mihaljević Djigunović & Lopriore, 2011, p. 59). Also reporting on individual differences of learners in the ELLiE project, Muñoz and Lindgren (2011) finds that both out-of-school exposure (subtitled tv and movies) and parents’ knowledge and professional use of the FL play a significant role in young learners’ FL achievement.

Victori and Tragant (2003) investigated Catalan-Spanish bilingual EFL young learners’ learning strategies. Their research design is both cross-sectional and longitudinal. In a preliminary study, they compare two groups of young learners (both groups aged 12) that differ in amount of instruction (200 hours vs 416 hours). They find no difference in learning strategies between the two groups based on amount of instruction. In another preliminary study, Victori and Tragant held amount of instruction constant but compared learners of different ages, i.e. they compared YL who were 10 and 12 years old after 200 hours of instruction, and YLs of 12 and 14 years after 416 hours of instruction. The study finds that “with only a difference of two years no significant changes in strategy use could be observed” (Victori & Tragant, 2003, p. 187). The focal study reported compares three groups that differ both in age and amount of instruction. Learning strategies were investigated using a questionnaire at two points in time. The study concludes that “as students become older, and consequently more proficient in English, they also become more resourceful language learners” (Victori & Tragant, 2003, p. 204).

Tragant (2006) investigated the relationship between motivation, FL proficiency, age, and amount of instruction. Participants in the study are Catalan-Spanish bilinguals with different ages of first instruction (8, 11, and 18+). The study made use of a questionnaire to assess motivation, as well as several instruments to measure FL competence: a 50 word dictation, a cloze test, a multiple choice grammar test, and a multiple choice oral comprehension test. These were administered after 200, 416, 726, and 800 hours for most age groups. The study found that age of onset is not a predictor of motivation. However, hours of instruction and the learners’ age at time of the investigation are related to motivation. Moreover, the study finds that there is a positive relationship between motivation and FL proficiency. The study suggests that the increase in motivation as learners get older is related to EFL learners becoming more aware of the role of English in the world and their need to learn English (with regards to e.g. traveling or career).

As for individual factors of Danish Young Learners, Søgaard and Andersen (2014) reported on preliminary tendencies they observed through oral language tests and interviews with Danish Young learners (1st and 2nd grade) and their teachers. The study suggested that Danish Young Learners are motivated, and that parental attitudes towards early English is positive. They found that Young Learners in Denmark only have limited English vocabulary knowledge prior to formal English instruction, and that this knowledge is clearly related to the specific extramural activities children do.

Another Danish study confirmed that Young Learners are motivated to learn English and that both teachers and parents have positive attitudes towards early English (Tollan & Beckmann, 2014). However, when comparing early (AoA 1st grade)
and late starters \( \text{(AoA 3}\text{rd grade)} \), Tollan and Beckmann \( (2014) \) found that while both groups are motivated, late starters soon come to realize their weaknesses, which inhibits participation in class. Early starters, on the other hand, seem to enjoy dancing, singing, playing, and imitating the teachers, which are factors the study finds to lead to language learning.

In line with the above study, Fenyvesi, Hansen, and Cadierno \( (2016) \) investigated socio-affective differences between early and late starters in the TYTB-project. Their questionnaire study showed that early starters experience less anxiety related to speaking in class than older learners, especially older girls. Furthermore, they found that younger learners are both more optimistic and more realistic with regards to their own foreign language competences than late starters are. Correlating these measures with language proficiency, Fenyvesi et al. \( (2016) \) found that these factors present a disadvantage for late starters, in that foreign language classroom anxiety, especially with low self-esteem, can influence language learning negatively. However, the study also showed some positive socio-affective factors of older learners. Late starters have a growth mindset to a higher degree, and their motivation seems to be more intrinsic than early learners’, i.e. they do not learn English just to please their parents or teachers.

This last finding sets the scene for another study on Danish Young Learners, also with learners that are in the TYTB-project. In an interview study with “heavy users” of extramural English, i.e. Danish children who use more than 7 weekly hours of English outside of school, Hannibal Jensen \( (\text{forthc.-a}) \) found that these children specifically seek out English-language activities. This, the study found, might be due to English-language media being more up-to-date than similar Danish media (i.e. video games or YouTube videos), and they open up the possibility to participate in cool communities, e.g. online communities where members help each other advance in a video game \( (\text{Hannibal Jensen, forthc.-a}) \). In contrast to Søgaard and Andersen \( (2014) \), Hannibal Jensen \( (\text{forthc.-a}) \) found that Danish Young Learners do know much vocabulary from outside of school, and that they even use some English words in private conversations with their friends. What is more, Hannibal Jensen \( (\text{forthc.-a, 2017}) \) showed that Danish Young Learners use and are exposed to relatively much English outside of school. While the average time spent on extramural English activities did not seem to differ between early and late starters at first sight (around 6 hours/week for both groups on average), a more detailed analysis showed that in both groups boys use significantly more extramural English than girls. What is more, there seemed to be gender differences in terms of what kind of extramural English Danish Young learners use, while girls prefer listening to music and watching television in English, boys mostly play video games, but also watch television, and listen to music, but listen to significantly less music than girls \( (\text{Hannibal Jensen, 2017}) \). The study further investigated how these activities are related to language proficiency, by comparing the time spent on the individual activities to scores obtained in a receptive vocabulary test, and found that especially gaming with (oral and) written English input influences test scores positively \( (\text{Hannibal Jensen, 2017}) \).

The studies reviewed in this section serve to show that when investigating the relationship between age and instructed foreign language learning, research might want to include individual factors, such as attitudes (of the learners, their parents, and their teachers) towards the FL, motivation, out-of-school exposure, and learning strategies as variables. In this thesis I do not investigate these factors but only provide an overview of the role of these factors in Denmark, as they are being investigated by other members of the TYTB-project \( (\text{Fenyvesi, forthc. Fenyvesi et al., 2016; Hannibal Jensen, forthc.-a, 2017}) \).
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2 Assessing Young Learners

The studies reviewed in this chapter employ a variety of tests to measure the FL proficiency of young learners. Researchers in different projects use different tests and evaluate the results differently even when using the same tests. Many of the tests have been developed specifically for one context, but the ELLiE project (Enever, 2011b; ELLiE, 2011; Mihaljević Djigunović, 2015) showed that it is possible and meaningful to use the same test battery across different contexts.

It seems that the use of different tests and thus the limited comparability of YL proficiency and reproduction of studies across contexts may be due to a lack of standardized assessment tools for young learners. While there are several standardized assessments for adult FL learners, these cannot just be used with young learners. Assessment tools for YLs need to be developed that consider “(1) English language learning contexts and language ability, (2) cognitive development, and (3) affective factors” (Wolf & Butler, 2017a, p. 5). Some of these have recently been developed, such as the Primary and Junior versions of the TOEFL (Wolf & Butler, 2017b), the scores of which can be mapped to the Common European Framework of References for Languages (CEFR) (Council of Europe, 2001).

However, Benigno and de Jong (2016) find that the CEFR cannot sufficiently assess the proficiency of young learners. Benigno and de Jong (2016) report on the then ongoing creation of the “Global Scale of English Learning Objectives for Young Learners” (Pearson, 2017), i.e. “CEFR-based functional descriptors ranging from below A1 to high B1 which are tailored to the linguistic and communicative needs of young learners aged 6–14” (Benigno & de Jong, 2016, p. 43). The scale consists of 120 learning objectives for young learners aged 6–14 – 30 each for speaking, listening, reading, and writing – ranked by difficulty. They justify the need for such a scale by stating that that the CEFR (Council of Europe, 2001) was developed for (young) adults, i.e. that “the majority of descriptors refer to communicative acts performed by learners who are likely to use the foreign language in the real world”¹ (Benigno & de Jong, 2016, p. 43) and are “therefore less appropriate for describing proficiency of young learners (YL, primary, and lower secondary learners), and particularly of the youngest ones whose life experience is substantially different from that of adults” (Benigno & de Jong, 2016, p. 44). Another reason why there is a need to develop descriptors particularly for YLs is that “many of the communicative acts performed by children at the lower primary level lie at or below A1, but the CEFR contains no descriptors below A1 and only a few at A1” (Benigno & de Jong, 2016, p. 50). Some of the proposed learning objectives below A1 are:

- **Writing:** “Can copy short familiar words presented in standard printed form (below A1 – GSE value 11).” (Benigno & de Jong, 2016, p. 54)

- **Listening:** “Can recognise familiar words in short, clearly articulated utterances, with visual support. (below A1; GSE value 19)” (Benigno & de Jong, 2016, p. 55)

- **Speaking:** “Can use basic informal expressions for greeting and leave-taking, e.g., Hello, Hi, Bye. (below A1; GSE value 11).” (Benigno & de Jong, 2016, p. 55)

¹I find this argument to be highly overgeneralizing. In many contexts, such as Denmark (Hannibål Jensen, 2017, forthcoming) or Sweden (Sundqvist, 2009) young learners use a lot of English in the “real” world, while in other contexts many adults and young adults never get the chance to use their FL outside of school.
3. Proficiency tests used in the TYTB project

The “The younger, the better?” project (Cadierno & Eskildsen, forthc.) uses a variety of tests. All students were given the same tests at different stages of the project, at the beginning of the 1st, 2nd, and 3rd year of instructed FL. The proficiency tests administered to the students were:

- PPVT™-4 Peabody Picture Vocabulary Test, Fourth Edition (Dunn & Dunn, 2007b)
- TROG-2 Test for Reception of Grammar (Bishop, 2003a)
- phonological awareness test
- oral proficiency interview
- picture-based storytelling task
- number learning task (MLAT-E)
- forward and backward digit-span recall (CELF)

This part of my thesis is concerned with the analysis of the first three tests, which measure receptive vocabulary, receptive grammar, and phonological discrimination, respectively. Chapter 5 describes each of these tests in detail.

4 Research Questions

The research questions that the chapters in this part attempt to answer are:

- Will there be differences between earlier (age 7) and later (age 9) starters of English language learning in their rate of learning and short-term L2 proficiency (i.e., after 2 years of instruction) with respect to the following language dimensions: receptive vocabulary, receptive grammar, and receptive phonological discrimination?

- What is the role of inside-school quantity and quality of exposure to and use of English in children’s rate of L2 learning and short-term L2 proficiency? To what extent is this variable a good predictor of faster rate of learning and higher level of short-term L2 attainment?

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2Some of the results have already been published by project members: (Fenyvesi et al., 2016; Hannibal Jensen, 2017)
5 Method

All of the tests used in the present thesis are multiple-choice tests, and which can only meaningfully be scored and analyzed quantitatively. Therefore, this part of my thesis relies on statistics for analysis. Field, Miles, and Field (2012) describe research using quantitative methods to involve several steps, from an initial observation (i.e., a research question), over theory and hypothesis generation, and data collection, to the actual data analysis. The research questions I have identified above are based on an initial observation, namely that there are children starting to learn English at different ages in Denmark, and that this happens in different educational conditions. The theory that comes into play here is that age and school factors empirically been shown to have some kind of influence on foreign language learning. Based on this, I formulate a “null hypothesis” and an “alternative hypothesis” for each question. As for research question 1, my expectation (based on reviewed literature) is that there are differences between early and late starters, and between individual classrooms. This then becomes my “alternative hypothesis”, while the “null hypothesis” is that there are no differences between early and late starters or between individual classrooms. Having a null hypothesis is necessary, because it is impossible to prove that the alternative hypothesis is true, the best-case result I can get from a statistical analysis is that I can reject the null-hypothesis. The last step before the actual data analysis, is collecting data and measuring variables. The data for this thesis were collected as part of the larger project, but I decided which variables to measure and score in order to describe both the age\(^3\) and the school factor. These variables are explained in detail in Chapter 5. The final step is then to do the actual data analysis. Data analysis often starts with an initial graphical exploration, which includes looking at frequency distributions to identify general trends in the data. Hypothesis tests are chosen depending on whether the data are “normally distributed” or not, which is why looking at the frequency distributions is crucial. If the data looks bell-shaped, i.e., when most of the scores are in the center, and the frequency of scores decreases as one goes further away from the center, the data is said to be normally distributed. For example, in a vocabulary test that has a total of 100 points obtainable, if the scores were normally distributed, a score of 50 would be achieved by most test-takers, a score of 40 or 60 by fewer, a score of 20 or 80 by even fewer, and a score of 0 or 100 would almost not be obtained by anyone at all. This distribution would be ideal for most tests, but in reality it is quite unlikely to achieve an exact normal distribution. Considering that two of the tests used in this thesis, the receptive vocabulary and receptive grammar tests, are developed for L1 English speakers of all ages and questions are designed to become increasingly difficult as the test progresses, it is to be expected that the scores are going to be positively skewed, i.e., that the peak of the frequency distribution curve will be around the lowest scores, rather than in the middle of the curve. It is important to test the frequency distribution for each individual tests’ scores, before choosing the hypothesis tests, as tests (which are basically just a mathematical formula) have different assumptions, including assumptions of how normally distributed the data are, that need to be met. To this end, there is no one-size-fits-all statistical test, the appropriate test needs to be selected with regards to both the hypotheses and the actual empirical data. The goal of the hypothesis test is to reject the null hypothesis; in this thesis I want to reject the null hypothesis that states that there will be no differences between the age groups, and I want to reject the null hypothesis that states that school factors

\(^3\)The “age factor” is the central concern of the TYTB project, but needs to be addressed in my thesis as well.
do not play a role in (i.e. are not predictors of) short-term L2 proficiency and rate of learning. This rejection is done through a hypothesis test and determining what the chances of obtaining the computed (or a more extreme) test statistic are, under the condition that the null hypothesis is correct. This chance or probability is expressed in a p-value. Research fields have different critical p-values, i.e. the value at which one decides whether to reject the null-hypothesis or not, but a value of 0.05 is the de facto standard in most fields. In this thesis, any p-value under 0.05, i.e. at most 0.04999, will be considered significant. In other words, this means that I am willing to accept a 5% chance that I might reject a null-hypothesis even though it is true, i.e., make a so-called Type I error (“false positive”). Now, one could lower the critical p-value to e.g. 0.01, resulting in a much lower chance (1%) of committing a Type I error. However, this is usually not done, because this might lead to a Type II error, which means that I would lack the statistical power to reject a false null-hypothesis (“false negative”). Levshina (2015, p. 13) notes that “most linguists and other researchers use the 0.05 level as a trade-off, and one should have very good reasons for changing it”.

The statistical tests for analysis I use are multiple linear regression and Tukey multiple comparisons of means. Linear regression is method for modeling the relationship between a dependent variable (or outcome variable) with one or more independent (or predictor) variables. In other words, I investigate whether I can predict the value of one variable on the basis of one or several others. Tukey multiple comparison of means is employed when the regression analysis shows differences between groups, e.g. that “name of classroom” might be a predictor of test scores, and I want to know between which pairs (i.e., in this case between which classrooms) there are significant differences.

6 Structure of Part I

This Part comprises this introductory chapter, two articles (Chapters 5 and 6), and a discussion and conclusion (Chapter 7).
Chapter 5

The Development of Danish YLs’ EFL Proficiency

Maria Vanessa aus der Wieschen

Abstract

This study investigates the role of starting age, gender, as well as inside-school quantity and quality of exposure to and use of English in Danish Young EFL Learner’s attainment and rate of short-term L2 phonetic discrimination skills and receptive vocabulary and grammar knowledge. Participants are around 400 Danish children in two groups, early starters (start of EFL lessons in 1st grade) and late starters (start of EFL lessons in 3rd grade). L2 proficiency is measured once a year for the first three years of instructed EFL using three tests, PPVT-4 (L. M. Dunn & Dunn, 2007), TROG-2 ((Bishop, 2003), and a phonetic discrimination test. The study finds that late starters have an advantage over early starters in all three measures. Late starters’ rate of learning is higher than early starters’ with regards to receptive grammar, and there are no differences in rate of learning between the two groups for the other two tests. Boys have higher scores and rates of learning with regards to receptive vocabulary and grammar, but not phonological discrimination, where there are no gender differences. Inside-school quantity and quality of exposure to and use of English was measured through three variables: English lessons per year, school type (public or private), and name of classroom. Private school students score higher than public school students in receptive grammar knowledge and phonetic discrimination. An increase in English lessons (two weekly lessons instead of one) lead to slightly higher receptive grammar scores. There are almost no differences between individual classrooms on the same grade level. No effects are found for receptive vocabulary. The study concludes that inside-school factors play only a very small role in differences between Danish Young Learners’ EFL proficiency test scores, which might be linked to out-of-school exposure to and use of English or socio-affective factors.

1 Introduction

With many countries lowering the onset age for foreign language learning in school (European Commission, n.d.), mainly based on the theoretical assumption “the-younger, the better”, the need for empirical research on the outcomes of lowering the starting age is clear. What is meant by “better” in many studies is either ultimate/short-term attainment or rate of learning. Studies have consistently shown higher (initial) rates of learning for older learners (Álvarez, 2006; Muñoz, 2006a), research on younger learners eventually “catching up” with the older learners is rare
Chapter 5. The Development of Danish YLs’ EFL Proficiency

With regards to proficiency, holding hours of instruction constant, older learners outperform younger learners (Cenoz, 2003; Miralpeix, 2006; Mora, 2006; García Lecumberri & Gallardo, 2003b; Muñoz, 2003, 2006a; García Mayo, 2003; Lasagabaster & Doiz, 2003; M.-C. Torras, 2005). This leads researchers to conclude that

advancing the age of first exposure to the foreign language does not by itself guarantee a higher level of attainment at the end of compulsory schooling. In order to achieve a higher level in foreign language attainment, it would be necessary both to advance the age of first exposure and to increase the amount of exposure (Álvarez, 2006, p. 153).

Mihaljević Djigunović (2015) reported on just such a study and found early starters to outperform later starters when given more instruction, but even in this context, older learners scored higher in tasks that required explicit grammatical knowledge. Denmark has recently lowered the starting grade for the first foreign language (English) in school from 3rd to 1st grade (EMU, 2016). To investigate the effects of this reform, the “The younger, the better?”-project (Cadierno and Eskildsen (forthc.); henceforth TYTB) has conducted a longitudinal study comparing two groups of Danish primary school students: early starters, who learn English from 1st grade on (aged 7), and late starters, who learn English from 3rd grade on (age 9), because they were already in 3rd grade by the time the amendment came into effect.

In this section I will report and discuss the administration and results of three proficiency tests: PPVT-4, TROG-2, and PHON.

The research questions for this article are:

1. What is the role of inside-school quantity and quality of exposure to and use of English in children’s attainment and rate of short-term L2 phonetic discrimination skills and receptive vocabulary and grammar knowledge?

2. What is the role of starting age in children’s attainment and rate of short-term L2 phonetic discrimination skills and receptive vocabulary and grammar knowledge?

3. What is the role of gender in children’s attainment and rate of short-term L2 phonetic discrimination skills and receptive vocabulary and grammar knowledge?

1.1 PPVT-4

Standardized language proficiency tests such as the Peabody Picture Vocabulary Test, Fourth Edition (henceforth PPVT-4) developed by L. M. Dunn and Dunn (2007) offer a reliable and ready-to-use solution to not only assess the language of an individual or group, but also to track language development over time. Even though the PPVT-4 has been developed for clinical use such as for speech-language pathologists, researchers have also used the test to assess the language proficiency of young English as a Foreign Language (EFL) learners from various countries, such as China (Sun, Steinkrauss, Wieling, & de Bot, 2016), the Netherlands (Lobo, 2013), and Norway (Dahl & Vulchanova, 2014).

The PPVT-4 measures the receptive Standard American English vocabulary of children ages 2.6 and up as well as adults. The test is developed for individual administration and consists of two parallel forms (Form A and Form B). Form A,
which is the form used in the present study\(^1\), consists in a list of 228 increasingly difficult stimulus words in 19 12-item sets, and a page with four pictures for each stimulus word, whereof only one picture represents the spoken word. To describe the procedure briefly, the examiner says a stimulus word, after which the examinee points at one of four pictures. This is repeated until the examinee has made a certain number of errors in one of the 19 item sets, after which the test ends, as it can be assumed that the test-taker will not know the vocabulary in the succeeding, more difficult, item set.

1.2 TROG-2

The test for reception of grammar (henceforth TROG-2) developed by Bishop (2003) evaluates an examinee’s ability to understand grammatical contrasts in English. Like the PPVT-4, the TROG-4 is administered by providing the individual examinee with an audio stimulus and having them point at one of four pictures; however, instead of single words, the stimuli in the TROG-2 are grammatical sentences. There are four stimuli each for a total of 20 grammatical contrasts, and the contrasts are presented in order of difficulty as normed with British children (Bishop, 2003).

1.3 PHON

The members of the TYTB-project developed a minimal pair discrimination test specifically for Danish learners of English. That is, the test assesses the examinees’ ability to discriminate between some phonetic contrasts in English that do not exist in Danish. The test consists of seven blocks with one phonetic contrast each (see table 1) and a training block with the contrast ‘fish – baby’ (compare the actual test items in Table 1). Each block is made up of four pairs, of which two are minimal pairs, and two are ‘false alarms’ i.e. the same word is repeated. The examinees listen to two words, which could either be the same or a minimal pair, and have to decide whether they hear the same word twice or whether they hear two different words. The stimuli were pre-recorded. To ensure that the sounds would be produced correctly, they were pre-recorded by a native speaker of American English, rather than by a native speaker of Danish as we have done in PPVT-4 and TROG-2.

The minimal pairs are:

<table>
<thead>
<tr>
<th>minimal pairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. three – free /θri:/ – /ˈfriː:/</td>
</tr>
<tr>
<td>2. sink – think /sɪŋk/ – /θŋk/</td>
</tr>
<tr>
<td>3. D’s – these /diːz/ – /ˈdiːz/</td>
</tr>
<tr>
<td>4. sue – zoo /suː/ – /ˈzuː:/</td>
</tr>
<tr>
<td>5. eyes – ice /aɪz/ – /ˈaɪs/</td>
</tr>
<tr>
<td>6. lock – luck /lɑːk/ (AmE) – /lɑːk/</td>
</tr>
<tr>
<td>7. lock – log /lɑːk/ (AmE) – /lɑːɡ/ (AmE)</td>
</tr>
</tbody>
</table>

Table 1: Minimal pairs used in the phoneme discrimination task.

\(^1\)I do not include the results from Form B in this study, since I cannot confirm that Form A and Form B are truly parallel. Dahl and Vulchanova (2014) have used both Form A and Form B at the same time and found that this led to a more realistic score and reduced outliers.
Chapter 5. The Development of Danish YLs’ EFL Proficiency

2 Method

In this section I will outline the methods, i.e. when, how, and to whom the three tests were administered.

2.1 Test times

There were three test periods in the TYTB project. One in fall/winter 2014/2015 (“pretest”), i.e. at the beginning of the participating children’s first year of English, another test period was in fall/winter 2015/2016 (“posttest 1”), and the last one in fall/winter 2016/2017 (“posttest 2”).

The three tests this chapter looks into were administered two or three times each (see Table 2). This means that the development of receptive vocabulary and grammar can be traced from the beginning of the first year to the beginning of the third year, and the development of phonological awareness from the beginning of the second to the beginning of the third year.

Table 2: Proficiency tests administered in the three test periods.

<table>
<thead>
<tr>
<th>test administered</th>
<th>pretest</th>
<th>posttest 1</th>
<th>posttest 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPVT-4 Form A</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>PPVT-4 Form B*</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>TROG-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PHON</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*Form B is not used in this chapter, as parallel forms reliability could not be confirmed for use with EFL learners.

2.2 Participants

Initially, 20 classrooms (11 with start of EFL lessons in 1st grade, 9 with start of EFL lessons in 3rd grade) participated in the study (see Table 3). Five classrooms (107 students) did not participate in the following posttests, and some individual students have left the remaining classrooms, which is why there are fewer participants in the posttests than in the pretest. There is a roughly equal distribution of girls and boys in every classroom and age group. As this chapter looks at the development over time, classrooms that left the project after the pretest are not included in the study.

Table 3: Participating classrooms in the three test periods, by starting grade and school type.

<table>
<thead>
<tr>
<th>Classrooms</th>
<th>pretest</th>
<th>posttest 1</th>
<th>posttest 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st grade (early start) public school</td>
<td>7</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>private school</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3rd grade (late start) public school</td>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>private school</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

The tests were administered by researchers and student helpers of the TYTB project. Prior to testing, all researchers and student helpers have attended a training seminar for the tests used in the project.
### Table 4: Participating students in the three test periods, by starting grade and gender.

<table>
<thead>
<tr>
<th></th>
<th>Students</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pretest</td>
<td>posttest 1</td>
<td>posttest 2</td>
</tr>
<tr>
<td>1st grade (early start)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>girls</td>
<td>104</td>
<td>80</td>
<td>78</td>
</tr>
<tr>
<td>boys</td>
<td>109</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>total</td>
<td>213</td>
<td>165</td>
<td>163</td>
</tr>
<tr>
<td>3rd grade (late start)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>girls</td>
<td>90</td>
<td>58</td>
<td>56</td>
</tr>
<tr>
<td>boys</td>
<td>95</td>
<td>54</td>
<td>45</td>
</tr>
<tr>
<td>total</td>
<td>185</td>
<td>112</td>
<td>101</td>
</tr>
</tbody>
</table>

#### 2.3 Ethical Considerations

Consent from the schools and the participating childrens’ parents was given prior to testing. Although the tests were scored on paper and had the participants’ names on them, these sheets were locked away safely after each test period. The scoring sheets have been digitized, in this process the participants’ and school’s names have been replaced with ID numbers. Only researchers and student helpers of the TYTB project can identify individual participants’ scores. Individual scores have not been shared with students, parents, teachers, schools, or anyone else outside of the project.

#### 2.4 PPVT-4 Administration Procedure

The test administration procedure is largely based on the official instructions that come with the PPVT-4 manual (D. M. Dunn & Dunn, 2007), with two exceptions. First, as none of the researchers involved in this study are native speakers of American English and differ both with regards to nativelikeness of their pronunciation and their L1, we decided to have a native speaker of Danish audio-record the stimulus words. The reason why we selected a non-native speaker of English for this purpose is that the English teachers of the participants in our study are non-native speakers as well, and we wanted to present the children with stimuli in a variety of English that they are used to, i.e. English as spoken by a native speaker of Danish. Moreover, studies have shown possible correlations between examiner voice and examinee test performance (Lyberg-Åhlander, Haake, Brännström, Schötz, & Sahlén, 2015), which is a factor we do not have to consider in our study. Second, rather than beginning with the start item recommended for a certain age, we started with the very first item in the test, as the recommended start items are normed for native speakers of English. The task was instructed in Danish and examinees were given positive feedback (as recommended in the PPVT-4 manual (D. M. Dunn & Dunn, 2007) in Danish. The form used in both the pretest and posttest 2 is Form A.

#### 2.5 TROG-2 Administration Procedure

We followed the official TROG-2 instructions (Bishop, 2003) with the exception of using pre-recorded test sentences spoken by a native speaker of Danish. Task instructions and positive feedback were given in Danish. First, instructions were given in Danish, and a test question was given to ensure task understanding. Then, the examiner played one pre-recorded audio stimulus at a time, allowing time for the examinee to point at one of four pictures of the multiple-choice test in between (and allowing the examinee to ask for the stimulus to be repeated up to three times). During the
administration, the examiner kept track of which questions were answered correctly, using the official TROG-2 scoring sheet. All examinees complete at least the first five blocks consisting of four items each. For each block passed (all four items correct), the examinee was asked to answer the five blocks that follow the passed block. Using this procedure, completed at least 5 and up to 20 blocks. Participants were not aware that the test would end after five consecutive blocks are failed (i.e. at least one incorrect answer in each block). Since one year passed between each of the administrations, some of the problems with test-retesting were prevented. Moreover, gain scores (posttest score minus pretest score) are easily calculated using the same form.

2.6 PHON Administration Procedure

The test was administered individually. A researcher or student helper explained the test to the examinee. Then, the test block was administered. In this test block, examinees heard the contrasts ‘fish – baby’ and ‘baby – fish’ and had to tell the examiner whether the words sounded the same or different from each other. After the test block was passed and the rules were clear, the examiner played the pre-recorded contrasts one by one, leaving time for the examinee to decide whether the two words were the same or different between each pair. Each pair was presented four times of which two were true minimal pairs and two ‘false alarms’, with the four items making up one ‘block’. For instance, the first block is:

1. free – free (‘false alarm’)
2. three – free (‘minimal pair’)
3. three – three (‘false alarm’)
4. free – three (‘minimal pair’)

The order of false alarms and minimal pairs differs in individual blocks, e.g. some blocks start with two minimal pairs followed by two false alarms or the other way around.

Feedback was only given in the form of encouragement, but not in a way that would reveal whether the examinee passed or failed an item. All 28 stimuli were played, regardless of how many items were passed.

3 Analysis

In this section I will outline how the three tests were scored, what the variables for the analyses were, and how the tests have been analyzed.

3.1 PPVT-4 Scoring Procedure

The PPVT-4 offers various ways to score and interpret results. From the Raw Score (sum of all passed items) one can obtain normative scores which can be used to compare the test-taker to a reference group (e.g. age- or grade-based). Another way to score the PPVT-4 is the non-normative Growth Scale Value (GSV) score, which is a conversion of the Raw Score that does not depend on the test-takers age or grade. The normative Standard Scores (normed with reference to age or grade) allow for more equity in assessment than the Raw Score in that they take the test-taker’s age or grade into consideration. For instance, children tested in the fall semester of grade
3. Analysis

1 will obtain a Standard Score of 64 with a raw score of 50, while children in the fall semester of grade 3 will only get a Standard Score of 45 with a raw score of 50. For longitudinal studies however, the Standard Score is not meaningful. A child tested in the fall semester of grade 1 and again in grade 3, both times achieving a Raw Score of 50, will appear to have less vocabulary knowledge at the time of the second test, because their Standard Score is lower. Therefore, the PPVT-4 manual recommends using GSV scores for studies of development over time.

3.2 TROG-2 Scoring Procedure

For the present chapter, two measures were scored.

*TROG blocks passed,* which can have the value 0 or 1 and indicates whether all four items in one block were passed (1) or not (0).

*TROG items passed* can have the value 0 or 1 as well, and is a measurement of how many individual items were passed, regardless of which block they are from.

3.3 PHON Scoring Procedure

For the present chapter, the following measure was scored:

*PHON blocks passed,* which can have the value 0 or 1 and indicates whether all four contrasts in one block were passed (1) or not (0).

3.4 Variables

**Independent Variables**

The independent variables are the same for all three tests.

1. Starting grade (dichotomous variable with two levels: 1 and 3)
2. Amount of English lessons up until the test time (continuous variable from 0-120)
3. School type (dichotomous variable with two levels: public and private)
4. Name of 1st grade classroom (nominal variable with nine levels)
5. Name of 3rd grade classroom (nominal variable with six levels)
6. Gender (dichotomous variable with two levels: F and M)
7. Test time (dichotomous variable with two/three levels: pretest, posttest 1, and posttest 2)

Other studies, e.g. García Lecumberri and Gallardo (2003a), have defined quantity and quality of exposure differently. They measure quantity based on teaching methods, i.e. on a scale from old-fashioned teaching methods to immersion. Quality is measured on a scale from “single-source non-native heavily NL marked pronunciations” to “very diverse, natural and native speech” (García Lecumberri & Gallardo, 2003a, p.118). These measurements were not possible in the present study, as most classrooms have had several teachers, and not all teachers could be observed. However, as it is reasonable to assume that the quantity and quality of exposure to and use of English is more or less the same for every child belonging to an individual classroom, but to some degree different for children belonging to different classrooms, the ‘name’ of the individual classrooms is a reasonable measure of inside-school quality and quantity of exposure to and use of English.

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2Depending on when and how many times the respective test has been administered, see Table 2
Dependent Variables

The dependent variables of the three tests are:

**PPVT-4**  ‘L2 receptive vocabulary knowledge’ is measured through the following dependent variables:

1. PPVT GSV score pretest (continuous variable from 15 to 270)
2. PPVT GSV score posttest 2 (continuous variable from 15 to 270)
3. PPVT GSV gain score (continuous variable from -255 to 255)

The ranges of these variables are derived from the PPVT-4 Manual. The Appendix includes a table to be used to convert raw scores to GSV scores. The lowest possible GSV score for Form A as used in this chapter is 15, the highest is 270, which is why the variables PPVT GSV score pretest and PPVT GSV score posttest can be any number between 15 and 270. As for the PPVT GSV gain score, the range is between -255 and 255, since one can theoretically have a score of 270 in the posttest and 15 in the pretest (15-270=-255), or the other way round (270-15=255).

**TROG-2**  ‘L2 receptive grammar knowledge’ is measured through the following dependent variables:

- TROG-2 blocks with all 4 items passed (ordinal variable from 0 to 20)
- TROG-2 items passed (ordinal variable from 0 to 80)
- TROG-2 blocks gain score (ordinal variable from -20 to 20)
- TROG-2 items gain score (ordinal variable from -80 to 0)

The ranges of these variables are derived from the minimum and maximum scores possible. As for the gain scores, if one had obtained the maximum score of 20 (for blocks) or 80 (for items) in the pretest, but 0 in a posttest, the gain score would be -20 or -80, respectively.

**PHON**  ‘L2 phonetic awareness’ is measured through the following dependent variables:

- PHON blocks passed (ordinal variable from 0 to 7)
- PHON blocks gain score (ordinal variable from -7 to 7)

For all three tests  The participants’ ID number was added as a random factor in analyses with stacked data (repeated measures).

### 3.5 Statistical Tests

All analyses were performed using the open source language and environment for statistical computing *R* (R Core Team, 2013), using the following packages:

- reshape (Wickham, 2007)
- lme4 (Bates, Mächler, Bolker, and Walker, 2015)
• lmerTest (Kuznetsova, Brockhoff, and Christensen, 2015)
• effects (Fox, 2003)
• multcomp (Hothorn, Bretz, and Westfall, 2008)
• MuMIn (Bartoń, 2013)

4 Results

In this section I will present the results of the analyses. The section is divided into four subsections; one subsection each for the results of the individual tests, and one that summarizes the main results of the three tests.

4.1 Results of the PPVT-4

The analysis looks at two types of scores, the PPVT GSV scores obtained in pretest and posttest 2, and the gain scores, i.e. the difference between posttest 2 and the pretest.

PPVT-4 GSV Scores

A multiple linear regression was conducted using the independent variables listed in Section 3.4 and PPVT GSV score (pretest and posttest 2) of all students as dependent variable (see Table 5 for regression coefficients). The analysis of the regression coefficients shows that the classroom factors (amount of English lessons and school type), holding all other variables constant, do not have a significant effect on PPVT GSV scores. Gender and starting grade are good predictors of PPVT GSV scores. Boys have an advantage over girls (+8.8), and late starters score higher than early starters (+19.67). PPVT GSV scores are higher in the posttest than in the pretest (+24.94). The model also tested for differences between individual classrooms, i.e. it compared all classrooms regardless of grade level with each other. There were differences between individual classrooms on different grade levels, but not between any two classrooms on the same grade level. Since the starting grade adds so much to the model, it makes sense that there are differences between classrooms on different levels.

<table>
<thead>
<tr>
<th>PPVT-4 GSV score</th>
<th>all children</th>
<th>early starters</th>
<th>late starters</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>74.51***</td>
<td>76.75***</td>
<td>99.66***</td>
</tr>
<tr>
<td>starting grade (3rd)</td>
<td>19.67***</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>school type (private)</td>
<td>3.0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>English lessons</td>
<td>0.05</td>
<td>0.03</td>
<td>-0.23</td>
</tr>
<tr>
<td>gender (male)</td>
<td>8.8***</td>
<td>6.53*</td>
<td>12.78***</td>
</tr>
<tr>
<td>test time (posttest)</td>
<td>24.94***</td>
<td>26.13***</td>
<td>57.37**</td>
</tr>
</tbody>
</table>

Values are regression coefficients

Significance codes: ‘***’ p<.001 ‘**’ p<.01 ‘*’ p<.05 ‘.’ p<.1

Table 5: Regression coefficients for PPVT GSV scores – all pupils, early starters, and late starters.
Another linear regression was conducted including only the scores of early starters, as this might be able to pick up differences between classes on the same grade level. The variables school type and English lessons were not included in this model, since they did not improve it. See Table 5 for the regression coefficients. Looking only at early starters, boys still have an advantage over girls (+6.53), and the posttest scores are higher than the pretest scores (+26.13). All early start classrooms were compared to each other using Tukey multiple comparisons of means. None of the pairs were significantly different from each other, i.e. there are no differences between individual early start classrooms with regards to PPVT GSV scores. Lastly, the same analysis was conducted for late starters. Late start boys score higher than late start girls (+12.78), and the posttest scores of late starters are significantly higher than their pretest scores (+57.37). As for differences between individual late start classrooms, Tukey multiple comparison of means finds no differences between individual classrooms.

