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A Multilingual Systematic Review on the Use of Easy Language in Educational Settings

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UNIVERSITÉ
DE GENÈVE

FACULTÉ DE TRADUCTION
ET D'INTERPRÉTATION

IATIS 2021

Panel: The social role of language: translation into easy and
plain languages

Friday, 17th September 2021

About today's talk

- Research **Context**
 - Easy Language and Text Simplification
 - Motivation
 - Research Question and Goal
- Systematic Literature Review (SLR): **Methodology**
- **Output** of the SLR
- **Research Gaps** and **Future Work**

The Concept of Easy Language (EL)

Easy and **Plain Language** can be considered controlled language varieties that aim at improving the readability and comprehensibility of texts.

Plain
Language

Target group: people with low domain knowledge

Easy
Language

Target group: people with intellectual disabilities and learning difficulties
+
people with dementia, hearing impairments and aphasia; learning impairments, functional illiterates and second language users

Umbrella term for all variants:

easy-to-read
easy-to-read-and-understand
oral communication

EL and Children

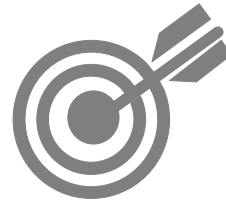
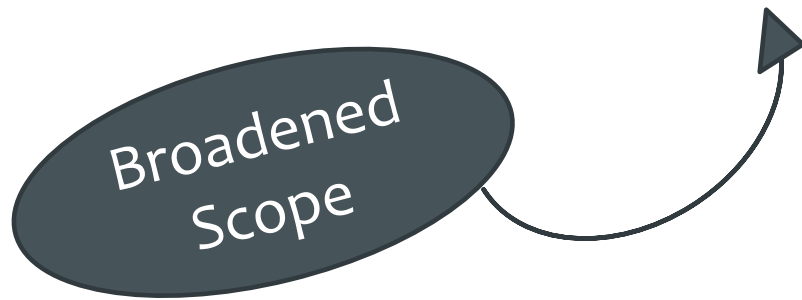
- **Children** often included in the group of “people with learning difficulties” as target **EL users** (*Hansen-Schirra & Maass 2020*)
- **Scarce mention** of children in general as potential beneficiaries of EL (*Diacquenod & Santi 2018*)
 - **EL Controversy:** moving away from infantilized texts (*Trescher 2020*)
 - There are some **commonalities** between **educational texts** for children and **EL texts** (*Casalegno et al. 2021*)
 - **EL not well known** among specialised **teachers** (Swiss context) (*Casalegno et al. 2019*)

Children and Text Simplification

- Prior studies have focused on **single practices** to improve readability for children; e.g. use of anaphoric expressions; temporal connectors (*Joseph et al. 2015; Lecorvé 2020*)
- Some of these practices are **compatible with EL rules**
- EL as a form of text simplification: **Limitations** in the lexicon; **reduced complexity** on the morphological, phrasal, syntactic and textual layers; and integration of pictures (*Hansen-Schirra et al. 2020*)

Research Question and Goal

What does research evidence suggest about the **use of text simplification** for **educational purposes**?

