



UNIVERSITY
OF COLOGNE

FACULTY OF ARTS
AND HUMANITIES

II LITERACY SUMMIT

MARCH 10TH - 12TH, 2025 | UNIVERSITY OF COLOGNE



LITERACY x EDUCATION x AI



Founding Patrons

2nd Literacy Summit

European Literacy Network

Proceedings of the 2nd Literacy Summit

**March 10th – 12th, 2025
University of Cologne**

Welcome to the 2nd Literacy Summit

ELN, the European Literacy Network, could have stopped some years ago, but it did not! It did not because you believe ELN has a valuable role to play for you and for the world of literacy, research and education. Thanks for your support of ELN, as long as it lasts, ELN will endure. We are forever impressed by the power of belief and the capacity of humans for altruism, collaboration, generosity, and resistance in the face of time, which slowly erodes everything and, crucially, memory. But books, in their silence, are more resistant to time than humans; and writing, in its ability to seek goals, can convene people, nurture ideas, and have us marching together. Thanks for marching for ELN, for its charter, and for its mission. Sorry for the military metaphor, but times are daring and asking for a resolute defense and promotion of the values ELN stands for and a humanistic worldview.

ELN could have stopped a few years ago if it was not for the tenacity of an idea born in the proposal for COST literacy Action IS1401, 12 years ago, for the decisive willingness of 14 Colleagues in the informal core group, for the unconditional support of 135 Founding Members, and the dedicated work of Mariana Silva. We'll continue marching together, and ELN will continue flourishing.

ELN might not have been here. But it is, and we are again seeing a gathering of its members and friends at Cologne University. Thanks especially to Esther Breuer for believing in ELN and making the strides necessary for this successful II ELN Literacy Summit. Six years after we ended several COST literacy actions, four years after we surpassed a pandemic, and one year after we legally established ELN, ELN is stronger than ever, and as long as you keep believing, ELN will endure.

The ELN Bodies are collectively taking the necessary steps to fulfill the ELN's mission, chiefly within it, organizing the ELN Literacy Summit, but crucially in the next years, establishing the bureaucratic proceduralism that will further structure and sustain ELN for many years to come. The next three years will be a time of ELN bodies' renewal, ELN

bylaws, ELN elections, and the organization of the III ELN Literacy Summit. In the next three years, we will be laying the foundations of a global literacy network with strong national networks and taking action to continue bridging the gap between Literacy Science and Education.

ELN is alive and kicking, long live ELN!

Rui A. Alves and the ELN Bodies

Welcome From The Organizing Committee

Welcome to the University of Cologne!

Cologne and its university share a long and eventful history, reflected in the city's unique and sometimes contradictory culture. Cologne embraces both tradition and modernity, is proud of itself but can still make fun of itself, and balances a strong local identity with an openness to the world. It is no coincidence that our city has its own "basic law," which embodies pragmatism, humor, and a love of communal celebrations.

The University of Cologne also upholds the values of liberalism, diversity, and change while remaining deeply rooted in tradition. With 40% of residents and 33% of our first-semester students having a migrant background, cultural exchange is at the heart of our community.

Much of this exchange happens through language, making it all the more fitting to host a conference on reading and writing. The development of literacy, diverse writing and reading practices, and the evolution of textual forms shape both our academic work and daily lives. We look forward to engaging with you in meaningful discussions and integrating new scientific insights into education and teaching.

We hope you have a wonderful time in Cologne and enjoy your stay with us!

Esther Breuer and the Organizing Committee of the II ELN Literacy Summit

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Conference Committees

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General Information

CONFERENCE VENUE – University of Cologne

The conference will be located in two buildings of the University of Cologne. They are both located close to the Albertus-Magnus-Platz – the main place of our university.

Registration, coffee breaks, paper presentations and poster sessions will take place at the Seminargebäude (building 106).

Keynote speeches will take place at the Hörsaalgebäude (building 105).

Internet Access

Conference Overview

Time	Monday, March 10 th	Tuesday, March 11 th	Wednesday, March 12 th
9:30 – 10:00			
10:00 – 11:00	Opening Ceremony <i>With musical moment</i>	4 parallel sessions	4 parallel sessions
11:00	Coffee Break	Coffee Break	Coffee Break
11:30 – 12:30	Liliana Tolchinsky Keynote	Nicole Marx Keynote	Kausalai Wijekumar Keynote
12:30 – 14:00	Lunch	Lunch	Lunch
13:00 – 14:00	Posters discussion	Posters discussion	Posters discussion
14:00 – 15:30	4 parallel sessions	4 parallel sessions	4 parallel sessions
15:30	Coffee Break	Coffee Break	Coffee Break
16:00 – 17:30	4 parallel sessions	4 parallel sessions	4 parallel sessions
17:45 – 19:00	Honor Committee RoundTable	General Assembly	Closing Session
19:00	Welcoming Reception	Conference Dinner	

Opening Ceremony

Stefan Grohé, Dean of the Faculty of Arts and Humanities, University of Cologne

Verena Carballosa Diaz, Benjamin Boone: "Malaysian Rain Forest" out of
Rafflesia, Colossal Flower of the Rain Forest

Rui A. Alves, ELN coordinator, University of Porto

Verena Carballosa Diaz, Jaime M. Zenamon: "Dos Palomitas und Llama" out of
Páginas del Altiplano

Esther Breuer, ELN Summit manager, University of Cologne

Verena Carballosa Diaz, Nicole Chamberlain: „Flexion“ for Altoflute Solo

Keynote
Liliana Tolchinsky, University of Barcelona
Growing into text literacy

Liliana Tolchinsky is Professor Emerita of Linguistics at the University of Barcelona. Her professional career has spanned several continents, beginning at the University of Buenos Aires and continuing at Tel Aviv University before settling in Barcelona. Her research areas encompass the seeds of literacy across various writing systems and cultural contexts, extending to the developmental path towards text-literacy, a level of literacy that enables writing to become a tool for complex thought. Literacy is viewed as a key feature of later language developments —how school-age children and adolescents employ language in different communicative settings for varied purposes. Her work has been significantly supported by a Spencer Fellowship from the National Academy of Education, through her involvement in the groundbreaking cross-national Spencer Project (IP Ruth Berman), and by competitive grant funding from national agencies. She has been deeply committed to educational initiatives throughout her career, engaging in school supervision, initial and ongoing teacher training—even under conditions of extreme diversity—and actively promoting literacy programs in the workplace and academic writing at the university level.

Symposium

Teacher Use and Beliefs about A.I. and Writing Instruction

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A survey examining teachers' use and beliefs about A.I. and writing instruction was completed by 530 secondary teachers from Norway in 2024. Schools in Norway were randomly selected and secondary teachers in these schools were asked to complete the surveys. Teachers' reported that they used A.I. for designing writing instruction several times a year, and that students also applied A.I. to compose text, creating multi-modal text, and revise text several times a year. All constructs measured by the survey evidenced construct validity and were reliable. They indicated that they believed students were using A.I. in unsanctioned ways more often than that, and they expressed strong concerns about ethical issues around the use of A.I. for writing. They believed their preparation and students' preparation to use A.I. for teaching writing was inadequate, but they were slightly positive about their efficacy for using A.I. for this purpose. They had a slightly negative attitude towards the use of A.I. for writing. Measures of teacher and students' use of A.I. were consistently predicted by teachers' beliefs (e.g., efficacy, attitudes, ethical concerns).

Student Use and Beliefs about A.I. and Writing

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Two separate cohorts of high school students in Norway were surveyed about use and beliefs concerning A.I. and writing. The first group of 414 students were surveyed in 2023. The second group of 985 students were surveyed in 2024. The survey collected demographic information about students, and assessed the following constructs: students' attitudes toward writing, knowledge about using A.I. for writing, beliefs about how A.I. can be used for writing, use of A.I. for writing at school, and sanctioned use of A.I. in school for writing. All constructs measured by the survey at both time points evidenced construct validity and were reliable. Students were slightly positive about writing in general. They were also slightly positive they knew how to use A.I. for writing, A.I. produced correct writing, and A.I. did not have a negative impact on learning (i.e., writing and content learning). They slightly disagreed teachers could use A.I. for teaching writing or they themselves could use A.I. with school-based writing. They were slightly disagreed that A.I. would improve their writing. Across the two cohorts of students, their beliefs about A.I. and writing were similar.

Large Language Model Holistic Scoring for Persuasive Essays from Elementary Students

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A critical element of good instruction for elementary students is the on-going assessment of writing and constructive feedback with specific scaffolds to promote reflection and revision. Within a web-based tutoring system called We Write, upper elementary students learn about writing persuasively through teacher-led and web-delivered instruction, practice tasks, and feedback. Recent research on scoring student essays using ChatGPT 4.0 shows that trained human rater scores are highly correlated with the artificial intelligence (AI) scores at the middle ranges and less correlated at the low or high ends of the scores. This poses a challenge for web-based tutoring systems that rely on the scores to provide feedback to the learners. In this session, the team will present our systematic attempts to re-train Chat GPT 4.0 to be sensitive to the nuances of writing elements for students scoring poorly on the holistic scores. This is a key ingredient in the use of automated scoring to provide correct and useful feedback to learners.

The Effects of A.I. Algorithmic Feedback on Students' Writing: A meta-analysis

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The need to enhance writing support in educational institutions worldwide has grown due to migration movements and globalization with its increased necessity of foreign language (FL) learning. To improve language learners' writing, providing timely feedback is crucial. However, in large classes, individual and frequent formative feedback is often unfeasible. AI-based algorithmic feedback can assist teachers by offering formative feedback on both surface-level (e.g., grammar, spelling) and deep-level (e.g., content, structure, coherence) writing features. Meta-analyses indicate moderate effects of algorithm-based feedback. Yet, these studies often do not differentiate between surface- and deep-level outcomes or among first (L1), second (L2), and FL learners, who have distinct learning experiences. Accounting for recent publications on algorithm-based feedback, our meta-analysis examines the impact of surface- and deep-level AWE feedback on L1, L2, and FL students' writing outcomes across 37 studies. We also assess how language proficiency, intervention duration, educational level, and writing genre affect these outcomes. Additionally, we differentiate between outcome measures focused on revision and those on transfer to new tasks. Results will be discussed in the context of fostering literacy with new digital technologies.

Children with dyslexia significantly improved their handwriting legibility and word-spelling performance after a graphomotor intervention

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Children with dyslexia (DYS) have a severe spelling impairment that is often coupled with additional graphomotor difficulties. Through an intervention design, this study aimed to assess the efficacy of a graphomotor treatment on both handwriting and spelling abilities of DYS children. Method. Participants were 19 DYS in Grades 2-4 (intervention group) and 19 age-matched children (control group). DYS received sixteen 30-minute intervention sessions consisting of learning the accurate graphomotor movements for letter formation. Word-spelling accuracy and handwriting legibility were evaluated at pretest and posttest through experimental writing tasks: a dictation task composed of 40 words varying in orthographic and graphic complexity and a sentence copying task administered in two conditions (best; fast). Results. Using GLMMs, results showed that the intervention led to improvements of handwriting legibility in word-dictation and copy-best tasks, specifically for regular and graphically simple words. Importantly, we revealed a transfer effect to spelling in dictation, with significant improvements in regular word spelling accuracy in the intervention group compared to control children. Overall, our results revealed the efficacy of the graphomotor treatment, leading to progress not only in handwriting but also in regular-word spelling, confirming the value of considering graphomotor difficulties in therapy with DYS.

Mediating invented spelling group activities in preschool

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Many studies have shown the importance of developing invented spelling activities in preschool for written language acquisition, but few have analyzed the mediation strategies mobilized by the adults during these activities. Social interactions between peers are important but the role of the adult in mediating these interactions is essential if it is adapted to children's skills and knowledge. Our aim was to explore adults' mediation strategies during invented spelling group activities. We selected four classes where invented spelling group activities were regularly developed. Thirty two 5-year-old children participated in the study. The mediation strategies used by the adults along group discussion sessions were recorded, transcribed and coded using a classification system of interactive dynamics based on previous studies. The results revealed an active role of the adults in mediating group interactions and guiding verbal discourse, to facilitate inferences about oral-written connections. They encouraged children to establish a collaborative dialogue and to justify their proposals. Their interventions were based on questions and clues, namely using oral sound analysis procedures. Children displayed a shared dialogical participation pattern, showing an appropriation of teacher's teaching procedures. Our research underscores the significance of the adult's role in the development of early literacy skills.

Training effects of syntactic word spelling in French and German: A cluster analysis of primary school students

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A growing number of schools support multilingualism and offer bilingual education from an early age. While many children successfully become literate in these languages, others struggle with one or both writing systems. This paper provides insights into the spelling performance of 4th grade students ($n = 171$) learning to read and write in German and French. The spelling domains focus on German noun capitalization and French plural spelling, both of which refer to morphosyntactic information. The paper presents spelling performance in both languages based on a dictation. Based on the pretest results, a cluster analysis was performed, which identified five distinct groups of students, ranging from low to high performers in both languages. The students' background information shows effects of first language and socioeconomic status on spelling performance in each cluster. Post-test results show the effects of training in German and French that emphasized visual syntactic markers in each writing system. A statistical model (GLMM), based on the spelling scores in the pre- and post-tests, illustrates the training effects for each cluster in each language compared to the control group. The paper discusses the results in the context of the characteristics of syntactic word spelling and multilingual writing acquisition at school.

Enhancing Vocabulary Learning with Captain Morph: A Single Player and Multiplayer Morphology App

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Captain Morph is a researcher-developed app that aims to support vocabulary acquisition for primary grade students. Available in Norwegian and Swedish, it builds on two learning principles. First, understanding morphemes—the smallest meaning-bearing elements of words—enhances word learning due to the morphemes' recurrence in many words. Second, input variability, presenting target morphemes across various root word contexts, aids in generalizing morpheme knowledge to new words. The app includes 40 sessions focused on common derivational morphemes (e.g., 'mis' in 'misunderstand' and 'ist' in 'guitarist') and compounding patterns. In a recent randomized controlled trial with 717 Norwegian second graders, the app demonstrated lasting effects on word knowledge, including untaught words containing taught morphemes. Given its effectiveness, we expanded the single-player version to include two multiplayer modes. In the student-student mode, students alternate roles as “game leader” and “game advisor.” This setup allows investigation of whether collaboration yields better learning outcomes than working alone, as well as effects of different roles in the collaboration. In the student-teacher mode, students needing extra support engage with an adult in recall-focused tasks. Together, the single and multiplayer modes enable a comparison of word learning in social and non-social contexts.

Raising skilled readers: The role of depth and breadth of abstract vocabulary

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Languages, understood as social tools, have not been analyzed with the architecture of the language in mind, or by questioning the correspondence of semantic representations to the social construction of reality. We explore the parallelism between the organization of social reality (individual and group education and literacy levels) and the organization of semantic representations crucial in establishing literacy competencies of a skilled reader. In line with Gleitmann's (2005) notion of "hard words", it is common to distinguish between depth of knowledge and vocabulary size in the context of literacy competencies. However, the type of vocabulary also plays the role. This is especially relevant for investigating the acquisition, processing, and recall of abstract words, because they differ from the concrete ones by many features, the most prominent of which is the fact that their understanding requires the mediation of language. To evaluate the quantitative and qualitative constraints related to employing abstract vocabulary at the individual and group levels, we will report on three experiments with two discrete populations, examining the impact of education and exposure to complex texts on the ability to recall the meaning of abstract words.

Multisensory Structured Literacy Curriculum for Grades K-2

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Poor phonological awareness, that includes phonemic awareness, leads to difficulties with decoding (the translation of print to sound), which is seen as a critical factor in successful literacy development. Structured Literacy prepares students to decode words in an explicit and systematic manner and is effective for all readers. There is an impressive array of studies showing that a measure of phonological awareness in preschool children is a good predictor of their reading achievement in the early elementary grades. Phonological Awareness, beginning with rhyming activities and culminating in word identification, provides children with skills to become independent readers as well as good spellers. Studies also indicate that systematic phonics instruction helps children to read more effectively than nonsystematic instruction or no phonics instruction. There is research showing English as second Language Learners benefitting from direct instruction in phonological awareness and systematic phonics instruction along with alphabetic knowledge. Studies have also stressed the beneficial role of phonological training on the reading abilities of children who come from low-income families. Through this presentation, the multisensory structured literacy curriculum, will be shared through a power point presentation and videos demonstrating how it is being practiced in inclusive classrooms in three schools.

Enhancing writing quality and motivation in digital cooperative learning settings: A quasi-experimental study with primary school children

Kathrin Grade

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Writing is central to a successful transition after primary school but poses cognitive and motivational challenges for many children. Our study explores the effect of an after-school writing program, which is embedded in the larger intervention project KommSchreib! (~54 classes, ~1,500 students in Years 3 and 4) in Germany. The sub-sample of the after-school program consists of ~100 children from 8 primary schools (data collection ongoing). In the after-school program, students work collaboratively in a digital learning setting and develop a multimedia cookbook using tablets. They are taught to plan, draft and revise instructional texts (recipes) based on modeling activities and engage with peer-revision. We assessed writing quality and emotional well-being in each session (PANAS-C). Results show that text quality improved significantly ($t[55] = -10.92$, $p < .001$, $d = -1.47$). The PANAS-C consistently showed high positive affect during sessions. We discuss results and compare students' writing development and motivation in the after-school program to development in the main intervention project.

Writing purposes: reporting on social writing experiences

Catarina Araujo

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The writing process is complex, demanding, and time-consuming. The writer has to mobilize various skills and knowledge (e.g., linguistic, neurocognitive, contextual). Many people experience difficulties in the writing process, and some associate it with less pleasurable activities. However, writing is a fundamental means of expressing ideas or demonstrating knowledge and is widely used in school and professional contexts. Developing writing skills and being aware of strategies that can help each writer improve this skill is pertinent. Although writing aims to convey a message that will last over time and allow the writer to express ideas or convey necessary information, these activities are only sometimes viewed in this way. Based on evidence-based practices and strategies that contribute to improving writing performance, attitudes, and self-efficacy, we present some examples of writing practices carried out in formal teaching contexts where students from different levels of education (e.g., elementary school and university) were invited to carry out contextualized writing actions (e.g., helping older people with writing activities, writing a social cause book). The sharing of experiences and reports aims to analyze how the contextualized and meaningful involvement of writing in students' daily lives can help develop interest, motivation, and the quality of their writing.

Permane(cer): the writing community of and for society

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The Permane(cer) writing community arose from the need identified by a group of primary school teachers, special education teachers, and families (Braga, Portugal) for access to information and skills development to promote improved writing skills. Since 2022, this community has created a network for voluntarily sharing knowledge and skills between education researchers and the community, respecting the fundamental values of equity and individual, group, and contextual diversity. The main objectives of this community are: 1) to make scientific knowledge in this area accessible to the community in general (and in particular to education professionals); 2) to create an online space dedicated to sharing tips and recommendations for families (on writing in general, but also about other aspects: Specific Learning Difficulties, Hyperactivity Disorders with/without Attention Deficit Disorder, Language Disorders, the use of technologies in the writing process, among others) and 3) create a space for sharing and encouraging writing (and its improvement) in a transversal way across various ages. Some of the initiatives and resources developed will be shared, as well as the results of research carried out in a school context within the scope of this community. It would be pertinent to discuss the results achieved with the scientific community.

Innovative Program: Dual Qualification in English as an additional language (EAL) and Health services vocational qualification in Australia.

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EAL training for adults emphasizes basic skills and knowledge essential for settling in Australia. However, migrant students often prioritize finding employment. In response to this need, Swinburne University launched an innovative program in 2022-23 that combined vocational qualifications with English language support, aiming to help students complete a health services assistant qualification. This program was delivered in 2 phases. Initially, students were prepared for dual qualification which included contextualized language instruction, familiarization with medical terminology, visits to nursing labs, talks from health professionals, and digital literacy training. The next one-year phase, students were enrolled in Certificate III in HSA and EAL. The primary aim in language classes was to support students in their vocational qualification needs. This required collaborative work between the departments and teachers from both courses. Students also had an opportunity to complete 2 weeks placement in various hospitals which enabled to practice skill in actual workplace. This program saw exceptional student motivation, high attendance, and active participation, driven by the goal of rapid workforce integration. As a result, there was 100% completion rate, 75% of the student and cohort secured employment. The program's success continues, as the second cohort will complete their dual qualification in December 2024.

Exploring Vocabulary Acquisition in Emergent Bilingual Children: A Comparative Study of Three Interactive Book Reading Approaches

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Vocabulary acquisition plays a pivotal role in the process of language acquisition (Zhang & Zhang, 2022). Numerous studies consistently affirm that interactive book reading (IBR) serves as an effective approach for stimulating children's vocabulary growth by fostering story-based interaction before, after and during reading aloud (Barnes et al., 2017). However, children whose home language (L1) differs from the instructional language (L2) often start with lower vocabulary knowledge in L2 and show lesser gains from IBR compared to native speakers (Vanparys et al., 2024). The present study addresses these disparities, focusing on emergent bilingual children in the first and second grade, with Turkish as L1 and Dutch as L2. To explore effective strategies for vocabulary instruction during IBR, three approaches were evaluated: (1) L2-only during IBR, (2) L2 and L1 interactions, and (3) L2 and L1 interactions with technology-driven L1 explanations of the target vocabulary. Seventy-seven children, with an average age of 7.4 years old (SD = 0.89) participated. At pre- and posttest, expressive L2 target vocabulary was measured using the TEVOC test (Vanparys et al., 2024). Results on the influence of learner and word characteristics on L2 vocabulary acquisition in the three conditions will be presented.