### PPVT-4 GSV Gain Scores

A multiple linear regression was conducted using the independent variables listed in Section 3.4 and PPVT GSV gain score (i.e., the score of the second minus the score of the first test) as dependent variable. As evident in Table 6, amount of English lessons and school type are not significant predictors of PPVT GSV gain score. Boys gain significantly more than girls (+8.2). There is no significant difference between gain scores of late and early starters. However, the four-predictor model was only able to account for 2% of the variance in PPVT GSV gain scores (F(4, 257) = 2.42, p = .049, Adjusted R² = .02). Another analysis was conducted with only the data from early starters. The independent variables school type and English lessons were excluded from the model, since they proved not significant in the previous analysis. The analysis shows that early start boys gain more (+8.08) than early start girls. A Tukey multiple comparisons of means finds no differences between individual early start classrooms. There is no difference in gain scores of late starters, neither considering gender, nor the individual classrooms.

<table>
<thead>
<tr>
<th>PPVT-4 GSV gain score</th>
<th>all children</th>
<th>early starters</th>
<th>late starters</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>26.08***</td>
<td>30.26***</td>
<td>29.02***</td>
</tr>
<tr>
<td>starting grade (3rd)</td>
<td>3.59</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>school type (private)</td>
<td>0.16</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>English lessons</td>
<td>-0.01</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>gender (male)</td>
<td>8.2**</td>
<td>8.08*</td>
<td>6.79</td>
</tr>
</tbody>
</table>

Values are regression coefficients
Significance codes: ‘***’ p < .001 ‘**’ p < .01 ‘*’ p < .05 ‘.’ p < .1

Table 6: Multiple linear regression for PPVT GSV gain scores – all pupils, early starters, and late starters.

### 4.2 Results of the TROG-2

The analysis of results is presented in two parts, one is concerned with the TROG scores (blocks passed and items passed) as such, the other with the gain scores (blocks passed and items passed).
4. Results

TROG-2 blocks

A multiple linear regression was conducted using the independent variables listed in Section 3.4 and TROG-2 blocks (pretest and posttests) of all pupils as dependent variable (see Table 7 for regression coefficients). The analysis of the regression coefficients shows that the classroom factors (amount of English lessons and school type), holding all other variables constant, have a significant effect on TROG-2 blocks passed, with private schools scoring higher (+0.73) than public schools, and the more classes, the higher the score (+0.02). Gender and starting grade are good predictors of TROG scores. Boys have an advantage over girls (+0.38), and late starters score higher than early starters (+2.2). TROG scores are not significantly different in posttest 1, but significantly higher in posttest 2 than in the pretest (+1.96). Another linear regression was conducted with the same variables, except that this time the analysis only includes the scores of early starters (which is why the variable “starting grade” was dropped). As for early starters, test time makes a difference, with each iteration adding more than the previous (+1.02 and +2.97, respectively). There is no gender effect for early starters. With regards to late starters, the later the test, the better the score (+2.38 and +6.29, for posttest 1 and posttest 2, respectively). In contrast to the scores of early starters, late starters’ scores seem to be related to gender, with boys scoring significantly higher (+2.03).

There are no differences between individual classrooms on the same grade level.

<table>
<thead>
<tr>
<th>TROG-2 blocks</th>
<th>all children</th>
<th>early starters</th>
<th>late starters</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>-0.88**</td>
<td>0.02</td>
<td>0.78</td>
</tr>
<tr>
<td>starting grade (3rd)</td>
<td>2.2***</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>school type (private)</td>
<td>0.73*</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>English lessons</td>
<td>0.02***</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>gender (male)</td>
<td>0.83**</td>
<td>-0.05</td>
<td>2.03***</td>
</tr>
<tr>
<td>test time (posttest1)</td>
<td>0.49</td>
<td>1.02***</td>
<td>2.38**</td>
</tr>
<tr>
<td>test time (posttest2)</td>
<td>1.96***</td>
<td>2.97***</td>
<td>6.29**</td>
</tr>
</tbody>
</table>

Values are regression coefficients
Significance codes: ‘***’ p<.001 ‘**’ p<.01 ‘*’ p<.05 ‘.’ p<.1

Table 7: Mixed effects regression for TROG blocks – all pupils, early starters, and late starters.

TROG-2 items

As an alternative score to blocks, a score of all individual passed items was used in this analysis. Note that the wider range (0 – 80 possible points) make numbers in this analysis appear higher than in the analysis above where the range was from 0 – 20.

Using TROG-2 items, the results are similar to the analysis using TROG-2 blocks. The analysis with the data from all pupils regardless of grade, reveals something that the analysis with TROG-2 did not show, namely a significant improvement between pretest and posttest 1 (+5.71).
Chapter 5. The Development of Danish YLs’ EFL Proficiency

<table>
<thead>
<tr>
<th>TROG-2 items</th>
<th>all children</th>
<th>early starters</th>
<th>late starters</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>4.37***</td>
<td>7.83**</td>
<td>14.54***</td>
</tr>
<tr>
<td>starting grade (3rd)</td>
<td>11.17***</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>school type (private)</td>
<td>3.39*</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>English lessons</td>
<td>0.07**</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>gender (male)</td>
<td>3.39*</td>
<td>0.2</td>
<td>7.66***</td>
</tr>
<tr>
<td>test time (posttest1)</td>
<td>5.71***</td>
<td>7.3***</td>
<td>11.39***</td>
</tr>
<tr>
<td>test time (posttest2)</td>
<td>14.08***</td>
<td>17.1***</td>
<td>27.13***</td>
</tr>
</tbody>
</table>

Values are regression coefficients
Significance codes: ‘***’ p < .001 ‘**’ p < .01 ‘*’ p < .05 ‘.’ p < .1

Table 8: Mixed effects regression for TROG items – all pupils, early starters, and late starters.

**TROG-2 blocks – gain score**

With regards to gain scores, late starters have an advantage (+3.26) over early starters, and private school students over those from public schools (+1.17). However, when we look at the data from early and late starters separately, and examine the relationship between individual classes using Tukey multiple comparisons of means, it becomes evident that there is only one pair of classrooms that is significantly different from each other, namely the two early start classrooms p2a–1 and f–3, where p2a–1 is better.

<table>
<thead>
<tr>
<th>TROG-2 blocks gain score</th>
<th>all children</th>
<th>early starters</th>
<th>late starters</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>1.17</td>
<td>2.63***</td>
<td>4.69***</td>
</tr>
<tr>
<td>starting grade (3rd)</td>
<td>3.26***</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>school type (private)</td>
<td>1.17**</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>English lessons</td>
<td>0.01</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>gender (male)</td>
<td>1.44***</td>
<td>0.12</td>
<td>3.36***</td>
</tr>
</tbody>
</table>

Values are regression coefficients
Significance codes: ‘***’ p < .001 ‘**’ p < .01 ‘*’ p < .05 ‘.’ p < .1

Table 9: Multiple linear regression for TROG-2 blocks gain scores – all pupils, early starters, and late starters.

**TROG-2 items – gain score**

This analysis looking at individual TROG-2 items confirms the analysis using TROG-2 blocks. Late starters have an advantage over early starters (+10.1), private schools score higher (+3.56) than public schools, and the amount of English lessons is not significant. There is a gender effect, but only for late starters, where boys score higher (+11.06) than girls. As for differences between individual classrooms, the same pair that has been identified in the above analysis, p2a–1 and f3–1, is significantly different from each other in this analysis as well.
4. Results

### TROG-2 items gain score

<table>
<thead>
<tr>
<th></th>
<th>all children</th>
<th>early starters</th>
<th>late starters</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>10.66**</td>
<td>15.47***</td>
<td>22.98***</td>
</tr>
<tr>
<td>starting grade (3rd)</td>
<td>10.1***</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>school type (private)</td>
<td>3.56*</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>English lessons</td>
<td>0.02</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>gender (male)</td>
<td>6.27***</td>
<td>2.7</td>
<td>11.06***</td>
</tr>
</tbody>
</table>

Values are regression coefficients

Significance codes: ‘***’ p < .001 ‘**’ p < .01 ‘*’ p < .05 ‘.’ p < .1

Table 10: Multiple linear regression for TROG-2 items gain scores – all pupils, early starters, and late starters.

4.3 Results of the PHON

The analysis looks at two types of scores, the PPVT GSV scores obtained in posttest 1 and posttest 2, and the gain scores, i.e. the difference between posttest 2 and the posttest 1.

### PHON blocks

For this analysis, PHON blocks passed was used as dependent variable (see Table 11 for the regression coefficients). The analysis using data from all children shows that late starters have an advantage over early starters (+3.4). Private schools score slightly higher than public schools (+0.33). The posttest has higher scores (+0.69) than the pretest. Amount of English lessons cannot be related to PHON blocks. There is a marginally significant gender effect, i.e. boys score lower than girls (-0.24). When looking at the analysis that only uses data from early or late starters, we can see that this effect is only significant for early starters, but not for late starters, where there are no significant differences between boys and girls. Tukey multiple comparisons of means shows significant differences between two late start classrooms, f3–3 scores higher than f4–3 (+1.18).

<table>
<thead>
<tr>
<th></th>
<th>all children</th>
<th>early starters</th>
<th>late starters</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>3.4***</td>
<td>3.96***</td>
<td>4.43***</td>
</tr>
<tr>
<td>starting grade (3rd)</td>
<td>1.28***</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>school type (private)</td>
<td>0.33*</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>English lessons</td>
<td>.001</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>gender (male)</td>
<td>-0.24.</td>
<td>-0.44**</td>
<td>0.01</td>
</tr>
<tr>
<td>test time (posttest)</td>
<td>0.69***</td>
<td>0.74***</td>
<td>0.35*</td>
</tr>
</tbody>
</table>

Values are regression coefficients

Significance codes: ‘***’ p < .001 ‘**’ p < .01 ‘*’ p < .05 ‘.’ p < .1

Table 11: Mixed effects regression for PHON blocks – all pupils, early starters, and late starters.

---

3 This analysis also shows a marginally significant difference between f4–3 and another classroom, p2b–3. P2b–3’s score is predicted to be 1.08 higher than f4–3’s, p =.053.
The Development of Danish YLs’ EFL Proficiency

5.1 PHON blocks – gain score

<table>
<thead>
<tr>
<th></th>
<th>PHON blocks gain scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>all children</td>
</tr>
<tr>
<td>(Intercept)</td>
<td>1.23**</td>
</tr>
<tr>
<td>starting grade (3rd)</td>
<td>-0.28</td>
</tr>
<tr>
<td>school type (private)</td>
<td>-0.05</td>
</tr>
<tr>
<td>English lessons</td>
<td>-0.004</td>
</tr>
<tr>
<td>gender (male)</td>
<td>-0.17</td>
</tr>
</tbody>
</table>

Values are regression coefficients
Significance codes: ‘***’ p < .001 ‘**’ p < .01 ‘*’ p < .05 ‘.’ p < .1

Table 12: Mixed effects regression for PHON blocks gain scores – all pupils, early starters, and late starters.

The model did not find any of the four independent variables to be predictors of phonological discrimination skills. There was no difference between individual classrooms.

4.4 Summary of Results

In this section, I sum up the results of the previous sections. There is a table for each of the tests (Tables 13 to 16). These tables only report on whether a given variable was a predictor of a given test score or not, i.e. they do not specify how significant the relationships are in terms of their p-value. Non-significant relationships are labeled “ns” in the tables.

**PPVT-4**

Table 13: Summary of PPVT-4 analyses.

<table>
<thead>
<tr>
<th></th>
<th>score/ gain score</th>
</tr>
</thead>
<tbody>
<tr>
<td>starting grade 3rd</td>
<td>3rd scores higher</td>
</tr>
<tr>
<td>English lessons</td>
<td>ns</td>
</tr>
<tr>
<td>school type</td>
<td>ns</td>
</tr>
<tr>
<td>classroom name (1st)</td>
<td>ns</td>
</tr>
<tr>
<td>classroom name (3rd)</td>
<td>ns</td>
</tr>
<tr>
<td>gender</td>
<td>boys score higher^4</td>
</tr>
<tr>
<td>test time</td>
<td>posttest 2 higher than pretest^6</td>
</tr>
<tr>
<td></td>
<td>boys gain more^5</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>
TROG-2 blocks

Table 14: Summary of TROG-2 blocks analyses.

<table>
<thead>
<tr>
<th></th>
<th>score</th>
<th>gain score</th>
</tr>
</thead>
<tbody>
<tr>
<td>starting grade</td>
<td>3rd scores higher</td>
<td>3rd gains more</td>
</tr>
<tr>
<td>English lessons</td>
<td>more lessons slightly higher scores</td>
<td>ns</td>
</tr>
<tr>
<td>school type</td>
<td>private schools score higher</td>
<td>private schools gain more</td>
</tr>
<tr>
<td>classroom name (1st)</td>
<td>ns</td>
<td>p2a–1 gains more than f3–1</td>
</tr>
<tr>
<td>classroom name (3rd)</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>gender</td>
<td>boys score higher</td>
<td>boys gain more</td>
</tr>
<tr>
<td>test time</td>
<td>posttest 2 (not posttest 1)</td>
<td>is higher than pretest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>

TROG-2 items

Table 15: Summary of TROG-2 items analyses.

<table>
<thead>
<tr>
<th></th>
<th>score</th>
<th>gain score</th>
</tr>
</thead>
<tbody>
<tr>
<td>starting grade</td>
<td>3rd scores higher</td>
<td>3rd gains more</td>
</tr>
<tr>
<td>English lessons</td>
<td>more lessons mean higher scores</td>
<td>ns</td>
</tr>
<tr>
<td>school type</td>
<td>private schools score higher</td>
<td>private schools gain more</td>
</tr>
<tr>
<td>classroom name (1st)</td>
<td>ns</td>
<td>p2a–1 gains more than f3–1</td>
</tr>
<tr>
<td>classroom name (3rd)</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>gender</td>
<td>boys score higher</td>
<td>boys gain more</td>
</tr>
<tr>
<td>test time</td>
<td>posttest 2 and not posttest 1 are higher than pretest</td>
<td>N/A</td>
</tr>
</tbody>
</table>

PHON

Table 16: Summary of PHON analyses.

<table>
<thead>
<tr>
<th></th>
<th>score</th>
<th>gain score</th>
</tr>
</thead>
<tbody>
<tr>
<td>starting grade</td>
<td>3rd scores higher</td>
<td>ns</td>
</tr>
<tr>
<td>English lessons</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>school type</td>
<td>private schools score higher</td>
<td>ns</td>
</tr>
<tr>
<td>classroom name (1st)</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>classroom name (3rd)</td>
<td>f3–3 higher than f4–3</td>
<td>ns</td>
</tr>
<tr>
<td>gender</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>test time</td>
<td>posttest 2 higher than posttest 1</td>
<td>N/A</td>
</tr>
</tbody>
</table>

5 Discussion and Conclusion

In this section I will summarize the previous sections, answer the research questions, and explore implications of the results.

This chapter reported on the administration, scoring, and results of three proficiency tests measuring receptive vocabulary (PPVT-4), receptive grammar (TROG-2), and phonetic discrimination (PHON). Children participating in the TYTB project
were given multiple choice proficiency tests at three points in time, at the beginning of their respective first, second, and third year of learning English. Multiple regression was used to identify which factors are predictors of test scores. The research questions for this chapter were:

1. What is the role of *inside-school quantity and quality of exposure to and use of English* in children’s attainment and rate of short-term L2 phonetic discrimination skills and receptive vocabulary and grammar knowledge?

2. What is the role of *starting age* in children’s attainment and rate of learning of short-term L2 phonetic discrimination skills and receptive vocabulary and grammar knowledge?

3. What is the role of *gender* in children’s attainment and rate of short-term L2 phonetic discrimination skills and receptive vocabulary and grammar knowledge?

**5.1 RQ1 – inside-school quantity and quality of exposure to and use of English**

Inside-school quantity and quality of exposure to and use of English was measured through three variables: English lessons up until the test time, school type, and name of classroom.

**English lessons** is not a predictor of receptive vocabulary or phonetic discrimination. It is a predictor of receptive grammar, but participants with more lessons only have an inconsiderable advantage, and not at all in the gain scores.

**School type** is a predictor of receptive grammar and phonetic awareness, private schools score higher in both the TROG-2 and PHON, and gain more in TROG-2.

**Name of classroom** was not a predictor of L2 proficiency or rate of learning. There were differences between one pair of late start classrooms in the PHON test, and one pair of early start classrooms with regard to their rate of receptive grammar learning as measured with the TROG-2 test. Considering that these two pairs did not differ in any other measure and did not differ from a third classroom or more classrooms, I do not see this to be sufficiently interesting to warrant further quantitative research into the respective classrooms’ practices.

To sum up, *inside-school quantity and quality of exposure to and use of English* seems not to be a predictor of L2 proficiency of Danish Young Learners of EFL.

**5.2 RQ2 – starting age**

**Starting age** seems to be the best predictor of L2 proficiency out of all variables measured in this study. Late starters have an advantage over early starters in all three tests. While one might think that this might be due to English classes being different in late start than in early start classrooms, the data does not support this hypothesis. In fact, late starters were already more proficient than early starters at the beginning of year one, and the rate of learning does not differ by starting grade (except for TROG-2). The differences between early and late starters might come from out-of-school use and exposure to English instead (Hannibal Jensen, 2017), or might be due to older children simply being better at taking tests.
5. Discussion and Conclusion

5.3 RQ3 – gender

Gender seems to be a good predictor of receptive vocabulary and grammar, with boys scoring higher and gaining more than girls. However, when looking at only the data from early starters or late starters, it seems that the gender effect is only significant for late starters in TROG-2 scores and gain scores as well as PPVT-4 scores, and only for early starters in PPVT-4 gain scores. For PHON scores, a gender effect can be found for early starters, and surprisingly, it is the girls who score higher.

5.4 Limitations

The numbers used in the variable “English lessons” are based on the hours planned/report by each of the schools, not the actually held hours, of which there is no data available. Actual numbers will differ from the planned hours due to national holidays, sickness of the teacher, other school events, and more. What is more, it is unreasonable to assume that every child that goes into the same classroom has had exactly the same quantity and quality of exposure to English inside of the classroom as their classmates. Individual students in one classroom differ in on which days they were sick or absent from school for other reasons, how engaged they are with what is going on in the classroom, and how meaningful individual activities in the classroom are for them. Furthermore, even if all lessons took place for the exact duration as reported and all pupils attended these lessons, it does not guarantee that “English” has taken place. From ethnographic observations in the participating schools I found that there are things going on during English lessons which are rather unlikely to have contributed positively to the lessons–test score statistical relationship, amongst them eating lunch, doing arts and crafts in Danish, and cleaning the school yard.

PPVT-4

The PPVT-4 is the only test used in this study whose scores are not related to inside-school factors at all. The PPVT-4 test might not cover the kind of receptive vocabulary knowledge that is learned in Danish primary schools. After all, this test was developed and normed for “the current U.S. population by sex, race/ethnicity, and culture” (D. M. Dunn & Dunn, 2007, p. 2). I explore this issue in Chapter 6.

TROG-2

The TROG-2 manual (Bishop, 2003) states that the TROG-2 should not be used as a proficiency test for L2 speakers of English, as it is not normed for speakers of other languages. What is more, there is evidence that certain grammatical contrasts are easier for native speakers of English than for native speakers of Danish. For instance, Jensen de Lopez and Knüppel (2008) have translated the TROG-2 to Danish and found that Danish children scored better in ‘comparative/absolute’ and ‘pronoun gender/number’ contrasts that make up TROG-2 blocks 10 and 13 respectively than in TROG-2 blocks 8, 9, 11, and 12 which represent other grammatical contrasts. As the grammatical contrasts in TROG-2 are meant to be presented in a specific order – starting with the easiest and ending with the most difficult contrast – Jensen de Lopez and Knüppel (2008) suggest changing the order of TROG-2 blocks in the Danish version to [...]. Similarly, Johansson and Rutgersson (2011) have translated the TROG-2 to Swedish and found that the order of blocks should be changed for native speakers of Swedish between the ages of 8 and 10. What these studies mean for the present study is that there might have been a disadvantage.
for Danish test-takers. As the rules for English L1 speakers were applied to this EFL test (at least 1 mistake in each of 5 consecutive blocks), there might be a disadvantage for Danish EFL learners, for whom this test is most likely not sorted by difficulty.

Further research is needed to evaluate to what extent the TROG-2, as well as the PPVT-4, can be used as a valid test of EFL receptive grammar of Danish young learners, in order to decide to what extent the results of the present study can be considered valid.

**PHON**

While the PHON test was specifically designed for Danish learners of English and includes a wide range of both vowel and consonant contrasts, it cannot cover all potentially difficult minimal pairs. Considering the order in which the stimuli were presented, there might be a learning effect from block 6 to 7, as the examinees have heard /lʌ:k/ four times before encountering the /lʌ:k/ – /lʌ:g/ contrast.

### 5.5 Implications and Further Research

*Inside-school factors* seem to play only a very small role in Danish Young Learner’s EFL learning; even after two years of instruction the differences between individual classrooms are minimal. Future research is needed to determine if this means that Danish YLs need more than just 1 or 2 weekly lessons in order to get the “younger, the better” benefits, in line with e.g. (Mihaljević Djigunović, 2015; Tollan & Beckmann, 2014).

*Starting age* is a good predictor of all three test scores, and shows that late starters score higher than early starters. However, when it comes to gain scores, the differences between late and early starters disappear. This poses an interesting question that future research should investigate: If early and late starters start at different levels, but their rate of learning is the same (at least in the first two years), will the early starters ever be able to catch up? A brief look at Tables 17 and 18 for instance reveals that there are differences between the means of early and late starters, with late starters consistently scoring higher than early starters, and early starters seemingly being ‘one year behind’ late starters.

<table>
<thead>
<tr>
<th>Starting grade</th>
<th>TROG blocks with all 4 items passed – group mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pretest</td>
</tr>
<tr>
<td>1st grade (early start)</td>
<td>0.36 (sd=1.5)</td>
</tr>
<tr>
<td>3rd grade (late start)</td>
<td>1.39 (sd=2.13)</td>
</tr>
</tbody>
</table>

**Table 17:** TROG-2 blocks passed by starting grade (pretest, posttest 1, and posttest 2).

*Gender* has proven to be a good predictor of PPVT-4 and TROG-2 scores, with boys scoring higher than girls. This is quite surprising, since girls are often found to perform better in school than boys (Voyer & Voyer, 2014). This suggests that there are other factors at play in early foreign language learning in Denmark. One may be individual learner factors such as motivation and foreign language classroom anxiety (Fenyvesi et al., 2016; Fenyvesi, forthc.). Another major factor may be the frequent exposure to and use of English outside of school (Hannibal Jensen, 2017, forthc.-a), in line with studies from e.g. Sweden (Sundqvist, 2009; Sundqvist & Sylvén, 2012;
<table>
<thead>
<tr>
<th>Starting grade</th>
<th>Amount of TROG-2 items passed – group mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pretest fall 2014</td>
</tr>
<tr>
<td>1\textsuperscript{st} grade (early start)</td>
<td>8.86 (sd=8.08)</td>
</tr>
<tr>
<td>3\textsuperscript{rd} grade (late start)</td>
<td>16.62 (sd=10.54)</td>
</tr>
</tbody>
</table>

Table 18: TROG-2 items passed by starting grade (pretest, posttest 1, and posttest 2).

Sundqvist & Wikström, 2015; Sylvén & Sundqvist, 2012) and Belgium (Kuppens, 2010).

Acknowledgements
This work was supported by a grant from the Danish Council for Independent Research | Culture and Communication. I would like to thank the researchers and student helpers of the The younger, the better project (Cadierno & Eskildsen, forthc.) for their contributions to the data collection process, and Jørgen T. Lauridsen for recommending a statistical model. I thank Lars Christian Jensen for helping me with the statistical analyses.

References
Chapter 5. The Development of Danish YLs’ EFL Proficiency


Chapter 6

Context-sensitive Scoring Procedure for the Receptive Vocabulary Test PPVT-4 For Danish YLs of EFL

Maria Vanessa aus der Wiesen

Abstract

This study proposes a context-sensitive procedure for scoring the receptive vocabulary test PPVT-4 (L. M. Dunn & Dunn, 2007) when it is administered to Young Learners (YL) of English as a Foreign Language (EFL). Originally developed and standardized for assessment of native-speakers of American English, the PPVT-4 has since been used in a variety of settings, such as with specific populations of English-speaking countries (e.g. low-income socio-economic status children in the United States (Allison, Robinson, Hennington, & Bettagere, 2011) or learners of English as a Foreign language (e.g. Dahl 2015). However, using standardized tests with groups that are not representative of the norm-referenced population brings with it problems of linguistic or cultural biases (Haitana, Pitama, & Rucklidge, 2010), reduced parallel forms reliability (Dahl, 2015), and construct validity (i.e. item difficulty hierarchy). The present study suggests an alternative, context-sensitive scoring procedure for the PPVT-4 administered to YL of EFL that takes into consideration the lexical relatedness of the EFL learners’ L1 and English, and the specific lexical fields encountered in the Danish primary school EFL classroom. The PPVT-4 Form A is administered to 257 Danish YLs in two groups twice, the first time just around their very first English lessons, the second time after two years of formal instruction. The two groups are early starters (formal EFL instruction starting in 1st grade) and late starters (starting in 3rd grade). This research has implications for testing and assessing EFL proficiency of YL, and adds to the growing body of empirical research showing that an earlier start of EFL instructions may not be as advantageous as popular belief holds.

1 Introduction

Standardized language proficiency tests such as the Peabody Picture Vocabulary Test, Fourth Edition (henceforth PPVT-4) developed by Dunn and Dunn (2007) offer a reliable and ready-to-use solution to not only assess the language of an individual or
group, but also to track language development over time. Even though the PPVT-4 has been developed for clinical use such as for speech-language pathologists, researchers have also used the test to assess the language proficiency of young learners of English as a Foreign Language (EFL) from various countries, such as China (Sun et al., 2016), the Netherlands (Lobo, 2013), and Norway (Dahl & Vulchanova, 2014).

The PPVT-4 measures the receptive Standard American English vocabulary of children ages 2:6 and up or adults. This test is developed for individual administration and consists of two parallel forms (Form A and Form B). Form A, the form used in the present study, consists in a list of 228 increasingly difficult stimulus words in 19 12-item sets, and a page with four pictures for each stimulus word, whereof only one picture represents the spoken word. To describe the procedure briefly, the examiner says a stimulus word, after which the examinee points at one of four pictures. This is repeated until the examinee has made a certain number of errors in one of the 19 item sets, after which the test ends, as it can be assumed that the test-taker will not know the vocabulary in the succeeding, more difficult, item set. While the PPVT-4 manual states that the test can be used to assess the vocabulary of English-Language Learners (ELLs 1), it also explains that “[v]ocabulary and illustrations [...] were carefully selected to represent the current U.S. population by sex, race/ethnicity, and culture” (D. M. Dunn and Dunn, 2007, p. 2). In a study comparing two groups of children, monolingual American English and Spanish-speaking ELLs, Wood and Peña (2015) confirmed that the items in the PPVT-4 are increasingly difficult with test progression for the monolingual English-speaking group. However, they have also shown that the relationship between item number and item difficulty is less clear for the Spanish-speaking ELL, possibly due to cognate status, word familiarity, and context (Wood & Peña, 2015). Since the test design presupposes that items will be increasingly difficult as the test advances, this possibly poses a disadvantage for ELLs and EFL learners, for whom some of the later items may be easier than the first items in the test.

Dahl and Vulchanova (2014) found that several items in the PPVT-4 are cognates in Norwegian. As the distribution of cognates in the individual sets of Form A and Form B of the PPVT-4 may differ, Dahl later (2015) has administered both forms to Norwegian YLs, and found that administering both forms and using the mean of both forms led to a reduced number of outliers. While this seems to be a way to overcome the problems of unreliable parallel forms and reduced construct validity due to unequal distribution of cognates, this solution requires researchers to spend twice as much time on administering the PPVT, which might not be feasible for large-scale studies with a large sample size, or studies in which the PPVT is just one of the tests in a larger test battery, or studies that trace development over time and are dependent on switching between A and B to avoid spillover effects.

With regards to item difficulty hierarchy, Nielsen (2008) has conducted a study in which she translated the PPVT items from English to Danish and administered the translated test to Danish children and adults. She found that the order of test items had to be changed for adaptation to a Danish context, in order to ensure increasing difficulty of the items as the test progresses. This revised item order has since been used in other Danish studies (e.g. Daugaard, 2015). While changing the order of the English PPVT-4 items to reflect the Danish item difficulty hierarchy may reduce the cultural bias when administering the English test to Danish EFL learners, this

1Typically, ELL refers to ‘deficient’ non-native speakers of English who live in the United States. This is different from EFL learners, which for the purposes of this paper are defined as people living in a country where English is not an official language and learning English as a foreign language takes place in a classroom setting.
method of translating to the L1, determining L1 item difficulty hierarchy in a pilot study, and then administering the adapted PPVT to the real sample of EFL learners seems time-intensive.

An alternative to using or adopting a standardized test is to specifically develop a test for EFL learners belonging to a certain population. Arguing for the need to develop a vocabulary test for a Norwegian context even though tests such as the PPVT-4 already exist, Størksen et al. (2013) claim that the existing tests contain words that are relevant in an English-speaking but not in a Norwegian cultural context in general, and specifically not for Norwegian children. They developed a receptive vocabulary test for Norwegian children with words from six categories which they found to be relevant for the intended test-takers: (1) home, (2) animals/nature, (3) children’s daily life, culture and people, (4) musical instruments, (5) food, and (6) "objects with terminology from the adult world". An advantage of designing a test for a specific population is that it overcomes most of the above-mentioned problems. However, this advantage comes at the price of losing the option to compare test results across populations.

The outlined research shows that simply administering the PPVT-4 to EFL learners without any cultural adoption or reordering of items is problematic, but alternatives explored in previous research are not satisfactory either, especially for large-scale studies, or researchers interested in between-group comparisons. The next section will describe a way to combine the best of both worlds, using the standard PPVT-4 administration procedure, but adopting the scoring procedure to reflect the YL EFL context.

1.1 Background of this study

In Chapter 5 have presented the results of an analysis of GSV scores of the pretest and the posttest, as well as of the GSV gain scores. The analysis was able to show differences between early and late starters, pointing at an advantage for late starters, as well as a gender effect that became more salient after two years of instruction. There was no difference in how much vocabulary knowledge the early and late starters gained, apart from a significant difference between late start boys and early start girls. Interestingly, there was no difference between the individual classrooms. While this underlines the credibility of the other analyses, this result is still fascinating. As part of the larger study on early foreign language learning in Denmark, I have conducted ethnographic observations of all the participating classrooms. I observed, albeit without a systematic framework, differences in the use of the students’ mother tongue versus the target language as a medium of instruction, as well as differences in teaching materials used. Moreover, some of the classrooms reportedly had one weekly EFL lesson, others had two weekly EFL lessons. Despite these differences which prior research has shown to have an effect on language proficiency, there is no difference in test scores after two years of instruction, and no difference in how much vocabulary knowledge the individual classrooms have gained. However, in the reported minimum and maximum scores one can clearly see that there is a wide range of individual scores, even when looking at individual groups (age, gender), and boys seem to have gained much more vocabulary knowledge than girls in the two years of instruction. As all classrooms, regardless of age, have on average gained the same amount of vocabulary knowledge, these differences potentially come from outside of the classroom (which has in fact been shown by e.g. Hannibal Jensen, 2017, forthc.-a;

2My translation, "objekter med faguttrykk fra de voksnes verden" in the Norwegian original. Examples of words in this category are syringe and thermometer.
Chapter 6. Context-sensitive Scoring

Sylvén and Sundqvist, 2012). It would seem, then, that the PPVT-4 does not only test vocabulary knowledge from the EFL classroom domain, but also includes vocabulary that YL are typically only exposed to outside of the classroom (also called "extramural" English (Sundqvist, 2009)). If items requiring knowledge of extramural English vocabulary are part of the earliest sets, children engaging in extramural activities might have an advantage over pure EFL learners, whose vocabulary knowledge in turn might be underassessed, as non-EFL items might stop them from advancing to potentially known YL EFL items in later sets. To obtain more qualitative results, I have developed a context-sensitive scoring procedure which takes into consideration the circumstances under which YL learn EFL.

1.2 Research Questions

This study addresses two questions:

1. Is the PPVT-4 a valid test for assessing the receptive vocabulary knowledge of beginner EFL YL?

2. Is it meaningful to use an alternative scoring procedure that gives scores for individual item categories?
   (a) Can it reveal differences between groups?
   (b) Can it be used to measure change over time?
   (c) Are some categories more meaningful than others?

2 Overview

2.1 Participants

The participants in this project are 398 Danish primary school-level children at the time of the first test (pretest), and 264 of these children at the time of the second test (posttest), see Table 1. They were not recruited solely for participation in the present study, but are part of a larger study on early foreign language learning (Cadierno & Eskildsen, fortc.). The aim of the research project is to determine the factors that influence short-term language proficiency and rate of learning in early EFL learning, and two compare two groups of YL: early start (age 6–7) and late start (age 8–9). Consent from the children’s parents and schools has been obtained prior to the administration of the tests.

<table>
<thead>
<tr>
<th>Starting grade and gender</th>
<th>Students</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>pretest, fall 2014</td>
<td>posttest, fall 2016</td>
</tr>
<tr>
<td>1st grade (early start)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>girls</td>
<td>104</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>boys</td>
<td>109</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>213</td>
<td>163</td>
<td></td>
</tr>
<tr>
<td>3rd grade (late start)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>girls</td>
<td>90</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>boys</td>
<td>95</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>185</td>
<td>101</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Participants in pre- and posttest, by starting grade and gender.
2. Overview

Starting grade classrooms

<table>
<thead>
<tr>
<th></th>
<th>pretest, fall 2014</th>
<th>posttest, fall 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st grade (early start)</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>3rd grade (late start)</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>total</td>
<td>20</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 2: Participating Classrooms in pre- and posttest.

Initially, 20 classrooms (11 with start of EFL lessons in 1st grade, 9 with start of EFL lessons in 3rd grade) participated in the study (see Table 2). Five classrooms (107 students) did not participate in the posttest as they were no longer part of the larger project, and 27 students who were in the remaining 15 classrooms at the time of the posttest had left their respective classrooms prior to the posttest, which is why there are fewer participants in the posttest than in the pretest.

2.2 PPVT-4 Test Administration Procedure

The administration of the PPVT-4 is based largely on the PPVT-4 manual (D. M. Dunn & Dunn, 2007). However, some modifications had to be made to accommodate the local circumstances. While the PPVT-4 stimuli are usually presented “live” by the examiner, a native speaker of Danish prerecorded the stimuli. This was done because the testing of almost 400 children around the same time had could only be accomplished by a whole team of examiners, none of whom were native speakers of American English and differed both in their L1 and “nativelikeness” of their pronunciation. The reason why a native speaker of Danish rather than a native speaker of American English was selected for the recording was to resemble the pronunciation of the participants’ teachers. Another modification to the administration procedure was that the tests always started with the first test item. The start item in the PPVT-4 test as it was designed for L1 English speakers depends on the test-takers age, i.e. older test takers usually start with a higher item as it can be assumed that they know the first items. Lastly, the instruction was given in Danish and positive feedback during the test was given in Danish as well.

2.3 Context-Sensitive Scoring Procedure

As for assessing the receptive language proficiency of the test-takers, a scoring procedure was developed that takes into consideration both the lexical similarities between Danish and English and the fact that the test is administered to young EFL learners. The procedure consists of two parts, a division of the items into lexical fields, and an assessment of cognate status.

Lexical Fields

The 228 items in the PPVT-4 (Form A) have been assigned to three categories:

1. YL EFL topics (i.e. animals, body, clothes, colors, food)
2. classroom words (e.g. “pencil”, “reading”)
3. other items (e.g. “drum”, “juggling”)
The idea behind this categorization is that these categories are relevant from a participant perspective. From ethnographic observations of the 20 participating classrooms and an investigation of the teaching materials used, I found that the YL EFL topics have been covered in all of the participating classrooms (see Figure 1 for a typical collection of YL EFL teaching materials).