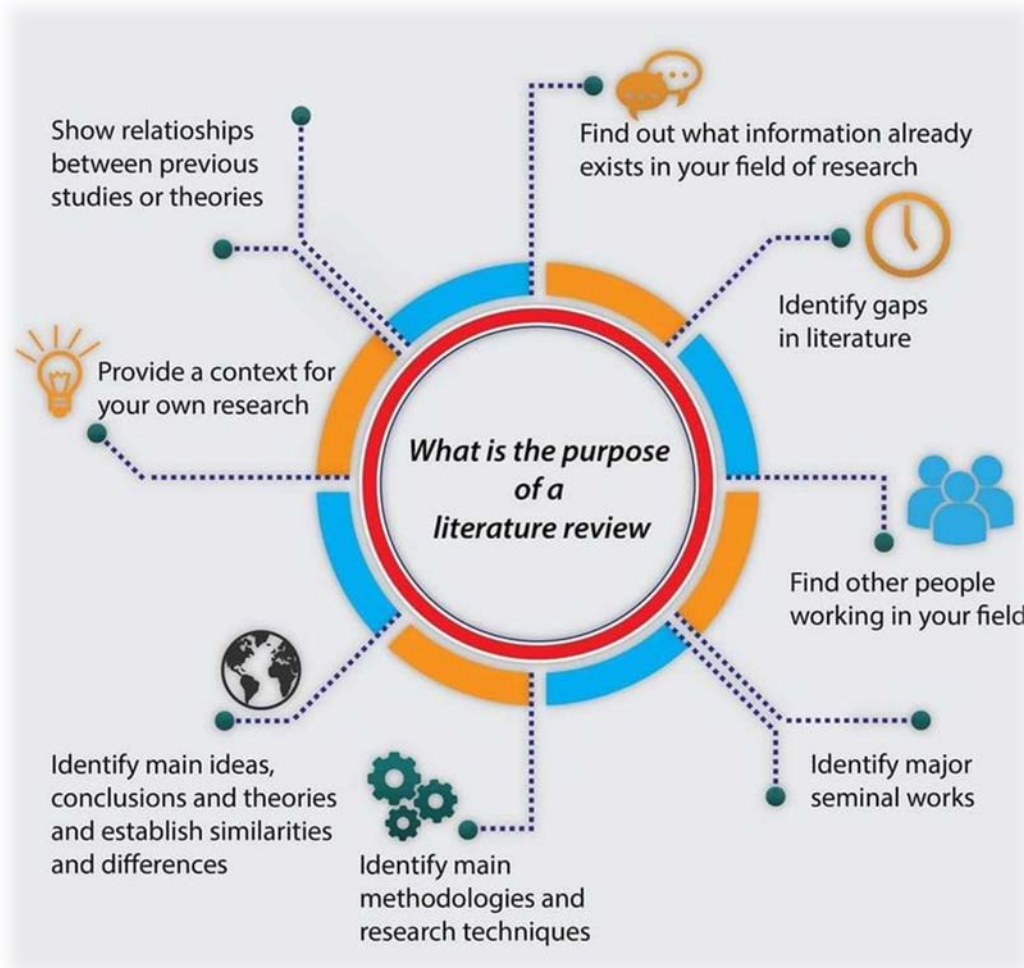


Put forward text simplification as a tool
to enhance **Universal Design for Learning**

Universal Design for Learning

- Inclusive education entails a wide variety of students, which can represent a challenge for teachers, as they are faced with rather **diverse educational needs** (Abegglen & Hessels, 2018; de Boer et al., 2011)
- The creation of an accessible curriculum according to the principles of Universal Design for Learning (UDL) (CAST, 2020) could be the key to manage this diversity **proactively**
- The second principle of UDL prescribes to provide **multiple means of representation** of information and concepts, from a lexical, syntactic, and structural viewpoint (CAST, 2020)

Method: Systematic Literature Review



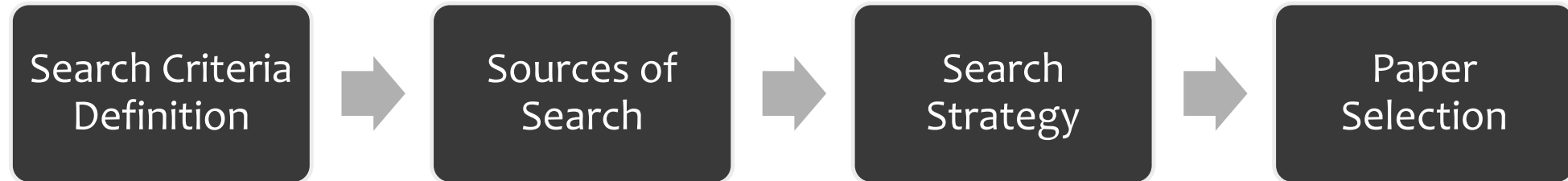
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Systematic Literature Review

Procedure



- **All forms of text simplification (not only EL)** for educational purposes
- Both process- and product-oriented research
- Target population: children and young adults

- Eight bibliographic databases: ACL Anthology, ACM Digital Library, APA PsychNet, Cairn.info, Cochrane Library, ERIC, PubMed, and Web of Science.
- Journals