Phonological awareness and pre literacy skills of children bilingual age 5-7 years in Kosovo

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Bilingual children show a special flexibility and a unique ability to develop rich linguistic knowledge. This experience of bilingualism can be manifested in a wide range of situations, from communication in family and society to their academic skills. These children, being influenced by two linguistic spheres, often present a creativity and a deepened understanding of communication, reflecting a real linguistic asset. This asset is reinforced by their interactions at home, school and social settings, making them equipped with a unique capacity to express themselves in both language and cultural contexts. This combined process of learning two languages brings with it advances in cognitive ability and strengthens the child's sense of identity and commitment to their cultures of origin. Phonological awareness in bilingual children is an essential aspect of pre-literacy skills. This includes knowing the sounds, vowels, and phonological changes in each of the languages and the ability to distinguish the phonology of the two languages. Children who develop this awareness develop better reading and writing skills in both languages given a phonological basis for understanding and producing sounds and words appropriately. The purpose of the study was to find the relationship between phonological skills in Albanian and English, as well as pre-literacy skills in children aged 5-7 years, and to analyze gender differences in the performance of the three tests and compare descriptive data, between the three age groups that were part of the research. The results of the research support the hypothesis of a significant positive correlation between the phonological skills in the Albanian language and the English language ($r = .742^{**}$), while the hypothesis about gender differences in the performance of the participants in the three applied tests of the research, which are the phonological skills in the Albanian language, phonological skills in the English language and pre-literacy skills through comparative analysis has shown that there are no significant differences between male and female participants.

Dyslexia as a risk factor for English as a Foreign Language Learning

Dyslexia as a risk factor for English as a foreign language learning

Marta Lockiewicz

University of Gdańsk

Learning English a Foreign Language (EFL) is a challenging task. It might be especially difficult, though, for those learners who struggle with their phonological processing skills, for example learners with dyslexia, as, according to the Sparks and Ganschow's Linguistic Coding Deficit Hypothesis (Sparks et al., 2006; 2009), there is a long-term transfer of linguistic capacities, especially phonological and orthographic ones, between the first (L1) and the second (L2) language. In this talk, I will present the results of several recent studies that attempted to identify and characterise the difficulties of Polish students with and without dyslexia in learning EFL. The studies demonstrated that Polish adolescents with dyslexia, as compared with their peers without dyslexia, read less correctly and more slowly both real words and pseudowords, and knew fewer words in English, regardless of their difficulty, as measured with word frequency. Moreover, they made more phonological and orthographic errors in a writing-to-dictation task. In both groups, however, phonological errors were more frequent than orthographic errors. No differences were noticed in grammar, syntax, and text length in an essay-writing task. To conclude, the results of the studies demonstrate that dyslexia might be considered a risk factor for EFL learning.

Meaning Making in Everyday Literacy Practices of Low Literate Adult Migrants with L1 Arabic and German as Second Language in Germany

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Everyday literacy demands in literate societies can be challenging, especially for second language learners with low literacy. Official definitions of literacy emphasize the link between functional literacy skills and participation in society. However, literacy courses for adult migrants often focus on teaching basic reading and writing skills and the use of written texts. This approach insufficiently addresses the situated, digital, and multimodal nature of contemporary texts. In order to gain empirical insight into everyday practices involving L2 literacy we undertook an ethnographic interview study with 12 Arabic-speaking adult migrants. In multilingual interviews the participants were invited to share personal experiences with everyday communication (literacy events) and texts they engaged with in those situations (literacy artifacts). In order to analyze the multilingual and multimodal data we draw on sociocultural perspectives on literacy, text-linguistics and multimodality. In this talk, we will examine the challenges of dealing with everyday digital texts, such as personal interactions in messenger apps and applying for jobs via digital advertisements. We focus on the resources and strategies participants use to make meaning and achieve their communicative goals. What lessons can be learned about real-life requirements outside the classroom, and how do these insights influence current concepts of literacy?

Exploring teenagers' perspectives on multilingual literacy through heritage language book clubs

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Previous research suggests that utilizing students' first language (L1) is beneficial for learning outcomes and literacy development (García & Kleifgen, 2020; Wouters et al., 2024). Yet, while many children in the Netherlands grow up multilingually, the role of multilingual literacy remains largely underexplored. To address this, we organized multilingual book clubs for first-grade secondary school students (aged 12-13), allowing them to read and discuss books in their L1 during Dutch language classes using translations. Following a 5-week intervention, we used questionnaires and semi-structured interviews to assess students' attitudes towards reading in their L1 and their perceptions of the project. A total of 114 students participated; 43 out of 73 multilingual students chose to read in their L1 (i.e., Turkish, English, Arabic, Spanish, German, French, Polish, Hungarian or Romanian). Interviews were conducted with 42 multilingual students. The results showed generally positive attitudes towards L1 reading, with most students appreciating the multilingual book clubs. Three themes emerged: identity and pride in being multilingual, the ease or challenge of reading in the L1, and the novelty of the experience. Our study offers valuable insights into teenagers' perspectives on multilingual literacy and heritage language use in schools, supporting translanguaging in literacy approaches.

Symposium

The developmental pathway from novice to fluent readers: individual differences and the potential and challenges of digital game-based learning (DGBL) tools to support struggling readers

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In this presentation, we will provide an overview of reading development from novice to fluent reader, emphasizing individual developmental differences. We will demonstrate that this developmental pathway is not an isolated process, but one that evolves in interplay with an array of factors, including social-emotional aspects, instructional factors, child background, and school environment. In the second part of this presentation, we will examine the potential of digital educational tools, particularly digital game-based learning (DGBL) tools, in enhancing reading development. We will highlight the benefits of these tools in providing individually tailored support for diverse struggling readers. In addition, we will address the challenges and pitfalls of these digital educational tools. Our discussion will include research findings that underscore the significance of teacher competence and confidence in using digital tools, as well as the effective integration of digital game-based practice with traditional teacher instruction (blended approach). These elements are critical for the successful adoption of digital game-based learning tools in reading education.

Keywords: Reading development; Digital game-based learning; Struggling readers

The use of digital tools to support pupils with reading difficulties

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The presentation will investigate the effectiveness of digital interventions in addressing the challenges faced by pupils with reading difficulties at the beginning of their academic career. The first part of the presentation will review the principles of gamification in the course of reading instructions and its impact on reading fluency, comprehension, and motivation. Secondly, it will summarize the process of localisation of a particular reading app (named Karaton), which was systematically used at several schools with the aim to gain empirical evidence of its effectiveness. Through a combination of qualitative and quantitative research methods, including case studies, surveys, and performance assessments of pupils, the paper will provide an analysis of how this reading app can be integrated into the classroom to support struggling readers. Key findings indicate that personalized digital tools, which use the principles of gamification, can significantly improve reading. Moreover, the interactive nature of these tools fosters greater engagement and motivation among pupils, making reading a more enjoyable task. The presentation will also address potential challenges in the implementation of digital tools within the educational process, such as access to technology, teacher training, and the need for ongoing support and evaluation.

Keywords: Reading app; Struggling readers; Intervention

Recent Developments in Educational Technologies (EdTech) for Differentiated Reading Instruction in Primary Education

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The presentation will focus on the latest advancements in EdTech and their applications in tailoring reading instruction to meet the diverse needs of primary education students. The presentation will review a range of contemporary EdTech tools, including adaptive learning platforms and artificial intelligence-driven applications, which provide customized reading experiences based on individual pupil needs. Through a review of recent literature, case studies and other outcomes of the above-mentioned AdAPptive project the presentation will evaluate the effectiveness of these technologies in enhancing reading skills, engagement, and motivation among young learners. The presentation will also discuss further impact of these technologies for educators, including the need for professional development to effectively integrate EdTech into reading instruction, as well as considerations for equitable access to technology. Challenges such as digital divide and resistance to technological adoption will be addressed. The paper will finally highlight the importance of multidisciplinary communities of practice within the education field which may guarantee continuous evaluation and adaptation of EdTech tools to ensure they meet the evolving needs of pupils and contribute to the advancement of literacy education.

Keywords: Educational technologies, Reading instructions , Primary education

Communities of Practice as a means for the adoption and sustained implementation of digital reading apps in the classroom to support struggling readers

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The presentation will introduce conclusions from the three-year Erasmus+ Cooperation Partnership AdAPptive project which explored how Communities of Practice (CoP) can be used to help teachers incorporate digital reading apps effectively into the literacy programmes of primary school learners who struggle to acquire basic reading skills. A key project objective was to explore how schools incorporate digital reading apps into their literacy instruction programmes, and how they were supported in this task by their membership in communities of practice. The project explores how teachers could upskill themselves as well as how learners could improve their engagement and competences in reading. Furthermore, it surveys how teachers' attitudes and experience of teaching reading has developed during the project in the context of the digital tools' implementation into the education process. We have been using a mixed methods approach to monitor the project outcomes. In this presentation, we will present findings from both qualitative and quantitative evaluations halfway the project. The implications of our midline results will be discussed vis-à-vis the projects' objectives.

Keywords: Digital game-based learning, Struggling readers

Plain Literacy: A New Journal for the European Literacy Network

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Increasingly, researchers are encouraged to disseminate research findings into plain language for the lay public and people without a scientific research background. Presentations of research findings in plain language allow researchers to support the translation of knowledge and evidence into practice, policy, and further research (Maurer et al., 2021). A major aim of the European Literacy Network (ELN) is to bridge the gap between literacy science and education. Considering the criticality of generating and informing public conversations on literacy teaching and learning to inform educational policies and practices, this roundtable will discuss the creation of a new journal for the ELN. The journal's major goal will be to support the dissemination of findings from ELN members and practitioners to a broader, non-expert audience to help maximize the accessibility of research publications. In this roundtable, we expect to understand and encourage venues for international collaborations for the creation of the ELN's journal, and participants will be invited to discuss the journal's format, aims and scope.

AI-Driven Risk Assessment for Learning Disabilities in English and Spanish-Speaking Children

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This research encompasses two studies utilizing machine learning (ML) techniques to assess the risk of learning disabilities (LD) in English and Spanish-speaking students from upper elementary to middle school. The first study applies ML algorithms to analyze handwriting features in a corpus of 146,000 student essays as potential indicators of LD risk. Advanced digital image processing techniques are employed to preprocess these handwriting images, enhancing visual quality for more accurate recognition. Saliency maps and attention mechanisms are used to extract unique visual attributes from the optimized images, enabling differentiation between LD and typical development (TD). The second study focuses on a subset of 1,534 students, combining ML and natural language processing (NLP) to explore meaning-based features critical for evaluating higher-order reading and writing skills. Approximately 800 NLP features are extracted, encompassing grammar, cohesion, syntactic complexity, lexical sophistication, and lexical diversity. Rooted in the principles of literacy research and translational science, these studies aim to bridge the gap between advanced computational methods and evidence-based educational practices.

The Role of Human-AI Collaboration in Writing: Insights from Student Interactions with ChatGPT

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The integration of generative AI systems like ChatGPT in educational settings is transforming the way students approach their writing assignments. This study explores the writing process of seventy-seven university students who utilized ChatGPT to solve a complex creative problem-solving task. Qualitative analysis of interactions with ChatGPT identified nine prompt types that students employed in their conversations. Students who provided an elaborated context with clear evaluation criteria for idea generation, and specific feedback on AI-generated outcomes exhibited significantly higher quality, elaboration, and originality in their written outputs. Subsequent process mining of log data showed that students with better writing performance engaged in an iterative dialogue with ChatGPT, using more prompts and actively refining their ideas. High-performing students monitored the AI-generated outcomes and regulated the process when necessary, whereas lower-performing students treated ChatGPT primarily as an information source, asking disparate questions similar to a Google search. These results underscore the potential of AI to enhance writing skills through active and iterative engagement, emphasizing the need for educational practices that encourage metacognitive skills during writing. This study contributes to the broader discussion on literacy in the digital age, highlighting how AI can be effectively integrated into the writing process to improve educational outcomes.

The adoption of Artificial Intelligence (AI) technologies in early childhood centres: From theory to practice

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Xi'an Jiaotong-Liverpool University

With the development of AI technology in China, the application of AI technologies in educational settings has become popular in all levels of education. Previous research focusing on AI technologies were predominantly in K12 schools and higher education; however, research on the application of AI in early childhood education is little. Particularly, the adoption of AI technologies as intervention tools for young children is scarce. This article uses the example of AI-5G assisted STEM evaluation tools to explore the benefits, challenges, and potentialities of using them in early childhood centres. This study uses semi-structured interviews to gain a deeper understanding of the attitudes and perspectives of early childhood teachers and senior management teams on the potential usage of AI technologies in the intervention programs for young children. The results reveal that most participants had a positive attitude towards the adoption of using AI-5G assisted tools to develop children's STEAM education, however, they expressed concerns on their high workload, stress, child privacy, and future professional development in terms of adaption to use AI-5G assisted tools. Suggestions and implications are also provided for both AI technology developers and EC academics in future research studies.

Finding the next word: What LLMs Can Teach us about Human Writing

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Zurich University of Applied Sciences

Large Language Models (LLMs) produce text of impressive quality simply by predicting the next word. This begs the question: How do human authors choose words? And is finding the next word as important to us as it is to LLMs? I want to rethink the role that words (and language in general) play in writing, but also what human writers need in addition to words, which is commonly referred to as "thoughts". But what exactly are thoughts, and do we know how they relate to words and language? By contrasting LLMs with human ways of producing text, I will point out some weaknesses in our theoretical frameworks for writing and thinking. I will try to sort out what is human and what is AI, and link this to current debates about the development of generative AI. I follow Floridi and Nobre (2024) in avoiding the tendency to anthropomorphise machines on the one hand and to computerise minds on the other. The results of my analysis are organised into eight theses which, taken together, emphasise the strengths and resources of the human mind as opposed to the computational power of the machines.

Fostering in-service teachers' interactive book reading competencies: How an hybrid professional development program makes a difference for teachers

Iris Vansteelandt¹, Jona Hebbrecht², & Hilde Van Keer¹

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In our contemporary society, it is crucial to become a proficient reader and to cultivate a love for reading (Ng, & Bartlett, 2017). Nevertheless, recent international studies repeatedly indicate a concerning decline in students' reading proficiency (Mullis et al., 2023; OECD, 2023). The #everyonereadsaloud initiative, established by the Flemish reading organization Everybody Reads in close cooperation with the research group Language, Learning, Innovation (Ghent University), aimed to contribute to counteracting this decline by strengthening kindergarten and primary school teachers' competencies regarding the schoolwide and sustainable implementation of interactive book reading (IBR)—an evidence-based approach to effectively stimulate reading and reading-related skills, such as for example vocabulary learning (e.g., Hadley et al., 2021; Vanparys, De Beer, & Van Keer, 2023; Vanparys & Vansteelandt, 2022). More specifically, we aimed to foster the participating teachers' content and pedagogical content knowledge, beliefs and skills (Blömeke et al. 2015; Döhrman et al., 2012) by means of a hybrid professionalization approach (i.e., online modules for individual teachers and school teams combined with school specific face-to-face coaching at the participating schools). Results on the impact of the professionalization will be discussed.

Magic in the Making: The Impact of Professional Development on Flemish Prevocational Teachers

Soetkin Werbrouck¹, & Hilde Van Keer¹

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Reading comprehension is crucial across disciplines and in daily life in our digital society (OECD, 2019a). However, many Flemish vocational students struggle with both reading comprehension and reading motivation (OECD, 2019b). Moreover, evidence indicates that teachers' competencies in reading are insufficient, partly explaining students' underperformance (Vansteelandt et al., 2022). To remediate, professional development is recognized as pivotal for enhancing teaching quality. This study investigates how a six-month professional development program impacted on teachers' dispositions (i.e., knowledge and affect-motivation) (Blömeke et al., 2015) regarding reading comprehension instruction and reading motivation promotion. In a multiple case study approach across four schools in Flanders, we conducted thematic analysis of semi-structured group interviews with teachers and staff to map teachers' dispositions before and after the program. Results indicated enhanced knowledge and changed beliefs regarding reading comprehension in three schools, although there remains room for improvement. Persistent gaps were noted in knowledge regarding reading motivation. These results underscore the necessity for ongoing, context-specific professional development. The study further emphasizes the vital role of school leaders in driving changes in teachers' attitudes and the importance of integrating practical training applications in classroom settings.

Documenting reference practices for learning to write in Primary Education

María D Alonso-Cortés Fradejas¹, Susana Sánchez Rodríguez¹

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The relationship between research and innovative practice is as desired by researchers and teachers as difficult to articulate. One of the threats that looms over a positive articulation between scientific knowledge and classroom practice is the very conceptualization of what educative scientific knowledge is and, therefore, of what can be considered educative evidence. Another is the reduction of this articulation to a simple technical application of procedures that have that scientific support. That's why, with the purpose to contribute to a shared scientific framework for the teaching of writing, this study aims to document a complete task for writing instruction so that it can become a reference task. Through the application of a systematic observation guide of effective practices, 18 effective practices were identified in a task which was implemented in the 4th year of Primary Education. The identified practices were characterized and related to empirical studies. The results allow to use the task as a reference practice for the initial and ongoing training of teachers and the process of evidencing practice within its context allows to reflect on the back-and-forth relationships between educational research and classroom practices and on the meaning of the term evidence for teacher professional development

Professional literacy: the key to successful communication in a society based on the division of labour

Marlies Whitehouse

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Successful communication in a society based on the division of labour requires taking the stakeholders' needs seriously and providing them with useful information to help them solve their issues. Unfortunately, the division of labour has resulted in fragmented and sometimes uncoordinated information processes. Especially in times of disruption, stakeholders depend on information from professionals who are subject matter experts and who know how to communicate with their stakeholders in a professional manner. In other words, professional literacy is key. Professional literacy means that communicational offers are developed by integrating the perspective of the addressees, their background knowledge and their needs. This means choosing the right communication channels and making sure they work. In my presentation, I define the key concepts of language awareness and professional setting. Based on a long-term qualitative corpus, I use pragmatic text analysis to explain how the lack of professional literacy affects individuals and society at large. I conclude by showing which measures and (AI) tools facilitate the understanding between the stakeholders in an increasingly heterogeneous society.

Understanding and Enhancing Literacy Skills in Vocational Education and Training

Liana Konstantinidou¹, Elsa Liste Lamas¹

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In the context of digitalisation, literacy skills have become increasingly important in both personal and professional settings. However, studies show that students in vocational education and training (VET) often struggle with literacy tasks. This poses a challenge for educators in terms of addressing the diverse language backgrounds and abilities of learners and individualising teaching approaches. In this paper presentation, we show the results of a study that aimed to systematically assess the quality of VET students' texts, to identify profiles of writing competence and to provide needs-oriented and inclusive teaching recommendations based on these profiles. For achieving these goals, we used a corpus of 1,472 texts written by VET students and employed both automated linguistic analysis and expert ratings to identify three clusters of students with similar writing competence profiles. The presentation focusses on the research design and highlights the potential of empirical evidence to shape our understanding of text quality in the specific VET-context, and to challenge prevailing narratives about learners' language background and their literacy skills.

Honor Committee Round Table

A2 (105 - Hörsaalgebäude) Chair Yusra Ahmed

Symposium

The dependency of word spelling and syntax: the noun phrase in French and German and other languages

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A comparative analysis of French and German noun phrases (NP) reveals differences at the level of the writing system and the syntactic structure. The most salient features are the visible cues of inflection, which may be termed "syntactic word spelling". Examples of these include capitalization in German and pluralization in French NPs. To illustrate, French NPs are distinctly marked for the plural, though less so for the singular. The beginning, end, and nucleus of the NP can hence be readily identified due to the syntactic and graphemic structure in the plural form. Moreover, an article or a word that can be identified as such is positioned in close proximity to the noun. In German, a number of words serve a similar function to that of an article, yet do not resemble one. Additionally, the distance between the article and the noun can be considerable. However, the nucleus of the NP is capitalized, thereby visually distinguishing it. With a thorough understanding of the syntax and the visible cues in the writing systems, new questions can be formulated for acquisition studies. The presentation outlines the essential observations on the two languages' NP structures and the associated syntactic word spelling. It also references existing empirical studies and their linguistic and cognitive assumptions.