The “classroom words”, however, have most likely not been used in all classrooms, as these are words typically only used when the medium of instruction is English, and many of the EFL teachers in this study mainly use Danish as a medium of instruction.

The last category, “other items”, is interesting in that it includes words that are presumably not frequently used or extensively covered in an YL EFL context.

In total, there are 57 items in PPVT-4 Form A that belong to the YL EFL topics category, 7 items are classroom words, and 164 items that do not belong to either of the first two categories. With regards to the YL EFL topics subcategories, “animal” is the most frequent category, followed by “food”, “body”, “clothes”, and lastly, “color”.

<table>
<thead>
<tr>
<th>YL EFL topic</th>
<th>count</th>
</tr>
</thead>
<tbody>
<tr>
<td>animal</td>
<td>24</td>
</tr>
<tr>
<td>body</td>
<td>10</td>
</tr>
<tr>
<td>color</td>
<td>2</td>
</tr>
<tr>
<td>clothes</td>
<td>8</td>
</tr>
<tr>
<td>food</td>
<td>13</td>
</tr>
<tr>
<td>total</td>
<td>57</td>
</tr>
</tbody>
</table>

Table 3: Distribution of lexical fields within the YL EFL topics category.

As for the distribution of YL EFL topic items in the individual sets of the standardized test, there are more YL EFL topic items in the first sets than in the last sets, but the relationship is not perfectly linear (see Figure 2).
2. Overview

Figure 2: Distribution of the three categories in the 19 sets of PPVT-4 Form A.

Classroom words, on the other hand, only appear in the first half of the test, with “pencil” being the first, and “group” the last classroom word items in the test. This is important to know, since the test is supposed to increase in difficulty with each set of 12 items. If we assume that the items from categories 1 and 2 are easier for EFL YL test takers than the other items, the difficulty does not seem to increase evenly, with sets such as sets 3, 6, and 8 including fewer items from categories 1 and 2 than the respective succeeding set, which may lead to an underestimation of the YL EFL test takers’ proficiency. However, other factors such as cognate status potentially play a role in determining item difficulty, which is what we will turn to in the next section.

Cognates

For the present study, the Crosslinguistic Overlap Scale for Phonology (COSP; Kohnert, Windsor, and Miller, 2004) was used, as it has shown to be successful in other studies investigating cognate effects in PPVT, especially with YL (e.g. Simpson Baird, Palacios, and Kibler, 2016, Potapova, Blumenfeld, and Pruitt-Lord, 2016, and Petrescu, 2014).

Data All 228 items of the PPVT-4 Form A have been evaluated.

Procedure Three speakers of both Danish and English have translated the PPVT-4 items into Danish. Translators were given access to the PPVT-4 Form A stimulus book and a scoring sheet. Each translator was asked to provide at least one translation for each of the 228 items. This resulted in multiple translations for each items, of which only one was chosen based on the following criteria:

- phonologically close translations were preferred (e.g. hydrant for hydrant, even though brandhane may be more used in everyday language)
- translations close to the picture in the PPVT-4 A stimulus book were preferred (e.g. rotte (rat) instead of gnaver (rodent) for rodent)
- translations submitted by multiple translators were preferred
Chapter 6. Context-sensitive Scoring

The final list of 228 translations was then transcribed using the International Phonetic Alphabet. Cognate status of the 228 was then determined using the COSP. Items with a score of 6 or higher were considered cognates for the purposes of this study. An example of a cognate score of 6 is *diamond–diamant* ([diamand]), a cognate score of 10 was assigned only to two items, *squash* and *net*. While these two words are actually only identical in Danish and English in writing, but pronounced slightly differently in Danish and American English, they were nevertheless given a cognate score of 10, as the prerecorded English sound files for these items for the study in this paper were identical to the standard Danish pronunciation.

<table>
<thead>
<tr>
<th>Cognate Score</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>7</td>
<td>28</td>
</tr>
<tr>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>total 10–6</td>
<td>74</td>
</tr>
<tr>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>53</td>
</tr>
<tr>
<td>1</td>
<td>34</td>
</tr>
<tr>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>total 5–0</td>
<td>154</td>
</tr>
</tbody>
</table>

Table 4: Number of items assigned to each COSP cognate score.

As evident in Table 4, almost one third of the PPVT-4 Form A items are cognates between Danish and English, according to the COSP cognate determination method. There is at least one, and up to 7 cognates per set of 12 items (see Figure 3).

Figure 3: Cognates per item set.
3 Analysis and Results

The analysis is a follow-up of another analysis using GSV scores, which was not able to find any differences between individual classrooms, and could not account for why there is such a wide range of scores in the individual scores (Chapter 5)). While a categorization of the test items into the three categories YL EFL topics, classroom words, and other items might not be able to show a causal effect of what happens inside or outside of the classroom on test scores either, it can nevertheless show trends. In the following, I will present results of analyses with the context-sensitive scores developed in the present paper. The aim of these analyses is to test whether the context-sensitive scoring procedure can provide a more fine-grained analysis of between-group differences.

The analyses were done using the open source language and environment for statistical computing R (R Core Team, 2013) and the following packages:

- reshape (Wickham, 2007)
- lme4 (Bates et al., 2015)
- lmerTest (Kuznetsova et al., 2015)
- effects (Fox, 2003)
- multcomp (Hothorn et al., 2008)
- MuMIn (Bartoń, 2013)

3.1 Lexical fields – scores

The variables used in this analysis are listed in Table 5. Other than these variables, the participants' ID number was added as a random factor.

<table>
<thead>
<tr>
<th>dependent variables</th>
<th>independent variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>lexical fields scores</td>
<td>English lessons</td>
</tr>
<tr>
<td>(pretest or posttest, depending on test time)* of:</td>
<td>(before respective test)</td>
</tr>
<tr>
<td>all pupils</td>
<td>school type (public or semi-private)</td>
</tr>
<tr>
<td>early starters</td>
<td>gender (girl or boy)</td>
</tr>
<tr>
<td>late starters</td>
<td>starting grade (1st or 3rd)*</td>
</tr>
<tr>
<td></td>
<td>test time (pretest or posttest)</td>
</tr>
<tr>
<td></td>
<td>classroom name</td>
</tr>
<tr>
<td></td>
<td>(9 (1st) or 6 (3rd) levels)</td>
</tr>
</tbody>
</table>

*separate for the 3 categories & *not applicable in analyses with & scores of only early/late starters

Table 5: Variables.

Looking at the analysis using the data from all pupils (see Table 6 for regression coefficients), it is clear that there is an improvement over time in all three lexical fields, especially classroom words (+22.67), but also YL EFL topics (+11.74) and other (+10.3). Starting grade seems to be another good predictor of lexical field scores, again especially regarding classroom words (+12.77 for late starters), and also YL EFL topics (+6.01 for late starters) and other (+6.64 for late starters). Concerning
gender, boys have an advantage only with regards to *other* (+5.33), gender does not seem to be a good predictor of the other two lexical fields. As for English lessons and school type, they are not good predictors of lexical field scores (apart from a marginally significant, very small advantage (+0.06) for pupils with more hours with regards to the *classroom words* score). Subsetting the data to only include early or late starters allows for further analyses. Adding to the analyses above, Table 6 shows that the advantage boys have regarding *other* items, is more visible for late starters than for early starters. This analysis also included the name of the classrooms as an independent variable, but did not find this to be a significant predictor of any of the three lexical field scores.

Table 6: Regression coefficients – lexical fields

<table>
<thead>
<tr>
<th></th>
<th>PPVT-4 scores – lexical fields</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YL EFL topics</td>
</tr>
<tr>
<td>(Intercept)</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>55.68***</td>
</tr>
<tr>
<td>early start</td>
<td>56.78***</td>
</tr>
<tr>
<td>late start</td>
<td>62.39***</td>
</tr>
<tr>
<td>test time (posttest)</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>11.74***</td>
</tr>
<tr>
<td>early start</td>
<td>11.69***</td>
</tr>
<tr>
<td>late start</td>
<td>10.57***</td>
</tr>
<tr>
<td>gender (male)</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>0.84</td>
</tr>
<tr>
<td>early start</td>
<td>0.68</td>
</tr>
<tr>
<td>late start</td>
<td>1.16</td>
</tr>
<tr>
<td>starting grade</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>6.01***</td>
</tr>
<tr>
<td>early start</td>
<td>-</td>
</tr>
<tr>
<td>late start</td>
<td>-</td>
</tr>
<tr>
<td>English lessons</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>0.01</td>
</tr>
<tr>
<td>early start</td>
<td>-</td>
</tr>
<tr>
<td>late start</td>
<td>-</td>
</tr>
<tr>
<td>school type (private)</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>1.43</td>
</tr>
<tr>
<td>early start</td>
<td>-</td>
</tr>
<tr>
<td>late start</td>
<td>-</td>
</tr>
</tbody>
</table>

Values are regression coefficients
Significance codes: ‘***’ p<.001 ‘**’ p<.01 ‘*’ p<.05 ‘.’ p<.1

3.2 Lexical fields – gain scores

This analysis uses *gain scores* as dependent variable. Gain scores were calculated by subtracting the pretest score from the posttest score, resulting in a score that expresses how much the scores have improved between these two tests.

In the previous analysis, gender was a good predictor of *other* items, predicting an advantage for boys regardless of starting grade. Looking at gain scores, however, it seems that only older boys have an advantage (+8.93) over girls their age, and only in terms of *other* items. Interestingly, late start boys actually gain less (-4.6) YL EFL words than girls. However, it seems that this difference is very small (see Table 8 for descriptive statistics).
### 3. Analysis and Results

#### Table 7: Regression coefficients – lexical fields gain scores

<table>
<thead>
<tr>
<th></th>
<th>PPVT-4 gain scores lexical fields</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YL EFL topics</td>
</tr>
<tr>
<td>(Intercept)</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>18.25***</td>
</tr>
<tr>
<td>early start</td>
<td>10.45***</td>
</tr>
<tr>
<td>late start</td>
<td>15.09***</td>
</tr>
<tr>
<td>gender (male)</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>-2.19</td>
</tr>
<tr>
<td>early start</td>
<td>-0.99</td>
</tr>
<tr>
<td>late start</td>
<td>-4.6*</td>
</tr>
<tr>
<td>starting grade</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>-1.49</td>
</tr>
<tr>
<td>early start</td>
<td>-</td>
</tr>
<tr>
<td>late start</td>
<td>-</td>
</tr>
<tr>
<td>English lessons</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>-0.05</td>
</tr>
<tr>
<td>early start</td>
<td>-</td>
</tr>
<tr>
<td>late start</td>
<td>-</td>
</tr>
<tr>
<td>school type (private)</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>-2.41</td>
</tr>
<tr>
<td>early start</td>
<td>-</td>
</tr>
<tr>
<td>late start</td>
<td>-</td>
</tr>
</tbody>
</table>

Values are regression coefficients
Significance codes: ‘***’ p<.001 ‘**’ p<.01 ’*’ p<.05 ‘.’ p<.1

Starting grade was a good predictor of all lexical field scores (see Table 6), but is not a predictor of lexical field gain scores (see Table 7). It would even seem, although only marginally significant, that late starters gain less (-5.77, applies only to classroom words) than early starters. A brief look at the descriptive statistics for this analysis (Table 9) reveals that even though late starters have gained less, they still score higher, and their scores are within a narrower range than the early starters’ scores.

The classroom factors English lessons and school type are not good predictors of any of the three lexical field gain scores.

#### Differences between individual classrooms

There are two early start classrooms with YL EFL gain scores predicted to be higher than other classrooms’, p2a–1 (+11.81, p<.01) (and f4s–1 (+9.55), marginally significant p=0.06). A post-hoc Tukey finds p2a–1 to be significantly different from one classroom, p2b–1 (+14.53, p=0.02), and find a marginally significant difference between p2a–1 and 3 other classrooms (see Table 10 for descriptive statistics). The classroom f4s–1 is not different from any other early start classroom in a pairwise comparison.

There are two early start classrooms whose classroom words gain scores are predicted to be higher than expected, p1a–1 (+18.49, p<0.02) and f3–1 (+13.51, marginally significant p=0.061). However, a post-hoc Tukey pairwise comparison shows that these two classrooms are not significantly different from any other classroom.

There is one late start classroom, p2a–3, whose YL EFL gain scores are marginally significantly predicted to be lower than others’ (-5.76, p<.1), but a Tukey multiple
Table 8: Descriptive statistics for YL EFL topic gain score – by gender

<table>
<thead>
<tr>
<th></th>
<th>% encountered</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>sd</td>
<td>min</td>
<td>max</td>
</tr>
<tr>
<td>pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>late start girls</td>
<td>61.85</td>
<td>7.72</td>
<td>43.75</td>
<td>81.25</td>
</tr>
<tr>
<td>late start boys</td>
<td>64.67</td>
<td>9.57</td>
<td>40</td>
<td>88.46</td>
</tr>
<tr>
<td>posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>late start girls</td>
<td>74.19</td>
<td>18.24</td>
<td>43.75</td>
<td>93.75</td>
</tr>
<tr>
<td>late start boys</td>
<td>73.48</td>
<td>7.6</td>
<td>57.14</td>
<td>86.79</td>
</tr>
<tr>
<td>gain score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>late start girls</td>
<td>11.93</td>
<td>9.92</td>
<td>-11.4</td>
<td>35</td>
</tr>
<tr>
<td>late start boys</td>
<td>7.36</td>
<td>11</td>
<td>-30.3</td>
<td>30.2</td>
</tr>
</tbody>
</table>

Comparisons of means do not find significant differences between this and any other late start classroom. One late start classroom, f4–3, is predicted to score lower in classroom words gain scores than other classrooms (-12.51, p<0.05). However, a post-hoc multiple comparisons of means did not find this classroom to be significantly different from any other late start classroom.

3.3 Cognates – scores and gain scores

The variables used in this analysis are listed in Table 11. Other than these variables, the participants’ ID number was added as a random factor.

Test time is a good predictor of cognate scores, but only for early starters. Their scores are predicted to be higher (+6.03) in the posttest, while there is no difference in the late starters’ scores. This can also be seen when looking at starting grade as the predictor variable: while late starters score higher (+5.14) than early starters, they gain less (-7.61) than early starters. Descriptive statistics for cognate scores by starting grade confirm that the gain score of late starters is close to 0, in fact negative (-0.88), i.e. the mean score of the posttest is slightly lower than of the pretest.

In light of the other scores reported here and elsewhere (Chapter 5), Hannibal Jensen, 2017, Hannibal Jensen, forthcoming), it is interesting to see that boys are at a disadvantage. However, this gender effect is very small and disappears when subsetting the data to only early or late starters. The classroom factors English lessons and school type are not predictors of cognate scores. There are no differences between individual classrooms with regards to cognate knowledge or cognate gain scores.

4 Validity of Measurements – GSV Scores vs. Context-Sensitive Scores

I have analyzed the results of the pre- and posttest as well as the gain scores by closely investigating four categories:

- YL EFL topics
4. Validity of Measurements – GSV Scores vs. Context-Sensitive Scores

Table 9: Descriptive statistics for classroom words gain score – by starting grade

<table>
<thead>
<tr>
<th></th>
<th>% encountered</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>sd</td>
<td>min</td>
<td>max</td>
</tr>
<tr>
<td>pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>early start (n=165)</td>
<td>57.5</td>
<td>21.17</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>late start (n=124)</td>
<td>71.76</td>
<td>14.96</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>early start (n=163)</td>
<td>80.17</td>
<td>12.74</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>late start (n=101)</td>
<td>89.94</td>
<td>12.39</td>
<td>57.14</td>
<td>100</td>
</tr>
<tr>
<td>gain score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>early start (n=163)</td>
<td>24.14</td>
<td>24.09</td>
<td>-42.9</td>
<td>100</td>
</tr>
<tr>
<td>late start (n=101)</td>
<td>18.29</td>
<td>17.88</td>
<td>-22.9</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of classroom</th>
<th>n</th>
<th>mean</th>
<th>sd</th>
<th>min</th>
<th>max</th>
</tr>
</thead>
<tbody>
<tr>
<td>p2a–1</td>
<td>17</td>
<td>21.68</td>
<td>18.94</td>
<td>-10.1</td>
<td>72.1</td>
</tr>
<tr>
<td>p2b–1</td>
<td>19</td>
<td>7.21</td>
<td>8.83</td>
<td>-3.9</td>
<td>27.2</td>
</tr>
<tr>
<td>f1–1</td>
<td>23</td>
<td>9.89</td>
<td>15.13</td>
<td>-17.6</td>
<td>39.4</td>
</tr>
<tr>
<td>f3–1</td>
<td>22</td>
<td>9.17</td>
<td>11.6</td>
<td>-12.2</td>
<td>37.8</td>
</tr>
<tr>
<td>p1a–1</td>
<td>19</td>
<td>9.16</td>
<td>11.9</td>
<td>-12.3</td>
<td>25</td>
</tr>
<tr>
<td>all early start</td>
<td>163</td>
<td>24.14</td>
<td>24.09</td>
<td>-42.9</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 10: Descriptive statistics YL EFL gain scores of selected early start classrooms.

- classroom words
- other items
- cognates

These analyses helped answer some of the research questions, but further methods are necessary to evaluate the remaining questions.

4.1 Is the PPVT-4 a valid test for assessing the receptive vocabulary knowledge of beginner EFL YL?

The PPVT-4 was normed for the US population as it was during the time of the development of the test. Taking a sample of the population of Danish YL EFL learners makes comparisons using norm-referenced scores such as the PPVT-4 Standard Scores meaningless, but the non-normative GSV scores can be used and were able to reveal differences in pre-, post-, and gain scores between early and late starters as well as between boys and girls, they were unable to show differences between the individual classrooms. At least with regards to the pretest, this might be related to low construct validity. However, the lack of differences in the posttest or the gain scores points at classroom factors not having a significant influence on PPVT test scores. The sets
### Table 11: Variables.

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Independent variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognate scores of:</td>
<td>• English lessons (before respective test)</td>
</tr>
<tr>
<td>• all pupils</td>
<td>• school type (public or semi-private)</td>
</tr>
<tr>
<td>• early starters</td>
<td>• gender (girl or boy)</td>
</tr>
<tr>
<td>• late starters</td>
<td>• starting grade (1st or 3rd)*</td>
</tr>
<tr>
<td>(pretest or posttest, depending on test time)</td>
<td>• test time (pretest or posttest)</td>
</tr>
<tr>
<td></td>
<td>• classroom name</td>
</tr>
<tr>
<td></td>
<td>(9 (1st) or 6 (3rd) levels)</td>
</tr>
</tbody>
</table>

* not applicable in analyses with scores of only early/late starters

Data are supposed to be ordered by difficulty, but a brief glance at an overview of the set at which the test ended for the test-takers reveals that some blocks seem to be too difficult given their relative position in the test (Figure 4).

![Figure 4: Histogram over the highest set reached by the participants of the pretest.](image)

While sets 1 and 2 were only failed by 6 and 26 children respectively, set 3 was too difficult for 134 children. The set after, however, was only failed by 20 children.

The posttest paints a similar picture for set 3 (Figure 5). Again, set 3 seems inadequately difficult when compared to the sets immediately before and after, and there are two other peaks that stand out, set 6 and set 11.

To test for item difficulty hierarchy, a Rasch analysis was conducted. Data from both pre- and posttest were combined to make use of the maximum number responses by YL EFL test-takers available. As later sets only had very few participants, the Rasch analysis was only meaningful using the items from sets 1–14. Figure 6 is a visualization of the results of this analysis. Low numbers correspond with low difficulty. While a positive relationship between the position of individual items in the set and their difficulty can be observed, one of the easiest items for YL EFL learners is item 58 – *panda.*
### 4. Validity of Measurements – GSV Scores vs. Context-Sensitive Scores

#### Table 12: Regression coefficients – cognates

<table>
<thead>
<tr>
<th></th>
<th>PPVT-4 – cognates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>scores</td>
</tr>
<tr>
<td>(Intercept)</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>81.18***</td>
</tr>
<tr>
<td>early start</td>
<td>79.24***</td>
</tr>
<tr>
<td>late start</td>
<td>83.39***</td>
</tr>
<tr>
<td>test time (posttest)</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>5.83***</td>
</tr>
<tr>
<td>early start</td>
<td>6.03***</td>
</tr>
<tr>
<td>late start</td>
<td>0.06</td>
</tr>
<tr>
<td>gender (male)</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>-1.69*</td>
</tr>
<tr>
<td>early start</td>
<td>-2.13.</td>
</tr>
<tr>
<td>late start</td>
<td>-1.29</td>
</tr>
<tr>
<td>starting grade</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>5.14***</td>
</tr>
<tr>
<td>early start</td>
<td>-</td>
</tr>
<tr>
<td>late start</td>
<td>-</td>
</tr>
<tr>
<td>English lessons</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>-0.03</td>
</tr>
<tr>
<td>early start</td>
<td>-</td>
</tr>
<tr>
<td>late start</td>
<td>-</td>
</tr>
<tr>
<td>school type (private)</td>
<td></td>
</tr>
<tr>
<td>all pupils</td>
<td>1.26</td>
</tr>
<tr>
<td>early start</td>
<td>-</td>
</tr>
<tr>
<td>late start</td>
<td>-</td>
</tr>
</tbody>
</table>

Values are regression coefficients
Significance codes: ‘***’ p<.001 ‘**’ p<.01 ‘*’ p<.05 ‘.’ p<.1

#### 4.2 Is it meaningful to use an alternative scoring procedure that gives scores for individual item categories?

A closer look at outliers such as item 58, which is both a cognate between English and Danish and part of the list of YL EFL topic words, makes a case for the context-sensitive scoring method. In fact, most of the ’easy’ items are cognates (compare Figure 7).

The analyses of cognate vocabulary knowledge were interesting, as they may contribute to the discussion on cognate knowledge of emergent bilinguals. A recent study found that even young, not yet literate Spanish-speaking ELLs are able to rely on phonology to identify cognates (Simpson Baird et al., 2016). The study in the present paper showed that the early starters, who in contrast to the late starters did not know many of the items yet, did score high on the cognate items. Their cognate scores were not as high as the late starters’ at the time of the pretest, but at the time of the posttest, the early starters had caught up, while the cognate item scores of the late starters have stagnated. However, the results of this study have to be interpreted with caution. Cognate scores were calculated as a percentage of the cognates each individual child has encountered. As the item difficulty analysis has shown, the first blocks include many cognates, and are very easy. That means that a child with a low raw score or GSV score, as many early start girls are, may have a high cognate score, but they were only assessed on their knowledge of the ’easy’ cognates. A child with a high raw score or GSV score, may have identified more cognates correctly in total, but has also encountered more difficult cognates, i.e. those in the later sets, and
Chapter 6. Context-sensitive Scoring

Table 13: Descriptive statistic words for cognates – by starting grade

<table>
<thead>
<tr>
<th></th>
<th>% encountered</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>sd</td>
<td>min</td>
</tr>
<tr>
<td>pretest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>early start</td>
<td>78.34</td>
<td>13.08</td>
<td>44.4</td>
</tr>
<tr>
<td>(n=168)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>late start</td>
<td>82.81</td>
<td>9.3</td>
<td>44.4</td>
</tr>
<tr>
<td>(n=124)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>posttest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>early start</td>
<td>84.4</td>
<td>8.23</td>
<td>59.09</td>
</tr>
<tr>
<td>(n=163)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>late start</td>
<td>83</td>
<td>6.88</td>
<td>69.09</td>
</tr>
<tr>
<td>(n=101)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gain score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>early start</td>
<td>6.42</td>
<td>17.19</td>
<td>-25</td>
</tr>
<tr>
<td>(n=163)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>late start</td>
<td>-0.88</td>
<td>11.17</td>
<td>-24.4</td>
</tr>
<tr>
<td>(n=101)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5: Histogram over the highest set reached by the participants of the posttest.

therefore possibly received a lower score on the percentage of encountered cognates identified correctly. The same limitation applies to the YL EFL topic, classroom word, and other item scores. While these scores then seem unreliable for comparing specific vocabulary knowledge across groups with significantly different GSV scores, they can nevertheless be used to qualify the GSV scores. A sub-division of items into cognates and non-cognates is especially important in the light of researchers from different countries using the PPVT, as these scores can contribute to an explanation for why children with an L1 which is related to English may score higher on the PPVT than others.

5 Conclusion

The study showed that the combination of GSV scores and the context-sensitive scores allows for the use of a standard test, but with a more fine-grained analysis. Other
researchers investigating YL EFL learning in other countries and possibly across countries may benefit from separating the PPVT-4 items into similar categories. The analyses showed in which domains the various groups differ and where they are alike, which opens up for further questions. The older boys scored significantly higher in the other items category than any other group, which may be a result of their engagement in extramural English activities (Hannibal Jensen, 2017). While the study set out to investigate the applicability of a L1 norm-referenced test in an YL EFL setting, it adds to the discussion of starting age and EFL learning inside and outside of the classroom. The context-sensitive analyses clearly reveal three aspects which deserve further research:

• late starters seem to have an advantage over early starters
• there are gender differences, but only for some lexical fields
• there is no clear difference between individual classrooms with the same starting grade

A limitation of the study is the low number of participants, especially in the posttest, as more reliable analysis of item difficulty requires more participants. While the cognate analysis was interesting, the results are not comparable to studies with YL EFL learners who are not Danish speakers, as the number and distribution of cognates in the test may vary for them.

Acknowledgements

This work was supported by a grant from the Danish Council for Independent Research | Culture and Communication. I would like to thank the researchers and student helpers of the The younger, the better project for their contributions to the data collection process, and Jørgen T. Lauridsen for recommending a statistical model. I thank Lars Christian Jensen for helping me with the statistical analyses.
Chapter 6. Context-sensitive Scoring

Figure 7: Difficulty of cognate vs. non-cognate items. The y-axis represents the difficulty of each item, positive numbers stand for high difficulty, the higher the number, the higher the difficulty.

References


Chapter 7

Discussion, Conclusion, and Implications of Part I

1 Summary of Part I

This part of my thesis set out to look at the role of quantity and quality of exposure to English inside of the classroom using quantitative methods to answer the following research questions:

1. Will there be differences between earlier (age 7) and later (age 9) starters of English language learning in their rate of learning and short-term L2 proficiency (i.e., after 2 years of instruction) with respect to the following language dimensions: receptive vocabulary, receptive grammar, and receptive phonological discrimination?

2. What is the role of inside-school quantity and quality of exposure to and use of English in children’s rate of L2 learning and short-term L2 proficiency? To what extent is this variable a good predictor of faster rate of learning and higher level of short-term L2 attainment?

In Chapter 4 I reviewed how the question “the younger, the better?” has been investigated in the literature. “Better” is a vague term in that it is used to describe several variables: rate of learning, ultimate attainment, and individual factors.

As for rate of learning, the literature review found higher (initial) rates of learning for older learners (Álvarez, 2006; Muñoz, 2006a), and only rarely did younger learners catch up with the older learners (Fullana, 2006). With regards to proficiency, holding hours of instruction constant, older learners outperform younger learners (Cenoz, 2003; Miralpeix, 2006; Mora, 2006; García Lecumberri & Gallardo, 2003b; Muñoz, 2003, 2006a; García Mayo, 2003; Lasagabaster & Doiz, 2003; M.-C. Torras, 2005). The conclusion of many studies is that “advancing the age of first exposure to the foreign language does not by itself guarantee a higher level of attainment at the end of compulsory schooling. In order to achieve a higher level in foreign language attainment, it would be necessary both to advance the age of first exposure and to increase the amount of exposure” (Álvarez, 2006, p. 153). Mihaljević Djigunović (2015) reported on just such a study and found early starters to outperform later starters when given more instruction, but even in this context, older learners scored higher in tasks that required explicit grammatical knowledge.

While rate of learning and ultimate attainment are the two variables that are typically meant by “better” in “the younger, the better”, there are various other factors that might be statistically related to age, such as classroom practices, motivation, parental attitudes, and out-of-school exposure to and use of L2. Many of these factors go beyond what is investigated in this thesis, but need to be acknowledged
since they might explain those differences between the participants in the present study which are left unexplained here. My colleagues Katalin Fenyvesi (forthc.) and Signe Hannibal Jensen (forthc. 2017) investigate some of these factors, and I look at classroom practices from a qualitative perspective in Part II.

1.1 RQ1 - Differences between earlier and later starters

This first research question was in principle formulated as a paraphrase of “the younger, the better?”, but it is more specific in that it defines exactly how much younger (start in 1\textsuperscript{st} vs. in 3\textsuperscript{rd} grade, i.e. 2 years difference), and exactly what is hypothesized to be better (rate of learning and short-term L2 proficiency in three specific language dimensions). To investigate this question, in Chapter 5 I analyzed the data from three quantitative L2 proficiency tests that was collected as part of the “The younger, the better?” project (Cadierno & Eskildsen, forthc.). The short answer to the “the younger, the better” question is that younger is not better for Danish Young Learners of EFL. Later starters consistently outperform early starters in short-term L2 proficiency in the three measured language dimensions: receptive vocabulary, receptive grammar, and receptive phonological discrimination. As for rate of learning, older learners have a higher rate of learning in receptive grammar, but there are no differences in rates of learning as far as receptive vocabulary and phonetic discrimination are concerned. This is in line with the literature I reviewed in Chapter 4. Gender seems to play a role in this, too, as boys consistently score higher than girls in terms of both rate of learning and short-term proficiency in the measures receptive grammar and vocabulary, but there are no gender differences in phonetic awareness. The more detailed analysis of the PPVT-4 as I have done in Chapter 6, however, paints a more varied picture. To summarize, the results of the lexical fields analysis showed: The individual scores of these categories painted a much finer picture of Danish Young Learners’ receptive vocabulary through these main findings:

- Older learners do seem to have higher short-term L2 proficiency than younger learners, but there does not seem to be an age difference in rate of learning.
- Boys only have significantly higher scores in the “other” category, not in “YL EFL topics” and “classroom words”.
- As for rate of learning and gender, there is no difference for early starters.
- Late start boys show a higher learning rate in the “other” category, but late start girls have a higher learning rate in the “YL EFL topics” category.

In Chapter 6 I also investigated the role of cognates. The analysis found that later starters score higher than early starters in cognates, but the rate of learning is higher for early starters, who seem to be on their way to “catch up” with the older starters.

1.2 RQ2 - The role of inside-school quantity and quality of exposure to and use of English

I originally intended to use a classroom observation scheme to measure the “quantity” and “quality” of exposure to English inside the classroom. This was not possible given that classrooms had several teachers with presumably different teaching methods, classroom materials, “nativelikeness”, etc. As a result, I was left with only a few variables to describe the school factor quantitatively, some of which might not be very reliable. One of the measures used was school type, i.e. public and (semi-)private
schools. However, from my classroom observations differences between public and private school are not necessarily visible in practice, two randomly selected private or public schools might theoretically very well be more different from each other than a private and a public school. We do not have enough schools in the project to make claims about the quantity and quality of teaching and learning English in these school types. Hours of instruction is an unreliable measurement, as I have already described in Chapter 5. Even if the measurements were precise, in light of the literature reviewed, it would be unlikely that these would have caused any significant differences between classrooms, considering that the range of hours is between 30-60 hours per year, i.e. 60-120 hours over the duration of this project. Keeping these limitations in mind, the main result of Chapter 5 is that inside-school factors do not have an influence on short-term L2 proficiency and rate of learning. The results of Chapter 5 can be summed up as follows:

**Amount of English lessons** is not related to receptive grammar and phonetic awareness. More lessons mean slightly higher scores (but not rate of learning) on the receptive grammar test, but the effect is very small.

**School type** is not related to receptive vocabulary. Private school students score slightly higher and gain more in receptive grammar than public school students, and have higher proficiency (but not rate of learning) in phonetic awareness.

**Individual classrooms**' scores are not different from each other when comparing only those on the same grade level. There is one pair of 1st grade classrooms that differs in their rate of receptive grammar learning, but these are only two classrooms that are different from each other, they are not significantly different from any other classrooms, and it is only the rate of learning that is different. There is also one pair of 3rd grade classrooms that differ in phonetic awareness scores. Again, it is just this one pair, and they do not differ from any other classrooms.

1.3 Variation within individual classrooms

What became evident in the analyses is that while there are no significant differences between classes on the same grade level, there is much variation between students in the same classrooms. Figure 1 shows the individual students’ receptive vocabulary scores in relation to their classmates'. The plots were made in R (R Core Team, 2013), using the packages ggplot2 (Wickham, 2009) and ggbeswarm (Clarke & Sherrill-Mix, 2017). The y-axes on the four plots have the same span – from 15 to 200 GSV points – to make visual comparisons possible. The plots show that while the mean of classrooms on the same level may not be different, there is variation within each classroom. This variation already existed at the beginning of formal EFL instruction, and increases with Age of Acquisition and test time.

In Chapter 6 I divided the PPVT scores by lexical field and their cognate status, in order to get more fine-grained results.

**Amount of English lessons and school type** are neither related to lexical field scores or gain scores, nor to cognate scores or gain scores.

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1The minimum GSV score obtainable is 15, the highest is 270. However, since no student achieved more than 185 points, I cut the axis off slightly above this point.
**Chapter 7. Discussion, Conclusion, and Implications of Part I**

**Figure 1:** GSV scores for PPVT Pre- and Posttest 2

Individual classrooms’ scores on the same grade level are not different for any of the lexical fields. As for gain scores, there is a difference in gain scores of “YL EFL topic” words of one pair of early start classrooms. There are no differences in cognate scores or gain scores between any individual classrooms on the same grade level.

While this subdivision of scores added additional information to the investigation of the factors starting grade and gender, it only confirmed the results of Chapter 5 which did not find school factors to be a good predictor of L2 proficiency and learning.

### 2 Reflection on methodology

Not only the variables used to measure classroom have limitations, but also the tests used here, as they were not designed for young EFL learners. In Chapter 6 I argued that one could adapt the scoring procedure when using an L1 test in an L2 context, but using tests designed for Young EFL learners would surely be preferable.

The study here tests two groups of young learners after 2 years, in order to make it possible to include hours or years of instruction as a variable in the statistical analyses. However, this does not match the reality of the context. Both early and late starters have certain goals to reach *by the end of 4th grade*, i.e. early starters have one more year to “catch up”. It is maybe unreasonable to compare them when they are in different grades, if teachers might intentionally teach the early starters more slowly, given that early starters have 3 years instead of 1 to learn exactly the same as late starters. What is more, the goals that the Fælles Mål state might very well have been met by both early and late starters (assuming that what the Fælles Mål expect and what the proficiency tests used here are different), but this

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goes unnoticed in the present study since the tests were not designed for Danish L2
learners. It seems that the proficiency tests used in this study are not suitable to find
differences between classrooms, since much of what they measure is not supposed
to be learned until after 4th grade, such as the vocabulary items “dilapidated” or
“tonsorial” of the PPVT, which I cannot imagine being part of any primary school
curriculum. There are children in this study who clearly outperformed their peers,
but it is doubtful that this is because they came to class more often or were “on
task” more often. The reason for their success must lie outside of the classroom (as
shown by Hannibal Jensen (2017, forthcoming)) or inside the individual child or their
social environment (see Fenyvesi (forthc.)).

3 Implications

The main finding of this part can be summarized as: starting grade and gender
matter, but school does not. In light of the literature reviewed in Chapter 4, a possible
explanation of this would be that the young learners simply do not get enough lessons,
1 or 2 weekly lessons only amount to 30–60 lessons a year, which might not be enough.
If this is so, schools should consider teaching more hours. However, while this is an
empirically and theoretically grounded implication, it seems impossible to implement
in practice. With the school reform of 2014, the school day has already become very
long for Young Learners (UVM, 2017d, 2017c), so adding more English lessons might
only be practically achievable by reducing lessons in other subjects. If the amount of
lessons cannot be increased, then research should be devoted to finding out how to
make the most of the 30–60 lessons per year, which amount to a total of 630 hours
by the end of 9th grade (UVM, 2017c), and how to help Young Learners use English
in their free time.

The results of this part also have implications for teachers and parents. Teachers
need to be aware that some of their students are highly proficient, possibly beyond
what teachers can see in regular classroom interaction and formal assessments (if there
are any). Considering that Danish young learners seem to benefit from extramural
English (see Hannibal Jensen (2017, forthcoming)), teachers might consider bridging
the gap between the classroom and the rest of children’s world, e.g. by bringing extra-
mural English into the classroom.