- Agreement on keywords
- Title check (1st round)
- Abstract (2nd round)
- Multilingual search

- Independent annotation
- Discussion to reach consensus

Languages:

- English
- French
- German
- Portuguese



SLR Outcome

Overview

A total of 49 papers were initially retrieved

The final selection consisted of 20 papers

Language of the paper	Timeline	Document Type	Language of the study	Educational Setting
				
■ EN (N=16) ■ FR (N=2) ■ PT (N=1) ■ DE (N=1)	2001 - 2020	■ Journal article (N=11) ■ Conference paper (N=8) ■ Book section (N=1)	■ FR (N=6) ■ EN (N=4) ■ ES (N=4) ■ IT (N=3) ■ DE (N=2) ■ PT (N=1)	■ Formal (N=6) ■ Informal (N=6) ■ Potential for both (N=8)

SLR Outcome

Target population

Children Profile



- No disabilities (N=8)
- Specific children groups (N=12):
 - Reading difficulties or disabilities (N=5)
 - ASD (N=2)
 - ID (N=2)
 - L2 learners (N=2)
 - Deaf (N=1)

Education



- Primary (N=10)
- Lower secondary (N=7)
- Upper secondary (N=5)
- Tertiary (N=5)

SLR Outcome

Methods and materials

Research Strategy



Product (N=15)
Product / Process (N=1)



- **Experiment (N=11)**
- Design and creation + experiment (N=3)
- Documents + experiment (N=2)

Process (N=4)



- Design and creation (N=4)

Materials

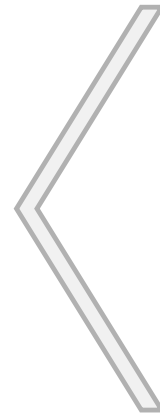


- **News/Wikipedia articles (N=5)**
- School materials/instructions (N=4)
- Stories for children (narrative) (N=3)
- Medical/administrative texts (N=2)
- Literary/scientific texts (N=2)
- Math exercises (N=1)

SLR Outcome

Type of simplification

- A. Lexical only (N=3)
- B. Lexical and syntactical (N=5)
- C. B + Discourse level (N=4)
- D. Application of easy to read rules (N=4)
- E. Other
 - Layout and format
 - Visual content (pictograms, images)
 - Summarisation
 - Anaphora resolving
 - High frequency content words
 - Use of connectives
 - Varied level of propositions



**Simplification
methods**



SLR Outcome

Key findings

Impact of Text Simplification



N=14



- Comprehension
- Recall
- Reading speed

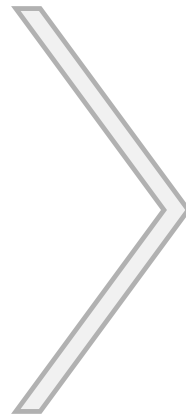


Positive or
non-significant
(N=1 negative)

Tool development



N=7



Text simplification (mono- and multilingual)

Graded lexicon / lexical simplification

Text summarisation

Research Gaps

- **School materials**
- User evaluation **comparing** EL texts and formal educational texts
- **Heterogeneity** of text simplification methods
- **Languages** other than English
- Wide **age range** and **abilities**
 - Age range 8-10
 - No mention of UDL

- Search the grey literature
 - Scientific evidence
 - Mention of EL/text simplification in education-related legislation
- Ultimate goal: **test EL materials in the inclusive classroom**



Merci beaucoup !

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Annex (II)

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<https://doi.org/10.1186/s13023-019-1236-9>.

Annex (III)

Journals included in the Search

1. Éducation et didactique
2. Lettre de l'AIRDF
3. Recherches en didactique des mathématiques
4. Recherches en didactique des sciences et des technologies
5. Repères : recherches en didactique du français langue maternelle (INRP)
6. Dossiers des sciences de l'éducation
7. International review of education
8. Revue des sciences de l'éducation
9. Revue française de pédagogie
10. Revue suisse des sciences de l'éducation
11. Exceptional children
12. Journal of special education
13. Remedial and special education
14. Topics in early childhood special education
15. Revue suisse de pédagogie spécialisée
16. Learning Disability Quarterly