The use of visible morphology for learning to write: opportunities and limitations

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The paper presents morphological spellings of fourth and fifth graders in German and French from two studies. The first study presents the variant spellings of morphologically complex words in German written by 364 fifth graders (Bangel & Müller 2018). The second study presents the syntactic word spelling in German and French, produced by 171 multilingual fourth-grade students who have become literate in German and French since first and second grade (Weth et al., 2024). Although both studies differ in their focus on specific aspects of morphology (complex words, inflection), they both offer insights into how learners make use of the strong interconnection between morphology (and syntax) and the writing systems. The data-driven analyses of the learner spelling also indicate that certain spellings reflect a lack of insight into the morphological regularities of the German and French writing systems. This aspect must be distinguished from spellings that are possibly the result of insufficient semantic-lexical knowledge. An understanding of the learner spelling is crucial for a deeper comprehension of morphological spelling and the development of effective instructional settings. Bangel, M., & Müller, A. (2018). Orthographic learning through structure-based approaches to the writing system. *Unterrichtswissenschaft*, 46(3), 345–372. Weth, C., Dording, C., Klasen, L., Fayol, M., Funke, R., & Ugen, S. (2024). Effects of parallel syntactic training in French plural spelling and German noun capitalization. *Morphology*, 34(2), 189-217.

“Alle andere Schafe [...] tragt auf Löwe”: Developmental pathways in acquiring German nominal inflectional morphology by deaf native signers of DGS

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Being able to read and write is the only way for people, deaf or hearing alike, to participate in a literate society. Deaf children, who are often unable to acquire an oral language, learn a language in a written form only. Being naturally visual, they can acquire a written language by eye, provided that L1 fluency in sign language is established (Caldwell & Harris, 2022). Skilled deaf readers make use of morphological knowledge about that language, suggesting that visually accessible graphomorphological information may be a resource for improving their reading and writing skills (Zhang et al., 2023). We aimed at describing the development of nominal inflectional morphology in the German written language of six deaf native signers of DGS tested between grades 5 to 9. To this end, we established the relative frequencies of markers that the children use to label subjects and direct objects in the three gender subclasses of German. Based on these data, we will assess whether the systematicity of the marking system that individual children develop is correlated with their reading proficiency, established in grades 6 and 8. We expect that analyzing these strategies offers new insights for developing successful teaching methods for Deaf learners. Caldwell-Harris, C. & Hoffmeister, R. (2022). Learning a second language via print: On the logical necessity of a fluent first language. *Frontiers in Communication*, 7:900399. Zhang, D.; Ke, Sihui; Anglin-Jaffe, H. & Yang, J. (2023). Morphological awareness and DHH students reading-related abilities: A meta-analysis of correlations. *JDSDE*, 28, 333-349.

Visual statistical learning and its impact on literacy in deaf and hard-of-hearing children

Barbara Hänel-Faulhaber, Anne Wienholz, Annika Herrmann

Statistical learning, the implicit detection of statistical regularities in the present environment, has been described as an essential part of language learning in children (Lidz & Gagliardi, 2015; Saffran et al., 1996). Moreover, statistical learning influences the efficiency of the reading and writing process (Arciuli, 2018; Schubert et al., 2020; Treiman & Kessler, 2022). Deaf and hard of hearing (DHH) children acquire German mainly through its written form when they enter school. In our study, we are interested in the relationship between DHH children's statistical learning performance and their literacy outcomes. Therefore, we examined DHH children entering school (aged 6–8 years) and their performance in a visual artificial grammar learning task (Schönberger et al. 2024) in multiple sessions testing for effects of learning and transfer. Two years later, literacy was assessed using standardized tests. We will focus on morphology and discuss how general statistical learning abilities affect later literacy outcomes. These data contribute to further understanding effects of visual pattern recognition on literacy acquisition. Arciuli J. (2018). Reading as Statistical Learning. *Language Speech and Hearing Services in Schools*, 49, 634. pmid:30120442 Lidz, J., & Gagliardi, A. (2015). How nature meets nurture: Universal grammar and statistical learning. *Annual Review of Linguist.*, 1(1), 333-353. Saffran, J. , R. N. Aslin, & Newport, E. L. (1996). Statistical learning by 8-month-old infants. *Science*, 274(5294), 1926-1928. Schönberger DK, Bruns P, Röder B. (2024). Visual artificial grammar learning across 1 year in 7-year-olds and adults. *J Exp Child Psychol.* 241:105864. Schubert T. M., Cohen T., & Fischer-Baum S. (2020). Reading the written language environment: Learning orthographic structure from statistical regularities. *Journal of Memory and Language*, 114, 104148 Treiman J., & B. Kessler (2022) Statistical Learning in Word Reading and Spelling across Languages and Writing Systems, *Scientific Studies of Reading*, 26:2, 139-14

Validating the “Not So Simple View of Writing” Model in Spanish Shallow Orthography: A Longitudinal Study

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This longitudinal study investigates the Not So Simple view of Writing (NSVW) model in Spanish orthography using a sample of 396 students (191 boys, 205 girls). Given Spanish's shallow orthography, where transcription skills are expected to automatize earlier, we explore how these skills, along with oral language abilities and executive functions, influence dimensions of writing performance—productivity, quality, and syntactic complexity—across early childhood through primary education. Hypotheses derived from the NSVW model predict autoregressive, concurrent, and bidirectional relationships: initial measures of transcription, language skills, and executive functions predict subsequent development in these domains. As handwriting fluency automates, emphasis shifts from transcription to language skills combined with executive functions, particularly evident from the second year of primary education onward. The study enhances our understanding of writing development in transparent orthographies and informs educational practices aligned with the Spanish curriculum. The findings of this study will be showcased at the conference.

Componential analysis of handwriting, spelling and planning instruction through ICT.

Carmen Álvarez-Moreno¹, Raquel Fidalgo¹, Mark Torrance²

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²Nottingham Trent University

Writing process involves two sets of skills: low-level transcription skills, related to handwriting and spelling; and high-level cognitive skills, which include planning processes (Berninger, 2012). Empirical evidence shows that instruction in both processes has benefits for writing competence (Graham & Santagelo, 2014), although the effects change with students' age. In addition, the literature comparing instruction in both processes is very limited. The aim of this study is to analyse the effectiveness of teaching low-level processes at the level of handwriting, low-level processes at the level of spelling, or high-level processes of self-regulation of textual planning through digital technologies, as well as their summative effect on improving the writing competence of students in the first year of Primary Education. We compared 280 first-grade children who had received 3 instructional programs focused on spelling, handwriting or planning following different sequences of implementation, through an instructional software, with 224 students of similar ability who received a business as usual instruction. We took the following measures in pretest and after each instructional program: handwriting accuracy, handwriting fluency, spelling and compositional quality. Data is being analyzed but preliminary finding suggests benefits in compositional quality in students who had received the intervention.

Key Indicators Of The Difficulties Specific To The Development Of Arithmetic Skills

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The main goal of the presented study is to map the key indicators of difficulties in the development of arithmetic skills of young Czech school-age children who are at risk of developing mathematical learning disorders, including dyscalculia. We intend to find the risk factors which cannot be merely explained by low intelligence, insufficient home preparation and/or inadequate teaching methods at school. It is believed that these factors include mainly working memory, spatial abilities, inhibition and preverbal counting. In our study, we compared the performance of third-grade Czech students with low arithmetic skills (N=21) and those with typical development (N=35) on a range of tasks focusing on spatial abilities, executive functions, and number processing to understand the underlying causes of arithmetic difficulties. We decided to use tablet-administered methods for this purpose. Compared to other factors, data analysis shows the key role of symbolic numerosity, especially regarding the processing rate, in developing arithmetic skills. We will discuss the results in relation to the possibilities of further research and their use in practice.

Discovering written world: Children's text in role play context

Nektarios Stellakis

University of Patras

The participation of preschool aged children (4 – 6 years old) in literacy events during “free choice” activities in play "corners" or play centers (shop, doctor's office, communication center etc.) in a kindergarten class in the area of Patras in Greece is investigated. Play, and especially role play, seems to be the most meaningful activity for children through which they are motivated to be engaged in authentic literacy events. It seems that only in these communicative contexts children's reservoir of literacy knowledge becomes fully activated. Data were collected through an ethnographic observational approach in a Greek kindergarten during a four month period during which the teacher of the class or one of the researchers observed and took notes of children activities. The data empirically support the assumptions about the emergence of literacy as situated practice, and more specifically the reinforcement of literacy throughout role play. Observation of children's reading and writing in context initiated by them not only provides evidence of their knowledge about the symbolic nature of written language and of the purposes it is used for, but also illustrates the significance of early childhood school education in the development of early literacy, by supporting children's investigation and engagement with written language through reading and writing for enjoyment and communication.

ApprendeRTi: Design and Implementation of na APP to Assess and Intervene in Reading Skill ins Primary Education

Amanda Abín¹, Pablo Garmen¹, Rebeca Cerezo¹, Inmaculada Méndez-Freije¹, Celestino Rodríguez¹,
¹University of Oviedo

The Response to Intervention (RTI) model aims to detect and intervene early in Specific Learning Difficulties (SLD), considering the active and dynamic role of teachers in the classroom. The scientific literature shows that SLD is closely related to the development of executive functions (EF). In fact, EF training at early ages contributes to a significant improvement of the cognitive processes involved in learning. In this sense, the aim of the present work is the enhancement of EF as an innovative complement within the RTI assessment model, proposing a program with a neuropsychological approach that takes into account the individual as an active part through the use of digital media. To carry out the pilot, 30 students between 6 and 8 years old from the Principality of Asturias were selected. The implementation of the program consists of a total of 8 sessions with a dynamic adjustment of difficulty, which require the use of tablets. The results obtained will allow the design of more effective and motivating assessment-intervention programs, which will have as main advantage the saving of material and personal resources, as well as a significant decrease in the number of false positives and false negatives with respect to traditional protocols.

Letras Prá Vida project transforming Portugal literacy landscape

Dina Soeiro¹, Silvia Parreiral¹, Carla Patrão¹

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Join us in this room, where we sit side by side. Young at heart and young students, the first learn how to read and write, all learn to read the world. Literacy is the queen in this intergenerational dynamic. It's one of the main objectives, but in that room, learning goes far beyond literacy. Life skills are developed, knowledge that people bring from the school of life is shared. The younger recognize and value the older wisdom. Older learners learn what they didn't have the opportunity to learn in formal school. It is never too late. At the table, with flowers and books, they discover a wonderful new world in print. Books seemed like an inaccessible luxury, now available. With mobile phones and computers, they search, participate in online life, communicate with family and friends, resolve everyday bureaucratic issues and actively engage in political action. They are citizens in the digital world. It is this meaningful intergenerational learning that we propose to illustrate, so that you can take a trip with us to a small Portuguese village, one of those where this Letras Prá Vida project is transforming the literacy landscape.

Life, Love, Loss and Literacy: The Learner Literacy Narratives Project

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The Museum of Broken Relationships was the inspiration for this project, which invites learners to share the stories of objects meaningful to them and are linked to important relationships in their lives. The international project Learner Literacy Narratives: A Library of Life, Love and Loss gives learners the opportunity to develop literacy skills by valuing their voices, their stories, their lives. At this early stage, the project already has a pilot experience developed by Adult Learning Wales, UK, as well as a website with an innovative 3 D gallery, which allows visitors to get to know the objects and stories that give them value. In addition to literacy, this challenge mobilises other skills and is suitable for various curricular areas. In this proposal we will present this initiative, inviting II Literacy Summit participants to join in. We'll explain how this project could have a lot of potential for working with diverse adult learners in different contexts. Stories have the power to move those who have lived them and those who know them through this project. It's a personalised, non-formal approach to promoting literacy that empowers and humanises those who tell the story and those who learn about it.

Improving functional literacy in N. Macedonia: A unique collaboration between elementary, secondary and tertiary educators.

Mira Bekar¹, Kalina Maleska, & Dijana Petrova

¹Sts Cyril and Methodius in Skopje

When memorizing information and reproducing material from textbooks is more in focus than functional literacy, then the result is learning by heart, without understanding or without connecting that knowledge to the real world. Being aware of the serious need for developing functional literacy of pupils, a team of 30 educators from elementary, secondary schools and a university in the R. N. Macedonia, together with graduate students, established a unique cooperation in order to create activities and exercises that will strengthen pupils' capacities for better comprehending of the material and for relating it with real life problems/challenges. In our presentation we will share the results and experiences from a national project aimed at equipping current teachers and university-level students training to be primary and secondary school teachers with the skills needed to effectively enhance elementary and secondary pupils' functional literacy. Specifically, we will present a wide range of materials and teaching techniques which help pupils connect information from multiple sources, draw relevant conclusions from texts, express their opinion with arguments, solve problems in the contemporary society based on knowledge and on the acquired skills such as self-criticism, analysis and synthesis, criticality/critical thinking, self-evaluation, emotional literacy, empathy, and authenticity.

Practice profiles and effective practices for the initial learning of writing

Maria Dolores Alonso-Cortés Fradejas

University of León

When dealing with the initial learning processes of reading and writing, there are teachers who focus on the explicit instruction of spelling and show a high concern for students to learn the same things and at the same pace (instructional profile, Tolchinsky, Bigas, & Barragan, 2010) and there are others who prefer to invest classroom time in the development of autonomous reading and writing activities related to emerging learning situations (situational profile, Tolchinsky, Bigas, & Barragan, 2010). On the other hand, a number of practices have been identified as having a proven effect on initial literacy (Graham, Harris, & Santangelo, 2015). However, how much and how these effective practices manifest themselves in the instructional teacher profile and in the situational teacher profile has not yet been studied. To this end, an exploratory analysis was carried out with a sample of 35 observations in 22 Early childhood Classrooms and 13 in Primary Education classrooms in Spain. The results of the analysis indicate that effective practices for the initial learning of writing are manifested differently, both in terms of quantity and quality in both teaching practice profiles.

Enhancing Critical Literacy Skills through Structured Cognitive Strategies

Pablo Delgado

Universidad de Sevilla

This best practice explored a structured approach to developing critical literacy skills for university students, focusing on cognitive labour division, conflicting information assessment, sourcing, and the Toulmin Model of argumentation. Piloted within Ulysseus, an international European University led by Universidad de Sevilla, with a small number of graduate and undergraduate students, this intervention aimed to improve students' critical reading skills through an online self-paced learning module, involving a small number of undergraduate and graduate students. Topic 1 - Division of Cognitive Labor and the Internet Participants engaged with key concepts from “Understanding and Using the Division of Cognitive Labor” and reflected on the pros and cons of using the Internet for information gathering and opinion formation. Topic 2 - Conflicting Information and Source Importance Activities highlighted source credibility and confirmation bias. Participants read conflicting texts on neuro-enhancement, evaluated biases, and reflected on personal experiences after watching a video on cognitive biases. Topic 3 - Sourcing: What It Is and How to Do It A guided reading introduced sourcing principles, followed by an exercise where participants assessed the reliability of various online sources using a provided rubric. Topic 4 - The Toulmin Model of Argument Participants learned to identify and construct strong arguments using the Toulmin Model.

Keynote

Nicole Marx, University of Cologne

**Transversal Writing Skills, Transfer of Writing Skills. Empirical and Pedagogical
Approaches to Exploring Plurilingual Writing Development**

Chair Matthias Grünke

Dr. Nicole Marx is an applied linguist working in language learning and language teaching. She holds an M.A. in German Language and Literatures from Philipps University Marburg, Germany, and a B.A. with distinction in Psychology and German Language and Literature from the University of Alberta, Edmonton, Canada. In 2005, she earned her Ph.D. from the Technical University of Darmstadt in German Linguistics. Dr. Marx has been Professor of German as a Second Language since 2009 and is currently Full Professor at the University of Cologne. She has led various research projects, including four scientific projects financed by the German Ministry of Education and Research (BMBF). She is currently leading a national research group on language(s) development of newly immigrated students and an international research group on language(s) learning and teaching for immigrant deaf and hard-of-hearing students. Her current research projects focus on language and literacy education for the specific group of newly arrived students in schools and their multilingual development.

Assessing reading comprehension in first graders: Insights from free recall and multiple-choice tests

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Effective assessment of reading comprehension is crucial for developing appropriate educational strategies. This study examines the impact of two types of assessments: free recall and multiple-choice on first graders' ability to comprehend text. A total of 184 first graders participated, with 100 students assigned to the free recall group and 84 to the multiple-choice group. Students read a standardised text from the PorTex diagnostic battery and then matched synonyms from the text. Reading comprehension was assessed using either a multiple-choice test or an adapted free recall test. The results indicated no significant difference in synonym matching between the free recall and multiple-choice groups. However, a significant difference was found in comprehension scores, with the multiple-choice group outperforming the free recall group. Additionally, correlation analysis for the free recall group showed a strong positive correlation between synonym matching and comprehension. For the multiple-choice group, a weak positive correlation was found. The findings suggest that multiple-choice assessments result in higher comprehension scores among first graders compared to free recall tests. However, the strong correlation between synonym matching and comprehension in the free recall group indicates that free recall can provide valuable insights into cognitive processing.

Keywords: reading comprehension, first graders, free recall, multiple-choice, PorTex diagnostic battery.

Reading comprehension diagnostics in relation to comprehension tests' characteristics

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Unlike the assessment of word decoding, diagnosing reading comprehension skills poses a significant challenge for researchers and practitioners. The diagnosis can be influenced by the test format and the mode of reading. When using standardized reading comprehension measures, it is, therefore, important not only to be aware of their psychometric characteristics but also of the detailed features of the tests concerning the analysis of key underlying skills. A comprehensive tool for reading and reading-related skills, PorTex, has recently been developed in the Czech Republic to guide practitioners in the complexity of reading and text comprehension and relationship between comprehension and decoding skills. PorTex contains three different formats of comprehension tests: the Oral and Silent reading comprehension test and the Test of word completion in sentences. In this study, we use regression analysis to evaluate the contribution of word reading skills (reading rate and accuracy) and oral language skills (morphosyntactic skills and listening comprehension) on performance on these tests. The contribution of each component was described in the group of beginning readers (2nd and 3rd grade, N=435) and more skilled readers (4th and 5th grade, N=345). Our data show the importance of using a complete and variable set of tests to assess reading comprehension.

Keywords: Word reading skills; Oral language skills; Reading comprehension

Screening of environmental and self-evaluative influences on the development of reading competence in children in the 1st grade of elementary school

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The paper will reflect on the benefits of three types of screening questionnaires mapping personality and environmental influences on the development of reading literacy in children of younger school age. These are a reading self-concept questionnaire, a parent questionnaire and a teacher questionnaire. The goal will be to anchor these methods and their influence on the diagnosis of literacy skills in the context of other key methods of the entire the new Czech test battery PorTex, as well as to monitor the mutual correlations of the results of questionnaires. This view will allow us to understand in more detail the possible connections and discrepancies between the results of other test methods of the battery and can thus significantly help to better target counselling interventions for children showing difficulties in the development of literacy skills.

Keywords: Home literacy environment; Reading self-concept; Screening questionnaire

Reading methods – performance differences in the PorTex test battery

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This paper will focus on the presentation of students' performance in the PorTex test battery across three different reading methods. These are the three most common methods of reading instruction used in the Czech Republic – the analytic-synthetic method, the genetic method and the Sfumato reading method. During the development of the test battery, the authors reflected on the results of previous studies (e.g. Nečilová, Dubová, Kabelková, 2006; Kocurová, 2012; Kucharská & Barešová, 2012), which confirm the fact that the developmental dynamics of the acquisition of reading skills depends on the method of teaching. For this reason, we devoted subsequent analyses to students' performance according to each method. The study included students from primary school grades 1 to 5 (AS: N=1301; GE: N=424). The Sfumato method was additionally added to the study, and only for students in 3rd grade of primary school (SF: N=45). Statistically significant differences in terms of AS and GE reading methods were demonstrated in decoding tests (word reading), comprehension tests (listening comprehension, oral reading comprehension, silent reading comprehension). In terms of the Sfumato reading method, statistically significant differences were found in the subtests of phonemic awareness, reading rate and accuracy compared to the remaining reading methods. The presented results of the study provide a stimulus for discussion on the influence of the reading method on students' performance in diagnosing reading skills in guidance settings and in recommending intervention procedures.

Keywords: Reading skills; Reading comprehension; Reading instruction

Data visualization for text analysis

Mónica Broido

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Humans respond to and process visual data better than any other type of data (Cronin et al., 2014), making visualization an ideal mode for research, as it allows new forms of analysis by identifying patterns in texts (Nualart-Vilaplana et al., 2014) that may not be otherwise apparent. We developed a web-based app that uses Google Doc's API to create visualizations of groups of texts, following their linear and sequential structure (Schneiderman, 1996). As a use case, we used texts produced by Tel Aviv University Advanced Spanish (B1) students who wrote four texts during a pedagogical sequence. The texts were first color-coded for rhetorical moves and connective devices, which our app then automatically used to create tree-like interactive visualizations. By analyzing these visualizations, distinct shifts in text organization, rhetorical move sequencing, and connector use throughout the pedagogical sequence were uncovered. In this app demo, we will show how this visualization can aid researchers and pedagogues. We propose that this type of visual analysis can help improve the speed and clarity with which we analyze textual data, and can be used to follow groups of students writing to provide a more complete understanding of the process of student writing development.

