## Exploring interactions between learner and task characteristics in a reading test of French for young learners

The example of the language of rubrics and responses
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13th EALTA Conference 2016 (Valencia)


## Content

## Introduction

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## The language of rubrics and responses

- International tests and most assessments in Swiss schools: foreign language is also the language of instructions, rubrics, responses, etc.
- The 'Lingualevel' issue:

What's on?
|ingualevel
Sports
Bspl.: Wo startet die Radtour „Pedal for Scotland"?
im Roseburn Park

1. Wie alt muss man sein, um am Diskjockey-Kurs teilnehmen zu können?
2. Wie lange hat die Einstein-Ausstellung am Dienstag geöffnet?

|  | 1 Oct, 2 Oct |  |
| :---: | :---: | :---: |
|  | Prices: | $£ 1$ (£50) |
|  | Venue: | Meadowbank Sports Centre |
|  | Address: | 39 London Road, Edinburgh, EH4 |
|  |  | 5AN |
| include | Tel: | 01316615351 |

3. Wie viel kostet der Eintritt in den Club "Po $\mathrm{Na} \mathrm{Na"?}$
http://lingualevel.ch/

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## TASK LAB

## Task Lab

- Objective: Understand computer-based reading comprehension assessment better
- Investigate specific task features (test formats \& language of rubrics and responses)
- Gain insights into the interaction between task and test taker characteristics
- Inform assessment scale interpretation
- Target group: pupils (age 12, German: language of schooling, French: first foreign language, 4 years, 2 or 3 lessons per week)


## Instruments



## Reading tasks:

- 12 tasks in 4 versions
(3 items each):
- MCQ + German
- MCQ + French
- SAQ + German
- SAQ + French
- 6 tasks in 2 test versions
(3 items each):
- MTCH + German
- MTCH + French


## Component tests:

- Digit span tasks
- Sight word recognition
- Pronunciation of non-words
- C-Tests
- Segmentation tasks
- Yes/no vocabulary test


## Questionnaires

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## Instruments

## Reading tasks

## Un mail d'Alicia

De : Alicia
A : M. et Mme Chappuis
Date : 25 juillet
Objet : Salut !

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$$
\begin{aligned}
& \text { De : Alicia } \\
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& \text { Date }: 25 \text { juillet } \\
& \text { Objet : Salut ! }
\end{aligned}
$$

## Un mail d'Alicia

De : Alicia
A : M. et Mme Chappuis
Date: 25 juillet
Objet : Salut !
Chers grand-papa et grand-maman,
Comment allez-vous ? Moi, je vais très bien
Hier, j'ai passé toute la journée au cirque. C'était génial :
le matin, les acrobates ont préparé le spectacle et nous, on a regardé. J'ai fait du jonglage : ce n'est pas facile !
A midi, nous avons mangé des spaghettis avec les acrobates et avec Ritchie, le clown. Après, nous avons vu une petite girafe. Elle
s'appelle Jamal et elle a 1 an. Elle est très belle. C'était le meilleur moment de la journée
Le soir, nous avons regardé le spectacle. C'était super! Les jongleurs étaient magnifiques et nous avons même vu Jamal. Mais je crois que Ritchie est tombé malade, on ne l'a pas vu ce soir.

A bientôt,
Alicia

## Links siehst du ein Mail von Alicia an inre Grosseltern. ihre Grosseltern.

Dazu stellen wir dir drei Fragen.

1ère question:
Quel est le thème du mail d'Alicia?

Sa vie comme enfant du cirque.

Sa journée dans un cirque.
Son cours dans une école
de clown.

Quel est le thème du mail
d'Alicia?

Schreibe deine Antwort auf Französisch! Ecris ta réponse en français !


## SAQ French

## Links siehst du ein Mail von Alicia an ihre Grosseltern. <br> Dazu stellen wir dir drei Fragen.

## 1. Frage:

Über welches Thema schreibt Alicia in ihrem Mail?

Schreibe deine Antwort auf Deutsch!


SAQ German

Links siehst du ein Mail von Alicia an ihre Grosseltern.
Dazu stellen wir dir drei Fragen.

## 1. Frage:

Über welches Thema schreibt Alicia in ihrem Mail?

## Über ihr Leben als

Zirkuskind.
Öber ihren Tag im Zirkus.
Über ihren Kurs in einer
Clownschule.

MCQ German

## Implementation

- Piloting
- Stimulated recall for reading tasks (34 students)
- Piloting of all instruments (97 students)
- Main study
- 35 classes, $\approx 600$ students
- Reading comprehension test (50 min) + short questionnaire
- Component tests:
- Oral test (20 min)
- Written test ( 40 min )
- Questionnaire (10 min)


## THE LANGUAGE OF RUBRICS AND RESPONSES: EVIDENCE

## Qualitative evidence from the interviews

- Switching between languages was not perceived to be a problem.
- Questions and multiple choice options in French were often not or falsely understood.

I: ...Was magst du lieber?
S: Auf Deutsch. Weil beim Französischen ist man aufgeschmissen, wenn man die Frage nicht versteht.

Frage: Pourquoi le chemin de l'école de Vidal est-il spécial? I: Weisst du, wie die Frage lautet? S : Warum ist das Chemielabor von Vidal so speziell.