Parents should know that their child takes EFL classes with classmates who are
most likely considerably more or less proficient than their child, and that this is
perfectly normal.

4 Outlook

The study showed that, albeit to different extends and in different rates, both early
and late starters have improved their short-term L2 proficiency. The next step would
now be to investigate how learning happens in the classrooms, i.e. how (or whether)
teachers differentiate considering that there are such salient differences between in-
dividual learners in the same classroom, and what other practices there are in EFL
classes in Danish primary school that might be conducive to learning. Part II of this
thesis aims at doing just that, by asking:

• How is intersubjectivity co-constructed in early English as a Foreign Language
classrooms and how does this turn into learning moments and microgenesis?
Part II
Chapter 8

Introduction to Part II

1 Introduction

While Part I of this thesis looked at the outcomes of early English teaching in Denmark, i.e. quantitatively measurable outcomes EFL learning, this part zooms in on actual classroom practices.

There are various approaches to studying interaction in instructed L2 learning. (Markee, 2015d) describes six “traditions” in research on classroom discourse and interaction: the educational, cognitive–interactionist, socio-cultural theory, language socialization, conversation analysis, and critical theory traditions. As (Markee, 2015c) mentions, putting labels on these traditions is by no means intended to draw distinct borders between them; in fact, many of these overlap in their philosophical or theoretical background and/or methods.

The research in this part of the thesis is at home in the Conversation Analysis Tradition (Sacks, Schegloff, & Jefferson, 1974), in that Conversation Analysis is the methodology used in the three articles presented in Chapters 10 to 12, though the term “microgenesis” in the research question addressed in this Part suggests that at least some of the research has in some way been influenced by the Socio-cultural Theory tradition. Socio-cultural theory and Conversation Analysis are compatible in that they are both socio-interactional approaches (Mondada & Pekarek Doehler, 2004; Pekarek Doehler, 2013; Pekarek Doehler & Fasel Lauzon, 2015; Thorne & Hellermann, 2015), i.e. approaches that understand that social interaction is the basis for language learning (Firth & Wagner, 1997; Gardner & Wagner, 2004).

This view is radically different from traditional, cognitivist SLA, but has been growing in popularity as part of the “Social Turn in Second Language Acquisition” (Block, 2003), not least brought forth by Firth and Wagner’s seminal 1997 paper “On Discourse, Communication, and (Some) Fundamental Concepts in SLA Research” (Firth & Wagner, 1997) in which they called for a reconceptualization of SLA in terms of:

(a) a significantly enhanced awareness of the contextual and interactional dimensions of language use, (b) an increased emic (i.e., participant-relevant) sensitivity towards functional concepts, and (c) the broadening of the traditional SLA data base. (Firth & Wagner, 1997, p. 286)

Today, 20 years after this much-cited call for a reconceptualization of SLA research, there is a growing body of research in the field of Conversation Analysis (CA) for Second Language Acquisition (SLA) (‘CA-SLA’, Markee and Kasper 2004; Kasper and Wagner 2011; Markee and Kunitz 2015). The research in this field is as diverse as the reality of second language acquisition. They show that language learning happens not in the brain of the individual but in interaction both inside the classroom and in
the “wild” (J. Wagner, 2004; Hellermann, Eskildsen, Pekarek Doehler, & Piirainen-Marsh, 2017; Eskildsen & Theodórsdóttir, 2017), and studies range from microgenetic to longitudinal investigations (Pekarek Doehler & Fasel Lauzon, 2015).

As diverse as these research interests are, CA-SLA research shows that “second language conversations are normal conversations” (Johannes Wagner & Gardner, 2004, p. 14), that is, the participants are not “deficient communicators” (Firth & Wagner, 1997), but use the “normal” rules for social conduct that Conversation Analysis has empirically identified. This makes Conversation Analysis an extremely robust methodology. L2 classroom discourse, which is what I investigate in this thesis, poses an exception to some of the rules that organize mundane conversation. However, this is not because the participants are not yet competent (i.e., native-like) speakers of L2, but because it is a form of institutional talk. I will come back to this in 9.

2 Research Question

• How is intersubjectivity co-constructed in early English as a Foreign Language classrooms and how does this turn into learning moments and microgenesis?

The articles in this Part cannot fully answer this question, but they add to the growing body of empirical – more specifically, conversation analytic – research on instructed foreign language learning that investigates precisely this or similar questions.

3 Structure of this Part

This Part consists of 6 chapters including the present chapter. Chapter 9 gives an overview of the methodology used in this Part, Ethnomethodological Conversation Analysis. Chapters 10 to 12 are the articles that report on the empirical research of this Part. Lastly, Chapter 13 discusses how the three articles relate to the above research question and presents the common conclusions and implications.
Chapter 9

Ethnomethodology and Conversation Analysis

1 Conversation Analysis’ background in Ethnomethodology

In this chapter I will describe ethnomethodology and conversation analysis (EMCA), as they constitute the qualitative methodological framework for the thesis as presented in Chapters 10 to 12.

EMCA investigates the methods people use to organize their lives socially. EMCA studies do not study individuals, but members, i.e. members of society, or members of a foreign language classroom. More specifically, EMCA studies members’ methods. A radically emic methodology, EMCA only explicates what is accountably recognizable, that is, publicly observable acts of sense-making from the perspective of the participants. In this section, I will describe three principles of EM and/or CA: respecification, unique adequacy, and ethnomethodological indifference.

1.1 Respecification

Harold Garfinkel’s ethnomethodology can be seen as a respecification of traditional sociology. “Forcefully reaffirming ethnomethodology’s incongruous character, Harold Garfinkel, the founder of the enterprise, deems it an incommensurable, alternate, asymmetrical sociology” (Sharrock, 2001, p. 249). Incommensurable, in this context, means that there is no common ground between sociology/formal analysis and ethnomethodology. In practice this means, if an ethnomethodological study is done as a respecification of a sociological question, it will not answer the original question that the sociological study asked. In that, it is an alternative study. In principle, any sociological study can be turned into an ethnomethodological one, i.e. by finding an actual setting where people deal with this problem. This relationship between sociology and ethnomethodology is asymmetrical, as the problems that ethnomethodology is interested in are not accessible to the inquiries of formal sociology. The concept of respecification very much plays a role in the present thesis. A sociologist (or psychologist/mainstream SLA-reasearcher) might be interested in a seemingly similar problem as I am. They might ask: “Under which circumstances do young learners learn a foreign language?” or maybe even more specific: “What is the effect of certain teaching methods/use of first and second language in the classroom on long-/short-term foreign language learning?” They can then develop formal analytic coding schemes for classroom observations, interview teachers, and test the learners’

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¹ I thank Rineke Brouwer for her excellent PhD seminar, in which she highlighted these three requirements and inspired me to think about them in relation to my thesis.
language proficiency, carefully controlling for age, gender, socio-economic status, and other factors that have been shown to have an influence on language learning. I have done this kind of research in Part I of this thesis, in this Part II however, it is necessary to *respecify* this question to something like: “What is language learning in terms of the practical organization of the language classroom?” or “Under which practical conditions, in which practical ways, by what practical measurements do teachers and students create learnables and teachables/orient to learning a foreign language/display and demonstrate understanding?”.

### 1.2 Unique Adequacy

Any researcher wanting to capture the indigenous methods people in a social setting use, needs to acquire some of the field’s competences in order to be able to understand it properly. Not fulfilling this requirement (e.g. not knowing the legal system when studying courtroom interaction) may put a researcher in a situation where they are unable to see what the members see and instead have to rely on what they report to them. Doing Conversation Analysis, in whichever social setting, one might argue that any researcher fulfills the unique adequacy requirement. Conversation Analysis looks at how participants in interaction organize their social conduct in and through social interaction. After all, co-participants in interaction are doing things and organize their lives in a publicly observable and reportable way. People are using accounts to organize their understanding of a setting, as not only the researcher, but also the co-participants themselves need to, in situ, make sense of and socially display what they are doing. A member of society myself, I can use my ordinary conversational competences to make sense of what the co-participants in my data are accountably doing. However, since this project is about institutional interaction, more specifically early EFL learning in Denmark, I needed some background knowledge in order to be able to make sense of some of the practices. This includes me understanding both Danish and English, as these are the languages spoken in the classrooms, and knowing what Danish children are expected to know and be able to do at certain ages, e.g. that children in 1st grade generally are not good at reading and writing yet.

### 1.3 Ethnomethodological Indifference

EM (but not necessarily CA) is indifferent to theories and previous findings in its studies. The reason why I separate EM and CA here is that it is very common for CA studies to not only refer to and build on previous CA research, but also to take findings from one setting, and deliberately try to look to observe the same in other settings, such as when doing comparative research or building collections across databases (Markee, 2015a; Pekarek Doehler & Fasel Lauzon, 2015). While the research in the three articles of this Part of the thesis starts with an ethnomethodologically indifferent stance (unmotivated looking), the research questions of the individual articles are influenced by previous findings. Chapter 11, for instance, heavily builds on previous research on and classifications of code-switching (Auer, 1984; Üstünel & Seedhouse, 2005), which led to the discovery that the observed behavior in a specific classroom (divergent language choices without alignment or even orientation to the markedness of these language choices) is interesting and different from language use in other classrooms. We did not conduct this research in order to make an evaluation of whether or not or teachers should use the L1 in the classroom, much in line with early EM research (“EM Version 1.0”, Pollner, 2012) in which
the ethnomethodologist abstained from assessing the correctness, appropriateness, or rationality of the practices characteristic of the host domain or discipline [...] seeking only to explicate the temporally unfolding courses of action and the practices and presuppositions which provided for their in-situ accountability. (Pollner, 2012, p. 15)

However, doing applied Conversation Analysis, the articles in this Part take an “EM Version 2.0” stance, in which the researcher “is no longer to exhibit indifference, but, to the contrary, is invited to join the local occupational dialogue to contribute to its improvement” (Pollner, 2012, p. 15). This allows me – and my colleagues who wrote these articles with me – to formulate practical implications for teachers, teacher educators, and policy makers based on our EMCA studies.

2 Intersubjectivity

EMCA relies on the fact that participants in interaction build on and co-construct shared understanding, and that they are morally accountable to do so. Heritage summarizes Garfinkel’s stance on intersubjectivity as follows:

Much of the time we are engaged in achieving mutual understanding by using background knowledge to ‘fill in’ the meaning of what people say and do. This is a fundamental activity – more fundamental than anything else we do. We absolutely rely on one another’s capacities and preparedness to maintain this shared universe. Garfinkel uses the term ‘trust’ to describe this reliance. Trust involves our expectation that others will work to see the world as we do. Garfinkel argues that, as the term implies, this expectation is a moral one. Making sense is something we morally require of one another. (John Heritage, 1998, p. 217)

Extract 1 is from a 3rd grade EFL classroom. The lesson is almost over, and as a last task, the students have to write at least 3 words but preferably 3 sentences about what they have done or learned in this lesson into their individual “logbooks”, and this is supposed to be done in English.

**Extract 1:** How do you spell and?

01 JON: *hvordan staver man til og*  
how do you spell and  
02 (0.6)  
03 TEA: *ant*  
04 (0.2)+(1.3) ((1.5))  
jon +positions her body and hand for writing--->  
05 JON: *a::n::t*  
jon +writes----->

In line 01 of Extract 1 JON asks “*hvordan staver man til og*” (“how do you spell and”). After 0.6 seconds, the teacher responds with “*ant*” in line 03, and JON gets ready to write (line 04) and starts writing into her logbook while slowly saying “*a::n::t*” (line 05). This example is quite interesting. JON literally asks how to spell “og”. If someone had just entered this room and did not know this was an English class and that the task was to write things in English and that most Danish 3rd graders know how to spell the very common Danish word “og” might have replied
“O G”. What actually happens is that teacher provides her with a different word, “ant”, i.e. the (final-devoiced\(^2\)) English translation of “og”, and he does not spell out the individual letters. This does not seem to cause any problems – in fact, it has solved the problem – since JON starts writing in lines 04 and 05.

This interaction unfolded the way it did, because JON and the teacher made use of their shared knowledge and understanding of the context. Both of them know what the task at hand is about, and both of them either know that JON can spell “og” in Danish or that even if she did not know how to spell “og”, she would have to write “and” in English right now as part of this task. For a similar reason, I have provided the reader with a description of the context before presenting the abstract. I made use of this information when I analyzed this Extract, without this background I could not have understood everything the participants understood.

3 Conversation Analysis

Conversation Analysis (Sacks, Schegloff, & Jefferson, 1974) studies naturally-occurring interaction and how people create social order through organized conduct. As fine details of interaction are interesting to conversation analysts, detailed transcripts (Jefferson, 2004) of audio- or video-recorded interaction are the foundation for any studies in this field. As an emic approach, conversation analysts study if and how participants themselves orient to these details. Conversation analysts often not only transcribe and included in their analysis verbal conduct, i.e. what is said and how it is said, but also other bodily conduct, such as gaze, body posture, and gestures.

Conversation Analysis is based on the assumption that interaction is orderly, i.e. that “there is order at all points”, and this order is an ongoing accomplishment of the participants. This order is created in an through interaction through different levels of organization, i.e. the organization of turn-taking, sequences, and repair (see Sidnell, 2010; Sidnell and Stivers, 2012 for a general introduction, or Pomerantz 1984; Sacks, Schegloff, and Jefferson 1974; E. A. Schegloff 1992 for more details).

Participants in interaction take turns at talk. Turns are made-up of turn-constructional units (e.g. a word or a sentence). The end of any turn-constructional unit marks a transition relevance place, i.e. the time where a change in speakership may occur. Which of the participants speak when is organized through a turn-taking model, which makes it so that usually, only one person speaks at a time, and that any next turn is allocated according to certain norms, broadly speaking that usually the current speaker selects the next speaker through some technique, and that a potential next speaker may otherwise self-select to be next speaker (Sacks, Schegloff, & Jefferson, 1974). These turns are designed so that they are connected to a (immediately) prior turn and understood as connected to this prior turn, and project what the next speaker can do in their next turn and how it can be understood. In that sense, each turn is both context-shaped and context-renewing (John Heritage, 1984b). This is nicely illustrated by adjacency pairs, which are the basis of any sequence.

 Extract 2: Question-answer adjacency pair

<table>
<thead>
<tr>
<th>Line</th>
<th>SUS: why does he go to the park</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>NES: to feed the monkey</td>
</tr>
</tbody>
</table>

\(^2\)Please note that I am not interested in judging how “nonnative-like” the teacher’s pronunciation is in line 03 and how this might have led JON misspelling “and” as “ant” and which potential impact this might have on JON’s L2 proficiency. I am indifferent to this question; my interest lies solely in uncovering which practical resources JON and TEA use for shared sense-making.
Extract 2 is an example of a basic question–answer adjacency pair. Other examples of adjacency pairs are greeting–greeting, invitation–acceptance, or invitation–rejection. In this Extract, SUS asks a question in line 01, and NES provides an answer in line 02. This adjacency pair could have come from any setting, an ordinary conversation or any institutional setting. In terms of intersubjectivity, even a simple mundane exchange like in Extract 2 is remarkable; NES understands that SUS’ utterance is a question, which normatively expects a response, and provides just this. However, to know whether it was meant as a request for factual information by SUS, we would have to look at what SUS does next, i.e. use the next-turn proof procedure (Sacks, Schegloff, & Jefferson, 1974). It might very well be that using this same linguistic form, SUS’ utterance was meant to perform a different action, e.g. making fun of “him” for doing something as uncool as going to the park, which then may have preferred NES’ alignment with this assessment (Pomerantz, 1984; Sacks, 1987). It might also have been the case, that SUS’ meant to refer to another person by “he”, i.e. not the person feeding the monkey. If this was the case, we would see a form of repair (E. A. Schegloff, Jefferson, & Sacks, 1977; E. A. Schegloff, 1992) in SUS’ next turn.

In this case, “he” would be a trouble-source that needs to be repaired in order to re-establish mutual understanding. Repair is first initiated, and then completed. Repair can be self-initiated (i.e. by the speaker who produced the repairable) or other-initiated (i.e. by another participant), and likewise self-completed or other-completed. Most commonly, repair is done as self-initiated and self-completed repair (Kitzinger, 2013). In L2 classroom interaction, however, the organization of repair is different, as L2 classroom interaction institutional interaction, as we will see in the next section.

4 Institutional Interaction

Institutional interaction is social interaction just as much as ordinary conversation is. However, institutional interaction, such as classroom interaction, is not institutional just because it takes place in an institutional building between people who have the role “teacher” or “student”. In EMCA, a teacher or a student is not something one is, it is something one does; i.e. the focus is not on roles/identities or what people say, but on which social actions they accomplish through their talk-in-interaction. People do “being a teacher” or student through verbal and other bodily conduct, which is both shaped by and renews the context of the social institution (Drew & Heritage, 1992). Heritage describes this as talking institutions into being: “It is this through the specific, detailed and local design of turns and sequences that ‘institutional’ contexts are observably and reportably – i.e. accountably – brought into being. They may be created and realized outside of their usual formal locations in classrooms, courtrooms, etc., and, by the same token, they may fail to be realized inside these places. This observation suggests that, notwithstanding the panoply and power of place and role, it is within these local sequences of talk, and only there, that these institutions are ultimately and accountably talked into being” (John Heritage, 1984b, p. 290, italics in original).

One of the main differences between ordinary conversation and classroom interaction is the organization of turn-taking. While there are some quite intricate rules about who has the right or obligation to take or keep the floor in ordinary conversation (Sacks, Schegloff, & Jefferson, 1974), in classroom interaction it is usually the teacher...
who controls the turn-taking. In teacher-fronted activities, much interaction can be described with the initiation-response-feedback/evaluation (IRF/E) pattern (Mehan, 1979; Sinclair & Coulthard, 1975), where the teacher asks a question, nominates a student to respond, and then evaluates this response (see Extract 3).

**Extract 3:** IRF/E pattern

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>SUS: why does he go to the park</td>
</tr>
<tr>
<td>02</td>
<td>NES: to feed the monkey</td>
</tr>
<tr>
<td>03</td>
<td>SUS: to feed the monkey</td>
</tr>
<tr>
<td>04</td>
<td>very good</td>
</tr>
<tr>
<td>05</td>
<td>forstår i det do you(PL) understand this</td>
</tr>
</tbody>
</table>

In a previous section, I have described Extract 2 as a basic adjacency pair that might come from any setting. Extract 3 is a continuation of this Extract, and shows that it in fact comes from a Danish EFL classroom. In line 01, SUS asks a question, which NES answers in line 02. In line 03, SUS repeats NES’ answer. Now, depending on how exactly SUS says this and which words she stressed (we do not know, because prosody is not transcribed in this transcript), line 03 could have been an expression of surprise. However, now in line 04, SUS evaluates NES’ answer, and in line 05 she asks “forstår i det” (“do you(PL) understand this”). At this point it becomes clear that this is a classroom setting, in which SUS is the teacher. The teacher has asked a display/known-answer question, and we can see that the teacher knew the answer, because she can and does assess the correctness of NES’ answer. This interaction follows the IRF/E pattern. We can also see that this conversation was not a private conversation between SUS and NES, but one that was designed to be overheard by others, namely by the rest of the classroom, who is addressed by the teacher in line 05. The pedagogical goal of this interaction and SUS’ (the teacher’s) and NES’ orientation to it unfolds in this Extract; the class has read a story about a monkey the week before, now the teacher checks to what extent the students have understood the story, and NES demonstrates her understanding.

Checks for understanding (Sert, 2011, 2013, 2015, “epistemic status checks”) and assessments of understanding or knowledge (see Koole, 2012) like in Extract 3 are integral parts of classroom interaction, and point at another main difference between classroom interaction and everyday conversations as well (see e.g. Drew, 1991), as asymmetries are “ubiquitous properties of dialogue” (Linell & Luckmann, 1991, p. 7). The asymmetry I refer to here is related to the participants’ institutional roles that are made relevant in and through classroom interaction.

Repair in L2 classroom interaction is organized differently than in mundane conversations as well. Seedhouse (Seedhouse, 2004) finds that the organization of repair, just like the organization of turn-taking and sequences, is dependent on the classroom “context”. He distinguishes between repair in form-and-accuracy (i.e. when the pedagogical focus is on morphosyntactic accuracy), in meaning-and-fluency (i.e. when the pedagogical focus is on expressing personal meanings and not so much on

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3It is also possible for students to break this pattern through learner initiatives (Waring, 2011). Not all classroom interaction is teacher-controlled, see e.g. task-based classrooms

4Not all classroom interaction is based on the IRE/F pattern (Seedhouse, 2004), and there are other things teachers can do in the E/F slot than evaluate or give feedback (Y.-A. Lee, 2007).
linguistic accuracy), and in task-oriented (i.e. when learners work collaboratively on a task) contexts. Seeing as the pedagogical goal in each of these contexts is different, what constitutes a repairable in these contexts is necessarily dependent on this goal (Seedhouse, 2004).

5 Data

The data used in this thesis is naturally occurring EFL classroom interaction collected by researchers of the “The younger, the better?” project (Cadierno & Eskildsen, forthc.) over a period of two years, from winter 2014/2015 to summer 2017. The data consists of approximately 6 recorded 45-minute lessons from each of the participating classrooms, but this varies heavily. It was attempted to record each classroom 3 times per semester. This proved to be rather difficult, mainly because several classrooms from different had English classes at the same time or because English classes did not take place as scheduled. Some recordings were lost due to technical problems.

All but one student’s parents and one teacher have given consent to being recorded prior to the data collection. The two individuals who did not wish to be recorded were consulted with regards to camera placement so that they would not be seen.

Video-recordings were made using one or two wide-angle cameras. Two cameras are preferable, as they can capture both the front of the students (Figure 1) and of the teacher/whiteboard (Figure 2). This was not always possible for various reasons, in which case there is only one angle available. When two cameras were used, they were usually placed in opposite corners of the room. Cameras were equipped with external microphones (as can be seen in the foreground of Figure 1), and sometimes additional voice recorders were placed in the classroom.

Figure 1: Camera angle – students’ view

6 Procedure

Preparation

Video- and audio data recorded simultaneously with different devices was synchronized using Adobe Premiere Pro CC or Final Cut Pro X. The purpose of synchronizing
data is that this results in all video- and audio-files from the same lesson starting at
the exact same time, so that e.g. the timecode 00:10:59 in one of the video file corre-
sponds to the exact same timecode in another video file, making switching between
angles during transcription and analysis much more convenient.

Transcription

Data was transcribed using CLAN (MacWhinney, 2000) and using CA transcription
conventions (Jefferson, 2004) as well as Mondada’s conventions for transcribing bodily
conduct (Mondada, 2014). Transcription for Conversation Analysis is very detailed
and thus requires much time. For this reason, not all of the data has been transcribed
to CA standards. While CA works on the assumption that there is order at all points
and that no detail can be dismissed as unimportant a priori, transcripts can never
be exhaustive. The final transcripts included in the articles are focused transcripts,
that show only those details that participants observably orient to. I had to make
a trade-off between representing the data truthfully and maintaining readability. In
Chapter 12 for instance, the original version of Extract 2A that was used in the
analysis before writing the final draft of this article included some variation of “du
har glemt jacket” (“you forgot jacket”) in overlap with or between almost every line,
as one or more students persistently told the teacher that she forgot something in the
immediately preceding task. By the beginning of Extract 2A however, the teacher
had already moved on from this task with the jacket and went on with her business,
showing no orientation to these shouts at all. As our focus in this article is on
something entirely different, namely the co-construction of a learnable/teachable,
and the transcript was very difficult to follow, these “du har glemt jacket” shouts are
not included in Extract 2A of Chapter 12.

Extract 4 is a transcript that I consider “good enough” for the purpose of showing
the IRF/E structure of classroom interaction.

Extract 4: 8.3 seconds of nothing

01 TEA: what is the name of tommys little sister
02 (8.3)
03 TEA: asta
However, Extract 4 would not be detailed enough if it was my point to show how Asta was selected as next speaker in line 03. In the preceding 8.3 seconds (line 02), Asta might have done something to show her willingness to participate, e.g. raised her hand, established eye-contact with the teacher, or snapped her fingers.

Data sessions

Data sessions are more or less regular meetings of CA researchers (and sometimes other stakeholders) in which they collaboratively analyze data. While the exact fashion in which data sessions are carried out by different groups may vary (see for example Tutt and Hindmarsh, 2011, for a description of one specific data session practice), the focus of data sessions is always collaborate data analysis. While working on this thesis, I attended regular data sessions at the University of Southern Denmark (PIPE, 2017) and Hacettepe University (HUMAN, 2017). My reasons for participating in these data sessions are twofold: to become a more experienced member of the community of practice of conversation analysts, and to discover practices in my data that I would probably not have found on my own.

Identifying a phenomenon to study

In Extract 1 I described how a student literally asks how to spell a Danish word, which is followed by the teacher providing her with the English translation thereof, and the student then writes this English word into her logbook.

Extract 5: Hvordan staver man til X?

A: hvordan staver man til X ((X is a Danish word))
   how do you spell X
B: (English equivalent of Danish X)
A: ((writes down the English word))

This sequence can be the basis for building a collection of this interactional practice. Heritage and Stivers define practice as “any aspect of action that (a) has a distinctive character, (b) has a specific location within a turn or sequence, and (c) is distinctive in its consequences for the nature or meaning of the action in which it is implemented” (John Heritage & Stivers, 2012, p. 665). I have only found free writing activities in this one classroom Extract 1 comes from, and I have data from two lessons from their first year of learning English where they do logbook writing. Looking at all cases of “How do you spell X”, one can build a collection of similar and deviant cases.

Extract 6: How do you spell (am/are/is) called

01 A: hvordan staver man til hedder
   how do it spell (am/are/is) called
02 B: if i say (.). jeg hedder i say my name is
   my name is
03 A: ((writes something))
Chapter 9. Ethnomethodology and Conversation Analysis

Extract 6 follows this same pattern identified above, except for B only providing an example in line 02, since the Danish “hedder” cannot be translated directly to English without knowing the grammatical person.

**Extract 7:** How do you spell one

01 A: e:n (.) hvordan staver man til e:n
     one     how do you spell one
02 B: one
03 A: hvordan
     how
04 B: o n e ((spelling in Danish))
05 A: ((writes something))

Extract 7 is different – or deviant – from the others. In line 03, following the identified structure, A could have written “one” into her logbook. However, she asks a follow-up question in line 03, respecifying how her turn line 01 was supposed to be understood, namely as a request for spelling the English equivalent of “en”. B understands it as such, as she spells “one” in line 04, and A responds to this by writing something (presumably “one”). While this case is different as it does not unfold in the same way as Extracts 1 and 6, it nevertheless shows that “how do you spell X” is commonly understood as an oral translation request by members of this classroom, as this is how B oriented to it in line 02, and A had to do repair work in line 03 in order to achieve something different.

Once a research focus is found, the next step is to build collections of similar and deviant cases. Some representative cases from the collections are then selected for inclusion in the respective article, and analyzed line-by-line, keeping the article’s research question in mind.
Chapter 10

Teaching EFL to Young Learners in Denmark: The case of extreme differentiation

Maria Vanessa aus der Wieschen

Abstract

This study investigates if and how primary school teachers of English as a foreign language (EFL) to young learners in Denmark interact in everyday classroom interaction with students who — according to a receptive vocabulary test — differ vastly in their English skills. Using conversation analysis, the study looks at how the high- and low-scoring students present themselves in terms of claimed and demonstrated proficiency, epistemic displays, and willingness to participate, and at teachers’ methods to engage in interactions with these children, for example when they select them as next speakers. The analysis focuses on how the categories “strong” and “weak student” are co-constructed by both the teacher, the student in question, and their classmates. It seems that membership in one of these groups is written in stone, as students are not given many opportunities to be reassessed, even though continuous assessment is a prerequisite for successful differentiation. The analysis of EFL teachers’ successful practices of doing differentiation in teaching-in-interaction identifies practical ways to support weaker and stronger Young Learners of EFL.

Keywords for Index: Conversation Analysis, differentiated instruction, Young Learners, EFL, Denmark

1 Introduction

The study is part of a project with around 264 pupils that compares the learning trajectories of students who were introduced to English in the 1st grade with students who were introduced to English in the 3rd grade (Cadierno & Eskildsen, forthc.). The students have been tested and observed for two years now. Prior to being tested for the first time (using the receptive vocabulary test PPVT-4 (L. M. Dunn & Dunn, 2007)) they had only had up to a few months of EFL classes, and there were very large differences in receptive EFL proficiency scores between individual students in the same classrooms. While some of the explanations for this most likely derive from the children’s use of English media at home, and certain socio-affective factors (see also Hannibal Jensen 2017, forthc.-a; Fenyvesi forthc.), I also know from classroom observations that teachers interact differently with different students. The purpose of
this study is to explore the extent to which this is related to the students’ proficiency levels.

To achieve this the study investigates how teachers interact in everyday classroom interaction with students who – according to a receptive vocabulary test – differ vastly in their English skills. The data come from 14 lessons from four focal classrooms, all four of which have a high number of students whose scores are among the highest or lowest out of all 264 students. These lessons are all set in the second semester of the first year of EFL lessons, i.e. at a time where teachers might already have noticed differences between individual students. Using multimodal conversation analysis, this article looks at how the high- and low-scoring students present themselves in terms of claimed and demonstrated proficiency, epistemic displays, and willingness to participate, and how their respective teachers orient to this. I also investigate the teachers’ methods to engage in interactions with these children, for example when they select them as next speakers.

I consider this co-construction of the categories “strong” and “weak” student as differentiation of teaching-in-interaction. Differentiated instruction is a way of teaching that acknowledges and caters to individual learner differences, such as “readiness, interest, and preferred approaches to learning” (Tomlinson, 2014, p. 5). Tomlinson and Moon (2013a) list four classroom factors through which teachers can do differentiation: differentiation of content, differentiation of process, differentiation of product, and differentiation of environment. While learning outcomes in differentiated classrooms are usually the same for all students - as they are defined by a standardized curriculum in many places - the ways individual students reach and demonstrate the achievement of these goals (i.e. content, process, product, and environment) can be individualized (Tomlinson & Moon, 2013b). While in practice this often means giving different tasks to different students, or allowing students more time to complete a test, this kind of differentiation is not found in the data.

1.1 Differentiated Teaching in Denmark

The present paper is part of a larger project on early foreign language teaching and learning in Denmark (Cadierno & Eskildsen, forthcoming). The project follows 264 students belonging to one of two groups, one with start of English lessons in 1st grade, the other in 3rd grade, in their respective first two years of learning English. These students in the project are from four public and two private schools. In Denmark, differences between public and private schools are not very large. For the purposes of the present paper, the only difference I would like to highlight is that while public schools are required to teach in accordance with the Fælles Mål (“Common Objectives”; UVM 2017a) that were revised as part of the 2014 educational reform, private school can choose whether they want to follow the Fælles Mål or not, as long as the education is as good as at public schools (UVM, 2017b). The private schools in this project do voluntarily follow the Fælles Mål.

One of the key principles behind the Fælles Mål is that the focus is on what competencies students should acquire through knowledge and skills. These competencies, knowledge, and skills are defined for each subject, for each educational stage. These stages can vary by subject, for English there are objectives to be reached at the end of the 4th, 7th, 9th, and 10th grade (EMU, 2016). For English in primary school (1st to 4th grade), there are 3 competence objectives to be achieved, and 13 knowledge or skill objectives. These objectives are “normal objectives”, i.e. objectives that are to be achieved by the majority of students in a class, assuming their performance is normally distributed in a statistical sense, with only some students achieving less
or more than the Fælles Mål (Rasmussen, 2015). There is methodological freedom in Denmark, which means that the government cannot ask teachers to teach in a certain way, but the school reform’s focus on students achieving national objectives does suggest teachers plan, perform, and evaluate teaching and learning in a highly goal-oriented fashion. This goal-oriented teaching is also referred to as proactive teaching, where the focus is on teaching proactively regarding each individual student’s needs and their progress with regards to achieving the current and long-term objectives (Rasmussen & Rasch-Christensen, 2015). This way of teaching is to be based on an iterative 5-step process (Rasmussen & Rasch-Christensen, 2015). The first step is planning, i.e. the teacher decides which competences/knowledge/skills students should learn (in accordance with the Common Objectives), and designs a curriculum and individual lessons based on these objectives. The second step is a pre-evaluation. Here, the teacher evaluates not only where each individual student is and what prior knowledge they have, but also evaluates the “average” knowledge of the class (Rasmussen & Rasch-Christensen, 2015; Helmke, 2013). The third step is developing signs of learning, i.e. visible success criteria that make the students’ learning visible. The fourth step is the actual teaching in the classroom, and differentiation is considered a prerequisite for teaching (Danmarks Evalueringssinstitut, 2011; Rasmussen & Rasch-Christensen, 2015). That is, in Danish public schools, differentiation is to be considered “a principle, not a method […] practiced alongside or as a supplement to teaching” (my translation; Rasmussen and Rasch-Christensen 2015, p. 126. The fifth step of the iterative process is an evaluation (by the teacher or the students themselves) of where the class as a whole/average and each individual student is with regards to the objectives, using the “signs” developed in step 2. This evaluation is also referred to as evaluation for learning, highlighting that the focus should not be on the measurement of learning, but on evaluating with the purpose of supporting learning (Dobson & Engh, 2010; Kousholt, 2015; Slemmen, 2012). Evaluations of each individual public school student’s status with regards to their personal objectives are required by law (UVM, 2017f), but only from 3rd-8th grade for the subject English. This requirement highlights the importance the Danish government ascribes to evaluation and thus to differentiation, but how and if this is done requires empirical research.

1.2 Prerequisites for differentiated teaching

As differentiation is based on individual learners’ needs, abilities, and preferences, a prerequisite for successful differentiation is that teachers not only know these individual differences, but also know where each individual student stands with regards to the lesson’s, unit’s, or year’s goals. As summative assessment, such as a test at the end of a unit, is not a part of early EFL in Denmark (it is not required by law, and I have not observed it in any of the project’s classrooms), the focus here will be on formative assessment, i.e. the formal or informal ongoing assessment that is part of the instruction (Black & Wiliam, 1998, 2009; Tomlinson & Moon, 2013b, 2013a; M. Heritage, 2013). Examples of ongoing assessment are worksheets and quizzes, but also interactions between the teacher and the students such as pedagogic questioning (M. Heritage & Heritage, 2013), as well as “assessment conversations” (Duschl & Gitomer, 1997; Furtak, Ruiz-Primo, & Bakeman, 2017; Ruiz-Primo & Furtak, 2006, 2007; Ruiz-Primo, 2011). The ubiquitous IRF/IRE structure in classroom discourse (Mehan, 1979; Sinclair & Coulthard, 1975) makes obvious that assessments do happen in regular classroom discourse, and conversation analytic research shows that teachers have an institutional right and obligation to do so (Drew & Heritage, 1992;
Chapter 10. Extreme Differentiation

Hellermann, 2003; Macbeth, 2004; Koole, 2012; Walsh, 2006a). As teachers are holders of knowledge that students not yet have – or experts in a community of practice in which the students are novices – they are epistemic authorities. Koole (2012) proposes three dimensions of teacher assessment: the positive-negative dimension, the value dimension, and the object dimension, and further states that teachers assess what students do, what they know, and what they understand. Teachers can do this, because these processes of knowing and understanding are observable as participants in the classroom interact with each other. Students display or demonstrate knowing and understanding for instance through interrogatives or assertions (Solem, 2016a, 2016b) in student initiatives (Waring, 2011), but these are often treated as problematic (Heller, 2017). Likewise, students can claim or demonstrate insufficient knowledge (Sert, 2011, 2015; Sert & Walsh, 2013), and teachers may orient to this for instance by performing epistemic status checks (Sert, 2013, 2015), doing embodied vocabulary explanations (Sert & Walsh, 2013), and through designedly incomplete utterances (Koshik, 2002; Sert & Walsh, 2013; Sert, 2015). On a similar note, students have also been found to have various resources to show their willingness or unwillingness to participate (Sert, 2013, 2015; Evnitskaya & Berger, 2017). Willingness to participate is defined as a “social, public demonstration of one’s interest (i.e. willingness) to engage in the ongoing pedagogical activity” (Evnitskaya & Berger, 2017, p. 88). Unwillingness to participate can be displayed for instance by withdrawing gaze from the teacher (K. Mortensen, 2008), smiling (Sert & Jacknick, 2015; Sert, 2015), or claiming insufficient knowledge (Sert, 2015). Likewise, willingness to participate can be displayed in various ways, some of which may be so subtle that they remain unnoticed (Evnitskaya & Berger, 2017).