Enhancing Executive Functions in Early RTI Models: A Neuropsychological Approach with Digital Tools

Tania Pasarin-Lavin

University of Oviedo

The apprendeRTi app is an innovative educational tool designed to assess and train executive functions and reading in students in the first and second years of primary education (ages 6-8). This program is divided into two parts. In this instance, we will present the section dedicated to executive functions, which focuses on five key components: attention, inhibition, working memory, cognitive flexibility, and planning. The attention component is addressed through exercises designed to maintain focus on relevant stimuli. The inhibition component focuses on controlling interfering impulses. The app's working memory exercises help users retain essential information for specific tasks, while its cognitive flexibility training facilitates adaptation to new situations. Planning is addressed through organizational and decision-making strategies. The app is proposed with two itineraries: as a structured training program or in a free mode for users to work on specific executive functions according to their needs. This flexibility allows users to personalize their learning experience, offering an accessible and attractive platform to enhance cognitive development from an early age.

Using Digital Tools to Improve Reading Skills in Early RTi Models

Amanda Abín

University of Oviedo

APPrendeRTi app is an innovative educational tool designed to assess and train reading skills and executive functions in students in the first and second year of Primary Education (ages 6-8). This program is divided into two parts. In this instance, we will present the section dedicated to reading skills, which is focused on four key components (phonological awareness, alphabetic knowledge, vocabulary and comprehension). The app is proposed with two concurrent itineraries: assessment and intervention. Assessment is individualized and is carried out by teachers using the digital tool. The intervention, on the other hand, is adapted to each student who works in an autonomous and individualized way. The teacher's assessment of the student's reading skills is conducted in order to identify potential learning difficulties. These assessments are categorized as screening and progress assessments and are tailored to the individual student in order to ascertain their current level of proficiency. Concurrently, the student will work with the digital tool on the aforementioned skills, using a variety of stimuli, instructions and activities. Accordingly, the intervention will be differentiated in terms of feedback and instruction, aligning with the level of risk presented by the student in the assessment phase.

The Captain Morph vocabulary app – singleplayer and multiplayer modes

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Captain Morph is a researcher-developed app that aims to support vocabulary acquisition for primary grade students. Available in Norwegian and Swedish, it builds on two learning principles. First, understanding morphemes—the smallest meaning-bearing elements of words—enhances word learning due to the morphemes' recurrence in many words. Second, input variability, presenting target morphemes across various root word contexts, aids in generalizing morpheme knowledge to new words. The app includes 40 sessions focused on common derivational morphemes (e.g., 'mis' in 'misunderstand' and 'ist' in 'guitarist') and compounding patterns. In a recent randomized controlled trial with 717 second graders, the app demonstrated lasting effects on word knowledge, including untaught words containing taught morphemes. Given its effectiveness, we expanded the single-player version to include two multiplayer modes. In the student-student mode, students alternate roles as “game leader” and “game advisor.” This setup allows us to investigate whether collaboration yields better learning outcomes than working alone and effects of different roles in the collaboration. In the student-teacher mode, students needing extra support engage with an adult in recall-focused tasks. Together, the single and multiplayer modes enable a comparison of word learning in social and non-social contexts.

GetWrite for iPads (with Pencil)

Stefan Hess, Guido Nottbusch, Mark Torrance

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Understanding children's real-time handwriting performance requires measurement with high spatial and temporal resolution. Over the past few decades, several applications (e.g., Eye and Pen) and tablets (e.g., Wacom tablets) have been developed that allow researchers to capture and analyze handwriting in real time. The development of iPad tablets with pencils provides researchers and teachers with yet another device that can be used to collect data. The OpenHandWrite program suite comprises GetWrite (handwriting capture) and MarkWrite (handwriting analysis). We will present a GetWrite iOS app for use with iPads-with-pencil. This allows researchers and teachers to easily collect all available data, such as x and y coordinates of the pen at a given time, pen-tip pressure, azimuth, and altitude, at the maximum sampling rate (depending on the iPad model and its pencil). We will also present our recently developed R-shiny website, which can be used to process the iPad data in a similar way to MarkWrite. Finally, we will show a Scratch-like drag-and-drop online experiment builder, which enables sophisticated experiments in GetWrite.

Development of written production and learning of grammar with 6 to 8 year-olds through Egramint didactic sequences

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This work deals with the relationships between grammar learning and written production in the 1st and 2nd year of Primary Education in Spain (6 to 8 year-olds), when students are consolidating the initial learning of written language (Sánchez y Santolària, 2020). The results of the implementation of a Grammar Didactic Sequence designed within the framework of the EGRAMINT Project (PID2019- 105298RB-I00), funded by the Ministry of Science and Innovation of Spain (Rodríguez-Gonzalo, 2023) is presented. The SDGE are teaching and learning devices that aim to promote reflective language learning through teacher support in communication situations that are significant for students, with special interest in the relationships between grammatical reflection and written production. The SDGE used (Casas et al., 2022) aims to familiarize students with the "photo caption" discursive genre, an informative genre linked to an image, of short length, with a descriptive nature (Castedo and Ferreiro, 2013). The analysis of the texts written by the children as the final product of the SDGE, in which the metalinguistic and interlinguistic reflection of the students has been encouraged, shows a certain adjustment to the proposed genre.

Promoting emergent literacy skills in preschool using a digital tool

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Emergent literacy skills are among the main predictors of successful learning in reading and writing. The goal of this study was to examine the impact of a digital intervention designed to enhance emergent literacy skills among preschool children. The participants were 539 children attending the last year of preschool education in Portugal, with 301 assigned to the control group and 238 to the experimental group. The intervention, delivered through interactive digital activities, aimed to improve key literacy components, including phonological awareness, vocabulary, print knowledge, and writing skills. Pre- and post-intervention assessments measured the efficacy of the program across these domains. Results indicated a significant positive effect on phonological awareness in the experimental group compared to the control group. However, no significant improvements were observed in vocabulary, print knowledge, or writing skills. The study underscores the need for a multifaceted approach in early literacy interventions and suggests further research to explore how digital interventions can be optimized to support a broader range of literacy outcomes. This research contributes to the growing body of literature on the role of technology in early childhood education and its implications for curriculum design.

Early Literacy Measures: A Comparative Study of Bilingual English-Learners and English-Only Students

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This study evaluates early literacy measures in kindergarten (KG) and first grade (G1) students within the state of California (USA), examining how early literacy measures correlate and predict end-of-year (EOY) word reading abilities. Additionally, it examines the differences in these literacy measures between English-only (EO) and bilingual students classified as English Learners (ELs), aiming to understand how linguistic backgrounds influence literacy development. Method: We assessed oral language components (expressive and receptive vocabulary, sentence repetition, listening comprehension), phonological awareness, rapid automatic naming (RAN) alphabetic knowledge (KG), and decoding skills (G1) using Multi-group Structural Equation Modeling to analyze performance variations. Results: Results indicated generally lower scores for ELs, particularly in measures of oral language, while decoding skills and rapid automatic naming differences were less impacted by the EL status. The relationship between phonological awareness and rapid automatic naming was stronger among ELs in KG. Alphabetic knowledge and decoding emerged as key predictors of EOY word reading success for both groups in KG and G1. Conclusion: The study underscores significant differences in literacy development between EO and EL students, emphasizing the need for tailored educational strategies to adequately support linguistic diversity in early grades.

Early primary students' attitudes towards paper and computer-based writing: A mixed-methods study

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Digital tools are now an integral part of most communities across the globe. In this context, preparing beginning writers to produce paper and computer-generated texts with similar levels of proficiency is of paramount importance. In the current study, we examined general attitudes toward writing and specific attitudes toward writing paper and computer-based texts of 544 Grade 2 students in Western Australia. Results from hierarchical-linear modelling showed that general attitude toward writing made a statistically unique contribution to predicting the quality of students' paper and computer-based texts. Specific attitudes towards writing paper-based texts made statistically unique contributions in explaining paper-based compositional quality and productivity. Contrastingly, specific attitudes towards writing computer-based texts did not make a unique and statistically significant contribution in predicting computer-based compositional quality and productivity. Following a mixed-methods design, we further examined children's motivational beliefs, namely value and utility, attitudes and interest, and competence in writing paper and computer-based texts (subsample of n = 54 students). Findings from deductive content analysis suggested that children found writing and learning how to write paper and computer-based texts equally important but show more negative attitudes towards writing paper-based texts.

“A more mature type of thinking”: Constructions of authorial identity in LLM- and student-produced Bachelor thesis conclusions

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Generative AI tools seem increasingly capable of taking over some of the aspects of text production, challenging our conventional understandings of writing and calling for a rethinking of teaching and assessment strategies. This is also true in the case of Bachelor theses, used in many contexts to assess students' research and writing abilities. In this study we conducted semi-structured interviews with 4 supervisors and assessors and 4 students and asked participants to respond to excerpts from bachelor thesis conclusions sections, both written by students and produced by OpenAI's GPT4. Participants were asked to rank the texts and comment on their quality, without knowing that some of the texts were LLM-produced. We found that both students and supervisors constructed an image of the author's identity in the texts, and that this constructed authorial identity informed perceptions of text quality (see Tardy & Matsuda, 2009). At the same time, the respondents' perceptions of text quality changed once they were informed that some of the texts were not human-written, and in some cases suggested resistance to the use of AI in text production. Finally, we discuss the implications of these results for assessment and teaching. Tardy, C. M. & Matsuda, P.K. (2009). The construction of author voice by editorial board members. *Written Communication*, 26, pp. 32–52.

Master Thesis writing and student-centred supervising in Danish / Scandinavian Higher Education

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Based on hermeneutic analyses (Gadamer 1989) of 30 semi-structured qualitative research interviews with both supervisors and Master Thesis students we have developed a three-dimensional 'vejledningsmatrix' with the interrelated dimensions of supervision models, supervisor roles, and functions of draft texts in relation to each other. This matrix serves as analytical framework for our investigation of student-centred supervision in inter-cultural encounters at a Danish Business University by focusing on experiences and expectations from non-Scandinavian educational backgrounds in the context of the local Danish educational culture. Research question How and why do supervisors' and students' understandings of supervision enable and constrain supervision spaces and the acquisition of academic literacies when supervisors and students come from different education-cultural backgrounds? Findings Our analyses show that Danish teaching & learning philosophies are based on dialogue and equality between student/s and supervisor emphasizing student autonomy. International students' and supervisors' ability to adopt this philosophy is essential for students' learning outcome. Otherwise, differences in education-cultural backgrounds lead to misperceptions of expected behaviour in the supervision spaces. Thus, the enacted supervision model has a direct impact on the role of students' texts in supervision and their ability to acquire academic literacies. Reference Gadamer, H.-G. (2)1989) Truth and method. London.

Teacher's identification of students with reading difficulties in the upper grades of elementary school

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The teacher plays an important role in identifying students with reading difficulties. Despite the available guidelines for monitoring reading performance, teachers still face challenges in assessing their students' reading performance, especially in the upper grades of elementary school. In this paper, we present the reading performances of two groups of older elementary school students: 653 fifth graders and 662 eighth graders from seventeen Slovenian elementary schools. We evaluate their reading efficiency as a necessary factor for successful utilization of reading, by using a reading efficiency test developed for this study. We present their results from the perspective of performance on other reading tests and based on other information we obtained about the students. We found a statistically significant, moderate correlation between the results of the reading efficiency tests and the school grades as well as the reading assessments carried out by the teachers. Assessing reading efficiency while considering other factors important to reading may be an effective way for teachers to identify students who need additional support in reading, even in higher grades of elementary school.

Symposium
On the creation of directly comparable assessments of early literacy skills: Insights from the MABEL tool.

Markéta Caravolas¹, Marína Mikulajová², Sylvia Defior³, Gabriela Málková⁴

¹Bangor University

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³University of Granada

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The MABEL arose from a longitudinal, cross-linguistic study of literacy development in English, Spanish, French, Czech, Slovak (ELDEL, a FP7, Marie Curie ITN). In the original study, we developed parallel versions of 15 tests for measuring foundational skills of alphabetic literacy, namely, phoneme awareness, letter knowledge, rapid naming, reading and spelling. Our methodological approach was confirmed and validated in several longitudinal, cross-linguistic studies (e.g., Caravolas et al., 2012, 2013, 2019). Working since 2018 with an expanded research consortium, we have applied our methodology to an additional four languages: Polish, Ukrainian, Portuguese, and Welsh. In this paper, we outline the key methods and criteria for cross-linguistic item selection and scale creation applied in the development of directly comparable assessments of phonological skills and word-level literacy of the MABEL tests. We report the key psychometric indicators of reliability and validity of the tests across languages, which confirm MABEL as a valuable tool in bilingual, multilingual educational and clinical contexts, as well as for literacy research. Furthermore, we describe some of the recent advancements of the web-based tool, new support documents, and training courses for students and practitioners that enable effective work with the tests in the broad MABEL diaspora.

A field survey of the MABEL tool in practice: Insights from clinical and educational professionals in different countries.

Gabriela Málková¹, Marína Mikulajová², Sylvia Defior³, Markéta Caravolas⁴

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Primary beneficiaries of MABEL, since September 2019, are over 2000 practitioners working in 25+ countries, many of which previously lacked objective, high quality, evidence-based assessments for early detection of children's risk for, and manifestations of literacy difficulties. By developing the Multilanguage Assessment Battery of Early Literacy, which offers appropriate, evidence-based test packages, our research consortium has enabled practitioners to meet the usual requirements for early identification and implementation of interventions to avert or alleviate children's literacy problems. Here, we summarise MABEL web-based data regarding currently registered practitioners. These include indicators of: the global reach and uptake of the tool across countries, the range of professions/professionals adopting the MABEL, users' preferred language versions and preferred tests. Furthermore, in seeking further evidence of MABEL's usefulness in practice, we report a survey of registered practitioners, assessing their satisfaction with the tool, the ease of usage of the materials for administration and scoring, the helpfulness of the support materials, and, critically, the observed sensitivity and predictiveness of the tests for individual children's literacy profiles and prognoses. The results shed light on the cross-cultural benefits of the assessment tool, and on the ways in which specific linguistic, and national/educational situations can constrain its generality.

How Letter Knowledge Paves the Way to Reading Ability: A Longitudinal Study with the Portuguese Version of the Multilanguage Assessment Battery of Early Literacy.

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In an alphabetic writing system, mastering the transition from spoken to written language is accompanied by increasing awareness of speech as a sequence of phones. Phonological awareness is a well-known predictor of reading acquisition in such systems. Albeit imperfectly, letters are instantiations of phonemes and often letter knowledge is a confounding factor in interpreting phonological awareness abilities. Here, we examine specifically the link between letter knowledge and reading acquisition. Our hypothesis is that letter knowledge, above and beyond phonological awareness, is a predictor of early reading ability. Data were collected with the Portuguese version of the Multilanguage Assessment Battery of Early Literacy (<https://www.eldel-mabel.net/pt/>) in a longitudinal study with children from kindergarten to grades 1 and 2. Data collection of the first wave has already taken place with circa 100 children in kindergarten and 100 in grade 1, and the second wave will be collected at the start of the next academic year. In this talk, we will present and discuss our main findings of both waves of data. We will compare our longitudinal results with those obtained in earlier studies with English- and Spanish-speaking peer groups.

Early literacy development: A longitudinal study of Ukrainian-Polish novice readers.

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Foundational skills of reading acquisition in monolingual children have been researched in great depth (Caravolas et al., 2012; Moll et al., 2014). Crosslinguistic similarities and differences in these predictors have been explored (Landerl et al., 2019; Caravolas et al., 2019), but less is known about predictors of literacy acquisition in bilingual contexts. This longitudinal study examines early predictors of reading acquisition among Ukrainian-Polish bilingual children learning to read in both L1 Ukrainian and L2 Polish. The study follows three groups over one year: Ukrainian monolinguals, Polish monolinguals, and Ukrainian-Polish bilinguals, in the 1st grade (aged 6;0 – 7;6). They were assessed on reading skills (word recognition, pseudoword decoding, text comprehension) and potential predictors (phonological awareness (PA), rapid automatized naming (RAN), working memory, vocabulary knowledge, letter knowledge (LK), and listening comprehension). Bilingual children were evaluated in both languages. ANOVA analyses revealed bilinguals improved in most tasks in L2 (Polish) over one year. Although initially outperformed by Polish monolinguals at T1, bilinguals showed better performance than both monolingual groups at T2. PA and RAN moderately correlated with all reading measures within and across languages. Regression analyses identified RAN as a unique predictor of reading efficiency in L1, while LK was significant in L2.

Maria's right to learn how to write: the urgency of guaranteeing the right to literacy education for older adults

Dina Soeiro

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Maria has a dream of learning to write her name. She doesn't want to die without fulfilling that dream. So simple, but yet, in her belief, so out of reach. 'No one left behind' is a beautiful expression that we often hear and read in political speeches and official documents from organisations with educational responsibilities at the most diverse levels, from local to international. But in an ageing Europe, do we see and give the attention that older people's literacy deserves? Is lifelong literacy really a recognised right that mobilises transformative educational action? And what kind of literacy do older people need, want and have the right to? Are we guaranteeing humanistic literacy education for all people, regardless of their age? More than answers, this proposal, inspired by Freire's Pedagogy of the Question, aims to ask questions, so that we, educational agents, committed to the mission of promoting literacy in this promising world of AI, don't forget those adults who have not yet been guaranteed the fundamental right to learn how to read and write, as a condition for freedom, democracy, inclusion and social justice, dignity and dreams.

Crisis? What crisis? Scaremongering and adult literacy

David Mallows

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In this paper I will question two 'beliefs' that dominate much of public discourse on adult literacy. Firstly, that there is an adult literacy crisis in the UK and other Western countries, and secondly that addressing low levels of literacy in the adult population will at the same time address social issues such as poverty and the rise of populism that are increasingly prevalent in our societies. I will argue that rather than a narrow focus on adult literacy we should seek to build adult education systems that recognise the broad range of skills that adults need to develop and maintain, but also the broad range of skills and interests that all adults have, but which are often overlooked when we design policy in this area. I will argue that developments in adult literacy education since the original 'literacy crisis' caused by the results of IALS in the early 2000s, have led to a focus on professionalisation in the sector, with a reframing of literacy as functional rather than critical. Implicit within this has been a rejection of the centrality of Freirean emancipatory processes, as incompatible with our current individualised, curriculum-led, performance-based modes of education. I will question who benefits from the scaremongering headlines that dominate most discussions of adult literacy in the media and suggest ways in which we might counter these dominant discourses.

Does it still make sense to talk about “illiteracy”?

José Pedro Amorim

CIEE/FPCE-University of Porto and Paulo Freire Institute of Portugal

Based on Freire, I propose critically analysing current and (almost) consensual adult literacy assumptions and concepts – with impact on practices. Perhaps the most significant thing is to remember that Freire never stopped using terms such as “illiteracy” [analfabetismo] and “illiterate” [analfabeto] despite the very critical view he took of them. Of course, he did not call people “illiterate” [“analfabetos”] – but rather “literacy learners” [“alfabetizandos”] – but, with them, he problematised “illiteracy” and its structural nature. Freire said that people are often illiterate for two reasons: they live in a hearing culture (and do not need to know how to read), or society prevents them from learning to read and write the word (which is not the world). Today, despite the freeze-dried discourses (e.g., “low levels of literacy proficiency”), a conception that takes “literacy” as an individual ability continues to prevail – and, if it is not dichotomous, it takes as “problematic” the “poor” and “very poor” literacy skills of those who are at “level 1 and below”) – rather than a necessity and/or a structural impossibility. How many people complete an adult education process (even with practices considered adequate, such as life stories and the recognition of prior learning) without becoming aware (and this is only the first step towards conscientização) of the collective nature of a “failure” (in terms of their educational path and employment, for example) that they take as personal?

Project SkribaTools: Developing an Open-Source Website of Resources to Support Students' Writing Skills

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Many students in public schools, elementary to university, struggle with writing. National assessment results indicate a range of 11-75% students (e.g., Alberta [11%], Canada, 2022; United Kingdom, 2023 [31%]; United States, 2017 [75%]) cannot write at a proficient level. Writing strategies and ideas are prolific in research., but there is a disconnect between the evidence and its accessibility for teachers, students, and parents. This session will discuss the results of Special Education teachers' perspectives about instruction and students writing skills. In the mixed methods study, teachers offered their ideas for the development of SkribaTools, an accessible, open-source website hub of strategy videos, infographics, and other writing webtools for students (e.g., age 7 to university/adulthood). The results from teachers' survey responses (n=146) and follow-up interviews (n=9) indicated that students' highest areas of need were planning their ideas and making a first draft. Teachers noted that the most useful methods to help students were to give them feedback on their writing and incorporating strategy instruction webtools. Special Education teacher participants suggested additional resources and commented about the advent of artificial intelligence tools (e.g., ChatGPT). The presenters will discuss the results of this study and implications for the use of webtools for writing.