> I: ... What do you prefer?
> S: In German. Because in French you're busted when you don't understand the question.

Question: Why is Vidal's way to school special?
I: Do you know what the question means? S3: Why is Vidal's chemistry lab so special?

## Qualitative evidence from the interviews

- In French, writing was perceived as difficult.

S: Ich habe die Antwort, kann sie aber nicht auf Französisch schreiben.

S: I've got the answer but I can't write it in French.

- Many students copied their (mostly wrong) answer directly from the text.

I: War das Schreiben auf Französisch ein Problem?
S: Nein, das konnte ich ja abschreiben.

I: Was writing in French a problem?
S: No, I could just copy it.

## Qualitative evidence from the interviews

- Students sometimes had answers in mind that were different from the ones they actually wrote down.

I: Kannst du mir deine Antwort kurz vorlesen?
S: Also Karusu verliert seinen Papa im Zoo. I: Und geschrieben hast du „Karusu devenu papa".

S: Ich habe geschrieben: "Pierre Dumont en danger" (...).
I: Was würdest du auf Deutsch schreiben (...)?
S: Pierre Dumont ist sehr gefährlich.

I: Can you read your answer?
S: Karusu loses his dad in the zoo. I: And you wrote "Karusu devenu papa" [Karusu became a dad].

## Qualitative evidence from SAQ answers

| Language of questions and answers | Absurd answers | Answers copied from text |
| :--- | :---: | :---: |
| French | $33 \%$ | $37 \%$ |
| German | $10 \%$ | $1 \%$ |

Q: Où sont les trois personnes?
A: elle intèressant ce livre, imageset parler.

Q: Where are the three people?
A: She interesting this book, [imageset] talk.

Q: Qu'est-ce qu'Emilie préfère à l'école? A1: Zurich.
A2: a monde.
A3: Il préféré à l'ecole jeudi.

Q: What does Emilie like in school?
A1: Zurich.
A2: [a] world.
A3: He preferred at school Thursday.

Q: Qu'est-ce que les deux veulent acheter? A1: papa et garcon.
A2: et en plus tu n aimes pas faire du velo.

Q: What do the two want to buy?
A1: dad and boy
A2: and you don't like to go by bike

## Qualitative evidence from the questionnaire

Was war für dich einfacher?
$\boxed{\square}$ Die Fragen und Antworten auf Deutsch.Die Fragen und Antworten auf Französisch.

What was easier for you?
The questions and answers in German. The questions and answers in French.


## Qualitative evidence from the questionnaire

## German is easier:



Warum? We:l ich die Fagen besser verstanden habe und auch eine besser. Antwout goben konnte

## French is easier:

warum? Manch mal whste ich nicht was glas wort bedentere. In traneösisch kounte iches eintach Kopieren

In French, it can happen that you don't understand an important word and then you don't understand the whole question.

Because I understood the questions better and I could give a better answer.

## Quantitative evidence from the test data

- Scaling: Rasch model
- 609 students
- 180 dichotomous items
- 6 item formats: mcq-ls, mcq-tl, saq-ls, saq-tl, mtch-|s, mtch-tl
- Each student encountered:
- 10 (13) of 12 (18) tasks (30 (39) items)
- 6-9 items of each format
- Individual items were solved by 84-156 (84-174) students ( $\varnothing 120$ )

The analysis of the complete data (incl. other measures) is not yet finished.

## Quantitative evidence: divergent difficulty (I)

PersonAbility
$\mathrm{N}=609$

ItemDifficulty
$\mathrm{N}=144$


## Quantitative evidence: divergent difficulty (II)

> Item difficulty 1-PL by format and language


## Quantitative evidence: divergent difficulty (II)

- MCQ-tl: more or less difficult compared to MCQ-Is when answer options contain more or less words from text
- SAQ more difficult than MCQ when answer cannot be copied from text


- Easier when key words in question appear in the text
- Words in correct answer help OR words in distractor mislead
- SAQ easier when answer can be copied from text


## Quantitative evidence: divergent difficulty (III)

## Profile Analysis: mean deviation profiles

(Verhelst 2011)

- Low-ability students score higher on MCQ items than the overall Rasch model predicts.
- High-ability students score higher on SAQ items than the overall Rasch model predicts. This effect is more pronounced when the language of rubrics and responses is the target language.

Verhelst, N. D. (2011). Profile
Analysis: A closer look at the PISA 2000 reading data. Scandinavian Journal of Educational Research, 1-18.

## Conclusion

- Qualitative data suggest a clear preference for the use of the language of schooling (German) for rubrics and responses in reading comprehension items for beginning learners of a foreign language (French).
- Quantitative data show differences between item difficulties that are related to item format and language.
- Quantitative data reveal varying difficulty profiles between format-language item variants. This variation often co-occurs with differences in text overlap as well as specific keywords in questions, answer options and texts.
- Profile Analysis shows significant format effects for different ability groups among students.
- More detailed analyses are in preparation.


## Comments and questions are welcome

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Barras, M., Karges, K., \& Lenz, P. (in press). Leseverstehen überprüfen. Welche Sprache für die Fragen und Antworten in den Testitems? Babylonia, 2(2016): 13-18.