2 Method

The present study draws on two kinds of empirical data collected from the same set of Danish young learners.

2.1 Participants

The participants are 264 Danish Young Learners of English as a Foreign Language (see Table 1).

2.2 Data

One type of data is obtained via PPVT-4 receptive vocabulary (L. M. Dunn & Dunn, 2007) test. The results from this test were used to identify students who score much higher or lower than other children in their age group, and to identify from which classrooms these “extreme” students are. The second type of data, which is going to be the main focus of the present paper, are video-recordings from those classrooms that have the most “extreme” students, i.e. classrooms in which one can expect to find instances of differentiation. This classroom data was analyzed using conversation analysis (Sacks, Schegloff, & Jefferson, 1974), as this approach is well-suited to analyze how the high- and low-scoring students present themselves in terms of claimed and demonstrated proficiency, epistemic displays, and willingness to participate, and how their respective teachers orient to this.
Table 1: Participants in the project – by starting grade and gender.

<table>
<thead>
<tr>
<th>Starting grade and gender</th>
<th>Students</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Fall 2014</td>
<td>Fall 2016</td>
</tr>
<tr>
<td>1st grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;early start&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>girls</td>
<td>104</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>boys</td>
<td>109</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>213</td>
<td>163</td>
<td></td>
</tr>
<tr>
<td>3rd grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;late start&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>girls</td>
<td>90</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>boys</td>
<td>95</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>185</td>
<td>101</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Focal students – by starting grade and classroom.

<table>
<thead>
<tr>
<th>Starting grade and anonymized name of classroom</th>
<th>Focal Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highest 10%</td>
</tr>
<tr>
<td>1st grade – &quot;early start&quot;</td>
<td>f2–1</td>
</tr>
<tr>
<td></td>
<td>p1b–1</td>
</tr>
<tr>
<td>3rd grade – &quot;late start&quot;</td>
<td>f1–3</td>
</tr>
<tr>
<td></td>
<td>p2a–3</td>
</tr>
</tbody>
</table>

2.3 Identifying focal students and classrooms

At the beginning of each school year for three consecutive years, all students participating in the larger project were given a receptive vocabulary test, the PPVT-4 (L. M. Dunn & Dunn, 2007). To identify focal students, I used the following criteria:

- The student must have participated in the first ("pretest") and the last test ("posttest 2")
- The student’s pretest score must be either lower or equal to the 10th percentile, or higher or equal to the 90th percentile of the scores of their grade level.

This resulted in 35 “early start” and 31 “late start” students to choose from. Each classroom has 3-6 students that belong to the most “extreme” students out of the entire sample. Table 2 below shows the distribution of these highest- and lowest-scoring students in the four selected classrooms.

From each grade level, I selected those two classrooms that have the highest number of “extreme” students. Incidentally, I have selected one public and one semi-private school from each grade level.
2.4 Procedure for analysis

The procedure was then as follows:

1. Verbatim transcripts of a total of 14 lessons from the first year of EFL classes of four focal classrooms were made.

2. A collection of all instances of differentiation was built. By differentiation I mean that at least one participant, the teacher or a student, orient to some student being a high or low achiever. These interactions were transcribed to finer detail, using the Jefferson (2004) transcription system.

3. 11 representative cases from this collection were selected for a CA analysis, these are presented as Extracts in the analysis section.

I did not identify the names of the “extreme” students (as found by the vocabulary test) prior to building the collection. That is, when I went through the video-recordings, I did so without knowing which students have high and low scores. This was done to ensure that I approach the data without any preconceptions of the students’ language skills, rather, I used a bottom-up, emic approach to identify high- and low-scoring students in terms of claimed and demonstrated proficiency, epistemic displays, and willingness to participate, and how their respective teachers orient to this.

3 Findings

This section is separated into two parts. I will first present my analyses of interactions with the strongest students, and then analyses of interactions with the weakest students.

3.1 Classroom interaction with the strongest students

In this section I will show that:

- a “strong student” is a category co-constructed by both the teacher, the student in question, and their classmates
- this categorization comes with category-bound rights
- teachers can challenge the strongest students
- these students will often seek these challenges themselves
- strong students are more often than not are ignored by the teacher, both when volunteering, and when making uninvited contributions

The strongest students in the classroom are often easily recognized, as they are oriented to as such both by the teacher, the students themselves, and their classmates. Extract 1 illustrates this point. The class has just watched a documentary in which Eric Carle talks about how he got the idea for writing and illustrating “The Very Hungry Caterpillar”. This documentary did not seem to have been created for children, much less for children learning English as a foreign language, and most of the students have made drawings instead of watching the documentary. After the lesson, I asked one of the students (Amalie) about the movie.

Extract 1: 1st grade – private school
3. Findings

01 RES: kunne du overhovedet forstå det han sagde  
could you understand at all what he said
02 AMA: ja det hele  
yes everything
03 PAR: ja kun fordi du er englænder eller hvad man kalder det  
yes only because you are English or what it is called

Actually, neither Amalie nor her parents are from England, but when she was younger she spent a total of two years in the USA with her parents, one year starting when she was a few months old, and another when she was 3-4 years old. Factually correct or not, this categorization gives Amalie rights which she can ask for herself (Extract 2), or which her classmates ask for on her behalf (Extract 3A).

Excerpt 2: 1st grade – private school

01 TEA: i think we should sing the song with the eyes and the ears
02 (0.5)
03 TEA: before we
04 AMA: ((singing)) head shoulders knees and toes knees and toes
05 TEA: before we go to the
06 classroom again to find our e things
07 FRE: jeg har øre med
I have ears with me
08 TEA: so get up please
09 AMA: må jeg syng for
may I lead the song
10 (0.3)
11 TEA: ja
yes
12 AMA: må jeg syng for
may I lead the song
13 AMA: ye::a jeg synger for
yea I am leading the song

In the beginning of Extract 2, the teacher introduces the next task, namely to sing the song with the eyes and the ears (lines 1-8). Already while the teacher is giving this instruction, Amalie demonstrates both that she knows what the "song with the eyes and the ears" is, and that she can sing it by herself (line 4). As the teacher is finishing giving the instruction, Amalie asks if she can be lead singer (line 9). This receives a confirmation after 0.3 seconds (line 11). Already as the teacher produced the confirmation token, Amalie asks a second time (line 12), and then expresses her joy over being allowed this special role (line 13). What is presumably meant by “lead singer” is the one person in a choir who is the model to be followed and imitated. I have only seen this role being assigned to a student in this particular classroom, in all other classrooms the teacher is the “lead singer” by default. Being the lead singer requires knowing the lyrics by heart and makes the lead singer accountable for failing to sing the song in an expectable manner, as some participants in the classroom may rely on having a model to imitate. The very fact that there is a lead singer creates epistemic asymmetry, in this case making Amalie the epistemic authority.

The teacher in Extracts 3A to 3C is a substitute teacher, who knows the names of the individual students in the class, but only replaces the actual English teacher on
this day because the English teacher could not be there. From the discussion in class before Extract 3A it seems that the substitute teacher has been informed that they have learned a song called “how do you do” in the previous lesson. The substitute teacher apparently did not know the song, but the class managed just fine as Amalie voluntarily led the song. While it seems that the substitute teacher had only planned to have the class sing the “how do you do” song and then watch a movie, several students have expressed their wish to also sing a song called “ten green bottles”, which the substitute teacher did not know, but nevertheless allowed the students to sing it. There was a rather lengthy preparation phase prior to Extract 3A, as the students insisted on drawing a brick wall and ten bottles on the blackboard which required the drawing skills of three students. As they have finished the illustration, the teacher asks “are you ready then” in line 01.

**Extract 3A: 1st grade – private school**

01 TEA: er i klare så
   are you ready then
02 NIC: ja amalie synger for
   yes amalie is leading the song
03 (0.7)
04 PAR: af' malie synger for
   amalie is leading the song
05 TEA: [ljaj]
   yes
06 (0.5)
07 TEA: hvem synger for
   who is leading the song
08 (0.4)
09 PAR: amalie
10 WIL: [mj] 
   me
11 FRE: lmå jēg ‘os og jeg 
   may I as well and me
12 TEA {amalie }
13 (1.3)

Nicklas responds to the teacher’s question in line 01 affirmatively, and adds that Amalie is the lead singer (line 02). After 0.7 seconds, Parina repeats what Nicklas said (line 04). The teacher’s “ja/yes” seems to refer to something else, as she 0.5 seconds later asks who is going to be the lead singer (line 07). Parina informs her that it will be Amalie (line 09). Now William and Frederikke orient to the teacher’s question as an invitation to volunteer, as they both volunteer to be the lead singer (lines 10-11). In overlap with Frederikke’s turn, the teacher confirms that it will be Amalie (line 12).

**Extract 3B: 1st grade – private school**

13 (1.3)
14 NIC: fre'derikke 
15 TEA: teller (.); vil du gern william
   or do you want to william
16 (0.5)
Nicklas then starts saying something to or about Frederikke (line 14). In overlap, the teacher now, despite already having selected Amalie orients to William’s volunteering, as she asks him if he wants to try (line 15). He confirms, and the teacher says “then william may try” (line 19). This formulation is quite interesting, the “then” indicates something like “now that I know that William wants to try”, but two other students have also expressed that they want to be the lead singer, so just a student wanting to try cannot possibly be the only condition the teacher based her decision on. It seems then that the teacher, albeit not being the actual English teacher, bases this decision on some kind of shared knowledge or experiences of this group. There might be a rule that if two or more students volunteer, the student who has contributed the least so far gets the right, or – alternatively – that for whichever reason every time William (or someone like William) volunteers and specifies that he actually wants to do what he volunteered to do, he is allowed to do so. I do not know what the reason for the teacher’s selection is other than some condition has been met (as indicated by her use of “then”). Nicklas however, in overlap with the teacher’s turn, contests this decision by claiming that “they” do not know “it” (line 20), i.e. that Frederikke and William do not know the song well enough to be the lead singer, indicating both that he has knowledge that the substitute teacher does not have, namely about individual students’ abilities, and that he is able and possibly entitled to assess his classmates. William and Frederikke do not acknowledge this entitlement, instead, Frederikke minds her own business talking to the camera which is in the classroom for data collection purposes (lines 22 and 24), and William actually starts the ritualized countdown “one two three” (line 21). However, nobody starts singing, and the teacher counts down again in line 25. This would have been Williams cue to start singing as the lead singer, but he does not. In the meantime, Nicklas has already asked Amalie to “just sing louder”, but Amalie does not start singing (line 27).
Extract 3C: 1st grade – private school

27 (2)
28 TEA: ik alligevel ((to William))
       (you do) not (want do it) anyway
29 (1.2)
30 WIL: jɔo::: 1
       yes
31 NIC: (amalie) hun (gør det) bedre
       amalie she (does it) better
32 TEA: (amalie) ja
       amalie yes
33 TEA: en to tre nu
       one two three now
34 (0.5)
35 AMA: ten (green bottles((singing “ten green bottles”)))
36 SSS: (green bottles((singing “ten green bottles”)))

The teacher then asks William to reconfirm that he wants to be the lead singer (line 28), and he does (line 30). Nevertheless, Nicklas states that Amalie can do it better (line 31) and in overlap with this the teacher agrees that Amalie should be the lead singer (line 32). As I have established in Extract 2, the lead singer is the epis-
temic authority for the duration of the song. Nicklas (and Parina) made suggestions regarding who should and should not be the lead singer, and based these suggestions on the respective classmates’ Amalie’s, Frederikke’s, and William’s) abilities. Nicklas (and Parina) show that they understand how to select a lead singer, i.e. by first assessing the potential lead singer’s ability to be the lead singer, and that they have some knowledge that the substitute teacher does not have, since she has not been in the class the last time they sang the song and Amalie, Frederikke and William demonstrated their ability to sing the song. However, it is ultimately the teacher who is allowed to assign this status, which Amalie acknowledges by not singing when she had the chance to do so, and first taking the lead singer role after she has officially been assigned this role.

Extracts 1 and 2 and extract 3A have shown that “being English” is a category which young learners orient to in terms of which rights come with this category, and that students may explicitly ask to take on a special role, but that it is ultimately the teacher who grants these rights. Teachers can also assign tasks to high achievers, which go beyond the curriculum (extract 4). In Extract 4, the researcher observing and video-recording the classroom is asked by the teacher to introduce herself to the class.

Extract 4: 1st grade – private school

01 RES: hi (0.3) i'm maria (0.2) you know me (from last time maybe
02 PAR:    lvi har set dig
        we have seen you
03 RES: yes heh
04 AMA: i have noticing you
05 (0.9)
06 RES: and i'm here to: (0.4) look at your english class today
The researcher introduces herself by stating her name, referring to a past visit, and stating that she is filming (lines 1-8). Already during this introduction, both Parina and Amalie share that they have seen the researcher, Parina in Danish (line 2), and Amalie in English (line 4), demonstrating her ability to communicate in English outside of regular classroom interaction. After the researcher states that she is filming (line 6), Amalie engages in a content-oriented parallel activity (Koole, 2007) as she turns to Frederikke and whispers “she is filming us” to her (line 10). The teacher picks up on this and asks Amalie to translate for the whole class (line 11). After 0.7 seconds Amalie translates (line 13), and the teacher confirms this translation (line 14). By asking Amalie to translate for the whole class, the teacher does several things. As the teacher acknowledges that Amalie understood something that others may not have understood, she positions Amalie as epistemically superior to her classmates. At the same time, the teacher maintains her own epistemic superiority, in that she demonstrates her ability to assess whether Amalie’s translation is correct, and orients to this translation as something she already knew before Amalie translated it by assessing and repeating the translation in line 14.

Student contributions like in Extract 4 (line 4) are quite commonly found in the data, both in parallel and in central activities. When they are in the central activity, they are usually “learner initiatives” as defined by Waring (2011). She defines learner initiatives are “any learner attempt to make an uninvited contribution to the ongoing classroom talk, where ‘uninvited’ may refer to (1) not being specifically selected as the next speaker or (2) not providing the expected response when selected.” (Waring, 2011, p. 204). Extracts 5 to 7 will illustrate the three common kinds of learner initiatives that are in the central activities that position the initiators as strong students: making a joke (Extract 5), contributing to another student’s turn (Extract 6), and initiating other-repair (Extract 7).

EXTRACT 5: 3rd grade – private school

01 TEA: i think we’ll start with the today song
02 (0.2)
03 TEA: what is today
04 (0.9)
05 TEA: <today is>
06 SSS: <today is mon day>
07 VAL: +THURSDay
val: points at wall display with weekdays
08 THO: mon "it isn’t thurs"day
09 TEA: it isn’t thursday
In lines 1-3, the teacher announces that they are going to sing the “today song” now, and asks what day it is today. As he does not receive an answer for 0.9 seconds (line 04), he very slowly – like choral speaking – says “<today is>” (line 05), which can be considered a designedly incomplete utterance (Koshik, 2002). Some students join him, they say “<ay is monday>” in chorus. Valdemar however, points at a display on the blackboard which lists all the days of the week (see Figure 1), and says “THURSday” quite loudly (line 07).

Another student corrects him (line 08). The teacher orients to Valdemar’s “THURSday” as a joke both through the use of smiley voice, laughing, and lifting his index finger (lines 9-10), after which some other students start laughing as well (line 11). What makes this “joke” recognizably a joke is of course that the teacher orients to it as a joke, i.e. the teacher assesses that Valdemar does not actually think that the first day of school after the weekend is called Thursday in English. Valdemar timed the joke in overlap with the choral speaking, going against the classroom order, and pointed at the classroom display on which he could find the days of the week, i.e. pointing at that the answer to the teacher’s question was already in the room. However, there classroom display is just a list of the weekdays in order, there is no visual indication of which day it is today such as for instance an arrow pointing at the correct weekday (see Figure 1). At the very least, Valdemar’s joke is a demonstration of his ability to find relevant information in a list in L2 and to name a weekday at a normal pace, without the safety net that choral speaking offers. To put this into context, in Chapter 11 I show that in this particular classroom the students very
rarely speak English. That is, Valdemar’s demonstration here is rather exceptional and positions him as one of the stronger students.

Extract 6 is an example of a strong student’s learner initiative to contribute to a task. The task is as follows: in preparation for this lesson, every student had to bring an object that starts with the letter E in English. The teacher asks one student at a time, and usually just repeats the word and/or gives positive feedback in the third turn.

**Extract 6: 1st grade – private school**

01 TEA: yea what did you bring
02 (0.2)
03 ROS: eyeliner
04 (0.4)
05 TEA: eyeliner o::h
06 AMA: den har jeg faktisk også taget
I actually brought this too
07 TEA: thats for big girls
08 do you use eyeliner
09 (0.3)
10 ROS: no
11 TEA: no
12 FRE: eyes
13 (0.3)
14 AMA: my mom
15 TEA: eyes
16 FRE: ø ring
ear ring
17 AMA: my mom uses eyeliner
18 S??: eyes det betyder
eyes it means
19 TEA: earrings
20 TEA: yea earrings
21 i think we should sing the song with the eyes and the ears

Rosa states that she has brought eyeliner, which the teacher repeats before expressing surprise “eyeliner o::h” (lines 3-4). Amalie states that she has brought eyeliner as well (line 6), but the teacher does not orient to this. Instead, the teacher states that eyeliner is “for big girls” (line 7), possibly to account for her surprise or to help the rest of the class understand what eyeliner possibly means. She goes on to ask Rosa whether she uses eyeliner, she does not, and the teacher accepts this (lines 8-11). Next, Frederikke self-selects to state an “E thing” she has brought, “eyes”. At first the teacher does not orient to this. Amalie then says, “my mom” (line 14) contributing something relevant to the ongoing discourse, in that the teacher has framed eyeliner as something “for big girls” and Amalie knows a big girl who uses eyeliner. She goes beyond the task that only consists of a student naming an “E thing” and the teacher assessing the contribution, as she demonstrates that she follows the current discourse and is able to contribute with her real-world knowledge, in English. However, Amalie does not get the teacher’s attention, as the teacher is now orienting to Frederikke’s “eyes” (line 15). In overlap with this, Frederikke already lists the next thing she has brought, albeit in Danish (line 16). Amalie states “my
mom uses eyeliner”, but the teacher does not ratify this, as she instead translates Frederikke’s item from line 16 to English (lines 19-20), and then begins the next task (line 21). Both Amalie and Frederikke have shown their willingness to participate by self-selecting and contributing to the ongoing interaction. However, only Frederikke’s contributions are ratified. Her first contribution “eyes” (line 12) is not adding anything new to the collection, as eyes have already been mentioned before (not shown in the extract), and “ear ring” (line 16) was not even produced in English, but ratified through the teacher’s translation anyway. Amalie’s contribution however is not ratified, as it is only contentwise related to the task and to the teacher’s question in line 08, but exceeds the task at hand and contests the teacher’s epistemic authority (Heller, 2017). In terms of differentiation, the teacher not orienting visibly to Amalie’s contribution is a missed opportunity for teaching and learning.

The third kind of learner initiative positioning a student as high achiever is self-selection to initiate (and complete) repair. In Extract 5, Thomas repaired Valdemar’s Thursday to Monday. In Extract 7, Amalie initiates repair when the teacher uses a wrong word.

**Extract 7: 1st grade – private school**

01 TEA: and tristan  
02 (2.2)  
03 TEA: what color is your dress today  
04 (.)  
05 AMA: ☺d- ress☺  
06 TEA: your suit  
08 your track suit  
09 (0.7)  
10 TEA: din trainingsdragt  
   your track suit

The teacher asks Tristan what color his dress is today (lines 1-3). The class is sitting in a circle, which means that everyone can see that Tristan is not wearing a dress, but a track suit. Amalie orients to this by saying “☺d- ress☺” with a smiley voice. The teacher completes the repair by saying “your suit” and then “your track suit”.

Seeing as some students stand out as very high achievers, teachers may want to create challenges for these students. From what the data tells us, most of the challenges are actively sought out by the students themselves, but teachers sometimes challenge these students as well. A frequently found challenge is to nominate these students to be the first to try a new, difficult task, even when they do not volunteer. In Extract 8, the teacher asks Nesrin to read a previously unknown story aloud, and from the teacher’s formulation it seems that this class has either not tried reading aloud before, or does not do it habitually.

**Extract 8: 3rd grade – public school**

01 TEA: vi ku også prøv at lade jer læse  
02 skal vi prøve det i dag  
   we could also try to have you read  
   should we try this today
3. Findings

In lines 1-5, the students reading a story aloud themselves is co-constructed as something new, and something that most of the students (except for Marcus, line 2), do not want to try. The teacher nominates Nesrin as the first student to read aloud (line 6). In lines 7-11, Nesrin insists that she is not able to read this story, and the teacher insists on her having to practice reading. Next, the teacher reads the first word of the story (line 12), after which Nesrin begins to read, i.e. the teacher has successfully handled Nesrin’s claim of insufficient knowledge (Sert, 2015). She is reading quite well apart from one long word (picture) and a possibly previously unknown word (sign). Note that this is a third grade EFL classroom in Denmark. According to the Danish Common Objectives (EMU, 2016), after the second grade, in the subject Danish, students are only expected to read words with two syllables. Having noted this, reading this text in a foreign language seems like a challenge, and further investigation of the data reveals that Nesrin performed much better than most of the others who were selected to read.

I have also found students to seek challenges themselves. These challenges may include delivering more than the task requires (e.g. listing two or more vocabulary items when only one was asked for), or having a private conversation in English with the teacher while the rest of the class is finishing a task.

3.2 Classroom interaction with the weakest students

Unlike the strongest students, who have various means to demonstrate their proficiency and willingness to participate, the weaker students are difficult to spot in the classroom. Their practices may include showing unwillingness to participate and claims of insufficient knowledge, but since these are not practices that are exclusively limited to low achievers, they cannot be treated as signs of low competence per se. However, in the analysis I found two interesting practices on the part of the teachers regarding the classroom language policy, namely:
• asking questions and giving instructions in the L1, when otherwise following a L2-only policy
• accepting contributions in L1 from some students, but not allowing others to contribute in L1

Some teachers try to follow a L2-only policy, which includes that they speak English most of the time, and do language policing when students respond to an English question in Danish. However, with some students, the teacher speaks Danish, and accepts their Danish responses (see Extracts 9-11).

In Extract 9, the class is moving from one part of the classroom to another, where they are expected to sit down on the floor. Not all of the students in this first grade are equally good at sitting still and the teacher asks them to come back to the circle.

Extract 9: 1st grade – private school

01 TEA: william where are you going (.) come on over here
02 ((7.4 seconds of classroom management in English omitted))
03 TEA: frederikke kom here
    frederikke come here

In this extract, both William and Frederikke are not where they are supposed to be. While the teacher addresses William in English (line 1), she addresses Frederikke in Danish. This is interesting, because the teacher’s use of English in line 01 shows that students in this classroom are expected to be able to understand the instruction “come here” in English, but the teacher nevertheless gives this simple instruction in Danish when talking to Frederikke, indicating that she might not expect Frederikke to be able to understand this instruction in English.

Extracts 10A and 10B are from a third grade. The current task is to retell a story that the class has read in the previous lesson.

Extract 10A: 3rd grade – public school

01 TEA: what are the names
02 WIL: R K five
03 TEA: R K five who is R K five
04 WIL: ehm this is a robot
05 TEA: that’s a robot very good
06 TEA: who else is in the story
07 NES: eh en abe
    uh a monkey
08 TEA: in Eng⌈lish
09 NES: ⌊monkey
10 TEA: a monkey very good there is a monkey also

In this Extract, the teacher asks for some names of the characters in the story. William gives a name and answers a follow-up question in English (line 1-5). Next, the teacher asks for more characters (line 6). Nesrin says “a monkey” in Danish, which the teacher orients to as a breach of the language policy (line 8). In overlap with the language-policing, Nesrin reformulates her answer in English (line 9), which is accepted by the teacher in line 10.
In the same lesson, the teacher allows other students to contribute in Danish, as in Extract 10B.

**Extract 10B:** 3\textsuperscript{rd} grade – public school

01 TEA: hvad hvor er det bongo han bor henne
what where is it bongo lives
02 (1.6)
03 TEA: hvor bor han henne hannah
where does he live hannah
04 (1)
05 HAN: i:: et træ ude i en park
on a tree in a park
06 TEA: ude i (.) park og hvad laver andy der hver dag
in park and what does andy do there every day
07 HAN: ehm:::
08 (1.9)
09 HAN: ja han går rundt o:::g
well he walks around and
10 (1.6)
11 HAN: hygger sig
has a good time
12 (0.2)
13 TEA: ja det gør han sikkert også men hvad er det han kommer med
yes he probably does but what is it he brings

This Extract is part of the same task as Extract 10A. The questions that Hannah is asked here have already been answered by Nesrin in English just prior to this extract. The teacher nominates Hannah, who has not displayed willingness to participate, to respond to the question she has asked in Danish in lines 1 and 3. After 1 second Hannah, with a bit of hesitation in the turn-beginning, responds in Danish. The teacher repeats part of her answer in Danish and asks a follow-up question (line 6). Hannah responds with a hesitation marker (line 7), followed by 1.9 seconds silence. She then answers, “well he walks around”, followed by an elongated ”o:::g/and“,” indicating that more will follow. After 1.6 seconds she produces “hygger sig/ has a good time” (line 11). The teacher tentatively accepts this answer or judges the adequacy of Hannah’s turn, i.e. that Hannah provides a relevant second pair-part, which does not mean that the teacher assesses the content of Hannah’s response to be correct (Macbeth, 2003), and then reformulates her question (line 13). This exchange continues in Danish for a few more turns. As the same teacher had just moments ago language policed Nesrin and other students (Extract 10A), and continued to do so with other students after this Extract, the teacher’s language choice and acceptance of Hannah’s use of L1 is an indication of the teacher assessing Hannah to be one of the weaker students.

I have more examples of selective disregarding of the language policy in this lesson and from other classrooms in the database. A rather curious example is presented in Extracts 11A and 11B. In preparation for the lesson, each student had to bring one or more items that start with the letter E in English, possibly to bring some words from outside of the curriculum to the classroom. It would make sense then, that these items are presented in English, like in Extract 11A below.
Chapter 10. Extreme Differentiation

Extract 11A: 1st grade – private school

01 TEA: Amalie did you bring
02 (0.2)
03 TEA: did you bring anything
04 (0.9)
05 AMA: yes
06 I have an uh eagle with me
07 TEA: eagle

In this Extract, the teacher asks Amalie whether she has brought anything. This is followed by 0.9 of silence, which might be due to the teacher using “anything” even though Amalie has already listed two or three items that she has brought to class prior to this extract, i.e. Amalie might have waited for the missing “else”. Amalie then confirms yes, and adds that she has an eagle with her (lines 5-6). The teacher accepts this by repeating part of Amalie’s response (line 7). Note that Amalie produces more than is expected in this task by producing a complete sentence. All other students, only named the object they brought. Some of the other students are not even responding in English, even though the task is specifically designed to say English words that start with the letter E.

Extract 11B: 1st grade – private school

01 TEA: what did you bring rosa
02 ROS: en kuvert
03 an envelope
04 (0.6)
05 TEA: an envelope

In Extract 11B, the teacher addresses Rosa in English, and asks what she brought to class (line 1). Rosa responds in Danish “en kuvert” which translates to “an envelope”. After 0.6 seconds, the teacher accepts this by translating Rosa’s response to English (line 4). The task was to bring to class and name an object that starts with the letter E in English, but the teacher accepts Rosa’s contribution in Danish. In order to ensure that language use and pedagogical goal are aligned (Üstünel & Seedhouse, 2005), she could have done language policing like the teacher in Extract 10B, or asked Rosa or the whole class to say “envelope” after line 04, but she did not. By accepting Rosa’s contribution in Danish, she effectively changed the pedagogical goal to something less demanding, in line with Rosa’s apparent low proficiency. This practice of accepting a Danish contribution by translating it to English and moving on to something else is quite common in the database, both in the first and the third grades.

4 Discussion

Whether this differential treatment of the weaker students does more harm than good or is an active acknowledgement of these students’ role as legitimate peripheral participants is a question that goes beyond the scope of this paper. From the empirical data collected as part of the vocabulary test it seems that those students who were in the bottom 10% of their age group at the beginning of their first year still receive
some of the lowest scores after 2 years of instruction, and for the top 10% of each age group, this is even more salient.

However, the scores of this summative assessment is accurate and relevant to the kind of participation required and enabled in the classroom is questionable. Very much like in Hellermann & Harris’ case study (2015), the scores of the language test do not reflect the competence that students can demonstrate in the classroom for the teacher to assess as part of the ongoing formative assessment. Amalie’s classroom for instance is a classroom that stood out in the vocabulary test because 5 students that belong to the top 10% of all of the first graders in the project are in this classroom. Amalie is one of them, but so is Rosa who does not stand out as one of the best students in Extract 6 and extract 11B, where the teacher treats her as someone who is not required to reach the current pedagogical goal. Where the teacher got this impression is unclear, but it might be a form of long-term responsiveness (Koole & Elbers, 2014), i.e. the teacher designed her first pair parts responsive to a previous display of low competence by Rosa. J. K. Hall (1997) shows how a Spanish as a FL teacher (for unknown reasons) constructs two groups of students, a primary and a secondary, the first of which has more interactional rights and gets more affirmation and attention from the teacher both in teacher-led IRF discourse and student initiatives, resulting in limited opportunities for participation for the latter group. It seems in Hall’s discourse analytic study that it is mainly the teacher who assigned the students to these groups, i.e. there were no between group differences with regards to quality or quantity of contributions that would warrant this separation, yet still, the teacher evaluated the participation and learning of students in the primary group to be better than in the secondary group. In Extract 11B, instead of closing the sequence (Waring, 2008), the teacher could have asked Rosa to present her object in English, which would have given Rosa a second chance to demonstrate her knowledge, very much like Nesrin was given a second chance in Extract 10A, and would have resulted in an opportunity for the teacher to assess Rosa’s proficiency anew.

In the same fashion, ignoring high achievers, by not nominating them when they volunteer or not acknowledging their learner initiatives may result in missed learning opportunities as well. Li (2013) studied the relationship between facilitated or missed learning opportunities and epistemic asymmetry and L1 and L2 identities. The teacher in this case study from a Chinese as a FL classroom is not a native speaker of English, but some of the students are. When the teacher asks the students to translate an English sentence she invented to Chinese, some of the L1 English students discuss the pragmatic appropriateness of the English sentence, a discussion which the teacher closes even though similar pragmatic rules apply in Chinese. While it might be unrealistic that young learners discuss pragmatics in class, the data in the present paper shows that they do actively contribute to something that could develop into a learning opportunity; i.e. by using complete sentences (Extract 11A) or discussing real-world use of “E things” brought to the classroom (Extract 6).

As for the age of the students, the differentiation practices observed happen in both first and third grades. While one of the tasks might only very unlikely be found in a 1st grade, namely students reading a story in English, the principle of calling on a known high achiever to be a role model – as the first to do a difficult task such as reading aloud, or as the lead singer - is the same in both age groups. However, these practices are not found in every classroom. While no classroom practices differentiation in the “common” sense, i.e. differentiation of content, differentiation of process, differentiation of product, and differentiation of environment, the kind of
interactional differentiation observed in the present paper is not practiced in every classroom either. Initially, four classrooms were selected for analysis for the present paper, but none of the extracts presented here are from this classroom, as no form of differentiation takes place in this classroom. This is because the practices described in this classroom require some kind of talk in interaction in English, but not all teachers teach in a way that lets students demonstrate what they know and can do. As it is student participation that enables teachers to assess students, it is difficult (for me as an analyst, and maybe also for teachers) to identify low achievers in the classroom, as not volunteering, or claims of insufficient knowledge are not solely done by low achievers, they may simply be a sign of unwillingness to participate for any reason.

5 Conclusion and Implications

This study aimed at identifying practices of interactional differentiation in primary school EFL classes. Using conversation analysis, the study found that both teachers and students assess students as high or low achievers, as students demonstrate their proficiency in interaction. The study identified several ways to support and challenge the strongest Young Learners: nominating them as the first to do something new and difficult (i.e. reading aloud), asking them to do something not related to the curriculum (translating, Extract 4), granting them certain rights (such as being the lead singer, Extract 2 and extract 3A). Not shown in this paper for reasons of space are two more practices: engaging in private conversations in English with students, both inside the classroom and on the school yard, and providing students with extra material such as letting them borrow English books.

As for the weakest Young Learners, a major challenge regarding supporting these students is that they are quite difficult to identify in regular classroom interaction. One of the practices this study found is teachers using the L1 when addressing apparent low achievers and letting them contribute in L1. However, teachers should be careful to not miss opportunities for reassessment like in Extract 11B. Another practice I found in the data but have not investigated systematically is the teacher’s positioning during interactions with apparent low achievers. Preliminary analysis shows that when eliciting answers from the seemingly weaker students, teachers of young EFL learners stand physically close to them if the classroom arrangement allows for this, oftentimes on eye-level, and touch them.

Usually differentiation has to do with planning tasks that can be carried out in different ways depending on the students’ abilities and proficiency levels or giving students different tasks based on their abilities and proficiency levels. The data in the present paper show different participation frameworks that can be linked to proficiency differences, i.e. differentiation here is more of an interactional than a pedagogical tool. From a usage-based perspective it has ramifications for learning because it is the interactional engagements that form the primordial scene of learning.

Acknowledgements

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References


Chapter 10. Extreme Differentiation


Chapter 11

Divergent Language Choices and Maintenance of Intersubjectivity: The Case of Danish EFL Young Learners

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Abstract

Language choice in foreign language classrooms and its relation to language teaching and learning has been hotly debated in the last decades. Although this line of research has advanced our understanding of classroom code-switching, it has mostly dealt with adolescent and adult learners. From a contextual perspective, research that focuses on micro-analysis of language choice is scarce at the European primary school level. Against this background, the present study is a case study of a Danish 3rd grade English as a foreign language classroom, in which a pattern of divergent language choices has been observed: the teacher consistently uses English, whereas the learners almost exclusively speak Danish. This might entail trouble in maintaining intersubjectivity and a joint pedagogical focus, but, using conversation analysis, we found two sequential formats that help ensure student understanding: learner translations and reformulations for peer support in expansion sequences, and expansions initiated by students requesting information or clarification that display partial or no understanding. We argue that the sense-making practices co-constructed in this classroom are only possible because the teacher gives the students space to engage in shared multilingual meaning-making practices. This research has important implications for teaching EFL to Young Learners, and classroom language policies.

keywords Young Learners; EFL Classroom Discourse; Code-Switching; Divergent Language Choices; Intersubjectivity; Conversation Analysis

1 Introduction

Code-switching is an interactional practice that has been extensively studied from various angles, including grammatical (e.g. Poplack 1980), sociolinguistic (e.g. Myers-Scotton 1993), and interactional (e.g. Auer 1998; Wei 2005; Gafaranga 2001). Studies on language choice in institutional settings, and in particular in classrooms, have been dedicated special journal issues including publications in the International Journal of
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Bilingual Education and Bilingualism (e.g. Raschka, Sercombe, and Chi-Ling 2009; Probyn 2009; McGlynn and Martin 2009).

The issue of the use of first language(s) and code-switching has been hotly debated especially in relation to second/foreign/additional language (henceforth L2) classrooms (see G. Hall and Cook 2013), due to the special role of L2 as both the medium and the content of instruction (Seedhouse 2004). Recent conversation analytic studies have revealed the positive role of multilingual resources on meaning-making processes, both in teacher-fronted (e.g. Ziegler, Sert, and Durus 2012) and student-student interaction (Ziegler, Durus, and Sert 2013; Ziegler, Durus, Sert, and Family 2015).

However, research is scarce on the role of language choice in L2 classrooms for young learners, although this is an important issue considering the fact that many countries in the world have lowered the onset of English classes. The present study aims at closing this gap by looking into a specific case in Danish early English as foreign language (EFL) classrooms.

Based on a database of video-recorded classroom interactions and using Conversation Analysis (CA) (Sacks, Schegloff, and Jefferson 1974), we investigate the divergent language orientations of a teacher and the pupils in a 3rd grade EFL classroom. Our research aims at revealing the interactional resources employed by Danish young EFL learners and their teacher in maintaining intersubjectivity and pedagogical foci despite the divergent language choices. Our analyses have revealed two different sequential formats that help to ensure student understanding, and have also illustrated different interactional and embodied resources the teacher employs to ensure student turns in English.