Integrating Cloud Subtitling in Translator Education: Building Skills for the Digital Age

Oryslava Ivantsiv

Ternopil Volodymyr Hnatiuk National Pedagogical University, Ukraine

The study explores the integration of cloud subtitling in translator education, focusing on its impact on the professional training of undergraduate students majoring in Translation and Interpreting at Ternopil Volodymyr Hnatiuk National Pedagogical University during the 2022-2023 academic year. The research employed a project-based learning approach, with students engaging in simulated translation assignments using the Amara web-based subtitling platform. A questionnaire survey was administered to assess the influence of cloud subtitling on students' translation competence, intercultural awareness, and digital skills. The findings reveal that incorporating cloud subtitling significantly enhances students' translation accuracy and cultural sensitivity, largely due to the collaborative features and real-time feedback provided by the software. Furthermore, it cultivates technical proficiency and adaptability to rapidly changing digital workflows by providing hands-on experience with real-world translation challenges. The integration of cloud subtitling tools into translation curricula aligns with the broader educational goals of advancing literacy and technology competence. This approach equips students with the expertise needed to thrive in an evolving translation landscape, ensuring they are well-prepared for the demands of a technologically advanced world.

Task and Person Covariates of Repeated Mistakes in App-Based Language Learning

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Mobile devices and apps offer novel opportunities for language learning, yet children's learning outcomes depend on how they interact with these tools. For example, the tendency to repeat mistakes is related to lower initial knowledge, as well as poorer learning outcomes, potentially upholding or even increasing the gap between high and low performing children. Identifying factors relating to such behavior is essential for providing suitable learning support. The current study provides a first look into child and task covariates of repeated mistakes in app-based language learning using data from Norwegian primary school children ($n = 363$). Our morphology-based app was designed to enhance vocabulary acquisition in the societal language. We used a generalized linear mixed model to simultaneously model sources of variance at the levels of individual response, task, child and session, including covariates at the task and child levels. Results indicate that children with lower morphological knowledge, word reading efficiency and non-verbal abilities were at larger risk of repeating mistakes. Further, tasks featuring pictures were more likely to elicit repeated mistakes, whereas textual/verbal context reduced error repetition. These findings have important implications for app development and implementation, highlighting the need for tailored support to optimize learning outcomes.

On the fundamental role of connectivity devices in academic text processing

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Text connectives are reliable predictors of text writing quality and literacy development. They signal logical-semantic relations between texts units; their procedural meaning guides readers' comprehension, limiting potential ambiguities. Experimental evidence confirms that elimination of connectivity devices (CD) increases cognitive efforts in text processing. However, their facilitating role is not confirmed for all types of connectives and contexts. We aim to determine whether CD relevant to academic text quality play a facilitating role in text processing. Indicators of text quality were identified in 345 expository-argumentative texts produced by Spanish-speaking university students. Causal and concessive CD entailed better scorings. A self-paced reading task was designed considering three factors: causal/concessive relation, presence/absence of connective, and congruency/ incongruency between sentences. We created 32 stimuli adapting real production examples. Experimental items were matched for syntactic structure and lexical frequency. Results gathered from a sample of 65 participants indicated that the presence of CDs did not lead to higher reading times (RTs). However, crucially, for incongruent relations stimuli, presence of CD lead to lower RTs. No differences were attested between the two types of semantic relations considered. Results indicate a facilitating role of CDs, when their presence aligns with the argumentative structure of texts.

The ABCs of writing motivation: a systematic review of factors emerging from K–5 students' self-reports as influencing their motivation to write

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Motivation is essential for writing success. However, investigations of writing motivation in younger students often overlook the students' voices, basing instead—insufficiently—findings solely on teachers' and/or researchers' observations. The present systematic literature review highlights the importance of also listening to students' own perspectives. It synthesizes findings from empirical studies in K–5 classrooms. Of 5,795 studies initially identified, 56 met the inclusion criteria and were qualitatively analyzed. The analysis yielded nine factors that influence writing motivation. They are presented as the ABCs of Writing Motivation, organized according to the first nine letters of the alphabet: (A) Appeal, (B) Beliefs, (C) Choice, (D) Difficulty, (E) Environment, (F) Feedback, (G) Goals, (H) Help, and (I) Instructor. We suggest that this ABCs of Writing Motivation can be a useful tool both for researchers and teachers, as a checklist or source of ideas when planning writing lessons or interventions. To facilitate the translation of research into practice, we also present a brochure with an overview of these factors, their motivational focus, and writing practice examples that may support those foci. Finally, we suggest a heuristic model that can support teachers in planning the implementation of these factors in their didactical endeavors.

Studies of reading motivation in Latin America, a scoping review of theoretical framework

Gabriela Gómez

Universidad de O'Higgins

Cultural and historical settings are critical elements in studying reading motivation. However, reading research tends to underrepresent cultures and regions other than those with high levels of development and non-English-speaking countries. Therefore, it is necessary to examine scientific evidence produced in those "other" cultures. Our review asks what studies on reading motivation are like in Latin America. To achieve this objective, we have conducted a scoping review applying the PRISMA-ScR protocol based on the following question: What are the paradigms and operationalizations of the motivation construct that support reading motivation research in Latin America? Initial findings indicate that reading motivation is a topic that is being studied intensely in Latin America. The main languages are Portuguese and Spanish, and qualitative approaches are more common. A frequent topic is how to foster reading comprehension in the context of social disadvantage. Many studies also conveyed technological tools, virtual learning, and interactive devices. These preliminary results highlight studies and evidence emerging from Latin America. From an international perspective, including more evidence from different cultures, languages, and diverse social contexts is an opportunity to advance research in the field. Moreover, it is a condition to validate research findings truthfully on a global scale.

Motivation and Writing: The Role of Motivational Beliefs in Writing Achievement

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Pontificia Universidad Católica del Perú

Motivational beliefs play an important role in the writing process. Some beliefs stand out for their predictive role in writing performance: self-efficacy, achievement goals, and beliefs about the malleability of writing. The objective of the research is to analyze the structural relationship between motivational beliefs (self-efficacy, beliefs about the malleability of writing, and achievement goals) and writing achievement. To do this, the responses of 5968 second-grade high school students in Peru were considered, who answered a writing test and scales in a large-scale assessment implemented by the Peruvian Ministry of Education. A hypothetical model was evaluated using structural equation modeling. The results show that a greater incremental approach is associated with a greater establishment of domain goals, and that a greater fixed approach is associated with a greater establishment of performance goals. In addition, a greater establishment of domain goals of approach is associated with better writing performance, while a greater establishment of performance goals (approach and avoidance) is associated with lower writing performance. The results suggest the importance of promoting approach domain goals and an incremental approach to writing in writing education. They also highlight the need to continue efforts to implement the communicative approach in the Peruvian context.

Are parents aware of their children's early literacy skills, and is it important?

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¹Tel Aviv University

Purpose. To deepen our knowledge about parents' beliefs on literacy development and activities at home and their relations to parents' evaluation of their children's early literacy. It focused on the accuracy of parents' assessment of their children's literacy. **Methods:** Participants were 278 children (M=5.3 years) and one of their parents (251 mothers and 27 fathers). Parents filled out questionnaires on their beliefs and literacy activities at home. They evaluated their children's literacy, and we directly evaluated children's letter knowledge (names and sounds) and word writing. **Results:** Parents have positive beliefs about their children's literacy knowledge and their role in promoting their children's literacy. They initiate literacy activities with their children, but not frequently. Parents underestimate their children's letter knowledge and overestimate their writing level. Positive beliefs about literacy knowledge expected from children are associated with greater accuracy. Alphabetical activities at home related to accuracy are related to children's writing level. **Conclusions:** The study deepens our knowledge about the accuracy of parents' evaluations of their children's literacy knowledge, a variable that has been less studied. This information may help raise parents' awareness about how their beliefs and literacy activities with children relate to their familiarity with their children's literacy knowledge.

How is the writing process for students with Learning Disabilities or Attention Deficit Hyperactivity Disorder

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¹University of León

²University of Oviedo

The purpose of this study was to explore if there are differences in writing processes between students with LD or ADHD and their typically-developing peers (TD). The sample comprised 124 upper-primary students with ages ranged between 9 and 12 years; 42 LD students, 42 age-matched students, 20 ADHD students, and 20 age-matched. All students with LD or ADHD had a prior diagnosis. The assessment was carried out in two sessions in which students were asked to plan and write a story and to revise another narrative text. Two raters scored the texts assessing the following variables: textual quality, planning and revising (location, diagnosis, and correction). Text quality was similar among students with LD or ADHD, being significantly lower in both cases compared to their TD peers. No differences were found in planning any of the groups, but they were found in revising. Both in location and in detection, significant differences were found, both at mechanical and substantive level, between LD or ADHD and their TD peers. Regarding effective corrections, significant differences were found between LD students and their TD peers at both levels; while differences were only found between ADHD students and their TD peers at substantive level.

Symposium

Trochee-Based Reading for First Graders: Precursors and Assessment

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Reading difficulties have a significant impact on an individual's life trajectory. Currently, there is a lack of reliable measurement instruments to assess reading skills in German at the initial stages of learning. This talk addresses this gap by investigating a novel reading instrument that focuses on the ability to read basic trochaic words with open and closed stressed syllables. These are essential components of the German language's graphemic structure as they are relatively transparent regarding basic structures and patterns. Depending on how beginning readers perform in reading these words teachers can provide suitable support to increase efficiency in their reading development. Furthermore, we present data on the predictive validity of a comprehensive school-based assessment battery from the very first week on learning to read to the end of first grade within the longitudinal project called SCHNAPP.

Exploring the Intersection of Multilingualism and Specific Reading Comprehension Difficulties (SRCD): Insights from the Potsdamer Lesetest Norming Study

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This study examines Specific Reading Comprehension Difficulties (SRCD; Catts, Adlof, & Weismer, 2006) in children using data from the Potsdamer Lesetest (PLT) norming study (n=2200). It assesses the incidence of SRCD among multilingual versus monolingual children and analyzes teacher assessments of reading difficulties considering student language and gender. Although the data analysis is pending, preliminary hypotheses suggest that multilingual children show a higher incidence of SRCD than monolingual children. Furthermore, it is speculated that teachers' assessments of SRCD may exhibit a gender bias, with boys potentially receiving more negative evaluations than girls. Crucially, this study accentuates the need for accurate early reading diagnostics to enable effective interventions. Robust diagnostics such as the PLT play a pivotal role in illuminating SRCD patterns across linguistic and gender demographics. This research highlights the broader educational imperative: informed teacher judgments alongside early assessment can mitigate SRCD's long-term effects and bridge the achievement gap for children of diverse linguistic backgrounds. Catts, H. W., Adlof, S. M., & Ellis Weismer, S. (2006). Language deficits in poor comprehenders: a case for the simple view of reading. *Journal of speech, language, and hearing research: JSLHR*, 49(2), 278–293. [https://doi.org/10.1044/1092-4388\(2006/023\)](https://doi.org/10.1044/1092-4388(2006/023))

Challenges and Insights in Developing a Dual-Mode Reading Comprehension Assessment for Early Grades

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Using digital assessments can support teachers in preparing, conducting, evaluating, and documenting assessments (Cheung & Slavin, 2012). Yet, the emergence of test mode effects between print and digital versions necessitates investigation. We developed a reading assessment (print and digital: Graz reading comprehension test, GraLeV) that measures comprehension at the word, sentence, and text levels for Grades 3-4, and recently adapted it for Grades 2 and 5. Two studies examined the reliability and validity of GraLeV's digital (N=550) and print (N=249) versions. Additionally, a comparative study involving Grade 3 students was conducted to probe differences between the modes. Subsequent studies extended the analysis to second (N=384) and fifth graders (N=218), with a particular focus on accommodating testing duration for these grades. Results indicate both test modes yield reliable and valid outcomes. However, discrepancies in student scores across the modes surfaced, with print assessment yielding higher scores in most subtests. These differences are discussed in relation to response formats, as fewer discrepancies occurred when the modes were more comparable (e.g., clicking on the correct answer vs. ticking a box). Cheung, A.C.K., & Slavin, R.E. (2012). How features of educational technology applications affect student reading outcomes: A meta-analysis. *Educational Research Review*, 7, 198-215.

Linguistic Skills Unveiled: Assessing Grammar and Vocabulary for a Complete Picture of Reading Comprehension

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Grammar and vocabulary are foundational for children's reading comprehension (e.g., Ennemoser et al., 2012), necessitating precise assessments. Standardized group instruments provide objective, valid, and reliable information, crucial for pedagogical diagnostics. This study introduces two German-language screenings to fill the gap in group-based, non-reading reliant vocabulary and grammar tests. Vocabulary Group Screening (GraWo): We present results on mode effects and preferences in kindergarten (n=85), using print and digital formats, supplemented with interviews with children and educators. Grammar Skills Group Screening (GraF GruS): Currently in development, this test assesses receptive grammar skills in groups without reading prerequisites, incorporating traditional (e.g., grammatical judgment) and innovative tasks (e.g., connecting tasks, drawing symbols, and choosing symbols for noun gender). Informed by single-case (n=10) and expert interviews (n=2), a pilot of 250 kindergarten to second-grade children assessed item difficulty, and suitability. This paper will discuss the development process and preliminary findings of both screenings, emphasizing their potential for supporting teachers in diagnosing linguistic competencies crucial for literacy. Ennemoser, M., Marx, P., Weber, J., & Schneider, W. (2012). Spezifische Vorläuferfertigkeiten der Lesegeschwindigkeit, des Leseverständnisses und des Rechtschreibens. Evidenz aus zwei Längsschnittstudien vom Kindergarten bis zur 4.Klasse. Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie, 44, 53–67.

Effects of gender and migration background on writing quality of primary school students

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Writing is a complex but essential skill for human communication and academic achievement in general. Research suggests that it can be especially challenging for two groups: boys and children with migration background who speak another language than the language of instruction at home. In our study, we focus on the influence of gender and migration background on writing performance and additionally address the barely investigated interplay of both factors. We examine the quality of narrative texts of primary school students (N = 1003) from eleven German primary schools. While boys with migration background showed the lowest writing scores descriptively, our multilevel linear mixed effects model showed two main effects of gender (large-sized, $\beta=.38$) and migration background (medium-sized, $\beta=-.28$), but no significant interaction between those two factors. Notably, 44% of the total individual differences occurred on the class level (ICC). Our results show that boys and children with migration background are in need of better support in writing, but do not support the thesis that boys with migration background are even more at risk. Possible implications for teaching are discussed against the backdrop of the strong impact of the class level.

Building a BRIDGE between Orthographic and Phonetic Processing

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Simulations that model the underlying cognitive processes associated with reading development have been influential in basic science but have failed to penetrate applied research and educational practice (Seidenberg, Cooper Borkenhagen, & Kearns, 2020). This is in part due to the relatively little research that has gone into modeling the learning processes associated with knowledge of long words and connected text (Perry, Ziegler, & Zorzi, 2010; Cooper Borkenhagen, 2023). This talk introduces BRIDGE, a computational model of naming printed words. This learning system maps orthographic and phonological representations (of potentially unbounded length) into a unified global embedding through a novel use of cross-attention mechanisms using a contemporary artificial neural network architecture within the connectionist modeling “triangle” paradigm (Seidenberg and McClelland, 1989). The architecture significantly enhances our ability to explore how orthographic and phonological modalities can be combined within a shared representation, especially for longer words. Furthermore, BRIDGE offers the ability to selectively activate different modalities that underlie learning about print (orthography and phonology) offering a unique tool for exploring how different training regimens influence learning to read. Standing at the intersection of cognitive neuroscience and educational technology, this work aims to offer new insights and practical tools for both experimental and classroom settings.

Associations between home literacy environment, executive function and language in early child development

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School readiness research identifies early language and executive function skills as key predictors of later academic success. Interrelated from birth, these skills also support socio-emotional development. We present results from an ongoing study examining the links between the home literacy environment and the development of executive function and language in young children. The sample includes 240 children aged 24-74 months and their families from various regions of Spain. Data on sociodemographic characteristics, home literacy environment, parenting behaviours during storybook reading, early expressive language, and everyday executive functioning were collected via a parent-reported online survey. The results showed an increase in linguistic performance associated with age. Older children had better executive functioning. Children of mothers with higher education presented higher expressive language skills and fewer executive function problems. Additionally, families engaged in literacy practices more frequently as children grew older and as the mother's education level increased. A positive and significant relationship was found between language and executive function, even after controlling for age. The results highlight the significant role of family literacy practices during reading in both linguistic performance and executive functioning. These findings underscore the importance of educating families to promote emergent literacy, thereby optimising children's school readiness.

Dynamic relations between reading comprehension and written composition: A longitudinal study from grade 2 to grade 4

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University of California Irvine

The Interactive Literacy Model (Kim, 2020, 2022) hypothesizes that reading and writing skills are not fixed but rather differ as a function of development and measurement (i.e., the dynamic relations hypothesis). In this study, we explored whether the relation between reading comprehension and written composition varies according to grade levels (a proxy for development) and different dimensions of written composition. To address this, longitudinal data from 165 English-speaking children (49% female) followed from Grade 2 to Grade 4 were used. Children's reading comprehension and written composition were assessed using multiple tasks, with written composition evaluated on overall quality, fluency, and Curriculum-Based Measurement (CBM). Confirmatory factor analyses revealed that reading comprehension exhibited differential relations with writing quality, fluency, and CBM. The strongest relations were observed with writing quality, followed by CBM, while the relation between reading comprehension and writing fluency was relatively weak. Additionally, we observed developmental differences: these relations were strongest in Grade 2. These findings highlight the dynamic interplay between reading comprehension and various dimensions of written composition and underscore the importance of developmental phases in understanding the relation between reading and writing skills.

Profiles of students' socioemotional skills and their association with reading and academic performance in primary school

Ana Camacho¹, Gabriela Silva¹ Patrícia Moreira¹, Cristina Silva¹, Joana Gouveia¹, Joana Cidades¹, Mauro Costa¹, Beatriz Rosado¹, Catarina Grande¹, Diana Alves¹, Teresa Leal¹, & Joana Cadima¹

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Introduction. The role of sociocognitive variables such as executive functions and motivation in reading has been extensively studied, while the connection between socioemotional skills and reading performance has received comparatively less attention. This study – conducted under Schools 2030 program – aims to identify different profiles of students' socioemotional skills and compare reading and academic performance across these profiles. **Method.** A sample of 450 Portuguese fourth graders (Mage= 9.6, DP= 0.7; 48% girls) completed self-report scales assessing empathy, reconciling tensions, and social problem-solving (α = 0.65-0.75, λ -2= 0.75-0.85). They also took a test measuring word decoding and reading comprehension, and their grades in school subjects were collected. **Results.** Hierarchical and k-means cluster analyses revealed two profiles: Profile 1 with students reporting higher levels of empathy, reconciling tensions, and social problem-solving (n= 343, 76%), and Profile 2 with students reporting lower levels across these domains (n= 107, 24%). ANOVAs showed that students in Profile 1 scored higher on the reading test and had better grades than those in Profile 2. **Discussion.** This study supports the positive link between socioemotional skills and both reading ability and academic performance by using a person-centered approach, thus highlighting the importance of a holistic assessment of students' learning outcomes. **References** [1] Connor, C. M. (2016). A Lattice Model of the Development of Reading Comprehension. *Child Development Perspectives*, 10(4), 269-274. <https://doi.org/10.1111/cdep.12200> [2] Yu, L., Yu, J. J., & Tong, X. (2023). Social–Emotional Skills Correlate with Reading Ability among Typically Developing Readers: A Meta-Analysis. *Education Sciences*, 13(2), 220. <https://www.mdpi.com/2227-7102/13/2/220> [3] Sucena, A. & Castro, S. L. (2010).

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Literacy and Adult Education

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Like all fields of knowledge, adult education has developed a set of principles and methodologies concerning adult literacy, its meaning and its various uses. This roundtable brings together four researchers in adult education with the aim of discussing both the theoretical inspiration for literacy and its particular uses in different subfields of adult education. We consider literacy as a set of complex phenomena and social practices that enable adults to become aware of the social world in their contexts and to focus the collective/community on building knowledge that can be used for social change. Literacy is a dynamic pathway that can contribute to improving the quality of adult life across the life course. Literacy within adult education is deeply concerned with social inequalities and seeks to address structural factors that affect adult lives (gender, age, social class, etc.) with unpredictable effects due to their potential intersectionality. Our first speaker will draw on the thought and pedagogy of Paulo Freire to link literacy and citizenship and to establish a basic humanistic approach that is consistent with the following presentations. The remaining three speakers will present their critical comments linking literacy with gender studies, critical gerontology, and community education and development.

The metacognitive training "Through the Glass" for Literacy Education: a best practice for the linguistic re-education of society

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¹ University of Bari Aldo Moro

In his "Manifesto for a new theatre" Pier Paolo Pasolini (1968) proposes the project of a school for the linguistic re-education of society (Gianceselli 2022, 2023, 2024). To achieve this educational goal, we suggest implementing a metacognitive training program named "Through the Glass" (Gianceselli & Bosco 2024; Gianceselli, Bosco, & Pastore 2024). We test the training program during an empirical project which involves 237 young adults (age cluster 15-21). The workshops engage two experimental groups in analyzing theatrical and cinematographic languages, while control group watches an audiovisual rendition of a dramaturgy without metacognitive stimulation. We present the outcomes of the Repeated Measures ANOVA on data collected from pre-intervention (T1) and post-intervention (T2) questionnaires (Bosco 2003; 2024). Specifically, we present results for the factors "Expertise" and "Self-Efficacy," highlighting the impacts of metacognitive training on the ability to analyze, understand, and use poetic-performative languages. This, in turn, enhances reading and writing skills (Rogers & Schaenen 2013; Patrão, Soeiro, & Parreiral 2021), thereby fostering participants' daily life coping strategies.

Literacy Proficiency Among Adults in Flanders: A Decade of Data from PIAAC

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The Programme for the International Assessment of Adult Competencies (PIAAC), coordinated by the OECD, is a comprehensive international survey assessing adults aged 16-65 years. Flanders (Belgium) participated in both the first cycle (2011-2018) and the second cycle (2022-2023), with the latest data available in December 2024. PIAAC features a background questionnaire and a direct assessment. The background questionnaire gathers data on respondents' socio-demographic characteristics, educational backgrounds, and labor market experiences. Following this, respondents undertake a direct literacy assessment, which adapts to their proficiency levels to ensure neither excessively easy nor overly challenging tasks. In Flanders, 3,433 adults completed both the background questionnaire and the direct assessment. This presentation will highlight the results of literacy proficiency among adults in Flanders, examining their distribution across various socio-demographic factors such as age, gender, educational attainment, immigrant status, and family background. Additionally, we will provide an overview of changes in mean proficiency scores and their distributions between the two PIAAC cycles.

Preemptive Interventions for High-efficacy Instruction on Writing

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² Universitat de Barcelona

We present an ongoing RCT where we will examine a novel approach: Preemptive Interventions for High-efficacy Instruction on Writing (PRINT-W), to help prevent the failure of teaching efforts in writing and to reduce the number of children that require specialized instruction. The PRINT-W approach involves taking data-informed, preventative action to avoid whole-class, evidence-based interventions to fail some students. We obtained knowledge on pretest skills that moderated the effect of the target, SRSD writing intervention, implemented in a previous study. According to our data, children with low reading comprehension skills did not make gains in text quality at posttest. To examine the efficacy of PRINT-W, 250 4th and 5th graders with low reading comprehension skills will be the target sample. Children will be randomly assigned to a treatment condition, where they will receive a highly-effective, SRSD writing intervention to plan opinion essays and a preintervention on reading comprehension. Their outcomes will be compared to both active-control conditions and to a business-as-usual control condition. We expect that our innovative preventative approach, which acts beforehand on a moderating skill, should optimize the outcomes of evidence-based practices in writing instruction and minimize the need for at-risk children to receive extracurricular support.

Did you write what I said? Investigating the accuracy of a mainstream speech-to-text system when used by children with reading and writing difficulties

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¹University of Gothenburg

²Linnæus University

It has been suggested that using speech-to-text (STT) to reduce the cognitive demands of spelling could facilitate writing for struggling writers. However, these systems are not flawless; they may "mishear" and create semantic errors. Effectiveness varies across languages and demographics, and STTs are, like other AI systems, trained mostly on typical adult speech/language. We investigated (a) the accuracy of a mainstream STT system in transcribing children's speech, (b) the impact of children's geographical background, gender, age, and linguistic/cognitive skills, and (c) interactions between accuracy and linguistic characteristics of the language produced. 58 children, aged 10-13, with and without reading and writing difficulties, from two geographical areas, dictated 18 predetermined sentences of varying length, structure, and word frequency. Preliminary analyses indicate that the system accurately transcribed over 80% of individual words, but errors throughout sentences resulted in a mean accuracy of only 39% for entire sentences. Neither age, gender, nor geographical background impacted transcription accuracy, while spelling skill, working memory, and naming explained some variation. Linguistic characteristics of words and sentences showed negligible effects, but analyses are ongoing. Our results provide clues to success factors for STT implementation and highlight the need for tailored STT instruction for children with different needs.

Keynote

Kausalai Wijekumar, Texas A&M University

Literacy is a human right – Achieving exceptional success for all children with

Literacy.IO tools

Chair Yusra Ahmed

Dr. Kausalai (Kay) Wijekumar is Houston Endowment Chair, Chancellor's EDGES Fellow, and Director for the Center for Urban School Partnerships at Texas A&M University. She is a passionate advocate for all children and dedicates her research, development, and dissemination efforts to eradicating illiteracy. She has developed web-based intelligent tutoring systems for reading, writing, and science in English and Spanish. She has further developed and integrated teacher professional development systems using the AI and web-based tools. To support the development, deployment, and research about these evidence-based practices in schools, she has secured over 80 million dollars in competitive grant funding from national agencies. Her work has been featured in the What Works Clearinghouse and US News and World Report. Her recent work integrates podcasts for families to encourage reading and writing at home. These podcasts are now available in English, Spanish, and Portuguese. She is a musician, avid gardener, and world traveler.

Symposium

Measuring the Impact of L1 Literacy on Basic L2 Literacy in Adult Migrants in Germany

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This paper investigates the development and assessment of basic literacy skills in adult migrants from an L2 acquisition perspective. Research shows that reading and writing skills in the first (L1) or other previously acquired languages have a strong impact on the development of L2 literacy skills. We report on the development of grapheme-, word and text-level reading and writing skills in the L2 German of about 100 adult participants of German literacy courses. The participants completed a battery of basic literacy assessment instruments, ranging from computerized letter and word recognition, word-level spelling to a more complex reading fluency assessment. Most tasks were administered both in the L2 and in (one of) the participants' L1 (Arabic, Farsi-Dari, Turkish). The results from these assessments and information from a background interview were drawn together using Structural Equation Modelling (SEM). The objective was to gain insight into the impact of L1 literacy and other influencing factors such as L2 receptive vocabulary, L2 word recognition, working memory, exposure and course participation on L2 literacy development. The results emphasize the intricate interplay of these factors in shaping basic L2 literacy skills and highlight the complexities involved in assessing literacy skills in heterogeneous populations.

Literacy development in bilingual contexts

Belma Haznedar

Boğaziçi University

Reading is a complex skill that requires the integration of various linguistic, cognitive, socio-cultural and economic components. It is a necessity to get by in today's modern world and a gateway to learning. Any deficiency in literacy skills will have a life-long impact on an individual's life standards. From this perspective, reading comprises an important dimension of everyone's social life and early diagnosis of problems in language and literacy acquisition is crucial in terms of individual and social well-being. The aim of this talk is to address major components of language and literacy development in bilingual contexts, with special reference to crosslinguistic influence as well as phonological awareness, rapid automatic naming, vocabulary and reading comprehension in a transparent language, Turkish, through different language combinations.

Alternative literacies in classroom discourse: Looking into an urban middle-school classroom in İstanbul

Işıl Erduyan

Boğaziçi University

Students' reception of classroom literacy is affected by a range of alternative forms of literacy, shaped by a network of people at home and outside, and the funds of knowledge they acquire across a range of non-school settings. Research analyzing alternative literacies focused on students coming from multilingual home environments where home literacies are constructed in a non-mainstream schooling language(s). The misfit school vs home literacies might also depend on students' social background and teachers' role in mediating literacy in the classroom. I will analyze an impoverished classroom context in İstanbul where the teacher neglects providing a space for the students to bring their funds of knowledge into the lesson. The dataset (from the project "LAS", <https://www.uni-potsdam.de/de/daf/projekte-1/las-1>) is a compilation of video recordings of thirteen seventh-grade L1 lessons obtained throughout one school year. I engage with the following research questions: a) What kind of funds of knowledge do the students bring to the classroom? b) How does the teacher delimit the ways these funds of knowledge might emerge in classroom discourse? and c) What kind of linguistic practices identify these discourses? I will discuss the findings in light of the role that alternative literacies play in classroom literacy research.

How Can Publishing Literacy Combat Unethical Practices in Publishing?: Insights from a Study of Ukrainian Researchers' Perceptions and Attitudes

Tatyana Yakhontova

Ivan Franko National University of Lviv

Unethical practices in scholarly publishing usually include submitting papers to fraudulent, or predatory, journals which prey on researchers for financial profit and do not follow ethical standards of publishing; inappropriate forms of authorship (e.g., “ghost” authorship); purchasing research papers. Many observations suggest that young researchers who pursue their careers under pressure of the current publish-or-perish research culture can be rather frequently involved into such practices, either consciously or due to a lack of awareness. Therefore, to prevent participation in these practices, it is crucial to reveal what researchers know about them and what measures can be recommended to avoid such practices. This paper reports the results of a survey conducted among Ukrainian graduate students and young researchers. The survey questions focused on various unethical publishing practices to find out whether researchers are aware of them, have participated in them, and how they approach such practices. Although the survey results present a rather mixed picture, it is obvious that Ukrainian researchers need to enhance what might be called “scholarly publishing literacy.” The characteristics of such a type of literacy and the ways of its development in research writing courses are discussed in the presentation.

Linguistic skills related to text reading comprehension in prelingually deaf readers: a systematic review

Marina Olujic¹, Tomislav Radošević¹, Iva Hrastinski¹

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Despite the considerable scientific interest in researching the reading skills of deaf population, most of these studies focus on reading comprehension (RC) at the word or sentence level. Such reading activates include different underlying language processes than text-level reading which defines more real-life reading literacy. The results of 36 studies on different linguistic skills and their correlation/prediction with RC of text in prelingually deaf readers are reviewed, considering age and two language modalities (spoken language and sign language). The studies were systematised and analysed according to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis 2020 (PRISMA; Page et al., 2021). Almost all studies reviewed investigated how lexical and phonological skills in spoken language relate to RC in deaf people, while there is an apparent lack of studies investigating the relationship between morphological and syntactic skills in spoken language and text-based RC in deaf people. The greatest contribution to RC of texts in deaf people is probably vocabulary knowledge and phonological skills in both language modalities and in all age groups, while probably morphological and syntactic skills contribute slightly less to RC of texts.

Revision strategies and its contribution to text quality in upper-primary students

Paula López¹, Olga Arias-Gundín¹, Teresa Limpo²

¹Universidad de León

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Writing a text, according to a specific genre, writing conventions and readers' needs, is a highly complex task. As a result, writers, especially those with less experience, often make mistakes. Revision, therefore, is considered as a critical process in the writing of high-quality texts. However, for revision to be effective, students must be able to detect, diagnose and correct errors through the implementation of effective revision strategies. The present study explores the revision strategies of upper-primary students and its relationship with writing performance. For that, 834 typically developing upper-primary students (grades 4th-6th) wrote a story and were asked to correct six mechanical and six substantive problems included in a narrative text. Students' compositions were rated using anchor texts. To assess revision strategies, the changes made by students were categorised by assigning them to one of the following strategies: edit, add, delete, transform, replace, permute, distribute and consolidate according to previous classifications. The initial analyses showed that the most used strategies were editing and permutation. Additionally, older students used more strategies than younger ones. Finally, adding and permutation were the most important strategies contributing to textual quality regardless of the grade level. Theoretical and educational implications of the results will be discussed.

Written language acquisition in -Arabic-French bilingual children: Impact of metalinguistic skills and vocabulary in the dominant and non-dominant languages

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In the present study, we examine the benefit of bilingualism on children's reading level in Lebanon, a country characterised by diglossia (spoken Arabic at home and Modern Standard Arabic-MSA at school) and multilingualism (learning at school in MSA and French/English). More specifically, we investigated if the metalinguistic skills (phonological abilities, morphological abilities) and the vocabulary level in the non-dominant language (NDL) predict reading and reading comprehension in the dominant language (DL) and vice versa. The participants are Lebanese bilingual Arabic-French students in Grade 4 and Grade 5 who have Arabic as their DL at home and in school and French as their NDL. We evaluated the predictors (phonological abilities, morphological abilities and vocabulary) in addition to their reading level and reading comprehension skills in Modern Standard Arabic and French. The results show that vocabulary in French (NDL) predicts derived word reading in Arabic (DL) beyond Arabic predictors. As for reading measures in French (their NDL), morphological awareness in Arabic predicts non-word reading beyond predictors in French and vocabulary in Arabic predicts speed indicator in text reading beyond predictors in French. In conclusion, this study shows the beneficial impact of bilingualism on children's reading at the end of elementary school.

Dialogic Writing: how to support peer feedback conversations that promote meaningful revisions

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Utrecht University

Preventing students from relying solely on generative AI for their writing requires a shift towards more attentive and interactive teaching methods. In this talk, I argue for dialogic writing as the core of writing instruction, emphasizing meaningful conversations between students and teachers about their texts. Drawing on studies in primary and higher education, I will demonstrate how regular one-on-one and group discussions centered on asking open-ended questions and collaborative reasoning, encourage students to engage deeply with their writing process and think critically about their writing decisions. I will illustrate how teachers can foster these peer dialogues and guide students in using feedback to make meaningful revisions and improve their writing. Reflective practices, such as writing logs and portfolio assignments, further promote self-efficacy and ownership for writing. This dialogic writing approach ensures that each writer maintains control over their work, becoming more aware of both their own and the reader's perspective, and developing a unique writing voice. This is crucial because each writer has something distinctive to express by writing, which cannot be replicated by an automatic text generator.

Considering the Source: Students' Perceptions of Formative Feedback from Peers and Generative AI

Penelope Collins, Albert W. Li

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The importance of formative feedback for writing development is well established (Graham et al., 2023), showing robust effects for undergraduates when provided by instructors ($ES = 0.75$), and peers ($ES = 0.91$; Huisman et al., 2019). Although its feedback may not be as strong as that of well-trained evaluators, generative AI can be useful for students' early drafts (Steiss et al., 2024). In this qualitative study, we examined undergraduate students' perceptions of formative feedback from peers and generative AI. All (39) students in a single, online upper-division writing class were approached and 32 (82%) agreed to participate. Students received feedback from both peers and generative AI while brainstorming an infographic and evaluating the first drafts of their research essays and short opinion essays. Students completed surveys regarding their initial beliefs about writing and generative AI, reflections after using generative AI, and surveys about the feedback they received from peers and generative AI after each assignment. Additional artifacts collected include the feedback students received and drafts of their writing. We will use content analysis to examine the themes and patterns of the types of feedback provided by peers and generative AI, and students' perceptions of the two sources of feedback.

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Developing an Automated Feedback Tool for Student Thesis Introductions: A Data-Driven Approach Leveraging a Language Model

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Students often struggle with focusing on research topics, identifying gaps, and applying rhetorical structures in thesis introductions (Helmanda et al. 2022; Maznun et al. 2017). Automatic writing evaluation tools could diagnose issues and prompt revisions. Despite existing literature and tools, no comprehensive digital tool offers detailed instructions and automated feedback for German Bachelor's and Master's thesis introductions. Such a tool was developed as part of the «Digital Literacy in University Contexts» project. This contribution aims to show how we developed this tool by demonstrating (1) how we used a theory-led (Swales 1990; Weder 2015) inductive analysis to identify key elements in student introductions, transferred this into a code system and applied it to 1,034 Bachelor's and Master's theses from two Swiss universities, (2) how this data (9,032 step-annotated sentences) was used firstly to develop instructions for writing introductions and secondly to develop an automated feedback tool by leveraging a German language model and employing a threshold-based post-processing method to ensure accurate step detection and (3) how accurately the automated feedback recognises the steps compared to human rating.

Implementation and empirical review of students' writing strategy awareness in storytelling

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The findings from NAEP (2012) and DESI (Neumann & Lehmann, 2008) indicate that students hardly make any progress in writing within a school year. Comparative studies increase demand for effective, implementable educational programs, spurring benefit-oriented research (Prenzel, 2012) as educational research faces criticism for limited impact (Gräsel, 2010). Therefore, this study examines the teacher driven implementation of a writing program, involving over 1000 students in primary school. The study explores the effectiveness of genre-specific text strategies in a self-regulated setting and investigates the relationship between strategy awareness and text quality. The results are discussed in the context of transferring scientific findings into practice. Questions: 1) What is the overall effect of the writing program? 2) To what extent do different sub-strategies influence text quality as a whole? Results Growth models were used to calculate the growth in strategy awareness and writing performance. They demonstrate that the intervention is effective for all training groups ($d = .23^{**}-.61^{**}$). Students develop increasing strategy awareness, they use strategies more often, and as a result their writing performance increases. The effectiveness of the test group's strategy use varied between the three different sub-strategies ($d = .12-.32$).

Adaptation of Reading Strategies in Adolescents with ADHD, Deafness, and Autism: An Eye-Tracking Study

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¹ Universidad de Sevilla

Reading comprehension challenges are prevalent among adolescents with ADHD, deafness, and autism, impacting academic performance and daily functioning. This completed two-experiment study examines whether adolescents with ADHD, deafness, and autism adapt their reading strategies to task goals (understanding an initial statement vs. answering a question) and text structure (presence vs. absence of headings) as their typically developing peers do. The experiments were conducted with three distinct populations, resulting in three separate studies including typical readers ($n = 22$) and adolescents with ADHD ($n = 25$), autistic ($n = 22$), and deaf groups ($n = 22$). Participants' eye movements and comprehension outcomes were analysed to assess differences in reading strategy adaptation. The first experiment focused on task goals, measuring how participants adjusted their reading patterns when instructed to comprehend an initial statement compared to when reading to answer a specific question. The second experiment investigated the influence of text structure by comparing reading strategies when headings were present versus absent. Results indicate variability in reading strategies based on both task goals and text structure, with different patterns emerging among adolescents with ADHD, deafness, autism, and their typically developing peers. This paper analyses the role of self-regulated reading in these three groups of atypical readers, contributing to a deeper understanding of cognitive processes underlying reading in these populations and informing tailored educational interventions to support reading comprehension.

A cross-orthographies comparison of spelling strategies in the primary years in French and English

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Learning to spell relies heavily on linguistic skills in the primary years, across a range of alphabetic orthographies. French and English are both morpho-phonemic orthographies that allow for children to build on their linguistic knowledge in their spelling attempts. Whilst spelling analysis has given good insight into the weight these skills may play in learning to spell French and English, spelling processes and strategies have not been explored across these two orthographies. The present study offers a first comparison of the spelling strategies used by children learning to spell French or English throughout the primary years. Ninety-one children were recruited in years 1-6 in mainstream primary schools in France and in the UK and were given to choose between alternative spellings for a word, and to explain their choice. Twelve words were chosen and matched across orthographies for length and complexity. Results suggest phonological strategies are used more frequently by young and English spellers, whilst morphological strategies are used more frequently by older and French spellers. This was despite similar spelling challenges across the orthographies' word lists. In both languages, the use of morphological and orthographic strategies predicted spelling ability, as measured by spelling performance on the same word lists.

Higher Education Opinion Essays Writing

Catarina Araujo¹, Ana Paula Cardoso¹

¹School of Education of Viseu

Writing is a complex, demanding process that requires effort and dedication. It involves various areas such as cognition, language, and motor development. It is a fundamental tool for personal expression, exercising participatory citizenship, and demonstrating the knowledge acquired. However, according to research, basic knowledge about writing a language takes around twelve years to develop. It is, therefore, essential to understand the level of performance of students entering higher education. Poor writers will be disadvantaged in the learning process, so learning strategies to help these students overcome their difficulties is crucial. On the one hand, access to higher education is a different context with different demands in terms of the formalities and textual genres to be produced by students compared to previous levels of education. On the other hand, higher education institutions should be spaces for promoting quality education so that all students can adjust their practices to the characteristics and needs of learners. Considering the above, this project seeks to describe the writing skills of higher education students, with the main focus on 1st-year students, in terms of writing opinion essays. We intend to share the preliminary results of this project about strategies to strengthen students' writing skills.

Symposium

Initiating Educational Empowerment Through In-Person Social-Emotional Learning Experience

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Social-emotional skills are fundamental to personal and academic development, yet their integration into higher education curricula remains insufficient. The Social-Emotional Learning (SEL) Winter School, organized by EdCamp Ukraine NGO, aimed to address this gap with 20 educators from Ukrainian teacher training institutions and universities. Known for its SEL advocacy in secondary education, EdCamp Ukraine launched this as its first effort to address SEL in higher education. These educators train future school teachers who should be able to address social and emotional learning in their classrooms. During the four days of the SEL Winter School, participants discussed and experienced social-emotional skills firsthand. Through immersive, collaborative activities, they were equipped with practical SEL strategies and techniques. This approach allowed participants to internalize SEL principles, with the expectation that they will implement these practices within their institutions. In the context of Ukraine's ongoing challenges, cultivating SEL can significantly contribute to national resilience and progress. The Winter School's initiative to integrate SEL into higher education highlighted the need for educational reforms that prioritize holistic development. By equipping educators with the tools to teach social-emotional skills, the program aimed to create a transformative impact, enhancing Ukraine's educational landscape.