1.1 Conversation-analytic approach to language choice and code-switching

In this paper, we adopt an interactional perspective, i.e. we are asking: “why that, in that language, right now” (Üstünel and Seedhouse 2005) to the study of codeswitching. This conversation-analytic approach to studying codeswitching is pioneered by Auer (1984; 1988), who called for emic (i.e. from the perspective of the participants, cf. Firth and Wagner 1997; Markee 2013) research on codeswitching. This approach researches how participants make use of their bi/multilingual resources, instead of assuming that speakers intentionally use a particular code in order to, for example, express their social identities.

Since Auer’s seminal work, several studies have investigated multilingual practices of language users from a conversation-analytic perspective in a variety of contexts, including bilingual homes (Filipi 2015), institutional settings such as classrooms (Hazel and Wagner 2015; Üstünel 2016) and workplaces (Hazel and Mortensen 2013; Hazel 2015a; Hazel 2015b), and computer mediated environments (e.g. Balaman and Sert 2017a; Balaman and Sert 2017b).

Pioneered by Sacks, Schegloff, and Jefferson (1974), CA is a method for studying the sequential organization of talk-in-interaction, and therefore particularly suited for investigating how multilinguals code-switch. As stated by Auer (1995, p. 116):“any theory of conversational code-alternation is bound to fail if it does not take into account that the meaning of code-alternation depends in essential ways on its ‘sequential environment.’” By this, he refers to the conversational turns that sequentially precede and follow the switch. A turn can be produced in one or more codes, and can influence which language a next speaker will use. In general, studies have shown that
there is a preference for same-language talk (Auer 1984; Cromdal 2000; Nevile and Wagner 2011).

Typically, in a bilingual conversation, speakers will use one code, until at some point one of the participants switches to another code, either within their own turn (i.e. code-mixing) or in response to another speaker’s turn, and the other participant will then use the new code as well (‘type I switching’; Auer 1995). However, this preference is not present or relevant in all communities (Auer 1984), as participants may not always orient to using the other code as dispreferred (Cromdal 2005).

A strikingly different pattern is that of divergent language choices. Here, one speaker will exclusively speak language A, while the other only speaks language B (‘type II switching’; Auer 1995; also referred to as ‘parallel mode’, cf. Gafaranga and Torras 2001). While this is not an uncommon pattern, Auer (1995) states that typically, following a language negotiation, one of the speakers will accept the other’s language choice and converge.

The data we present in this paper represents type II code-switching, in that the teacher consistently uses English, while the students only speak in Danish. Convergence in our context is only ensured through so-called designedly incomplete utterances (henceforth DIU; Koshik 2002) in combination with deictic gestures (see the analysis of Extract 4). This is very different from the findings of previous studies on code-switching in foreign language classrooms, as we will outline in the next section.

1.2 Language choice and code-switching in L2 classrooms

Researchers that subscribe to the conversation-analytic approach to code-switching do not engage in theoretical discussions of whether or not the use of students’ first languages should be permitted in classrooms. Instead, they investigate how students and teachers use their language repertoires.

A recent focus of investigation is the medium of classroom interaction, which Bonacina and Gafaranga refer to as “the linguistic code’ that classroom participants actually orient–to while talking, as opposed to the policy-prescribed medium of instruction” (Bonacina and Gafaranga 2011, p. 330f; see also Amir 2013; Amir and Musk 2013; Cromdal 2005; Kunitz 2013). Investigating code-switching in Turkish EFL classrooms, Üstünel and Seedhouse (2005) found three patterns of code-switching and described how the practice of teacher-initiated, teacher-induced, and student-initiated code-switching is related to teachers’ pedagogical foci. They find that students can show alignment or misalignment with the teacher’s pedagogical focus through their language choices (ibid.).

Sert (2015) shows three types of student-initiated code-switching: code-mixing, expansions for topic management, and providing an L1 utterance in a response turn. Sert (ibid.) has also identified several ways for teachers to manage learner-initiated code-switching, such as DIUs, displaying compliance in L2 to a request in L1, and embedded repair. He further argues that the successful management of these multilingual resources is part of a teachers Classroom Interactional Competence (CIC), defined as “[t]eachers’ and learners’ ability to use interaction as a tool for mediating and assisting learning” (Walsh 2011, p. 153).

What is interesting about the terminology used in the research outlined above is the use of ‘induce’ and ‘initiate’, stressing that both students and teachers work to negotiate the code of the ongoing interaction. These terms build on the finding that participants in an L2 classroom orient to the preference for same-language use, and teachers thus can manage student code-switching. In the same sense, students have
been found to invoke micro-level language policies themselves (Amir and Musk 2013; Chimbutane 2013; Oga-Baldwin and Nakata 2014).

**Language choice and code-switching in YL L2 classrooms**

While there is research on language alternation practices of young learners in institutional settings, the learning contexts are very different from the one in this study. Much of this research is set either in post-colonial settings (e.g. McGlynn and Martin 2009), or settings where there is diglossia for other reasons (e.g. Unamuno 2008; or Wei and Wu 2009). Moreover, most studies seem to focus on code-switching by the teacher (e.g. Oga-Baldwin and Nakata 2014) or in peer interaction (e.g. Shin and Milroy 2000), whereas our study focuses on divergent language choices in classroom interaction in general.

Lastly, the term ‘young learner’ is used inconsistently in research, with some researchers including young teenagers in this definition or researching mixed-age classrooms (e.g. Wei and Wu 2009). While we do not propose to solve this issue it needs to be addressed in the future seeing as teenagers are very different, cognitively and with regards to their experience in school, from eight to nine year-olds (as in our study) or even younger children.

The present case is different from the literature reviewed above, as the teacher in our data consistently uses English, while the students only use Danish (with exceptions, as outlined in extract 4 below), and neither display any orientation to these divergent language choices as being marked.

### 2 Method

#### 2.1 Data and Participants

The data for our analysis come from a corpus of classroom interaction that we have collected over one-and-a-half years. The corpus comprises almost 100 English lessons from nine primary schools in Denmark. The present paper focuses on one classroom, as the phenomenon of divergent language choices is specific to this one third grade.

Following the procedure of conversation analysis, we started by transcribing all lessons from this classroom, then engaged in unmotivated looking, through which we finally observed recurrent patterns regarding the language choices in this classroom. As Seedhouse states, in conversation analytic research, to justify the adequacy of one’s database (if one even choses to do so), one has to “relate the size and nature of the database to the researcher’s stated research aims and methodology” (2004, p. 68). We therefore chose two lessons, one from the end of the first semester and one from the end of the second semester, and found that the practices we have observed endure over time.

The teacher is a native speaker of Danish and has gone through professional English teacher education in Denmark, and attended a professional workshop on teaching English to young learners. The students are mostly monolingual Danish speakers, but are exposed to some English language media outside of school (Hannibal Jensen 2017).

#### 2.2 CA Methodology and Analysis

We use a conversation analytic methodology with a focus on multimodal aspects of interaction including verbal conduct, gaze, gestures and orientations to classroom artifacts. CA is a research method with roots in ethnomethodology and strives to
reveal how co-participants in interaction co-construct social interaction through multimodal conduct, such as (verbal) turn-taking, gaze, and bodily actions. This emic, bottom-up methodology entails a subscription to Garfinkel’s ethnomethodological indifference (2002a), i.e. our main goal here is not to impose our own moral or political ideas on the practice analyzed; we simply describe and analyze a naturally-occurring phenomenon (divergent language choices in the EFL classroom). However, because this particular practice seems to have important pedagogical implications, we will contribute to the ongoing discussion of whether or not or when languages other than the target language should be used in foreign language classrooms.

The video-recorded interactions have been transcribed using a combination of Jefferson’s (Atkinson and Heritage 1984) and Mondada’s (2014) transcription conventions (see appendix A). While the production of such fine-grained transcripts for conversation analysis is time-intensive, its micro-analytic approach can reveal the relationship between pedagogy and interaction in the L2 classroom empirically.

2.3 Data Collection and Preparation

The data was collected as part of an externally funded larger project on early foreign language learning in primary schools. Permission to video-record had been obtained from all schools and the parents of the students prior to recording. English lessons were recorded around three times per semester for the duration of three semesters, starting with the second semester of English lessons. Teachers and students were informed about the purpose of the video-recording.

Two wide-angle cameras were placed in opposite corners of the classrooms. The data was transcribed using CLAN (MacWhinney 2000), then adapted to the more commonly used Jefferson transcription system (Atkinson and Heritage 1984) as well as ICOR conventions for multimodal transcriptions (Mondada 2014; see appendix A).

As studies using CA do not rely on pre-existing theories for selecting phenomena, we engaged in unmotivated looking in the initial stages of our research. Without specifically looking for language alternation practices, we observed that, almost exclusively, the co-participants in the classroom make divergent language choices (the teacher speaks the L2, English, while the students speak the L1, Danish), and that even though they do so, their language choice is not marked and intersubjectivity is seemingly maintained. Based on this, we have built a collection of cases where intersubjectivity is explicitly broken (e.g. when students initiate repair) and subsequently resolved. The selection criteria for this collection were:

1. one or more students had displayed a lack of understanding, e.g. by not answering relevantly to the teacher’s question, or by explicitly requesting clarification
2. following this, co-participants oriented to resolving this trouble, e.g. by providing translations or reformulating
3. the resolution of the trouble, i.e. the establishment of intersubjectivity, was observable, e.g. through the use of a change-of-state token (John Heritage 1984a)

Incidentally, what these cases have in common is that the teacher speaks English, while the students speak Danish. Neither teacher nor students display any orientation to these language choices as being marked, and no language negotiation took place. As a second step we searched our data for moments where elicitation of an English utterance by the students was ensured. We found these rare cases to only occur after
designedly incomplete utterances by the teacher in combination with deictic gestures, of which we made a collection as well.

3 Analysis and Findings

In this section, we present our analysis of six extracts that are representative of our collections. We have divided the analysis into three subsections, based on the sequential formats that we found help ensure student understanding. The first two are:

- learner translations and reformulations for peer support in insert expansion sequences
- expansions initiated by students requesting information or clarification that display partial or no understanding

By expansions here we refer to the conversation-analytic notion of sequences. A sequence, in its most basic form consists of an adjacency pair, which in turn is made up of a first and a second pair part. For instance, a question and an answer, or a request for information and an informative answer would be two common examples of adjacency pairs. At times, there will be expansions of these basic sequences in naturally occurring talk. These expansion sequences can come before the first pair part of base sequence (pre-expansions), after a first pair part and before its second pair part (insert-expansion), or after a second pair part (post-expansion) (E. A. Schegloff 2007).

The expansion sequences in this paper have in common that there are divergent language choices, i.e. the teacher speaking English and the students speaking Danish, even though there is an obvious trouble source related to students not understanding an English utterance by the teacher.

The third subsection presents a deviant case in this specific setting, namely the students speaking English. This is only found after designedly complete utterances in combination with deictic gestures by the teacher.

3.1 Learner Translations and Reformulations for Peer Support in Insert Expansion Sequences

The following extract is the beginning of a lesson, the teacher introduces the topic of the lesson: the zoo. Due to the length of the episode, and for the sake of readability, we split the extract into two parts (Extract 1a and 1b), with Extract 1b starting at the end of Extract 1a. In Extract 1a, the teacher asks a question, which the nominated student apparently misunderstood. In an insert expansion (E. A. Schegloff 2007), i.e. between the teacher’s question (first pair part) and the student’s answer to this question (second pair part), some fellow students offer peer support by translating and reformulating the teachers question.

In line 1, the teacher asks a question while pointing at a new word – the zoo. VIL immediately volunteers, his ah oo::h is both displaying he has understood the question (ah) and is willing to participate (oo::h). This claim is supported by the teacher’s orientation to this; after 0.7 seconds TEA selects VIL by pointing at him and rephrasing his question, designing it in the declarative format which seeks confirmation (Weber 1993). VIL displays that he is thinking in line 6, and after a one second pause he gives a candidate answer with an in-built question that is a candidate understanding (what there is in a zoo, there is) in Danish, demonstrating his
interpretation of the teacher’s question. KAS provides peer support by answering the question in VIL’s candidate understanding through overlap (line 9), producing the word animals (dyr). Note that both students are answering in Danish, while the teacher’s question is formulated in English (lines 1 and 4). The teacher interrupts VIL’s turn (line 10) starting with a no-prefaced evaluation which rejects VIL’s candidate understanding, and repeats his question as a multi-turn question in which the grammatical form is marked through a restart, and then with suprasegmental modification, this time employing further resources (fig. 1a and 1b); TEA stresses you in line 10 while pointing at VIL and accompanies to the zoo with pointing at the whiteboard (line 12).

**Extract 1A**

<table>
<thead>
<tr>
<th></th>
<th>TEA:</th>
<th>VIL:</th>
<th>KAS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>+have you been to the zoo?</td>
<td>ah oo::h</td>
<td>[dyr]</td>
</tr>
<tr>
<td>02</td>
<td>茶</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03</td>
<td></td>
<td>(0.7)</td>
<td></td>
</tr>
<tr>
<td>04</td>
<td>TEA:</td>
<td>yes? ++(0.2) you’ve been+ to the zoo?</td>
<td></td>
</tr>
<tr>
<td>05</td>
<td>茶</td>
<td>--&gt;++points at VIL,,+</td>
<td></td>
</tr>
<tr>
<td>06</td>
<td>VIL:</td>
<td>øhm</td>
<td></td>
</tr>
<tr>
<td>07</td>
<td></td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>08</td>
<td>VIL:</td>
<td>hvad der er i en zoo, da [e:r   ]</td>
<td></td>
</tr>
<tr>
<td>09</td>
<td>KAS:</td>
<td>[dyr   ]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>animal/animals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>TEA:</td>
<td>[+n+#ha]ve +#you have been+</td>
<td></td>
</tr>
<tr>
<td></td>
<td>茶</td>
<td>+points at whiteboard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>茶</td>
<td>+looks at whiteboard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>茶</td>
<td>+points at VIL,,+</td>
<td></td>
</tr>
<tr>
<td></td>
<td>;}</td>
<td>#ia  #lb</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>+(0.5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>茶</td>
<td>“finger-walking” with hands+</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>TEA:</td>
<td>+to the zoo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>茶</td>
<td>+points at “the zoo” written on whiteboard+</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>(0.6)</td>
<td></td>
</tr>
</tbody>
</table>

After 0.6 second silence following the repeated teacher question, CLA informs the teacher about her interpretation of the teacher’s question in Danish (line 14), perhaps providing peer help in the form of accounting for why VIL (and KAS) delivered an incorrect answer. Her interpretation of the question was apparently wrong, as we can see from the teacher’s explicit negative assessment no:: in line 15. The teacher attempts to solve this interactional trouble by reformulating the trouble source (replacing the past participle been with walked), embodying ‘walking’ and pointing at VIL (lines 17-18; cf. also aus der Wieschen and Eskildsen 2016).

VIL is displaying that he is participating (line 19) already before the teacher has finished asking. Two students then translate the teacher’s question to Danish
Chapter 11. Divergent Language Choices

(lines 20 and 22). This is an expansion (E. A. Schegloff 2007) that is inserted between the teacher’s first pair part and VIL’s second pair part in line 23. A similar pattern has been observed by Appel (2010), with the difference being that the helping student in his data was whispering. Their translations are interesting in that KAS translates TEA’s been to from line 17 and stresses inde (English: in/inside) thereby seemingly focusing on to as a trouble source (‘to’ being a preposition that has multiple potential translations in Danish, depending on the context; here it would be ‘i’). JAN’s contribution, on the other hand, draws on TEA’s embodied walked (’gået’) but adds the Danish preposition ‘i’ which may be a modification of KAS’ inde or a sediment of TEA’s original been to which translates to været i. VIL replies with yes already before JAN is finished, and in line 27 we can see that he now understands the question, as he elaborates on his reply from line 23, which is followed by TEA’s invitation to continue yes by giving a concrete example, in Danish, which is accepted by TEA in line 28. It is interesting that TEA is stepping away from VIL’s desk right after KAS’s translation (line 21), as he thereby allows for VIL to direct his attention to his peers.

**Extract 1B**

13 (0.6)
14 CLA: jeg synes to sagde ( ) en zoo altså=
    I thought you said ( ) a zoo so
15 TEA: =no:: i said +>you<  
    tea +points at VIL+
16 VIL: øhm
17 TEA: +have you     +(0.2)# been to #th- have you walked   +#to the
    tea +points at VIL+walks towards VIL with arms swinging +points
    at VIL
    fig #1c #1d #1e
19 VIL: [æ:hm]
20 KAS: [har ] du været inde?
    have you been inside
21 +(.)
    tea +steps away from VIL’s desk---->
22 JAN: har du gå[et i] (en zoo)
    have you walked in (a zoo)
23 VIL: [yes ]
24 (0.2)
25 TEA: ye::s?
26 (0.3)
27 VIL: RANders regnskov for eksempel
    Randers Rainforest for example
28 TEA: anranders (0.3) rainforest, yes,
In extract 2, we show that after a student’s clarification request of an English word, another student offers the Danish translation, which then leads to understanding. From lines 1-4, the teacher refers to a past learning event (Can Daşkın forthc.) using deictic gestures, pointing at different places of an imaginary timescale. However, in line 6 CLA’s learner initiative (Waring, 2011), preceded by 0.5 seconds of silence, demonstrates trouble of understanding; she asks for a translation in Danish. Two people respond to CLA’s request, her peer ASL (lines 7-8) by translating to Danish (krop), and the teacher (lines 7-8), by touching and looking at parts of his body. This helps CLA to understand the meaning of body, as evidenced through the change-of-state token nå: (M. F. Nielsen 2002; John Heritage 1984a) in line 9, although it is still a claim of understanding rather than a demonstration of it (Sacks 1992). The teacher reacts to ASL’s volunteered translation by nodding, putting him on stage, and verbally praising him (ye:s, good) in lines 9-10.

**Extract 2**

01 TEA: remember?  
02 (0.4)  
03 TEA: +not last week, +but the week+ +before?+  
04 TEA: >we had something about< +the body  
05 (0.5)  
06 CLA: hvad er body?  
07 +what is  
08 asl: +turns towards CLA/TEA-->>  
09 tea: --+lifts hands off of chest, looks at chest--->  
10 ASL: +krop body  
11 tea: --+touches and looks at his chest and stomach+  
12 CLA: +nå: os=+  
13 tea: +nods and points at ASL with both hands-->>  
14 TEA: =ye:s, good.  

*: moves hand to his left, tracing an invisible arch

In this section we looked at one specific sequential format that helps ensure student understanding: learner translations and reformulations for peer support in expansion sequences. In all of these extracts, some students have demonstrated that they have trouble understanding the teacher’s (English) utterances. While the teacher attempts to solve this trouble by reformulating in English, other students take the initiative to translate or reformulate the teacher’s utterance in Danish. This leads to solving the conversational trouble.

Another specific sequential format that we found in our data are insert-expansions initiated by students, requesting information or clarification in Danish. In these cases, the teacher successfully creates intersubjectivity without resorting to the use of L1.

### 3.2 Expansions Initiated by Students Requesting Information or Clarification

Understanding task instructions is crucial in a classroom setting (Markee 2015b), so students who are not sure about what they have to do might request clarification. In L2 classrooms where the L2 is the medium of instruction, there is an additional
challenge: students not only have to understand instructions for task types that they have possibly never encountered before, they also have to understand instructions in the L2. In extract 3, the teacher is trying to explain a task that the class completed many times before: walk-and-talk (‘free movement’). In the analysis we show how students display which parts of the instruction they have (not) understood, and how this trouble is subsequently resolved. We have divided Extract 3 into two parts to maximize readability.

**Extract 3A**

```
01 TEA: no:w,  
02 (0.7) you take, (0.2) +one (0.1) of you:r  
03 tea + raises LH closed w thumb on top +  
04 (1.1) ((5 lines omitted))  
10 TEA: no:.  
11 (0.6)  
12 actually (0.4) +take two:.  
13 tea + takes hold of imaginary cards mid-air w both hands and holds up both hands (closed w thumbs on top) --> (23)  
14 (0.6)  
15 TEA: <o:ne in each hand.>  
16 (0.4)  
17 CLA: +ska vi ha en i hver hånd?  
18 shall we have one in each hand  
19 cl:a +looks at her cards and reaches for two of the -->  
20 TEA: YES:  
21 (0.1)  
22 CLA +sådan sån her#.  
23 like like that  
24 cl:a --> + holds up one card with each hand -->  
25 fig +fig 3.a

26 TEA: choose two,  
27 (0.3)  
28 +yes.  
29 cl:a --> + takes both cards into one hand  
30 TEA: +one here, and one here.  
31 tea + LH forward and back then RH forward and back +  
32 (0.3)  
```

The teacher is giving instructions for an upcoming walk-and-talk task both verbally and through the use of gestures. The students have to take one or two cards from their desk, stand up, walk through the classroom, talk to a peer, and move on to talk to another student. Following the teacher’s demonstration of the task (lines 1-14), after a 0.4 second pause at the transition relevance place (TRP), CLA initiates a repair that requests clarification in line 16. Note that CLA’s turn in Danish is not just a repair initiation, but also a display of understanding, which receives a
suprasegmentally marked confirmation in English from the teacher (YES, line 17),
also positively assessing the student performance, that is aligned with CLA’s return
gesture (de Fornel 1992; Eskildsen and Wagner 2013a). In line 19, CLA demonstrates
understanding by picking up two cards and holding them as displayed by the teacher
(fig. 3a), at the same time asking for approval in Danish. The teacher confirms and
instructs CLA to choose two cards, which is taken up by CLA, and is approved
with a minimal agreement token by TEA in line 22. The teacher reformulates his
instruction in line 23, while illustrating having one card in each hand through his
gestures. This is followed by 0.3 seconds of silence.

Extract 3B

<table>
<thead>
<tr>
<th>Turn</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>(0.3)</td>
</tr>
<tr>
<td>25</td>
<td>MIK: &quot;hm hvo:s&quot;</td>
</tr>
<tr>
<td>26</td>
<td>TEA: okay.</td>
</tr>
<tr>
<td>27</td>
<td>(0.3)</td>
</tr>
<tr>
<td>28</td>
<td>AUG: hva er det for nogen to vi ska ta?</td>
</tr>
<tr>
<td>29</td>
<td>TEA: +you #deci:de</td>
</tr>
<tr>
<td>30</td>
<td>tea *shakes head slightly then points at AUG---&gt; fig</td>
</tr>
<tr>
<td>31</td>
<td>(0.5)</td>
</tr>
<tr>
<td>32</td>
<td>AUG: +&quot;nå:::&quot;</td>
</tr>
<tr>
<td>33</td>
<td>TEA: you choose.</td>
</tr>
<tr>
<td>34</td>
<td>(0.3)</td>
</tr>
<tr>
<td>35</td>
<td>MIK: &quot;jeg ta /but/&quot; {{to neighbor}}</td>
</tr>
</tbody>
</table>

The teacher completes this part of the instruction (okay, line 26), which is followed
by 0.3 seconds of silence. Following this instruction in English, AUG asks in Danish
which cards they have to pick up (line 28). Only after the teacher specifies that
the students should decide which (line 30-31), in combination with a deictic gesture
(pointing at AUG (fig. 3.b), cf. also aus der Wieschen and Eskildsen 2016) can we
see a change-of-state token ("°nå::°") in AUG’s turn in line 32. MIK, too, displays
understanding in line 36 by announcing that he will take the card with a butt on it
("°jeg ta /but/°"). Note that these turns by the students are in Danish. Although
the teacher’s turns are in L2, the students are displaying understanding and are
resolving understanding issues.

What the extracts analyzed have in common is that the teacher consistently speaks
English and the students consistently speak Danish. In line with prior findings, one
would have expected the teacher to comply with the students’ language choice (i.e.
by speaking Danish to create intersubjectivity) or the students to speak English.
However, we have shown that the co-participants in this classroom make use of other
successful trouble-solving resources, namely learner translations and reformulations for peer support in expansion sequences and expansions initiated by students requesting information or clarification that display partial or no understanding.

In our data we found only few instances of students speaking English apart from choral singing. We found a pair of interactional resources for the teacher to elicit student replies in English: designedly incomplete utterances (2002) in combination with deictic gestures.

3.3 Designedly Incomplete Utterances in Combination with Deictic Gestures

In Extract 4 we show how the teacher successfully elicits an English vocabulary item (neck) from the students through the use of designedly incomplete utterances (this is my:::) in combination with deictic gestures (touching and pointing at his neck).

**EXTRACT 3C**

01 TEA: +this is # my:#+: 
       tea +.LH on neck +both hands around neck---> 
       fig #4a #4b 
       
02 +(0.9) 
       tea -->+lifts chin and moves hands to the front of his neck---> 
03 TEA: +remember this :one 
       tea -->+puts hands around his neck and lowers chin---> 
04 +(0.4) 
       tea -->+lifts chin and moves hands to the front of his neck---> 
05 SSs: [α::h] 
06 MAG: [+æh det halsen] 
       uh it’s the neck 
       mag +--------1------->(08) 
07 SOF: n.ej, +æh +heeheehee=+ 
        no 
        sof +shakes head + 
08 TEA: =n:+[ : ]; 
       mag -->+ 
09 JON: [/het/](head) 
10 TEA: N::: 
11 CLA: neck= 
12 MAG: /=ne[yk/] 
13 TEA: [+NE[ck HH]] YES: + 
       tea -->+removes hands from neck, points at CLA and nods+ 
14 SOF: [neck ] 
15 TEA: >it’s my< neck,+ (H) 
       tea +touches neck---> 
16 (0.8) 
17 TEA: my hals, right? my :neck(H) 
       neck 

¹:MAG places both hands palm-down on his neck and moves them to the back of his neck and to the front again
Line 1 starts with TEA’s embodied elicitation turn, during which he puts his hands on his neck (fig. 4.a-b) and produces a DIU (Koshik 2002; Sert 2015). The turn-final myːː is stretched while the teacher is demonstrating what is expected in the second pair part of the adjacency pair. Following 0.9 second silence, TEA starts moving his fingers toward his neck while at the same time scanning the class. While doing it, in line 3, TEA initiates a recognition check (You 2015), which first receives a minimal contribution from some of the students, indicating that they are trying to remember (line 5), and then receives a correct response in Danish by SIM (line 6). SIM employs a return gesture, thus embodying and demonstrating his response. What follows is an embodied disagreement by ALB in the subsequent turn, a turn that is embodied through a lateral headshake. This response, however, is not oriented to by the teacher and the peers, and the teacher goes on to enact his pedagogical goal, to elicit the target word in English. In line 8, in fact, TEA again starts producing a DIU, this time only producing the initial sound of the L2 (i.e. English) word by lengthening the consonant while still touching his neck. A first candidate answer is offered by JON, referring to head, which is marked as a dispreferred response by TEA as he re-initiates his DIU, stretching the word-initial sound even stronger in line 10. This embodied DIU (Sert 2015) proves to be a successful interactional resource to elicit the L2 item, since in lines 11 and 12, the correct answer is produced in English by two different students. In line 13, TEA assesses the student responses as correct and points to the student who pronounces the word correctly (line 13). In line 17, he finalizes the sequence by producing a bilingual turn, mixing codes, and using the Danish translation hals to clarify meaning.

This extract has shown how the teacher’s use of DIUs in combination with deictic gestures led to the successful elicitation of English student responses. In the following, we will discuss the findings of this paper and give implications for research and practice.

4 Discussion and Conclusion

Relying solely on empirically observable verbal and non-verbal conduct, we uncovered how young learners collaborate to achieving intersubjectivity through and despite their divergent languages choices. The findings have shown two sequential formats that help ensure student understanding:

1. learner translations and reformulations for peer support in insert expansion sequences and
2. expansions initiated by students requesting information or clarification that display partial or no understanding.

4.1 Learner Translations and Reformulations for Peer Support in Expansion Sequences

As the analyses of Extracts 1 and 2 demonstrate, learners can offer peer support through translations and reformulations. In Extract 1, VIL fails to provide a relevant answer to TEA’s question. Two learners then self-select and translate or reformulate TEA’s questions to Danish, which results in VIL finally providing the answer in English. In Extract 2, CLA takes the initiative to ask for clarification in Danish. While CLA looks at TEA and for reasons of moral order it is TEA’s obligation to respond to CLA’s learner initiative (and he does so through his embodied response), CLA’s
fellow student ASL steps in and provides the Danish translation, which forms part of the co-construction of intersubjectivity. In both Extract 1b and 2, the supporting students are, using Waring’s terms (2011, p. 210), “shifting into the teacher identity”, and at the same time demonstrating their understanding of TEA’s English turn, even though they are using Danish. While these contributions were student-initiated, TEA encourages or rewards these learner initiatives; in Extract 1b by stepping away from VIL’s desk, thus removing himself from the center of VIL’s attention and giving space to VIL’s peers, and in Extract 2 by pointing at ASL with both hands, putting him on stage. By creating an environment in which peer support in the learners’ L1 and thereby divergent language choices are, albeit not actively solicited, definitely not obstructed, the discourse co-constructed by the co-participants in the classroom creates intersubjectivity and thus allows for the activity at hand to progress.

Another sequential format that leads to the achievement of these goals are expansions initiated by students requesting information or clarification that display partial or no understanding, which we demonstrated in Extract 3a and 3b and will be discussed below.

4.2 Expansions Initiated by Students Requesting Information or Clarification

While what the practices in Extract 3a and 3b achieve might seem similar to the accomplishments of the practices discussed above, what makes these cases different from Extract 1 and 2 is that the focus here is not on a fellow student taking the initiative to help another student, but on a learner requesting information or clarification in Danish and thereby displaying partial and no understanding of the teacher’s instruction that was delivered in English.

In extract 3a, CLA verbally requests confirmation of her candidate understanding of a task in Danish (shall we have one in each hand), and after TEA confirms her candidate understanding in English, CLA mirrors TEA’s embodied instruction in the form of a return gesture, asking for confirmation again in Danish.

A few moments later, in Extract 3b, another student (AUG) requests clarification in Danish (what are these two we have to take), displaying that she understood that she has to take two (cards), but also that she does not know which two cards. TEA then clarifies in English, and what follows is a change-of-state token by AUG in Danish.

What is interesting in both extracts is the high specificity with regards to the trouble source (E. A. Schegloff et al. 1977). This finding is in line with the results of Liebscher and Dailey-O’Cain’s (2003) study on repair practices in a university CLIL setting, where students were explicitly encouraged to use their L1. Their study found that the most commonly used forms of student-initiated repair are requests for definition, translation, or explanation, and candidate understandings. They argue that this preference for specific repair initiation techniques is a way of ‘doing’ being a student, which entails “show[ing] that they follow the classroom discourse by providing a candidate understanding, making sure that their understanding is the right one” (Liebscher and Dailey-O’Cain 2003, p. 388).

What is maybe most surprising about our findings is that they do not align with the findings of other conversation analytic studies of language use in specific classroom contexts. Seedhouse (2004) for instance, found that especially in procedural contexts (e.g. when providing instructions for an upcoming task, such as in Extracts 3a and 3b in the present paper), teachers tend to use the students’ L1, in order to to maximize comprehension and to ensure the progressivity of the current
task at hand (e.g. explaining an upcoming task). As his research has found that teachers tend to use the L2 in task instructions mainly with older or more proficient learners (Seedhouse 2004; see also Seedhouse 1996), it is interesting to see that the co-participants in this 3rd grade beginner EFL classroom have developed local practices for the co-creation of intersubjectivity. The empirically observable differences between Seedhouse’s Norwegian setting and ours clearly underline our point of departure for this study, which was that top-down language policies and theories about code-switching in the classroom are highly questionable and cannot replace empirical studies of local practices.

While the divergent language choices in the instructions in Extracts 3a and 3b may not be very time-efficient, they allow for the co-participants in the classroom to turn what might have been a short teacher monologue in a different classroom into an L2 learning space (Eskildsen and Theodórsdóttir 2015) in which the students display precisely what they have (not) understood, and the teacher is able to evaluate on-line what his students understand in the L2. This L2 learning space is built for learning-in-interaction, rather than just a space for giving instructions.

The focus in this paper is on how students in an EFL classroom where the teacher exclusively speaks the L2, display their understanding of the teacher’s turns in and through the use of L1-Danish. Another, maybe more prototypical, way for students to demonstrate and for teachers to evaluate their students’ language proficiency is for teachers to elicit student responses in English. While this happens rarely in our database, our analysis of Extract 4 shows that when the teacher uses DIUs (Koshik 2002) combined with deictic gestures, elicitation in English from the students is ensured.

The results have important implications for teaching English to young learners as well as for informing micro and macro level language policies. The present study adds to the growing body of emic research that uses actual multilingual practices to inform teacher education and practice (Sert 2015; Üstünel 2016). The practices described in the present paper were only possible because the teacher has given the students interactional space and encouraged them to engage in shared meaning-making practices, which include the use of languages other than the target language.

As proposed by Sert (2015, see also 2011), the successful management of displays of insufficient knowledge and of code-switching are important phenomena to be considered part of L2 Classroom Interactional Competence (CIC). Teacher educators should be made aware of such interactional resources and include these concepts in their curriculum (i.e. SETT (Walsh 2006b) or IMDAT (Sert 2015)).
Appendix A: Transcription Conventions

<table>
<thead>
<tr>
<th>TEA:</th>
<th>participant talking</th>
</tr>
</thead>
<tbody>
<tr>
<td>tea</td>
<td>participant embodying an action</td>
</tr>
<tr>
<td>(.)</td>
<td>pause of less than 0.2 seconds</td>
</tr>
<tr>
<td>(2.4)</td>
<td>pause of 2.4 seconds</td>
</tr>
<tr>
<td>[ ]</td>
<td>beginning and end of overlapping talk</td>
</tr>
<tr>
<td>=</td>
<td>indicates that there is no pause between two utterances</td>
</tr>
<tr>
<td>:: :: ::</td>
<td>preceding sound is prolonged, more colons mean longer sounds</td>
</tr>
<tr>
<td>underline</td>
<td>speaker used emphasis</td>
</tr>
<tr>
<td>LOUDER</td>
<td>louder than surrounding talk</td>
</tr>
<tr>
<td>‘softer’</td>
<td>softer than surrounding talk</td>
</tr>
<tr>
<td>.</td>
<td>falling intonation</td>
</tr>
<tr>
<td>?</td>
<td>rising intonation</td>
</tr>
<tr>
<td>,</td>
<td>rising intonation, not as strong as '?'</td>
</tr>
<tr>
<td>( ) (guess)</td>
<td>inaudible speech, transcriber’s best guess as to what was said</td>
</tr>
<tr>
<td>/IPA/</td>
<td>phonetic transcription</td>
</tr>
<tr>
<td>&lt;slower&gt;</td>
<td>slower than surrounding talk</td>
</tr>
<tr>
<td>&gt;faster&lt;</td>
<td>faster than surrounding talk</td>
</tr>
</tbody>
</table>

**TEA: word word** + while TEA is producing talk,

**sam:** +raises LH+ SAM raises his left hand (LH)

**sam:** +raises LH--> --- the action continues over the next lines

**sam:** +raises LH-->(5) -->(5) the action continues until line 5

**sam:** +raises LH-->>> -->>> the action continues until (after) the end of the extract

**TEA: word wo+rd**

**sam:** -->+ indicates where an action that has started in a previous line ends

**TEA: word wo#rd** # indicates the moment where screengrab 3.1 was taken

**fig #3.1** #3.1 refers to the figure number

**TEA: word in Danish**

**English** bold type represents talk as it was produced

italics are used for translations to English

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References


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Chapter 11. Divergent Language Choices


Chapter 12

Embodied and occasioned learnables and teachables in early EFL classrooms

Maria Vanessa aus der Wieschen, Søren Wind Eskildsen

Abstract

This chapter investigates embodied and occasioned learnables and teachables in an early English as a foreign language (EFL) classroom in Denmark. By the notions of occasioned learnables and teachables we refer to that which by the participants is made interactionally relevant as an object of incipient understanding, learning, and/or teaching (Majlesi & Broth, 2012; Majlesi, 2014; Majlesi & Eskildsen, in press). We investigate how gestures, often in combination with self-repairs, employed by teachers in the pursuit of intersubjectivity, are crucial in the occasioning of learnables and teachables in early English teaching. Drawing in particular on findings from (Eskildsen & Wagner, 2013b, 2015, n.d.) we explore how L2 speakers use locally anchored, embodied resources in the form of gesture-talk connections to achieve intersubjectivity, and how these gesture-talk connections sediment in speakers’ interactional repertoires to be employed in later productions. Our data show that the pupils orient to the teachers’ embodied repair practices in their responses, for instance in the form of return gestures that either display understanding (de Fornel, 1992) or work as embodied requests for clarification, and that the ensuing gesture-talk combination becomes an embodied resource in its own right.

Keywords for Index: learnable, teachable, intersubjectivity, gestures, Denmark, comparability, young learners, microgenesis

1 Introduction

Research by e.g. Muramoto (1999), Lazaraton (2004), Taleghani-Nikazm (2008), Sert (2015) has established gestures as a pervasive phenomenon in language classrooms, used in the service of establishing intersubjectivity, explaining new vocabulary, and indexing previously shared learnables/ teachables. This chapter supplements this previous research, which has predominantly concerned adults, with early EFL data. We are especially interested in return gestures (de Fornel, 1992). These are reciprocal gestures employed by interactional co-participants to display on-going listenership and understanding; that is, the return gesture is a recipient’s response, a second speaker’s
use of a gesture that resembles or is identical to a gesture used by a first speaker in situ.

In Extract 1, introduces the next task, namely singing a song, “Who stole the cookie?”. They have sung this song before and in his task introduction he refers to this past learning event by asking the pupils whether they remember the song (lines 1-2). He seems to be having difficulties eliciting a response from the pupils as only two of them respond, and not very enthusiastically (lines 4 and 6). In overlap with the second pupil’s response, the teacher’s “yes” in third position works as a post-expansion of the adjacency pair indicating that the response in the second-pair part was not satisfactory (cf. E. A. Schegloff 1992). He continues the post expansion by showing the children the song (line 9) and reminding the children that they have it in their folder (lines 9 and 11). The turn in line 11 elaborates the folder gesturally as the teacher mimics opening and closing an imaginary folder in front of him. This yields an embodied response from Clara who returns the teacher’s gesture and suggests that she has the song in her book. Her embodied and verbal behavior suggests that she infers the word “book” from the teacher’s gesturing, and the teacher’s next turn is a dual accomplishment; the “yes” (line 15) serves as a positive response to her embodied display of understanding whereas his “in your ↑folder” in line 17 works as a repair of the word “book”. Another pupil, Sofia, picks up on the repair and, orienting physically to Clara, says “in our folder”. Clara’s non-lexical token (line 19) sounds like a response to Sofia in the form of a change-of-state token.

**Extract 1: Embodied pursuit of intersubjectivity**

01 TEA: I have another ↑song for you toda:y
02 do you remember ↑who: stole the cookie
03 (0.7)
04 CLA: mmmh,
05 (0.2)
06 SOF: y[uuss]
07 TEA: [ja?]
08 yes
09 (0.5)
What we are interested in here is how L2 speakers use locally anchored, embodied resources in the form of gesture-talk connections to achieve intersubjectivity. Here, the teacher’s elaboration in line 11 is a reformulation and a gesture that enhances parts of the talk and shows the co-participants where to focus their attention. We can see already in line 9 that the teacher is attending particularly to the word “in your folder” (high pitch, stretched vowel), perhaps anticipating difficulties in understanding on the part of the children. That his embodied reformulation works to establish intersubjectivity is apparent from the responses from Clara and Sofia. Especially Clara’s contribution is interesting because her return gesture displays understanding even if her verbal response is not quite on the mark. The teacher’s response also testifies to this, his “yes” being a positive acknowledgment of her embodied response. The similarity between a book and a folder and their inherent characteristic of being openable in much the same way is what occasions the teacher’s positive acknowledgment and what gives rise to the recognizability of the gesture and its connection to these particular instances of talk (folder/book). The question that we investigate closer in this chapter draws on Eskildsen and Wagner (2013b, 2015) findings in an adult ESL classroom that such gesture-talk connections sediment in speakers’ interactional repertoires to be employed in later productions as embodied resources in their own right. The example shown here was situated and one instance only; our question is if such gesture-talk connections can be found over time in a young learners EFL classroom as well.

2 Literature Review

Gestures have been studied intensively as an embodied resource related to speech at least since Kendon (1972), and the interest in gestures as a learners’ compensatory communication strategy in second language acquisition (SLA) research is almost as old (Færch & Kasper, 1983; Tarone, 1980). Given that our phenomenon originates from the teacher as an occasioned multimodal sense-making resource employed in the service of accomplishing intersubjectivity and emerges as a co-constructed means for teaching and learning, we will in this section focus on second/foreign language
teachers’ use of gestures and learners’ active use of gestures for learning purposes. Gestures have been found to be a resource in other-repair initiation, with or without accompanying talk (Seo & Koshik, 2010; K. Mortensen, 2016; Lilja, 2014; Sert, 2015; K. Mortensen, 2012), and a crucial tool for L2 teaching, especially in the case of vocabulary explanation (Lazaraton, 2004; Taleghani-Nikazm, 2008; van Compernolle & Smotrova, 2013, 2017). These phenomena can be derived from the broader interactional function of especially deictic and iconic gestures which is to elaborate and highlight particular aspects of the on-going talk in order to establish intersubjectivity (Goodwin, 2000). The pedagogical uses of gestures are only possible because gestures, or embodied behavior more generally, are recognizable to the participants as an interactional resource on a par with spoken language; embodied behavior is a pervasive resource in the accomplishment of understanding and learning (Streeck, Goodwin, & LeBaron, 2011). In fact, with more and more video-data available it is becoming increasingly visible that classroom interaction is fundamentally embodied (Lazaraton, 2004; Markee, 2013, 2015b; Hellermann, 2008; Pekarek Doehler, 2010; van Compernolle, 2015; Seo, 2011) and that effective use of gestures is a crucial component of a teacher’s classroom interactional competence (Walsh, 2006a; Sert, 2015). Of particular relevance to us is the research that has explored the role of embodied behavior as a means to internalize new ways of seeing the world through the L2. This research is predominantly carried out from the perspective of Vygotskian sociocultural theory (e.g., McCafferty 2002; J. Lee 2008; McCafferty and Stam 2008; Lantolf 2010; van Compernolle and Williams 2011, 2011; Negueruela-Azarola, García, and Buescher 2015; van Compernolle 2015) and shows that gestures are integral to learning as movement from the interpsychological to the intrapsychological plane in the Zone of Proximal Development (Lantolf & Thorne, 2006). While the Vygotskian perspective on learning and development shares its participatory dimension with situated learning theory and (some) work in conversation analytic L2 research (Hellermann, 2008; Mondada & Pekarek Doehler, 2004) our approach is agnostic as to the empirical validity of Vygotskian theoretical constructs, and we remain careful in making any arguments about psychological processes, including mnemonic ones, to which we have no empirical access. We explore instead the interactional relevance and role of gestures in the pursuit of intersubjectivity and the learning that may ensue from this as a gesture-talk connection is used repeatedly by co-participants to co-construct and subsequently re-index a learnable, “defined as whatever is interactively established as relevant and developed to become a shared pedagogical focus” (Majlesi & Broth, 2012, p. 193). Before moving on to the empirical analyses in which we trace how our focal L2 speakers use locally anchored, embodied resources in the form of gesture-talk connections to achieve intersubjectivity, and how these gesture-talk connections sediment in speakers’ interactional repertoires are employed in later productions, among other things to re-index a learnable (Eskildsen & Wagner, 2013b, 2015), a few words on the context of our data is in order.

3 Context

The data for this study is collected as part of a larger project on early foreign language teaching and learning in Denmark investigating the effect of starting age on EFL (Cadierno & Eskildsen, forthcoming). The data come from two young learner classroom classrooms – one 1st/2nd grade at a public school, and one 3rd grade at a semi-private school – which both are in their first year of learning after a 2014 amendment lowering the onset age for English classes from 3rd to 1st grade. This amendment brought with
it some challenges; schools now need teachers to teach English in the early grades, and teachers who have never taught English before, or never taught a 1st/2nd grade before, or a combination of both, now have to teach English to young learners.

There is methodological freedom for teachers in Denmark, but The Danish Ministry of Education set national objectives (“Common Objectives”) for early English to be reached by the end of the 4th grade (EMU, 2016; UVM, 2017a). These objectives concern the three competencies oral communication, written communication, and culture and society. Each of these three sub-objectives is divided into 2-4 consecutive “phases”, and it is up to the teacher to decide when to move from one phase to the next, i.e. they are not bound to specific grades (ibid.). For instance, in phase 1 of the objectives for reading (under written communication), the competence pupils learn is to be able to “decode common English words that are accompanied with a picture” (our translation; EMU 2016), whereas in the final phase pupils learn to “understand the main point of simple stories” (our translation; EMU 2016). How and when to teach the competencies, knowledge, and skills is at the individual teacher’s discretion (ibid.), but there are guidelines and inspiration available to teachers at “EMU”, an on-line resource initiated by The Danish Ministry of Education (EMU, Danmarks læringsportal, 2016). How teachers plan and use the limited time in the classroom remains to be investigated. Most classes at this age level, including our focal class, have only 45 minutes a week for English classes, and one could ask how much of this time can reasonably be used for actual teaching and learning English in a classroom with 20 7- to 8-year-olds. For example, in the lesson we look at in this chapter, (and in other lessons from this and other classrooms we have observed,) a considerable amount of time is spent on classroom management, mainly the teacher asking the whole class or individual pupils to be quiet, and asking pupils to sit down etc.

The example (Extract 1 in the introduction comes from a 3rd grade at a medium-sized school with just under 500 pupils located in a small town close to one of the largest cities in Denmark. The school is semi-private, but voluntarily follows the Common Objectives (“Fælles Mål”; UVM 2017a) under regular supervision. This means that the school has the same curricular obligations as public schools.

**English:** The school has decided to teach English from 1st grade on. This is done as a 3-year trial, after which they evaluate whether they still want to continue by comparing the 1st graders’ proficiency after the 3rd grade with the proficiency of those who started in 3rd grade, also at the end of the 3rd grade. The reason why they lowered the starting grade is partially because they want to follow the government’s recommendations, and partially because they have noticed problems with starting in the 3rd grade. They explicate that while they found all 3rd graders to be motivated, many 3rd graders do not dare speak English in class which is a big challenge for the teachers as they strive for active participation of all pupils. By starting in 1st grade the school hopes to increase the number of pupils actively participating in class, as they are more likely to dare speak in class. As a result, the school hopes for better pronunciation and intonation, higher receptive vocabulary skills, and higher linguistic self-confidence.

**Teaching:** There is no information about the general teaching methods publicly available. With regards to early English, the school only wants actual English teachers to teach, the medium of instruction is supposed to be mainly English, and the classes should be oral and playful. The teacher has to look out for signs of motivation, such as pupils being curious, striving to learn more, using English words, and being able to understand English words.

The other school is a small school with 200-250 pupils located in a small satellite town near one of the biggest cities in Denmark.
Chapter 12. Embodied and occasioned learnables and teachables

English: The school is currently trying out different ways to evaluate the children’s learning. The school suggests using e.g. portfolios and log-books in these four subjects: Danish, mathematics, nature and technology, and English. This is very interesting, as Danish and mathematics are regarded by national law-makers as the most important subjects, and adding English to this list shows that the school finds it to be valuable, or at least more valuable of evaluation than e.g. the other mandatory foreign language, GermanII.

Teaching: The school’s teachers practice differentiated instruction and base their teaching on the children’s different learning styles. Moreover, they focus on the children’s strengths rather than their weaknesses. Good pupil work is to be presented to the class or even the entire school, success is to be celebrated. Teachers are supposed to spend as little time as possible on giving instructions to the whole class; instead, most of the lesson is to be spent with varying activities that as many pupils as possible participate in. At least half of the teaching time is to be based on cooperative learning and workshops. Moreover, learning and learning goals have to visible and meaningful to the pupils at any time.

Half of the pupils in our focal classroom are in 1st grade, and half in 2nd grade. This is known as ”age-integrated early education”III and while it is not typical it is becoming more widespread in Denmark.

4 Research Question

This chapter forms part of a series of investigations that are concerned with embodied practices in the co-construction of learnables/teachables in Danish early EFL classrooms. In particular we are interested in how L2 speakers use locally anchored, embodied resources in the form of gesture-talk connections to achieve intersubjectivity and accomplish learning. Based on findings from previous research that return gestures are a pervasive phenomenon and a potential pedagogical resource in adult L2 interaction, we investigate the situated importance of the phenomenon in interactions involving children and how such gestures may become a resource for learning and teaching among young foreign language learners.

5 Methodology

Our starting point is essentially usage-based: we understand language learning as emergent from particular occasions of language use (Eskildsen inter alia 2012, 2015, N. C. Ellis (2002, 2015), Tomasello (2003)). This means, as argued already by Firth and Wagner (1997), that in order to understand language learning we need to understand situated language use. To this end we draw on conversation analysis (CA) and for our purposes in particular, CA’s notion of sequentiality, next turn proof procedure and its focus on people’s actions in situ afford a lens onto the interactional procedures by which people co-construct learnables and teachables through embodied behavior. Moreover, this chapter is a first attempt at building a collection of instances of our phenomenon. We present here only examples from two classrooms and a more thorough review of the database with an eye to our phenomenon is still pending. Building a collection entails that our data must meet E. A. Schegloff (2009) comparability criteria – that is, that we must minimally identify our phenomenon across instances on the basis of some recognition criteria. Recently, Eskildsen and Wagner n.d. showed that establishing recognition criteria when a L2 learning phenomenon is investigated in changing environments over time can be challenging because change itself is part
and parcel of L2 learning. In the case of the data discussed here, however, there are clear recognition criteria that are based on the interdependence of a recurring gesture, a recurring expression, and a recurring action. One reason for the differences between the data discussed in Eskildsen and Wagner (n.d.) and the data used for the present exploration is the timescale. In the former, development was traced over more than two years, whereas the present study is microgenetic, showing development over approximately 20 minutes. In the next section we will show our instances and unfold the phenomenological discussion.

6 Findings

In the remainder of this chapter the focus will be on tracing, over one lesson, the expression “swap seats” across users and show how it was co-constructed by the teacher and the learners collaboratively as an embodied learnable, i.e., that which is made interactionally relevant to become a shared pedagogical focus (Majlesi & Broth, 2012). The activity in which it happened is a game of memory as a circle game, known locally as “the wardrobe game”. In preparation for this game, each pupil gets assigned one clothing item of their choice. They take turns saying what they want to be, for example a pair of shoes, and then the teacher draws a pair of shoes on the whiteboard and writes “a pair of shoes” underneath it. While this assigning is going on, two pupils (Frederik and Josefine) are outside the classroom; they do not know who chose what clothing item and it will be their task to figure it out. In the activity they will be standing at the whiteboard (Figure 2) and take turns naming two clothing items from the whiteboard (Figure 3). The two children who have selected these two items then have to swap seats. The game ends when all clothing item – pupil matches have been identified.

When all the pupils are each assigned to a clothing item, the teacher calls Frederik and Josefine back into the class and begins instructing them on what to do. Prior to our first example (Extract 2A) she has outlined the rules of the game. She then specifically instructs them to use the phrase “swap seats” (lines 1-5, Extract 2A) when playing the game. She uses a gesture to accompany the term – and this gesture becomes a vital resource for the ensuing sense-making and learning.
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Figure 3: Frederik points at a clothing item on the whiteboard.

Extract 2A: Embodied instruction

01 TEA: and- (. ) you are going to say
02 (0.2)
03 TEA: for instance bikini top and sweat band
04 (0.7) +(1.2) ((1.9))
    tea +'swap seats' gesture (see Figure 4)
05 TEA: swap seats
06 FRE: må jeg begynde
    may I start
07 TEA: ja
    yes
08 +(0.2)
    tea +prepares start of 'swap seats'-(Figure 4)
09 TEA: swap+
    tea -->
10 TEA: +det betyder bytte
    it means swap
    tea +'swap seats' three times-->-
11 (1)+
    tea -->+

The teacher's instruction draws on an example, “and- (. ) you are going to
say (--) for instance bikini top and sweat band (--) swap seats” (lines 01,
03 and 05). During the silence (line 04) she deploys a gesture which elaborates the
term "swap seats".

The gesture consists in crossing movements of both arms, with fingers pointing,
from one side to the other (see Figure 5 and Figure 6).
6. Findings

**Figure 4**: Extract 2a - line 04.

**Figure 5**: One version of the 'swap seats' gesture (re-enacted). Starts by crossing arms, then opening them.

**Figure 6**: Another version of the 'swap seats' gesture (re-enacted). Starts by opening the arms, then crossing them.
At the onset, before she begins saying “swap seats”, the teacher holds her hands spread before her in the interactional space shared with Frederik and Josefine (Figure 4). She then makes the crossing movement of the arms (Figure 4) and finally she halts the gesture with her arms crossed, her index fingers still pointing (Figure 4 – this is difficult to see because of the camera angle and because a pupil’s head is in the line of sight). Coinciding with the halting of the gesture, her arms crossed and index fingers pointing, she says the words, “swap seats”. At this stage, however, neither the phrase “swap seats” nor the gesture receives any attention from Frederik and Josefine. Instead, Frederik makes the next move to begin playing the game as he asks if he can start (line 06). The teacher answers affirmatively (line 07) and at the same time she moves her hands back to the position of the onset of the gesture she just deployed (Figure 7).

While the children do not seem to orient to “swap seats” at this point, the teacher maintains her focus on the phrase. Her next action is to repeat “swap” and translate it (lines 09-11). During her delivery of ”swap” she repeats the gesture from before, and during her translation of the term she repeats the gesture three times at a higher pace. We will refer to this gesture as the ‘swap seats’ gesture, because, as we will see over the next couple of extracts, this gesture is connected to that particular linguistic item. Although the teacher has allowed Frederik to begin playing the game, she is not yet done with ”swap seats”. Immediately after explaining what ”swap seats” means, both by translating to Danish and through the repeated use of the ‘swap seats’ gesture (end of Extract 2A), she asks Frederik to demonstrate his ability to say “swap” (Extract 2B, lines –01-03).

**Extract 2B: Embodied instruction II**

```
01 TEA: +dennis (0.2) eller (.) frederik
       Dennis or Frederik
     tea +hands terminal 'swap seats' position --->
02   (.,)+
     tea -->+
03 TEA: +ka du si swap+
       can you say swop
     tea +'swop seats' +BH stay in terminal
     position---> (Figure 8)
04   (0.9)
05 KAS: +schwop +
  fre +fists of BH together+
```
6. Findings

While eliciting the term “swap” from Frederik “(can you say swap”, line 03), TEA makes the ‘swap seats’ gesture, and leaves her hands at the final position of the gesture (see Figure 8). After 0.9 seconds, a student says “schwop” (line 05) while Frederik clenches his fists, utters an approximation of “swap”, and does a repeat of the teacher’s gesture - a return gesture (line 06). The teacher repeats “swap” (line 07) and then upgrades her elicitation to include “seats”, swap seats (line 08). Accompanying her talk she does a minimal version of the “swap seats” gesture: her hands are still in final position but at the time of uttering “swap” she briefly lifts both hands in direction of each other and moves them back to the position corresponding to the final position of the swap seats gesture. Following a 0.3 seconds pause (line 09) and perhaps orienting to the teacher’s “swap” in line 07 as a correction of his pronunciation, Frederik produces ‘swap’ in a way that sounds very close to the teacher’s version, once more returning the teacher’s gesture (line 10; Figure 9). At the same time, Josefine contributes with “swap sea::t”, while also doing the ‘swap

seats’ gesture (line 11; Figure 9). After Frederik and Josefine have both demonstrated their ability to produce the new item (and the gesture), the teacher concludes by translating to Danish what the pupils have just learned to say (line 12). Finally, the teacher moves on to the next activity in line 14, by asking the whole class if they are ready. In this extract we have seen that both the teacher and Frederik and Josefine continue to co-construct ‘swap seats’ as a teachable/learnable. Both the teacher and the pupils treat “swap seats” as a multimodal unit consisting of the verbal “swap seats” and the ‘swap seats’ gesture. In the next extract, we will look at how the embodied package, the gesture-talk connection that swap seats is emerging as, is used in the actual guessing game task.

**Extract 3: First tries in actual task**

```plaintext
01 FRE: +cap og bookini et eller andet cap and
     bookini thingy/something
     fre +points at 'cap', then at 'bikini top'
02 (.).
03 TEA: bikini top
04 JOS: [bi[ki]ni top
05 CAR: [hh heh
06 FRE: bikini top
07 (0.2)
08 TEA: swap seats
     tea +'swap seats'-->(line 10)
09 (0.4)
10 FRE: schwop +sheat +
     fre +'swap seats'+
     tea -->+
     com: no mutual eye gaze
     jos turns head twd FRE/TEA
11 UNK: [er du bi]ki]i man
     are you bikini man
12 TEA: [+s::i::
     jos +swap seats
13 JOS: [+swap
     [seats
     jos +swap
     seats
14 TEA: [Bent
15 AND: [+swap ze:a +baby:
     and +'swap seats' +beat twice (see Figure 10)
```

Frederik lists two clothing items, “cap and bookini thingy/something”, while pointing at cap and bikini top on the whiteboard (line 01). Following some repair work on “bikini top” (lines 03-06), the teacher says “swap seats” while producing the swap seats gesture. After 0.4 seconds, Frederik produces something like “schwop sheat”, including the use of the swap seat gesture coinciding with the onset of “sheat”. This turn is interesting for two reasons: Firstly, Frederik treats the teacher’s “swap seats” in line 08 as a repair initiator, thereby orienting to the apparently noticeably absent “swap seats” in his own talk; and secondly, Frederik produces “schwop sheat” and the accompanying gesture even without having looked at the teacher as she
produced the gesture-talk connection. This is noteworthy as it implies that Frederik is remembering the gesture and treating “swap seat” as an embodied unit, a gesture-talk connection. In the lines that follow, we can see that other pupils now also do learner initiatives to practice the new item: Josefine repeats the “swap seats” gesture as well (line 12), then says “swap seats” accompanied by the gesture in line 13. In addition (in overlap with the teacher reprimanding a pupil in line 14) there is an unsolicited contribution (line 15) by a pupil who produces the gesture-talk combination (see Figure 10). This turn also plays with the new phrase as the speaker adds “baby” to it, giving it a playful tone almost like a pop song. For our present purposes, however, the interesting thing is that the gesture-talk combination is continuously being reused by not only the main participants in the conversations surrounding the phrase “swap seats” so far, but also by other more peripheral co-participants.

Next time it is Frederik’s turn, the gesture-talk relation is becoming more established (Extract 4). He begins by naming the items, jeans and hoodie (line 01), which occasions repair on “jeans” and an acknowledgment token from the teacher on “hoodie” (lines 02-04).

**Extract 4**

01 FRE: janes a:n thoodi:e (. ) janes
+shifts gaze from board to TEA
02 TEA: jea:+ns:↑
tea +nods
03 FRE: +hoodie
fre +moves l. hand to r. wrist
04 TEA: and hoo+die
tea +begins swap seats gesture
05 UNK: and hoodie
fre repeats swap seats gesture facing class,
holds the gesture in terminal position with
crossed arms, then looks at TEA
06 TEA: sw+ap↑
tea +nods
07 FRE: +shwupp
fre +repeats swap seats gesture, shifts gaze
+back to class
08 TEA: sea+ts
+mak+ ½ ‘swap seats’
tea
09 UNK: swap seats
10 TEA: swap {seats
11 AND: [+sheats
and +repeats swap seats gesture

**Figure 10**: Extract 3 – line 15.
Meanwhile, jeans and hoodie swap seats.

During the delivery of hoodie, line 04, the teacher begins making the swap seats gesture. In response, Frederik repeats the gesture but then holds it in terminal position, arms crossed, while establishing mutual eye-gaze with the teacher (line 05). The teacher orients to this as an embodied request for help as she provides him with “swap” but her nod also suggests that she is encouraging him, displaying recognition of the gesture as a token of Frederik being on the right track (line 06). Frederik, then, not only demonstrates an awareness of the gesture-talk connection here, but he is also using the gesture as a resource to elicit help from the teacher. He next produces an approximation of “swap” (line 07) along with the swap seats gesture, following which the teacher completes the phrase, adding “seats”, while also seemingly making the gesture again (lines 08; this is hard to discern because of the camera angle). At the end of the sequence, the phrase and the gesture sieve out into the environment where a few other pupils repeat them, albeit not in the same coordinated ways as the teacher, Josefine and Frederik, but also not for the same purposes. Exactly why they are doing it is uncertain but their behavior showcases an orientation to the task and the language used to accomplish it. Flipping the coin it could be argued that if the repetitions we see in lines 09 and 11 are displays of an orientation to the current learnable, then the vast majority of the pupils (out of 20) are not currently taking part in the pedagogical activity. They may be playing the game and swapping seats when prompted but given that they know the rules of the game, they do not need to know – or learn – the phrase for any present, practical purposes; they are primarily playing the game. So far we have seen how co-participants in the classroom continue to re-index “swap seats” as an accountable learnable, which is noticeably absent when not produced, and which is to be produced both verbally and gesturally. Also the pattern of what exactly Josefine and Frederik have to say emerges here in a more solidified format as “ITEM1 and ITEM2 swap seats”. In the next round, it is Josefine’s turn (not shown due to space considerations) and she delivers a fluent example of this, “pajamas and hat swap seats”, also using the swap seats gesture during the delivery of the phrase. In the next extract (5), we will see what happens when the teacher deviates from this format. Frederik is appointing sweatband and sunglasses as the next to swap seats but only by saying the two words; there is no imperative in the form of “swap seats” or other motion constructions (line 01).

**Extract 5: ‘Go!’ + ‘swap seats’-gesture**

```
01 FRE: sweatband and +sunglasses
   fre +points at ‘sunglasses’ on WB
02 TEA: sweatband and sunglasses +GO
   Tea +claps
03 FRE: +go=
   fre +makes minimal swap seats gesture
04 TEA: =Frederik say +schwap seats+
   tea +’swap seats’+
05 FRE: +swap +seats
   fre +prep. ‘swap-seats’ +’swap seats’
   com: no mutual gaze between FRE and TEA
06 TEA: yes GO+
   tea +claps
```
6. Findings

The teacher repeats the two clothing items and then she diverges from the established “ITEM1 and ITEM2 swap seats”-format by saying GO instead of “swap seats” (line 02). Frederik repeats the teacher’s GO while doing a minimal version of the ‘swap-seats’ gesture (line 03). This is quite interesting in that Frederik replaces “swap seats” with “go” on the lexical level, while still making a minimal version of the same gesture. This implies that although he is repeating the teacher’s “GO”, we can see through his embodied action that he considers it a possible substitution for “swap seats” functionally and sequentially. The teacher then explicitly instructs Frederik to say “swap seats” (line 04), thus marking it as something not quite the same as “go”; this is also evident in her embodied actions as is using the swap seats gesture while saying swap seats, which she did not do when saying “GO” earlier (line 02). Thereby she clearly orients to “swap seats” as a previously co-constructed pedagogical goal/learnable, as it would not be necessary for Frederik to say “swap seats” just to get the other pupils to carry out the appointed activity, they already know the drill by now, and Frederik has also both said “go” and done the swap seats gesture, which was sufficient to get the relevant pupils to swap seats. Frederik still complies (line 05) by saying “swap seats”, this time changing the gesture slightly as he separates it into two discernible parts: opening and crossing over, doing one part with each word. The teacher accepts and says “go” and claps her hands once (line 07). While there are instances in the game where the teacher does not require or instruct the pupils to use “swap seats” in cases where they fail to, the tendency is that the phrase is becoming increasingly noticeably absent. This is evident in what happens next (Extract 6). Here, the teacher not only makes Frederik accountable for not using the phrase, which she has done before by way of instructing him to use it post hoc; rather, she holds him accountable for knowing the phrase in the sense that she is demonstrably trying to scaffold him to use it instead of merely giving it to him verbatim. Just prior to this extract, Frederik and the teacher have worked together to construct sweatband and bikini top as the next seat-swapping pair, and now in line 01, the teacher summarizes this.

**Extract 6:** And what are they going to do

01 TEA: +sweatband and bikini top
fre: +claps
02 (0.9)
03 TEA: and what are they going +to do Frederik
   tea +’swap-seats’ w palms-
   up twice
04 +(0.2)
   tea +’swap seats’ twice (line 05)
05 TEA: tell them+
   tea ->+
06 +(0.6)
   fre +prepares ‘swap seats’
07 FRE: +ehm:::
   fre +’swap-seats’-->(line 09)
08 (0.6)
09 TEA: schwap+
   fre -->
10 (0.6)
11 TEA: +seats
   tea +’swap-seats’
As we have established, the normative order for this task is to say the two items, immediately followed by swap seats. But there is a 0.9 second gap, in which Frederik does not make an effort to do “swap seats” (line 02). The teacher then attempts to elicit the expression from Frederik by asking him what the two pupils (“sweatband” and “bikini”) are going to do while producing a slight modification of the ‘swap seats’ gesture three times. Following another gap of 0.2 seconds where Frederik might have come in, the teacher instructs him to “tell them” (lines 03-05). In response, Frederik shows understanding of what the teacher is after as he immediately prepares the swap seats gesture (line 06) and produces a speech perturbation (lines 07) indicating that he has trouble saying the accompanying words ‘swap seats’, and then he deploys the gesture in full (line 07). The teacher orients to this as a word search and gives Frederik “schwap seats”, producing the gesture with “seats” (lines 09-11), but leaves the floor open for 0.6 seconds after saying “schwap” (lines 09-10). This was an invitation for Frederik to take over but he does not do so until after the teacher has provided the full phrase. Then Frederik repeats “swap seats”, while making a miniature ‘swap seats’ gesture (line 12) and the teacher responds with a repeated gesture-talk combination (line 13). Here, “swap seats” is noticeably absent in lines 02, 06, 08, and 10. The teacher holds Frederik accountable for not using the item. Whereas the teacher instructed Frederik as to what to say, she now positions Frederik as someone who should know how and when to say “swap seats” by now. When Frederik had trouble saying “swap seats” (line 7) he made just the gesture, which occasioned scaffolding on the part of the teacher. Frederik’s eventual repeating of “swap seats” in line 12 shows his orientation to “swap seats” as an accountable learnable.

**Extract 7:** And what are they going to do II

<table>
<thead>
<tr>
<th>Line</th>
<th>FRE:</th>
<th>TEA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>sweatband (0.3) and (0.2) ↑skeet</td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>(0.2)</td>
<td></td>
</tr>
<tr>
<td>03</td>
<td>skirt</td>
<td></td>
</tr>
<tr>
<td>04</td>
<td>skirt</td>
<td></td>
</tr>
<tr>
<td>05</td>
<td>(0.7)</td>
<td></td>
</tr>
<tr>
<td>06</td>
<td>+and what are they going to do</td>
<td></td>
</tr>
<tr>
<td>07</td>
<td>tea + makes swop seats gesture</td>
<td></td>
</tr>
<tr>
<td>08</td>
<td>(0.6)</td>
<td></td>
</tr>
<tr>
<td>09</td>
<td>FREL: + (s::)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>fre + makes swap seats gesture</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>(0.4)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>swap</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>(0.5)</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>ATE: seats</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>FRE: + seat(s)</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>fre + makes swap seats gesture</td>
<td></td>
</tr>
</tbody>
</table>
In line 01, Frederik announces which two pupils he selects, but pronounces “skirt” in a deviant way. After 0.2 seconds, the teacher corrects Frederik’s pronunciation (line 03) and Frederik repeats “skirt” just as it was pronounced by the teacher (line 04). Then follows a 0.7 second silence. As the teacher did not take this turn, for example to evaluate Frederik’s pronunciation in line 04 in alignment with the three-turn classroom discourse format IRE (Mehan, 1979; Y.-A. Lee, 2007), it would seem as if she is expecting Frederik to continue. He does not, however, and the teacher responds to the lack of continuation from Frederik’s side by asking him “and what are they going to do”. This resembles the embodied elicitation in Extract 6, in that the teacher does the swap seats gesture while asking (line 06). Sequentially it also sits in the same position after the announcement of what two clothing items are supposed to swap seats. After another 0.6 second pause, Frederik does the swap seats gesture, but seems, again, to have trouble saying swap seats (line 08). What follows is the teacher saying “swap”, and Frederik repeating it after 0.5 seconds (lines 09-12), and then the teacher saying seats and Frederik immediately repeating that, too, while doing the “swap seats” gesture (lines 13-15). After this successful elicitation, the teacher yet again explains what “swap seats” means in Danish (line 17 and continuing after the end of this extract). Of primary interest here is the way the teacher does the scaffolding and Frederik does the delivery of “swap seats” as seen in comparison to the previous extract. There the teacher had to deliver the entire expression before Frederik displayed recognition and produced it himself, whereas here he is already demonstrating partial recollection of the phrase as he delivers the first sound simultaneously with the gesture (line 08). They then co-produce “swap seats” step by step (lines 10-15). The next extract (8) shows the current developmental trajectory as Frederik seems to be scaffolded into an increasingly independent ability to use “swap seats”. Line 01 in the extract is the teacher eliciting “swap seats” from Frederik as she says “and what are they going to do” while producing the “swap seats” gesture twice. Her elicitation sits in the same sequential position as in the previous extracts, that is following the announcement of the clothing items and a pause where Frederik might have given the “swap seats” command.

Extract 8

01 TEA: +and what are they going to do
  tea +swap seats twice--->
02 + (0.7) + (1)
  tea +swap seats twice
  fre +swap seats, holds gesture mid-way, keeps
  mutual gaze with teacher
  jos +stands up +swap seats
03 TEA: +swap
  FRE and TEA hold mutual gaze
  tea +first half of swap seats--->
  jos +first half of swap sears--->
04 + (0.2) +
  jos +second half of swap seats+ 
  tea +holds gesture--->

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Following this, in 1.7 seconds of silence (line 02), the teacher repeats the gesture twice while Frederik and Josefine both return the teacher’s gesture. Like in Extracts 5 and 6, what follows is that the teacher says “swap” (line 03), opening for a possible completion by Frederik. This is supported by her gesture, she only performs half of the swap seats gesture, and keeps her arms in this position for another 0.2 seconds after finishing saying “swap” (line 04). Frederik and the teacher have mutual eye gaze but Frederik is still not aligning with the teacher’s designedly incomplete utterance (Koshik, 2002) by providing the elicited item. The teacher then adds “seats” (line 05) and completes her gesture in overlap with which Frederik says “swap seats” and performs the second half of the accompanying gesture. The teacher evaluates Frederik’s contribution positively, “yeah”, and repeats “swap seats” (line 07). Just prior to Extract 9 Frederik has, with the help of the teacher, selected sweatband and dress as the next two pupils to swap seats. In line 01, the teacher sums up Frederik’s selection.

Extract 9

01 TEA: sweatband and dress
02 +(1.8)
   com: sweatband and dress get up to swap seats
03 JUL: hov i har glemt det +der
   hey you(PLU) forgot this here
   jul +swap seats 3x-->(l.05)
   (see Figure 11)
04 (0.6)+ (0.5)+ (1) ((2.1))
   fre +initiates `swap seats',
   freezes--->(l.05)
   jos +`swap seats'--->(l. 05)
05 TEA: °swap+ seats°
   jul -->>
   fre ->>+touches chin w RH
   jos ->> (see Figure 11)

Immediately after this, the two pupils who have been assigned sweatband and dress, respectively, get up to swap seats (line 02). Now, while the two pupils are swapping seats, Julie uses the interjection “hov” (“hey”) and states that they have forgotten “this” (line 03). She elaborates what she means by “this” by doing the swap seats gesture 3 times (see Figure 11). After 0.6 seconds, Frederik joins her in performing the gesture, and after another 0.5 seconds Josefine joins them as well (line 04; see Figure 11). One second later, the teacher says “°swap seats°” rather quietly. While the teacher says this, Julie, Frederik, and Josefine finish doing the swap seats gesture.

In this extract, Julie is doing more than the task requires from her. From how the task is designed, and from what we have seen in the data (although not central
to the present chapter), the task only requires the participants in the game to wait until it is their turn to swap seats, and although we have not shown many instances of classroom management (again, not central to our purposes), it happens quite often that the pupils talk amongst themselves so loudly that the teacher has to shush them repeatedly. Julie, however, not only demonstrates that she is actively listening and watching, but also that she takes part in the continuing co-creation of swap seats as an accountable learnable (which TEA has neglected at this point, she has accepted – or forgotten about – it). What is more, even though it is seemingly Frederik’s turn, as it was Frederik who selected sweatband and dress, Julie states that “they” forgot it (line 03). What follows is both Frederik and Josefine doing the gesture (see Figure 11), and the teacher saying “swap seats”. In other words, both Julie and all three participants by the whiteboard orient to the forgotten “swap seats” as a transgression of the task which must be repaired. Eventually, FRE uses the item voluntarily, as we will show in Extract 10.