Writing Alone or Writing Together: Exploring Collaborative Writing in Ukrainian Education

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Collaborative writing is a relatively novel concept in Ukraine's educational context, where traditional methods long dominated. The SEL Winter School, organized by EdCamp Ukraine NGO, introduced university teachers to the practice of collaborative writing, marking a significant departure from conventional approaches. Historically, the Soviet legacy in Ukrainian education neglected writing, often stifling creativity and critical thinking. The Winter School's program, which ran from March 4 to June 10, involved twenty participants working in five microgroups to develop educational programs collaboratively. This presentation will feature five educators who led these microgroups, sharing their experiences and insights from guiding their teams in preparing curricula based on the SEL approach. The program highlighted both the benefits and challenges of collaborative writing, such as navigating standardized vocabulary and fostering creative freedom. Despite initial unfamiliarity, participants recognized the value of collaborative efforts in enhancing writing quality and fostering a more dynamic learning environment. The presenters will discuss how collaborative writing within the SEL framework can transform teaching methods and contribute to educational reform, emphasizing the importance of creativity and critical thinking in curriculum development.

Collaborative Development of SEL Curricula: Insights from the Writing Group Participants at the SEL Winter School in Ukraine

Halyna Kaluzhna¹, Inna Leontieva², Oksana Voloshyna³, Maryna Davydiuk³

¹EdCamp Ukraine NGO

²Borys Grinchenko Kyiv Metropolitan University

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This presentation examines the collaborative journey of a writing group at the SEL Winter School, organized by EdCamp Ukraine. Twenty university teachers participated in the program, where they were divided into five peer groups, each tasked with developing SEL-focused curricula. The program aimed to address gaps in the traditional education system, which focused heavily on academic achievements while neglecting explicit writing education and social-emotional learning. The presentation focuses on one microgroup interaction. The group sessions concentrated on developing social-emotional curricula through collaborative writing and fostered creativity, team building, time management, and cognitive flexibility. Despite the tension between structured tasks and spontaneous discussions, reflective practices and idea generation became integral parts of their collaboration. The presentation highlights challenges ranging from war-related disruptions to managing busy schedules and the complexities of collaborative writing. Strong connections that formed within the group led to ongoing professional collaboration and joint projects. Not only did this effort enrich participants' professional capabilities, but it also strengthened national resilience by advocating for education reforms that emphasize the integration of SEL principles into curricula.

The Intersection of AI, Writing, and Social-Emotional Learning

Halyna Kaluzhna

EdCamp Ukraine

The advent of artificial intelligence (AI) presents both opportunities and challenges in education, particularly in the teaching of writing. As AI takes on many tasks more efficiently than humans, the importance of social-emotional skills becomes increasingly critical. These skills help individuals navigate AI integration, leveraging its benefits while mitigating its risks. This presentation is a reflective exploration based on conversations during the SEL Winter School, organized by EdCamp Ukraine. The School brought together 20 university teachers to collaboratively develop SEL educational programs. Insights from these conversations indicate that AI is fundamentally altering the way we write and the writing process itself, presenting challenges for educators and students alike. The discussions also revealed diverse perspectives on AI and its impact on writing. They further focused on how SEL can help us view writing as a collaborative and evolving process, inspired by Kenneth Burke's metaphor of an unending conversation, which also underscores the value of maintaining academic integrity. By reflecting on these discussions, the presentation aims to provide insights into how SEL can support the ethical integration of AI in education. This exploration underscores the need for balanced approaches to technology in education, ensuring AI's benefits are maximized while its risks are mitigated.

Improving Transcription Skills: Digital Baseline Measurements of Handwriting and Spelling in Single Case Studies

Sibylle Hurschler Lichtsteiner

University of Teacher Education Lucerne

Spelling and handwriting are different yet related processes of basic writing skills. Their early automatization supports writing fluency and relieves the working memory when writing. Although additional problems in handwriting are often observed in children with spelling difficulties, the causes and directions of effects must be clarified. To support the development of writing skills, careful diagnostics are advisable. In our single-case study we developed customised interventions for twelve third to sixth graders showing combined handwriting and spelling problems, applying a standardized spelling test, a digital handwriting analysis and an observation procedure for handwriting as pre- and post-test. In addition, we developed baseline measurements using the alphabet task and word dictation on a digitizer. As they are short and simultaneously provide data on the development of handwriting and spelling, they represent a minimal burden for the participating children, but are beneficial for the evaluation. They not only provide insights into the course of an intervention, but also enable the early identification of children who do not respond to the intervention and require more intensive observation and better customised treatment. In our presentation we will present experiences using real-time videos and measurement data.

Structured spelling curriculum in primary school

Masarrat Khan

Maharashtra Dyslexia Association, India

In many classrooms spelling instruction is treated as an afterthought to or as a byproduct of reading. The assumption is that if students learn to read, they learn to spell. Frequently, it is confined to irrelevant spelling exercises or relegated to the memorisation of word lists with little or no instruction. Spelling is a complex process that needs to be taught explicitly. Unlike popular belief, the English spelling system is not crazy, funny, illogical, chaotic or unpredictable. Many students struggle with spelling and, consequently, with reading or writing because some don't get appropriate spelling instruction soon enough, and many are not exposed to a good spelling curriculum in primary school. Spelling serves as a foundation for reading and provides a means of communication. Even though not right or fair, undeniably, it is used by society to judge one's level of literacy and intelligence. Also, spelling is not merely a decorative element of the writing process, but a building block. Thus, neglecting spelling can lead to social, educational, and personal consequences. Further, poorly developed spelling can affect the higher-level literacy processes in which it is embedded. The importance of a structured spelling curriculum, will be highlighted through a power point presentation and classroom videos.

Effect of the “Word Processing and Typing Instructional Program” (WoTIP) in enhancing fourth grade students’ composition performance

Nagham Gahshan-Haddad¹, Naomi Weintraub¹

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Frequently, students are expected to perform written assignments using computers. However, often they are not systematically taught basic computer skills to support writing (e.g., typing and word-processing [WP]), which may affect their automaticity, and consequently their composition performance. To address this problem, we developed the Word Processing and Typing Instructional Program (WoTIP), which draws upon motor learning and self-regulation principles, and is integrated in a language arts class. This study examined the effectiveness of the WoTIP in improving Grade 4 students' typing, WP, and composition performance, through a quasi-experimental case-control design. Two Israeli schools were randomly assigned to the WoTIP (n=27) or control (no-computer-instruction; n=23) groups. Students were tested before (pretest) and 3 mo. after (long-term) the program, measuring typing speed, WP skills, and composition performance. Findings showed that at the long-term, the WoTIP group significantly outperformed the controls in typing speed and WP skills. There was also a significant time-group interaction effect for composition performance - the WoTIP group significantly improved, while the controls showed no improvement. The distinct components of the WoTIP; following motor-learning and self-regulation principles and delivery within the language arts curriculum, are likely contributors to its success.

A Review of Qualitative Studies on Secondary Writing Instruction from 1963 to 2023

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This study shares the research approach and initial findings from a systematic review of qualitative research in teaching secondary writing from the last 60 years. In collaboration with content experts and a research librarian, the research team created a keyword search based on our research questions, systematically searched the single most comprehensive library search tool, and identified results published from 1963-2023 using a three-part search strategy. We developed screening inclusion criteria and a process for reaching interrater agreement. Our keyword search yielded 1500 studies. As of the writing of this proposal, of these, 22% meet our inclusion criteria. All the publications that met our inclusion criteria are in the process of being coded analytically - which will facilitate our literature review and final write-up. This project contributes to qualitative writing studies by sharing approaches and methodological issues connected to constructing a historical corpus. This presentation focuses on our methodological approach and provides a descriptive overview of the content types and geographical scope of our findings. We offer insights and welcome questions into best practices for conducting systematic literature reviews and partnering with research librarians to address discoverability issues such as the critical importance of keyword and abstract decisions.

Eye-tracking in Reading Research: A Systematic Review of Studies with Children of Varying Reading Ability

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Eye-tracking methods have become a valuable tool for reading research, as they provide significant evidence on the behavioral and cognitive performance of developing readers. They also help identify reading behavior patterns among children with neurodevelopmental conditions such as reading difficulties (RD) or attention deficit hyperactivity disorder (ADHD). We reviewed relevant literature (73 empirical studies) from the past 15 years (2008-2023) and documented how reading performance was measured through eye-tracking methodology among typical and atypical readers across various languages. To ensure a rigorous and transparent review, we adhered to the PRISMA framework and defined keywords, established criteria for inclusion and exclusion, conducted data extraction, and employed a multi-phase selection process. We focused on research samples, stimuli designs, independent variables, eye-tracking systems, and metrics. The results indicated that research involving typically developing children mainly included participants from primary school and employed various eye-tracking methods, with English being the most studied language. Studies on children with RDs varied significantly in participants' sample sizes, languages, and experimental designs. Summarizing the findings, the discussion highlights the need for standardized data collection procedures to improve the reliability and comparability of findings, which will contribute to the development of effective interventions and instructional methods for reading difficulties.

Effectiveness of an RTI-based digital tool to promote early writing competence

María Arrimada¹, Carmen Álvarez-Moreno¹, Raquel Fidalgo¹, Mark Torrance², Sara

Real¹, Paula López¹

¹Universidad de León

²Nottingham Trent University

Early writing failure, when undetected, is likely to scale into a more permanent writing deficit. This study explores the efficacy of a digital Response-to-intervention-based tool to improve writing performance and to prevent writing disabilities from early educational stages. The 504 first-grade participants were randomly allocated to an experimental (n = 289) or a control group (n = 215). Students in the experimental group received tier 1 instruction in spelling, handwriting and planning through an instructional software, varying the order in which writing processes were addressed. Students in the control condition received business-as-usual instruction. After 3 months of tier 1 instruction, 56 students were identified as at risk of writing disabilities. During the following 6 weeks, their performance was supported through additional tier 2 small-group instruction using the same digital tool. Tier 2 adopted different forms according to each student's writing deficits. Writing performance and other literacy-related skills were formally assessed at 6 time points throughout the school year. Students' writing progress was monitored through bi-weekly probe tasks. Data is currently being analysed. Effects of the digital tool on students' writing skills and its efficacy to support students at risk, will be presented and discussed at the conference. This work is part of a project funded by MCIN/AEI/10.13039/501100011033 and the UE "NextGenerationEU"/PRTR" (ref: TED2021-132647B-I00).

The Influence of Kindergarten Transcription, Oral Language, and Executive Functions on Second-Grade Writing as a Function of Text Genres in Spanish Children

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Early literacy development is crucial for academic success, and understanding the foundational skills that contribute to writing proficiency is essential. According to the not-so-simple view of writing, effective writing requires transcription skills, oral language abilities, and executive functions. This study examines the impact of these early skills on Spanish children's writing, comparing their effects on two different text genres in second-grade students. Specifically, we explore how transcription skills, oral language proficiency, and executive functions in kindergarten influence the productivity, quality, and syntactic complexity of these texts. We employed structural equation modeling (SEM) to analyze each writing dimension separately. Three SEMs were conducted for each text: one for productivity, another for quality, and a third for syntactic complexity. In all models, transcription skills, oral language proficiency, and executive functions served as exogenous variables. The sample comprised 177 students. Our study aims to explore how transcription skills, oral language abilities, and executive functions assessed in kindergarten influence narrative and information text writing in second grade. Initial findings suggest significant impacts on writing outcomes, providing valuable insights into foundational skills crucial for writing development. This research informs educational practices and early literacy interventions, emphasizing the importance of early assessment for enhancing writing proficiency.

P1: Empowering Teachers' Competence: Implementing Lesson Study to Enhance Reading Instruction and Promotion in Prevocational Education

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¹Ghent University

Students in Flanders' prevocational education frequently encounter challenges with reading comprehension and a lack of motivation. Both are, however, crucial in contemporary society. Consequently, equipping teachers with effective instructional approaches to foster reading comprehension and motivation is imperative. In this respect, the present study addresses the potential of a Lesson Study cycle in view of fostering teacher professional development. Lesson Study, a collaborative professional development approach (Dudley, 2015), emphasizes reflective practice, focusing on enhancing students' learning (i.e. reading comprehension). Although extensively studied in subjects of mathematics and sciences, its application in reading education remains limited in current practices. The present study meticulously outlines the implementation of a Lesson Study cycle involving 7th and 8th-grade Dutch teachers and staff across 4 prevocational schools in Flanders. It assesses participants' dispositions — encompassing knowledge and affect-motivation (Blömeke et al., 2015)— towards reading comprehension, reading comprehension instruction, reading motivation, and reading motivation promotion. A multiple case study approach is used as method. The specific Lesson Study approach, and the results of the cases will be presented in the poster presentation and implications for practice will be discussed.

P2: Enhancing Emergent Literacy Skills through Prosodic Training: A Pilot Study

Marisa Filipe, Tânia Carneiro, Sónia Frota

Center of Linguistics, University of Lisbon, Portugal

The critical role of prosody in reading development underscores the importance of studying prosodic interventions. Prosody enhances reading fluency and contributes to comprehension. This pilot study examines the effects of prosodic training on emergent literacy skills. Twenty-three children aged 5-6 were randomly assigned to two groups: one receiving training in oral language and phonological awareness and the other in oral language and prosody (both groups received eight sessions of oral language training). The training consisted of 17 weekly 45-minute sessions conducted in groups of 5 to 6 children. The phonological awareness group engaged in activities such as syllable segmentation and rhyming games. The prosody group participated in exercises emphasizing formal properties (auditory discrimination, vocal skills) and functional aspects (e.g., communication turns, emotional intonation, emphasis on key expressions). Pre- and post-intervention assessments included measures of receptive and expressive language, rapid naming, vocabulary, and phonological awareness. Both groups showed significant improvements; however, the differences were not statistically significant, indicating that both types of training were similarly effective in enhancing the assessed skills. This underlines the potential of both approaches in early literacy programs. Further research with larger sample sizes is necessary to explore the possible benefits of prosodic training in literacy development.

P3: Enhancing Early Literacy: Teacher Insights on Kindergarten Skill Development

Fien De Smedt

Ghent University

Early stimulation of children's literacy skills is crucial, beginning in kindergarten. To effectively support young children's literacy development, kindergarten teachers need comprehensive insights into literacy progression. Additionally, they must recognize and address the significant variability within their classrooms, such as the presence of multilingual students, and tailor their instruction accordingly. This study involved 73 kindergarten teachers who completed a questionnaire regarding their students' language development. Teachers assessed the extent to which children in their class demonstrated specific literacy skills (e.g., using complex sentence constructions, rhyming, predicting story outcomes) and reported on the variability of these skills among the children in their classes. The findings highlight the importance of differentiated instruction to accommodate diverse literacy development needs in early education settings.

P4: The role of oral language at the beginning of the teaching of writing from teachers' perspective

Díaz-Tejedor, Álvarez-Moreno, Arias-Gundín

Universidad de León

The present study focuses on oral language skills, which are essential for writing texts, since ideas and thoughts must be encoded in oral language before being transcribed into written texts; specifically, oral language skills that affect writing include the appropriate and effective use of vocabulary and sentence construction. Two aims have been established for this study: i) to analyze teachers' beliefs about the influence of oral language on writing acquisition; and ii) to analyze instructional practices that are explicitly and deliberately applied to improve writing by working on oral language. For this purpose, an interview was designed with questions related to the following aspects: time dedicated to writing, handwriting, spelling, planning, and oral language. The study involved 23 1st grade primary school teachers from 12 different schools. The interview was conducted at two points during the school year, January-February and May-June. Once the interviews were transcribed, the MAXQDA tool was used for the analysis, using a comprehensive and mutually exclusive category system developed Ad Hoc. The study is ongoing, so the results and conclusions will be discussed at the conference. However, teachers are expected to point to a strong relationship between oral language and writing, but they may not engage in many oral language-based activities with the aim of improving writing.

P5: Does instructing in oral language improve writing in early childhood and primary education?

Díaz-Tejedor, Álvarez-Moreno, Arias-Gundín

Universidad de León

Written competence is closely related to learners' oral competence, as the generation of written texts involves prior ideation in oral language (Kim & Schatschneider, 2017). This study aims to identify the most effective instructional practices to improve oral competence and those which have the greatest impact on the acquisition of written competence. A meta-analysis was conducted following PRISMA guidelines. The search was carried out in two databases (Web of Science and Scopus) with writing and oral language as keyword, applying the following inclusion criteria, from which the final sample was selected: a) Publication date between 2019 and 2024; b) Written in English or Spanish; c) Full text; d) Instructional study. On the other hand, the exclusion criteria were as follows: a) Sample at an educational stage higher than 3rd grade (9 years); b) Students with special educational needs; c) Instruction in a second language. The final sample comprised 11 studies. Effect size analyses of instruction in each study were conducted using the SPSS 29.0 tool. Results will be presented and discussed at the conference.

P6: Assessing general vs. task-specific writing motivation in beginning writers

Sousa, Alves, Kalchhauser, Silva, Gouveia, Camacho

Faculdade de Psicologia e Ciências da Educação da Universidade do Porto

In this cross-sectional study we sampled 177 Portuguese first-graders ($M_{age} = 6.47$, $DP = 0.5$; 51% female) to answer two questions: Are there gender differences in beginning writers' motivation?; Is task-specific writing motivation more strongly associated with performance across writing tasks than general writing motivation?. To answer these questions, we measured students' general writing motivation (e.g., "How much do you like writing?"), task-specific writing motivation (e.g., "How much do you think you will like this task?"), handwriting fluency, spelling accuracy, length and quality of dictated stories. Girls reported more writing motivation in the alphabet and word dictation tasks than boys ($ps < .05$), despite not presenting superior performance. Girls outperformed boys ($p = .016$) in the dictated story, plausibly due to stronger verbal language skills. No motivational differences emerged in this task ($p > .05$), possibly due to its novelty and collaborative nature. Furthermore, results indicated that general writing motivation items were not associated with writing tasks ($ps > .05$), while task-specific motivation items were associated with the length of dictated stories as well as copy task performance (rs between 0.17 and 0.24, $ps < .05$). Therefore, task-specific writing motivation questions seem more appropriate to assess beginning writers' motivation.

P7: Effect of daily choral singing and creative writing on literacy-related language skills development in young children

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The literature on the effects of music training on children's literacy-related language skills has grown considerably in recent years (Gordon et al., 2015). To our knowledge, very few studies have looked at the effects of singing alone. However, one hypothesis would be that the processing of spoken and sung words involves interactive processes and common brain regions, so singing training could improve language development, particularly phonological awareness, as well as the general cognitive abilities involved in language. However, most of these studies have used a cross-sectional approach, and correlation is not causation. We therefore set up a 4-year longitudinal study in which we compared the cognitive performance of children participating in daily choral singing activities, or in creative writing workshops (which could be considered as a more direct literacy training), or not participating in any specific activity (passive control group). The children were tested at the beginning and end of each year on a series of skills such as phonological awareness, verbal fluency, oral and written language. The results show that the progression between pre and post measures in several tests of language abilities is greater for the active groups, but not in the same tests.

P8: Primary Teachers Classroom Writing Practices (2015-2025)

Catarina Araujo, Faria, Martins

School of Education of Viseu

Institute of Education, University of Minho

Over the last ten years, with the diversification of contexts, formats (multimodal writing), and resources used for writing (e.g., technologies), new and different challenges have arisen for the mobilization of pedagogical practices for teaching writing by primary teachers. We intend to share the differences in results relating to writing practices in the classroom with primary school pupils. To do this, we re-applied a questionnaire on writing teaching practices in the classroom to ten primary school teachers (Portugal) ten years after the first application and compared the results obtained. It would be helpful to reflect on and discuss this data in writing with the community of researchers and teachers.

P9: Reading comprehension of non-fiction texts: An intervention programme in primary school

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Many students, despite being able to decode written texts, reveal difficulties in understanding non-fiction texts which are widely used as a means of learning the different subjects of the school curriculum. Given this difficulty, our aim was to develop and evaluate the effectiveness of an intervention programme with the purpose of developing students' comprehension of these texts. The participants were 103 4th grade pupils from 6 classrooms in Portuguese public primary schools. Three teachers agreed to implement the programme (53 students - intervention group) and 3 teachers performed normal curriculum tasks (50 students – comparison group). We designed an interdisciplinary programme (30 sessions) for which we selected texts with different structures: descriptive, sequential, comparative, problem-solution and cause-effect. Several strategies were used as creating schemes, eliciting prior knowledge, identifying new vocabulary, monitoring comprehension, determining main ideas, and writing keywords. Students were assessed in reading comprehension before and after the programme. The results showed students in the intervention group evolved more in reading comprehension of non-fiction texts than those in the comparison group. These results show the relevance of explicitly teaching strategies to enhance reading comprehension of non-fiction texts. At the end of the study this programme was made available to all teachers.

P10: A Study on Determining the Fluent Handwriting Skills of Primary School Children (Age 7-10): An Example of Türkiye

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Handwriting is still the predominant form of writing taught in most countries (Alves et al., 2018). Also in Türkiye, it is taught and used in formal education but most of the studies conducted neglect handwriting fluency skills and do not use real-time tools for assessments of writing. There is a need for findings specific to writing systems with rich agglutinative morphology, such as Turkish. This study focuses on the fluent handwriting skills of primary school children and real-time writing measurement methods. Therefore, a Turkish Battery of Writing Skills (TWBS) for primary graders will be improved and applied to measure students' handwriting, spelling, and composing skills based on Graham's WWC model (2018). The study was designed as a cross-sectional study to provide prevalence estimates of Turkish population. The sample was determined based on the most updated study on the socio-economic levels in the Türkiye (Ministry of Industry and Technology, 2022). The sample group is planned to be 1080 students and consist of 36 classes selected from 2nd, 3rd, and 4th grades of village and city schools. Students will write their compositions using smartpens. Compositions will be analyzed with Handspy and the collected time-stamped numerical data will be analyzed using the Jamovi. Findings from this study are important to define, evaluate, and teach fluent handwriting skills.