**Extract 10**

01 FRE: +(shirt and (0.8) shacken and +jack)
   fre +points towards whiteboard +points at jacket-->(line 03)
02 +(1.1)
   fre +gaze at TEA
03 TEA: swea+ter +and +ja[c]cket
   fre -->>
   tea +nods+ +gaze tw class
03 FRE: [+jag
   fre +gaze at class
04 FRE: jacket
05 FIN: SWEATER AND [JACK[ET
06 BEN: [jack[et
07 KAR: jacke\[ \cdots \]}:::t
08 FRE: [swap +seats]
   fre +swap seats
09 TEA: sweater and jacket
10 FRE: +swap seat(s)
   fre +swap seats 1.5 times
11 TEA: do we have a sweater and a jacket
Frederik selects two items and has troubles pronouncing at least “jacket”, at which he points before and while gazing at the teacher for 1.1 seconds (line 02). The teacher then restates Frederik’s selection for the class (line 03), and what follows are two attempts by Frederik to pronounce jacket (lines 03 and 04). At least three pupils then repeat either both or one of the clothing items rather loudly for the whole class to hear (lines 05-07). During this, Frederik adds swap seats, both verbally and through bodily conduct (line 08). The teacher repeats “sweater and jacket” (line 09; presumably because no one is swapping seats at this point, see line 11). Immediately, Frederik says “swap seats” again, and does the swap seats gesture twice, with the second time being rather minimal, i.e. it seems the semiotics of the gesture disappear into the spoken language (Eskildsen & Wagner, n.d.) after Frederik has learned to pronounce swap seats.

Summary
In brief, Frederik learned, over numerous instantiations and an introductory translation, to pronounce and use “swap seats” appropriately. The use of gestures was crucial – to achieve intersubjectivity, to enhance the semantics/function of the new item, and to re-index the item as an accountable learnable/teachable (Eskildsen & Wagner, 2013b). Our data show that the pupils orient to the teachers’ embodied practices in their responses, for instance in the form of return gestures that either display understanding (de Fornel, 1992) or work as embodied requests for clarification, and that the ensuing gesture-talk combination becomes an embodied resource in its own right. Embodied resources in general, but in particular the constant (re)use of the same gesture to indicate intersubjectivity or initiate repair, are pervasive and found across data sets (Eskildsen, 2017).

7 Discussion
We have demonstrated how, over the course of one activity, the participants in this classroom have co-constructed Frederik’s (and Josefine’s) task as saying “ITEM1 and ITEM2, swap seats”. At the same time, this means that “swap seats”, i.e. both the verbal and the embodied part of this item, has been co-constructed and continually re-indexed as a learnable/teachable (both as part of the task and for itself) by both the teacher and the pupils. This is evident in Extracts 5 to 9, in which the teacher (and a fellow pupil) holds Frederik accountable for not using/saying “swap seats” and orients to “swap seats” as being noticeably absent. Sometimes the gesture starts with hands spread apart and the crossing movement is done only once, with the hands staying in the opposite positions to the starting position, or twice where the hands are moved back to the starting position, and sometimes the gesture starts with hands together in front of the torso and the crossing movement is done twice with the hands coming back to the starting position. These variations, however, do not seem to be significant to the participants; the gesture becomes recognizable to them as a resource to drawn on to achieve and maintain intersubjectivity. In the picture, it is Frederik who is doing the gesture to elicit the term from the teacher who in response does a return gesture (de Fornel, 1992) and helps him remember the phrase. In sum, these “swap seats” data exemplify how a learnable / teachable is co-constructed in situ as the participants make it interactionally relevant as an object of incipient understanding, learning, and/or teaching (Majlesi & Broth, 2012; Majlesi & Eskildsen, in press). The activity described in this chapter spans almost an entire lesson, only preceded by pupils finding their seats and the students telling the teacher what clothing item they
want to be while Frederik and Josefine are outside of the classroom. This activity does not match the description of this school’s teaching style very well (see section on Context). The teacher’s whole-class instruction time was limited, as it should be according to this school, but this is the only part of the lesson that fits the description. The part of the lesson that is not spent on teacher-fronted instruction is supposed to be spent on varying activities in which as many pupils as possible participate. The lesson only included two activities: one happened while Frederik and Josefine were not present, the other one only required full time verbal participation from Frederik and Josefine. A relevant question to ask now is who is learning, and what. It seems (from looking at the first part of the lesson which is not presented here) that the class has talked about clothing items before. However, some pupils chose objects that were disallowed by the teacher (two pupils who wanted to be a diaper and jockstrap, respectively) and another pupil chose a “dino shirt” (a t-shirt with a dinosaur on it) which is not a vocabulary item they had dealt with before. After almost every new clothing item chosen, some pupils asked for a Danish translation, which was given by their peers, or the teacher. When Frederik and Josefine came into the class, the teacher only briefly pointed at each item (written word and sketch) on the whiteboard while saying the word and at times pointed at parts of her own body to indicate where this item is worn, leaving no space for Frederik and Josefine to ask about the meaning of these new items or hear the pronunciation of them once more which might have been conducive to further learning. Moreover, the way this activity is designed, Frederik and Josefine are the only two students who are really provided with speaking time, while the rest of the pupils only wait for their item to be called (unless it already has been guessed by Frederik and Josefine, in which case they are not participating in the game anymore at all). We saw throughout the activity, that the pupils who swap seats do not orient to Frederik not saying swap seats as a transgression of the task, they swap seats immediately because they are primarily concerned with playing the game, not publicly orienting to the related learnable. However, there is visible evidence that at least some pupils are paying attention to what is going on linguistically, as seen in their byplay, such as Anders’ “zwap ze:a baby:” in Extract 3 and “sheats” in Extract 4, where he used the swap seats gesture in a playful way, or Julie’s “hey you(PLU) forgot this here” in Extract 9. The only learning that demonstrably results from this activity is Josefine’s relatively swift appropriation of “swap seats”, as briefly mentioned, and the trajectory seen in Frederik’s progress over time, as he learns to pronounce and use “swap seats” appropriately and voluntarily (Extract 10). Of course, other pupils might have had the chance to pick it up (in particular the classmates who are visibly and hearably orienting to the expression (and the gesture)). Because the establishment of this gesture-talk assemblage is the result of publicly available interactional work that goes into the co-construction of it as a learnable / teachable as the participants made it interactionally relevant as an “object of incipient understanding, learning, and/or teaching” (Majlesi & Broth, 2012), the wider implication is that the semiotic resource known as “language” is a residual of social, embodied, and local sense-making practices

8 Practical Implications

‘Swap seats’ was co-constructed by the participants in this classroom as an accountable learnable/teachable, as part of task to be accomplished but also a teachable/learnable in and of itself. We do not know that the teacher planned to teach this gesture-talk combination in this fashion. Ethnographic information tells us she did
Chapter 12. Embodied and occasioned learnables and teachables

not; in an informal conversation with the teacher following the class the first author (who was present during the lesson) commented that Frederik seemed to have learned “swap seats” on the basis of her embodied actions to which she responded that she had not noticed. From an ethnomethodological point of view, this makes sense because, after all, social order cannot be imagined, only discovered - “only actually found out, and just in any actual case” (Garfinkel, 2002b, p. 98). What this means for teachers is that they should be careful to use the practices described in this chapter as a concrete script for planning a gesture-talk combination as a teachable/learnable; these happen as they are made relevant in the contingencies of local ecologies. However, teachers and teacher educators could try to develop awareness of the possibilities that an effective use of multimodal resources can open up. While this point has been made repeatedly in the case of (unplanned) vocabulary explanation practices in the adult FL classrooms (e.g. Eskildsen and Wagner 2013b; Lazaraton 2004; Sert 2015; Walsh 2006a; van Compernolle and Smotrova 2017, one point we would like to stress here is that it also applies to teaching young learners, as evident in our data. Another point of consequence for policy makers and teachers is that language learning is a usage-driven process that happens in a slow and piecemeal fashion (Tomasello, 2003; Eskildsen, 2012). This, in turn, raises the question of how to spend the time most profitably in the foreign language classroom. With the data that we have shown here, the time-consuming nature of language learning is perhaps an even more important factor to take into consideration with young learners because of the little time available; as already pointed out, young learners (1st and 2nd graders) in Denmark only receive one weekly lesson (45 minutes) and much of this time disappears into non-teaching activities (giving messages, handing out materials, fixing technologies, entering / exiting the classroom, classroom management etc.). The wardrobe game shown here seems to be something that the children enjoy (at least the children are playing along with it), but that does not mean that it makes for a pedagogical context that is conducive to language learning. As already mentioned, the only learning that demonstrably happens here is microgenetic (i.e., long-term effects are unknown) and concerns only Frederik and Josefine. Perhaps our data indirectly speak to the dawning recognition that teaching English to young learners is not particularly profitable (Rich, 2014) and that we might rethink the prevailing idea that younger is, in fact, better when it comes to foreign language learning. Perhaps the limited learning that seems to come out of the classroom(s) in our data is testament to the idea of discontinuing the tendency to blindly introduce foreign languages increasingly early.

9 Acknowledgements

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10 Transcription conventions

Transcriptions are based on the Jefferson (2004) system, as introduced in the Introduction chapter. Additionally, to capture multilingual and bodily conduct, the following conventions were used. For talk in Danish, a line in bold type underneath a line in Danish includes a translation to English.

14 CLA: +*i (en/min)* (. ) b[og ]+
in (a/my) book
Transcription of bodily conduct is largely based on Mondada (2014). A line starting with a participant name underneath a line of verbal conduct or silence indicates bodily conduct.

07 FRE: +ehm:::
   fre +'swap-seats-->(line 09)

Here, fre indicates the participant’s name, + indicates on- (and offset) of the action. Where it continues beyond this line of verbal conduct, this is indicated by an arrow and the line where the offset is - - - >(line 09) In the line where the action ends, this is indicated by an arrow and a plus sign ->+ indicating the relative position to the talk/silence.

09 TEA: schwop+
   fre ->+

11 Notes

I The description of the schools is based on information from their public websites. References to these websites cannot be provided as to not compromise the schools’ anonymity.

II The second mandatory foreign language can be either German or French and is typically introduced in the 5th grade.

III Our translation of “aldersintegreret indskoling”.

IV For a recent overview of the importance of language play in L2 learning, see Bell (2017)

References


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NOTES


Chapter 13

Discussion, Conclusion, and Implications of Part II

1 Summary of Part II

This Part started where Part I ended, as it set out to answer some of the questions raised by Part I. Using Conversation Analysis, the three articles presented in Chapters 10 to 12 contributed to answering the research question:

- How is intersubjectivity co-constructed in early English as a Foreign Language classrooms and how does this turn into learning moments and microgenesis?

1.1 RQ3 - Intersubjectivity, learning moments, and microgenesis

In the three articles, my co-authors and I have looked at how intersubjectivity is co-created in and through verbal and bodily conduct. The analyses showed that both teachers and learners use a variety of resources, such as the skillful use of gestures in reformulations, task instructions, or in combination with designedly incomplete utterances, in order to prevent or repair breakdowns in communication. The analyses further showed to what extend participants in the L2 classroom rely on shared knowledge and previous interactions, especially in interactional differentiation. The microgenetic studies in this thesis enabled detailed studies of learning moments, which is the exact opposite of what I have done in Part I, where I only looked at the big picture outcome of learning.

2 Reflection on methodology

The methodology used in this section for gathering and analyzing data is Conversation Analysis, which is a micro-analytic, data-driven, qualitative methodology for studying social interaction. In Conversation Analysis, analytical findings are based on what can be shown from the interaction.

The video data used for this study are a few hours from many classrooms. While this allows for cross-sectional, comparative studies as called for by e.g. Markee 2015a, some questions like how the categorization of high and low achievers came about, or whether Frederik or anyone else in this class has used swap seats or swap again cannot be answered.

3 Common themes of the analyses

The three articles presented in Chapters 10 to 12 revolve around some common themes: language choice, pursuits of understanding, embodied repair/explanation,
and differentiation. In this section I will discuss differences and similarities between classrooms on the same or across age groups in relation to these themes, drawing both on the data presented in the articles, and on ethnographic observations.

### 3.1 Language choice

In early EFL lessons in Danish public primary schools, the medium of instruction should be English (EMU, Danmarks læringsportal, 2017b). In my observations I noticed that this is not the case in all classrooms. At first I assumed that this was related to the teachers’ English proficiency and teacher qualification, i.e. that teachers who did not train to be English teachers or teachers who feel they are not very proficient in English would choose to use Danish as much as possible. However, after closer investigation, language choice seems to be related to assumed proficiency of the students and not of the teacher. This becomes evident in Chapter 10, where teachers use Danish or English according to the assumed proficiency of the individual students they address, and do language policing or allow students to answer in Danish according to the respective students’ assumed proficiency as well. This is something I have observed in both early and late start classrooms; there is usually an orientation to English as the language that should be used, but exceptions are made for individual students, and for certain activities, such as classroom management.

In Chapter 11 we described one specific language alternation practice from one late start classroom. This practice has changed in later lessons, where the teacher used language policing as a differentiation practice, i.e. he now actively elicits responses in English from most students, but there are two specific students from whom he accepts Danish answers without language policing. Moreover, he speaks Danish when addressing these two students directly, while he used to leave the classroom to speak Danish in previous recordings. The teacher of this classroom also teaches an early start classroom in the same school, in which he uses Danish and English differently (see Extract 1).

Extract 1 was recorded around the same time as the data from Chapter 11, the teacher is the same as in Chapter 11, but this Extract is from his early start classroom. In this Extract, the teacher is doing some classroom management and introducing a task to the class. What is salient in this Extract is that the teacher says everything twice, i.e. once in Danish, and once in English. In line 03 he reformulates/translate to Danish what he has said in English in lines 01-02, in line 07 he reformulates/translate to English what he has said in Danish in line 05, in line 16 he reformulates/translate to Danish what he has said in English in lines 11 and 12, and finally in line 21 he reformulates/translate to Danish what he has said in English in line 20.

This is quite curious, as this practice goes against my ethnographic observations and against what the teacher stated in interviews with me. With regards to the teacher’s language use in his classrooms, he revealed in an interview: “In the first lessons they [(the students)] said to me: ‘You can speak Danish’ and things like that. ‘No, not very well, I don’t speak Danish very well’, I said with a [foreign] accent. So when they are in the classroom, I think they know that in here, we speak English. In the beginning it was quite hard for them, and it is still difficult for some of them to get used to it, but they have started to produce some short sentences already” (my translation from Danish original). Sometimes, the teacher finds it necessary to speak Danish, as he stated in an interview. However, to not violate his rule of only speaking English inside of the classroom, he will in this case leave the classroom and speak Danish in the hallway, with the door open so his students can hear. In an interview, the teacher said about this practice: “This is something I came up with. There were
3. Common themes of the analyses

Extract 1: Language alternation in a first grade

01 TEA: now listen↘ (.)
02 now its VE:RY VERY important that you listen↘
03 nu det me::get vigtig i lytter↘
now it is very important that you listen
04 (0.7)
05 TEA: alle↘
everybody
06 (0.8)
07 TEA: everybody↗
08 (0.8)
09 TEA: girls↗
10 (0.8)
11 TEA: turn around↗ be ready↘ (0.2)
12 are you ready↗
13 (0.6)
14 JUL: m⌈hm ⌉
15 EMI: ⌊ye:s⌋
16 TEA: er i klare↗
are you ready
17 (0.2)
18 TEA: good↘
19 (0.6)
20 TEA: good because you gone to make a lil book⌉
i skal lave en lille bog↘
you have to make a small book

some who were completely lost in the beginning, they asked: ‘What are you saying? We don’t understand this’. So as you could see today, I was there [outside of the classroom] two times. In some lessons I have been there more than two times, but now I usually only do this one time, or not at all. It depends on what we do in the lesson. So today it [the explanation of the task] had to be done fast, because we had a lot planned for the lesson. It took quite a long time for them to cut it [the worksheet] out. But usually we basically do things everyone can participate in and understand without me having to speak Danish” (my translation from Danish original). He went on to explain that especially with the younger learners it is important that they are exposed to as much English as possible. The teacher’s strong English-speaker identity goes beyond his English lessons. As an example, the teacher is in regular contact with the parents of his students. Interestingly, the very first letter he wrote to the parents, he wrote in English. Also, in a school meeting with all parents, the teacher talked about his English class in English. What is more, when I visited the school, I noticed that students talk to the teacher in English even when they meet him in the schoolyard during their break. Moreover, he always brings a suitcase with the UK flag on it to class.

What is more, Eskildsen and I (aus der Wieschen & Eskildsen, 2016) have previously found that his Classroom Interactional Competence (Walsh, 2012) actually includes several methods to create intersubjectivity without resorting to the L1. The
practice we studied in detail is the combination of deictic and iconic gestures with reformulations, as in Extract 2 (Extract 1 from Chapter 12).

**Extract 2: Embodied pursuit of intersubjectivity**

01 **TEA:** I have another **song** for you toda:y
02 **TEA:** do you remember **who** stole the cookie
03 **CLA:** mmh,
04 **SOF:** y[uss]
05 **TEA:** [ja?]
06 **TEA:** +this song here [i t]it's in your ↑folder +
07 **TEA:** +holds up laminated sheet with song text+
08 **TEA:** +you have it in your folder? +
09 **SOF:** +turns head to CLA +
10 **SOF:** in your ↑mappe folder
11 **TEA:** [yes]
12 **SOF:** [i vores mappe in our folder
13 **CLA:** hng
14 **CLA:** +°i (en/min)* (. ) b[og ]+
15 **CLA:** +opens imaginary book +
16 **CLA:** [yes]
17 **TEA:** +in your ↑folder in your+ [tmappe
18 **TEA:** folder
19 **SOF:** [i vores mappe

Why this teacher uses language differently in the classrooms is unclear. It might to some extend be related to differences perceived proficiency of early and late starters. In Chapter 10 I showed that using L1 with some and L2 with other students is a way of differentiating. Early starters are less proficient (at least that is what the statistics show in Chapter 5) than late starters, so maybe that is the reason the teacher has different language policies, but there is no way to know this. At the very least, this example shows that data from interviews does not always correspond with empirically observable facts, i.e. they cannot replace emic, microanalytic studies of what actually goes on in the classroom.

### 3.2 Pursuits of understanding and embodied repair/explanation

Pursuits of understanding are a prerequisite for foreign language teaching and learning and can be accomplished in several ways. As discussed above, these are done differently in different classrooms. Even though it is the same teacher in Extracts 1 and 2 and both classes have had English lessons for around the same amount of time, he uses different strategies to pursue student understanding with his 1st and his 3rd
3. Common themes of the analyses

grade; translations to Danish with the early starters (Extract 1) and reformulations with iconic gestures with the late starters (Extract 2). However, there does not seem to be a general pattern related to age in the database. In Chapter 12, for instance, the main data comes from an early start classroom (a mixed classroom of 1st and 2nd grade students). The teacher uses embodied repair practices, and our data shows that the students orient to these in return gestures (de Fornel, 1992). These return gestures work as displays of student understanding, or as embodied requests for clarification. This happens across classrooms and age groups. Even in the early start classroom from Extract 1, in which the teacher prefers to translate to prevent breakdowns in communication instead of solving them through e.g. embodied repair/explanations when they occur, does he at times use embodied explanations, as in Extract 3.

**Extract 3:** Verbal and embodied displays of understanding

01 TEA: its a sma::ll book
02 (0.3)
03 TEA: its a small one
04 TEA: you see
05 (0.7)
06 CAM: en l⌈ille bog⌉
a small book
07 TEA: ⌊its like⌋
08 (0.5)
09 TEA: ∇o:⌈ne⌉ (1.0) tw⌈o⌉ (0.3) thr⌈ee⌉ (0.3) f⌈our⌉ (0.3) pages⊢=
10 TEA: =four pages
12 (0.2)
13 TEA: okay
14 (0.5)
15 TEA: good
16 CAM: fire sider
17 TEA: what you need to do:

Extract 3 shows what happens just after Extract 1, i.e. after the teacher explained “good because you gone to make a lil book” first in English, then in Danish. Now, in Extract 3, the teacher is switching to using English only. In pursuit of understanding, he employs several verbal and embodied resources, and one student, Camilla displays her understanding in various ways as well. In lines 01–03, the teacher states that it is a small book (line 01), and repeats part of it in a reformulation, where “book” is replaced with “one”. This reformulation, together with the elongated production of “sma::ll” are verbal resources the teacher uses to draw the students’
attention to “small”. To underline the meaning, the teacher holds up an empty book, which is just an A4 sheet folded in half. He holds it there for the remainder of this Extract. In line 06, Camilla requests confirmation by saying “a small book” with rising intonation (in Danish). At the same time, she uses a gesture for “small”. However, instead of orienting to Camilla’s display of understanding, the teacher begins instructing the next part already in overlap with Camilla (line 07). Next, the teacher points at one of the four pages at a time, and says the numbers 1–4 as he does so (line 09). Assuming that the students already know the numbers 1–4 in English (this lesson is at the end of the first year of EFL), this combination of numbers and pointing at the pages serves as an embodied explanation of how many pages the students’ small books have to have. It seems that Camilla might understand the teachers slow counting not as a task instruction but possibly something else, namely as an invitation for choral speaking, as she counts along with the teacher, both verbally and with her fingers (line 10). The teacher does not do anything with Camilla’s counting along, instead, he summarizes his instruction as “four pages” (line 11). The teacher’s use of “okay” and “good” in lines 13 and 15, respectively, both times with falling intonation, serves not only to close the sequence, but also to mark that intersubjectivity has been achieved. This is not contested in line 14, and in line 16 Camilla actually demonstrates her understanding by translating to Danish, and by showing the number 4 with her fingers. Again, the teacher does not do anything with this, instead, he moves on to the next step of the instruction.

Two things become evident from this Extract. First, while it might be that the teacher often translates in his 1<sup>st</sup> grade which is something he very rarely does in his 3<sup>rd</sup> grade, he does use all of the resources he has, i.e. not only translations but also embodied explanations, in the pursuit of understanding. I don’t know what his reasons are for choosing one over the other, but both work. Teachers use the meaning making resources they have in their repertoire, as they see fit with regards to the current pedagogical goal. Not shown in the transcripts is that this class has lost quite some time at the beginning of the lesson, as there was a fight between classmates in the break before this lesson and the teacher helped them make up. Using translations in Extract 1 instead of reformulations and embodied explanations, which work just fine in 1<sup>st</sup> grades as Extract 3 and Chapter 12 have shown, might just be a way to recover the lost time, as translations are faster than reformulations and embodied explanations, and the class still has to accomplish the goal of finishing their small books before the bell rings. This makes sense and matches what the teacher stated in an interview, namely that he uses Danish when activities (such as cutting out a worksheet) take longer than expected, and he can save time by speaking Danish. I assume that time-saving practices for creating intersubjectivity are needed more in early start classrooms, as they have only one weekly lesson and late starters have two in public schools<sup>1</sup>, but as Extracts Extracts 1 and 3 have shown, teachers use a variety of resources that they have in their repertoire, regardless of their students’ age. Another time-saving way to pursue intersubjectivity in early EFL classrooms that has not been discussed in any of the articles or this discussion is when a teacher directly addresses one (usually the same) student to translate the teacher’s English instructions to Danish for the rest of the class. While it still needs to be investigated how much the rest of the class actually learns when they know they have a fellow student who will translate, this is a way for teachers to a) uphold an L2-only policy by not speaking Danish, b) save time by not having to use multiple resources to create

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<sup>1</sup>Actually, in this specific school – a private school – early starters have two weekly lessons, and late starters only one.
3. Common themes of the analyses

intersubjectivity, and c) differentiate, by making one student stand out from the rest of the class and acknowledge that this student understands more than others.

3.3 Differentiation

Differentiation is the heart of goal-oriented teaching of any subject. The language tests in Part I showed that Danish children do not start from ground zero when they start with English in 1st and especially in 3rd grade; already around their first English lessons, Danish children have some receptive vocabulary and grammar knowledge, and late starters even more so than early starters. However, both for early and late starters, there is great variation in how much they already know when they start learning English, which might be due to variation in exposure to and use of English outside of school (Hannibal Jensen, forthcoming). Some schools acknowledge this at least theoretically, in Chapter 2 we saw that especially the private schools in this project voluntarily lowered the starting grade because Young Learners are exposed to and use English outside of school. This knowledge Young Learners have is rarely used in the classroom, though (but see aus der Wiesen and Eskildsen, 2017). In my interview with teachers I found that this is mainly for two reasons: either because teachers do not want to let those students feel left behind who do not use English outside of school, or because they already have to spend a lot of time finding teaching materials that can be used to achieve the Common Objectives – or are lucky enough to have a YL EFL book which they can just use starting from the first page and moving forward – and can therefore not plan extra activities and materials that make use of the extramural English some students know. The differentiation that does happen in Danish early EFL classrooms is therefore not the kind one commonly thinks of, i.e. giving different tasks to students depending on their ability, but a much more subtle interactional differentiation. The differentiation practices described in Chapter 10 are not specific to any grade level, the data from both early and late start classrooms contributed to the description of interactional differentiation in YL EFL classrooms. However, while the article meant to describe the practices in four select classrooms, it only used data from three of these. There was no differentiation at all in the fourth classroom, the 1st grade of Bjarne Reuter skolen, which is why it was not included in the analysis. The school itself is quite big, and this classroom has 27 students, which is well above the Danish average of 20,7 for 1st grades in 2014 (DST, 2015) and bigger than any other classroom that is part of the TYTB project. It might be that continuous evaluation, as it is necessary for successful differentiation, is not easy in such a big classroom. What is more, as evident in the description of this school in Chapter 3, this school focuses on inclusion, as it has an autism disorder spectrum center, and on general well-being. This is very evident in the lessons I have observed. Before class, students can place a sign with their name on the whiteboard if they want to talk about something. Depending on how many names there are, the actual English class ends early, as to make time for students who want to tell the class about something, for example what they had for dinner the day before or that they are going to have a friend over after school. This classroom can best be described as a safe space where children and adults have fun, the focus seems to be mostly on Danish “hygge”, and only peripherally on teaching and learning English. What this shows is that differentiation in early EFL classrooms in Denmark happens across age-groups and classrooms in much the same way, but only under the condition that no student is left behind.
Chapter 13. Discussion, Conclusion, and Implications of Part II

4 Implications

Teachers should not be afraid to use the L2 or the L1 in the classroom. There are ways to create intersubjectivity even when speaking the L2, such as using gestures skillfully (aus der Wieschen & Eskildsen, 2016) and allowing students to help each other in the L1 as in Chapter 11. Language choice can also be a form of differentiation, i.e. differentiating on a classroom level between different classrooms a teacher teaches, or differentiating in interaction with individual learners. When working on Chapter 10, most instances of differentiation were in interactions with highly proficient learners, which is understandable because they stand out so much. However, this highlights the need for continuous re-assessment of all learners, in order to differentiate properly. To this end, I recommend goal-steered teaching as it is suggested by the Danish school reform, as this way of teaching is dependent on and ensures an iterative process of evaluation and differentiated teaching. Chapter 12 showed how, without having specifically been planned, learnables and teachables can be co-constructed in classroom interaction, and that gestures play a part in this process. Both of these concepts should be included in teacher education. The three articles together are only adding a piece of the puzzle to the emic investigation of the co-creation of intersubjectivity in L2 classroom interaction. They have shown that some practices we already know happen in adult L2 classrooms are also found in YL classrooms, but there seem to be differences between 1st and 3rd grade EFL classrooms which I was not able to pinpoint here. Future research might want to investigate early EFL learning longitudinally and comparatively, in order to find out what makes a 1st/3rd grade classroom just this, and which pedagogical implications this has.
Chapter 14

Discussion, Conclusion, and Implications

I have discussed the results and implications of the individual articles both in the respective articles and in Chapters 7 and 13. In this final chapter, I am going to summarize them and put them into a broader perspective. I also discuss the design of this thesis by reflecting on my theoretical and empirical choices as well as the limitations that may be associated with them.

1 Research questions

- Will there be differences between earlier (age 7) and later (age 9) starters of English language learning in their rate of learning and short-term L2 proficiency (i.e., after 2 years of instruction) with respect to the following language dimensions: receptive vocabulary, receptive grammar, and receptive phonological discrimination?

- What is the role of inside-school quantity and quality of exposure to and use of English in children’s rate of L2 learning and short-term L2 proficiency? To what extent is this variable a good predictor of faster rate of learning and higher level of short-term L2 attainment?

- How is intersubjectivity co-constructed in early English as a Foreign Language classrooms and how does this turn into learning moments and microgenesis?

2 Reflection on Methodology

In this thesis I have relied on two strikingly different methodologies. The "Cognitive-Social Debate in Second Language Acquisition" (Larsen-Freeman, 2007) has been a long one and it goes beyond the scope of this thesis for me to participate in it. However, I do wish to justify why I did not choose one over the other. I see the value in large-scale, longitudinal quantitative studies of SLA, as they are well-suited to give an overview of a certain population, and make cross-context comparisons and replications possible. The studies presented in Chapters 5 and 6 are important, as they can show that in Danish primary schools, the classroom is not the most important factor in FL learning – if we accept multiple-choice test scores as measures of L2 learning. From a mainstream SLA view this is acceptable, as the building up of increasingly complex morphosyntax and phonological awareness until achieving a native(-like) level is a desirable and measurable outcome of FL learning. Nevertheless, in order to evaluate this properly, test instruments need to be adapted to the local context. Even if L1 competence is what a learner’s test performance is held up against,
Chapter 14. Discussion, Conclusion, and Implications

the tests used for assessment have to be standardized for use by L2 learners, and tests to assess young learners need to be age-appropriate. Luckily, interest in research on and design of assessment of young learners in their local context is increasing, as the recent volume "Assessing Young Learners of English: Global and Local Perspectives" edited by Marianne Nikolov (2016) nicely illustrates.

Setting the previously discussed issues with the statistical validity and reliability of the tests used aside, the research in this thesis has shown that the question is not whether both methodologies have a rightful place in SLA, but what kind of questions they can answer. As research questions 1 and 2 asked to compare the rate of learning and short-term proficiency of a total of 400 early and late starters, and to determine the role the classroom plays in this, quantitative assessments were the most appropriate and feasible method, and an adoption of cognitivist views of SLA was necessary and in any case predetermined by the questions. Research question 3 asked for the practical methods participants in the FL classroom use to co-construct intersubjectivity. By design, this question can only be answered by studying social interaction, and Conversation Analysis is the most robust method to do just that. To sum up, the combination of both methods led to a more rich and varied description of early English teaching and learning in Denmark.

3 Main findings and implications

The aim of this thesis was not only to contribute to the field of SLA and our understanding of Young Learners in general and specifically in Denmark, but also to provide practical implications for teaching English to Young Learners.

Chapter 5 found that starting age and gender are good predictors of short-term L2 proficiency and rate of learning, but classroom factors are not. The findings of this article confirm those of earlier investigations that have shown the same to be true in other countries (Cenoz, 2003; Miralpeix, 2006; Mora, 2006; García Lecumberri & Gallardo, 2003b; Muñoz, 2003, 2006a; García Mayo, 2003; Lasagabaster & Doiz, 2003; M.-C. Torras, 2005). Considering prior research (Mihaljević Djigunović, 2015), the results of this investigation strengthen the idea that in order for a lower starting age to be meaningful, 1 or 2 weekly lessons are not sufficient (Álvarez, 2006).

Chapter 6 has addressed some of the methodological shortcomings of Chapter 5 contributes additional evidence that suggests that receptive vocabulary is related to age, gender, and possibly some unexplored factors, but not to the classroom. The key strength of this study is that it considers the multitudes of contexts in which Young Learners languages. By sorting the test items of the PPVT-4 into the categories "YL EFL topics" (i.e. related to: animals, body, clothes, colors, food), "classroom words" (e.g. “pencil”, “reading”) and "other items" (e.g. “drum”, “juggling”) it reflects the still pervasive border between language learning in the classroom and in the wild. What is more, this categorization showed that older boys excel in the "other” category both in terms of short-term proficiency and rate of learning, while older girls have higher rates of learning in the "YL EFL topics” category. Using only regular GSV scores as in Chapter 5, this strength of girls went unnoticed. Considering that in Denmark many boys use considerably more English outside than inside of school, and more than most girls do (Hannibal Jensen, 2017), puts the boys’ advantage into perspective.
3. Main findings and implications

To this end, this study has raised important questions for assessment design. If some young learners only encounter English in school (i.e. girls) and others use more English outside than inside of school (i.e. boys), to what extent are proficiency tests fair? If the goal is to compare L2 learners to L1 speakers, this does not seem to be a problem. However, if the goal of assessment is to specifically measure outcomes of inside-school factors, or to assess for learning so as to help each learner become the best they can be, proficiency tests need to be tailored to the individual context of the test-takers, which in a Danish context might include taking the national Common Objectives into account. What is more, the results of this study provides additional evidence to findings by Hannibal Jensen 2017, who showed that older learners use more extramural English than younger learners, as we can see in the higher scores of late starters already in the pretest, and especially in the ”other” category. A practical implication of this is that teachers need to be aware of where each individual student learns English other than inside of the classroom, and to try to go beyond ”YL EFL topics” and ”classroom words”, as young learners are very much capable of learning more than colors and animals.

Assessment, the way it was conducted in Chapters 5 and 6 or as it happens on a moment-to-moment basis in the classroom is a prerequisite for goal-oriented teaching and thus for differentiation. In Chapter 10 I showed that teachers do interactional differentiation, both in 1st and 3rd grades. The study has implications for our understanding of ”differentiation”, i.e. that it is more than giving different tasks to different students. Although the study is based on only a few lessons per classroom, the findings suggest that teachers draw on previous evaluations of young learners in their interactions with them. The study has shown that it is harder to identify low achievers in the classroom than high achievers, who clearly stand out and are categorized as such by their teachers, their peers, and themselves. To this end, the study highlights the importance of continuous assessment and skillful differentiation. One of the interesting practices of interactional differentiation is the use of L1 and L2 based on individual students, rather than on pedagogical goal, which is different from what previous studies have found (Üstünel & Seedhouse, 2005).

Zooming in on just language choice, in Chapter 11 Sert and I described divergent language choices in one 3rd grade classroom, and described the practical ways the teacher and the students co-construct meaning in the classroom. This study highlights the importance for emic research of language choices, that focuses on what the use of L1 and L2 can accomplish, rather than top-down theoretical explanations of why one should or should not use the L1 in the L2 classroom.

In Chapter 12, Eskildsen and I conducted a microgenetic study of one specific gesture-talk combination as a learnable/teachable, tracing its origins and the its subsequent constant re-indexing, both by the teacher and the students. While we cannot say anything about the longterm consequences, i.e. whether or not this item has been acquired and if yes by whom, it strengthens our understanding of learnables and teachables and makes a case for what microgenetic studies can accomplish.

Both the studies presented in Chapters 5 and 6 and those in Chapters 10 to 12 challenge some of the assumptions that seem to be the basis for the introduction of early English as part of the Danish 2014 school reform. Introduction of EFL in 1st based on some theoretical “the younger, the better” assumption cannot be effective, if one does not consider the growing body of empirical research that concludes that
an increased amount of lessons and special teacher training are necessary to make use of an earlier start, i.e. higher L2 proficiency and faster rate of learning. The Danish curriculum states that the medium of instruction should be English (EMU, Danmarks læringsportal, 2017b). Nevertheless, Chapters 10 and 11 show that that Danish is used in the classroom – and for good reasons. Allowing and using Danish in the classroom enabled the participants in the individual classrooms to do learning-in-interaction, and to do interactional differentiation. Especially the microgenetic study in Chapter 12 showed that language is learned is a slow, usage-driven process. Considering that Young Learners in Denmark only have one or two weekly lessons, and a portion of each lesson is used for non-EFL activities, such as classroom management, the results of the quantitative studies are not surprising.

The exact amount of lessons or the school type do not seem to matter, what matters are the resources teachers and students can use for sensemaking in classroom interaction. These resources we have identified, i.e. the use of epistemic, multilingual, and multilingual resources, to use Sert’s 2015 categories, are part of the teachers’ and Young Learners’ classroom interactional competence (Walsh, 2006a, 2012). The development of this interactional competence over time should be investigated in more detail, e.g. as cross-sectional or longitudinal studies of Young Learner EFL classroom interaction.

To end on a positive note, the findings of both parts show that EFL learning happens in both early and late start classrooms.


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