P11: Cultural and Social Considerations for the Writing Literacy of 13-14-year-old Pupils

Nina Gerdzhikova

University of Plovdiv, Bulgaria

The sociocultural approach to acquiring knowledge and skills considers the interaction between the external environment and the student's aptitudes as a prerequisite for his progress in learning. This basic idea makes tracking students' attitudes within intercultural learning possible. The report will present a qualitative analysis of seven essays by sixth- and seventh-grade students in Bulgarian general education schools. The essay topic provokes students' thinking by guiding them to justify moral choices. The essays will be analyzed in the light of L. Vygotsky's theory of the internalization of knowledge. On this basis, the peculiarities of the thinking of 13-14-year-old students and their writing skills will be highlighted. In this sense, the report aims to assess the different socio-cultural positions of the students. The verbal means by which students present their moral positions will be analyzed and evaluated in terms of "for" and "against" prejudices about friendship with "others than myself." The examination of this small sample of essays will be guided by the question: how do students present their identity as bearers of 'good' - through action or as claiming 'power' over the weaker? This will be established through text analysis.

P12: The Role of Pitch in Statistical Learning in Children with and without Developmental Dyslexia: Neural Evidence

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Reading is a complex ability that requires multiple cognitive skills to be implemented successfully. Deficits in rapid temporal processing and the formation of stable phonological representations are widely accepted as linked to reading difficulties, such as Developmental Dyslexia (DD). Recent studies also suggest that the capacity to extract statistical regularities from the sensory input, such as the probability of a given syllable to be followed by another syllable in speech (Transitional Probability [TP]); might also be impaired in DD. Studies combining these two lines of research are however scarce. Here we resorted to an artificial learning paradigm to ascertain how children with and without DD exploit different cues to word segmentation (TPs and pitch changes). To that purpose children with DD and age-matched controls were exposed to speech streams made of four nonsense trisyllabic “words” presented in three experimental conditions: a baseline condition where only TPs were provided for word segmentation; and two other conditions where the pitch of the middle or the last syllable (fixed condition) and the pitch of the middle and the last syllable (variable condition) of the triplets were enhanced. Results showed that children with DD and age-matched controls rely on different cues for word segmentation

P13: A large-scale evaluation of handwriting and typing skills in French 3rd to 8th graders

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Handwriting stands as one of the most sophisticated movements in the human motor repertoire, and students need to train intensively before reaching automatization during adolescence. It is also indispensable to children's academic training and intricately intertwined with other cognitive processes during learning. However, there is a very limited understanding of individual differences in the acquisition of handwriting. Besides, typing is becoming more and more prevalent among children and no study has yet tested if intensive typing practice interferes with handwriting acquisition. We will present the project of a large-scale evaluation of graphomotor skills, typing skills and spelling performance in 3rd to 8th grade French students. This evaluation will aim to identify the factors that predict difficulties, and elucidate the relationships between handwriting and typing acquisition. Among the predictors, we will focus on the effect of grade, demographic, socio-economic and linguistic profiles of the students. Linguistic profiles will include bi- or multilingualism as well and bi- or multiscryptuality, i.e. the ability to write in two or more scripts. Recent data from our group suggests that in adults, biscryptuality is beneficial to graphomotor coordination. We will test if this advantage extends to the acquisition period.

P14: Impact of a self-assessment program on teacher's reflection about teaching writing: an exploratory study

María Benétiez Bayón

Universidad de León

Within the framework of a broader study aiming to test the effect of a teachers' training program focused on self-assessment on the learning and instruction of writing, a partial study was carried out in order to explore its impact on the quality of the reports of two Early Childhood teachers. Firstly, both teachers were asked to implement a writing session and then to write a report describing their teaching practice. Next, teachers were informed about their practice and reflection during a formative interview, after which they implemented a second writing session and wrote a second report. Reports written before and after the whole process of self-assessment were analyzed to find if there were differences about the effective practices reported. The results of the analysis showed that reports written after self-assessment included more effective practices than the previous ones, which suggests a potential positive effect of the program on the teaching of writing because it improves the degree of awareness of the quality of their performance.

P15: Impact of the Covid-19 Pandemic on Reading Comprehension Skills in Brazilian Children

Salles, Koltermann, Borges, Silva, Piccolo, Silva

Universidade Federal do Rio Grande do Sul

Understanding the impact of the Covid-19 pandemic on reading performance among Brazilian children is a primary objective of the national agenda nowadays. Our study aimed to investigate these effects specifically on the reading comprehension of Brazilian children in 4th ($n = 108$) and 5th/6th grades ($n = 269$). A total of 377 children (Mage 10.40; SD = 0.96) participated in the study. We employed Mixed ANOVAs, examining the effects of school grade and time: Pre ($n = 108$) vs Post-Covid-19 ($n = 269$). Our findings revealed no significant interaction between these factors; however, clear effects attributable to Covid-19 pandemics were observed. Post-Covid-19, children exhibited poorer reading comprehension performance compared to pre-Covid-19, particularly evident in inferential comprehension questions. Additionally, the total number of clauses in their narratives was significantly lower post-Covid-19 than pre-Covid-19. These results underscore the significant impact of the Covid-19 pandemic on children's reading comprehension abilities. We emphasize the need for ongoing research to explore potential long-term effects and best strategies to mitigate these deficits within the educational framework.

P16: Analysis of the Family Writing Environment for Primary School Students through Focus Groups of Parents

Robledo

University of León (Spain)

The research aim was to describe the home literacy environment related to writing in families of Primary Education students, analyzing the writing practices and family support carried out in homes, their implementation procedures, the reasons or motives justifying their application, the difficulties encountered, and the strategies to overcome them, based on focus groups with parents. To this end, semi-structured interviews were conducted in three focus groups with 31 parents of students from the first, second, and third cycles Primary Education (6-12 students yeras old). Qualitative results are presented through the development of different categorization systems for the analyzed variables, allowing for the description of the home writing environment of Primary Education students. Additionally, quantitative results indicate that the most frequent practices are those oriented towards content and transcription skills, while parental support include graphophonemic support, verbal assistance, and reinforcement, among others. Regarding who performs the practices, it is generally the children who carry out the activities individually and seek help from their parents when needed. As students progress through Primary Education, home writing practices tend to decrease, becoming limited to academic tasks requested by teachers. Furthermore, it is highlighted that families are motivated to foster essential writing skills in their children and to prepare them for future academic and professional challenges.

P17: From Concept to Classroom: EFADIL's Differentiated Digital Materials

Feyertag, Paleczek, Stabler

Private University College of Teacher Education Augustinum Graz

Universität of Graz

Reading comprehension abilities vary significantly in primary school classrooms (Seifert et al., 2022) (Seifert et al., 2022). To foster reading comprehension in inclusive classrooms and support knowledge acquisition, differentiated materials have proven effective (Pozas et al., 2020). Digital tools can facilitate implementation, organization, and motivate students (Mertens et al., 2022). In the project EFADIL, we developed differentiated digital lesson materials, varying specific in aspects (reading strategies, glossary words, audio files) within three groups (approximately 230 students per group). These materials will be implemented in Austrian Grade 3 classrooms (11/2024 to 02/2025). Our study aims to analyze the implementation of digital learning environments in inclusive classrooms and evaluate their potential to enhance students' reading comprehension and knowledge acquisition. We will assess students' reading comprehension before and after 20 lessons with the materials, comparing development between the three groups and a control group. Additionally, two lessons will be observed, screen casts will be obtained, and students' knowledge assessed before and after the lessons. We will conduct interviews with teachers and students for deeper insights. The poster will present the differentiated materials in the digital learning environment used, the research design, and initial insights from one of the lessons.

Mertens, C., Quenzer-Alfred, C., Kamin, A.-M., Homrighausen, T., Niermeier, T., & Mays, D. (2022). Empirischer Forschungsstand zu digitalen Medien im Schulunterricht in inklusiven und sonderpädagogischen Kontexten. Eine systematische Übersichtsarbeit. *Empirische Sonderpädagogik*, 14(1), 26–46. <https://doi.org/10.25656/01:25529>

Pozas, M., Letzel, V., & Schneider, C. (2020). Teachers and differentiated instruction: Exploring differentiation practices to address student diversity. *Journal of Research in Special Educational Needs*, 20(3), 217–230. <https://doi.org/10.1111/1471-3802.12481>

Seifert, S., Paleczek, L., & Gasteiger-Klicpera, B. (2022). Diagnostik und Differenzierung im

Leseunterricht: Bd. (4) (51; Nummer 51, S. 683–695). Universität Regensburg.

<https://doi.org/10.5283/epub.53383>

P18: Orthographic knowledge in bilingual children

Lukas Hauser

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With migration being a common phenomenon nowadays, children are often exposed to different sources of orthographic patterns when learning to read in two languages. The purpose of this study is therefore to investigate how orthographic knowledge (regularities and consistencies of a writing system) is organized in bilingual elementary school children. Orthographic knowledge is assessed in 80 bilingual and 80 monolingual children via a forced-choice target detection task. Participants are asked to indicate whether a presented bigram does or does not contain a target letter. Bigram frequencies are orthogonally manipulated, resulting in four conditions: High-frequency in both languages, high-frequency in one language and low-frequency in the other, and low-frequency in both languages. Response times and accuracy are recorded. Additional measures include spelling and reading fluency. We expect a frequency effect in processing speed: High-frequency will be processed faster than low-frequency – in all participants. However, we also expect this effect to be qualified by bilingualism: Conflicting frequencies between languages will cause interference. Our findings will yield insights into how orthographic representations are stored, which, in turn, can prove helpful in designing materials for reading instruction in bilingual settings.

P19: The development of literacies in school curricula: The case of the foreign language curriculum in upper secondary education in Greece

Maria Melina Laina

National Exams Organization

This paper approaches the learner-centred aspect of Foreign Languages Curriculum in Upper Secondary Education in Greece in the framework of developing literacies. The Curriculum emphasises the enrichment of learning process through teaching scenarios, designed and adapted to the educational needs of each case, as well as innovative teaching methods and techniques, which aim at the development of multiple competencies and literacies in an open, supportive learning environment that promotes experiential, exploratory learning, problem-solving and knowledge transformation, where foreign languages are, in fact, a means of literacies' development. The Curriculum incorporates the communication competence indicators in the foreign language, as described by the Common European Framework of Reference for Languages, and the digital literacy competency indicators of the Council of Europe. It also fosters soft skills for the 21st century, where soft skills coexist with social, educational, aesthetic, cultural and intercultural literacy principles. The Curriculum is in line with modern pedagogical and educational approaches, as presented by the Communicative Approach combining constructivism, and connectivism in learning practice. The paper presents structure and philosophy of the Curriculum through the prism of comparative examples of teaching scenarios focusing on the development of literacies in foreign language teaching in upper secondary education in Greece.

P20: Evaluation of a 5-part training series on the implementation of digital tools in individualized reading lessons at primary level

Elisabeth Herunter¹, Susanne Seifert²

¹ University of Graz

²University College of Teacher Education Styria

In Austrian classrooms, there is a high degree of heterogeneity in terms of children's reading comprehension skills. Digital tools could support various areas of reading didactics, relieve the workload on teachers and enable lessons to be as student-centered as possible. Currently, the potential of digital media in primary education is not being exploited especially regarding the meta-disciplinary individualization possibilities. The poster presents the content and tools of the training series for teachers (N = 35), which will be held in a hybrid format at the University College of Teacher Education Styria in the winter semester 2024/25. Initial results of the supervised evaluation in mixed-methods design are presented. The following research questions will be answered: 1) Which parts of the training series made a particular contribution to the use of digital tools for the individual teachers? 2) Which tools and applications for the primary level could be used individually and are didactically useful in reading lessons? 3) Do teachers and students experience added value from digital tools? The results will show us, on the one hand, how teacher training should be adapted to today's digital classrooms and, on the other hand, which digital tools can be used in a didactically meaningful way to individually support pupils in reading lessons.

P21: Evaluation of Composition in Writing from the Perspective of a Counselling Psychologist

Kucerova, Kucharská, Jindrová, Laufková, Barteková

Faculty of Education Charles University

In the Czech counselling system, there is a complete lack of a testing tool that assesses the quality of the independent written composition process. The presented poster will focus on introducing a test battery and an evaluation system for the process and outcome of writing composition. Additionally, we will present the results of the first study, which overview the composition skills of students in the 3rd to 5th grades of Czech elementary schools.

P22: Behind a great text, there will be a great picture: A systematic review.

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This systematic review investigates the effectiveness of different types of visual supports on reading comprehension in people with typical development and with reading difficulties, covering studies from 2010 to 2023. A total of 39 studies were included, evaluating various types of visual aids (images, pictorial diagrams, photographs, pictograms, graphic novels, and charts). The results indicate that images and pictorial diagrams are the most effective in enhancing reading comprehension, particularly in expository and narrative texts. Although useful, photographs showed mixed results, while pictograms and charts showed lower effectiveness. Combining texts with explicit instructions and visual aids significantly improves reading comprehension. This combination is especially beneficial for school-aged children and individuals with reading difficulties, such as dyslexia and aphasia. The findings suggest that visual supports not only facilitate the comprehension of complex concepts, but also increase readers' motivation and engagement. However, more research is needed to better understand the impact of different types of visual aids and their effectiveness in various educational contexts. This review highlights the importance of effectively integrating visual aids with texts to maximise their educational impact and the need for additional studies to explore the use of engaging visual formats in education.

P23: Integrating Ideas: Building the Empirical Foundation of Writing Development and Source Integration in Writing

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¹University of California, Santa Barbara

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Our poster presents a mixed methods study aimed to explore in-situ dimensions of source-based writing through think-aloud protocols, lifespan developments of writing and expertise through text-based retrospective interviews, and current approaches to academic integrity through textual analysis and semi-structured interviews. The researchers' initial inquiry regarding pedagogical approaches to the teaching of source integration in academic writing raised two concerns 1. the lack of an evidence base to support such current and common approaches and 2. the potential for negative impact on student accessibility and fairness in learning as a result. For example, might the conflicting and vague language around paraphrase provided in L1/L2 writing handbooks for undergraduates inadvertently and negatively relate to the often inaccessible and biased language policies and procedures around academic integrity for minoritized and other student populations? This potential lose-lose and high-stakes systemic approach to teaching and learning source integration is presented as a form of institutional irresponsibility (Eaton, 2021). This poster reports on a study that aims to contribute to an evidence base useful for informing pedagogy and policy by redirecting data collection efforts from student writers to that of expert writing and expert writers (Wette, 2021). The poster describes the text-based retrospective protocol used to understand how senior scholars across the sciences, social sciences, and humanities learned, conceptualized, and produced pieces of award-winning source-based writing. The poster also describes in depth the think-aloud protocols with emphasis on the Zoom-based and screen-enabled aspects of the data collection procedure. The poster also makes clear how these streams of research shed light on what expert writers actually do when integrating ideas and provides a foundation for critically evaluating advice that is currently given to students and teachers for source-based writing, including in the context of GenAI.

P24: ApprendeRTi: Innovation in the development of executive functions in primary education

Pasarin-Lavin, Areces, Garcia, Menendez, Cerezo

University of Oviedo

The Response to Intervention (RTI) model aims to detect and intervene early in Specific Learning Difficulties (SLD), considering the active and dynamic role of teachers in the classroom. The scientific literature shows that SLD is closely related to the development of executive functions (EF). In fact, EF training at early ages contributes to a significant improvement of the cognitive processes involved in learning. In this sense, the aim of the present work is the enhancement of EF as an innovative complement within the RTI assessment model, proposing a program with a neuropsychological approach that takes into account the individual as an active part through the use of digital media. To carry out the pilot, 30 students between 6 and 8 years old from the Principality of Asturias were selected. The implementation of the program consists of a total of 8 sessions with a dynamic adjustment of difficulty, which require the use of tablets. The results obtained will allow the design of more effective and motivating assessment-intervention programs, which will have as main advantage the saving of material and personal resources, as well as a significant decrease in the number of false positives and false negatives with respect to traditional protocols.

P25: Handwriting difficulties in children with dyslexia: Poorer legibility in dictation and alphabet tasks, slowness in the alphabet task

Vanheuevers, Gosse, Van Reybroeck

UCLouvain

Purpose. Several studies have shown that children with dyslexia, in addition to their reading and spelling deficits, encounter handwriting difficulties that are still poorly understood in terms of their nature and origin. The present study aimed to better understand the handwriting difficulties of these children by comparing their handwriting quality and speed in two tasks, a dictation task and an alphabet task. Method. Twenty-nine French-speaking children (Mage = 9.5 years) participated in the study, including 18 children with dyslexia and nine typically developing children matched on chronological age. The children performed control tasks, a simple-word dictation task and an alphabet writing task. Accuracy, handwriting quality and fluency (speed, writing, and pause time) were carefully measured using a digital tablet. Results. GLMMs analysis and t-tests showed that children with dyslexia made more aesthetic errors in both the dictation and alphabet tasks than typically developing children. They also wrote more slowly than typically developing children in the alphabet task but not in the dictation task. These findings suggest that children with dyslexia present handwriting difficulties, even in an alphabet task. These results provide a strong argument for a handwriting deficit in children with dyslexia, in addition to their spelling deficit.

P26: Risks in the development of literacy in Czech children with developmental language disorder

Zemánková, Málková

Charles University

Literacy is part of language development, so children with developmental language disorder are a high-risk group in terms of successful acquisition of reading and writing. A simple view of reading (Gough & Tunmer, 1986) states that success in decoding text depends on Phonemic Awareness (PA) and Rapid Automatic Naming (RAN), comprehension of text is dependent on other aspects of language such as vocabulary, morphosyntax. The aim of our study is to investigate the situation of Czech children with DLD before starting school in terms of risks in the development of literacy skills. Methods: we used tests of PA, RAN, vocabulary, morphology and sentence repetition in children with DLD (DLD, n=50), compared their performance with an age-matched control group (AC, n=50) and a language control group (LC, n=50). LC children were paired with DLD children based on performance on the verbal subtest of the WISC III. Results: no significant differences were found between the study groups on phonological tests and RAN. On the other hand, in the tests of morphology and sentence repetition, the DLD group performed significantly lower than the LC and AC groups, and in the vocabulary test, the performance of the DLD and AC groups was similar. The results suggest that children with DLD are particularly at risk in the area of reading comprehension.

P27: Assessing and Diagnosing Reading Learning Disabilities in Latin America A Systematic Review

Real, Loja, Arias-Gundín

Universidad de León

This systematic review analyzes standardized tests in Latin America to assess reading performance (comprehension and decoding) and diagnose Learning Disabilities in Reading in students aged from 6 to 14 years. The research addresses the need to identify standardized tools adapted to each context, ensuring psychometric validity and reliability in the evaluation and diagnosis of the sample, in order to be able to make international comparisons. Following the PRISMA protocol, a systematic search was conducted in databases such as Dialnet, Redalyc, and Latindex, using the following keywords: "learning disabilities in reading"assessment," and "diagnosis." The search was limited to studies published between 2014 and 2023, selecting only peer-reviewed articles written in Spanish or English with full-text access. The review included studies describing tests used for the assessment and diagnosis of reading disabilities, excluding those in which the sample had concomitant diagnoses different than reading disabilities. The results will identify and evaluate the most used tools in the Latin American context. This analysis aims to contribute to the development of more precise and context-relevant assessments to identify reading disabilities in different Latin American countries.

P28: Compounded Challenges: Examining the Co-occurrence of Reading and Socio-Emotional Difficulties in Austrian Second Graders

Kogler, Gasteiger-Klicpera, Prinz, Paleczek

Departement of Education Research and Teacher Education, Inclusive Education Unit

Students with low reading skills are at heightened risk to experience socio-emotional difficulties. Previous research has demonstrated this link with internalizing (such as depression and anxiety) and externalizing problems as well as social withdrawal for different age groups (Francis et al., 2019; Viera et al., 2024). Our study aims to explore this association specifically in early school years, focusing on Austrian second-grade students. To investigate the relationship between reading skills and socio-emotional difficulties, we will involve approximately 500 second graders in our study. We will assess reading skills using a one-minute word and pseudoword reading test, while socio-emotional skills will be assessed using a self-report screener. Additionally, teachers will provide their assessments of their students' socio-emotional skills, allowing us to compare these ratings with the students' self-reports. Data collection will take place in autumn and we expect students with reading difficulties to exhibit higher internalizing, externalizing and social withdrawal scores than their peers without reading difficulties. This poster will highlight the co-occurrence of reading and socio-emotional difficulties in Austrian second graders and will closely examine the discrepancies between teacher and student ratings of socio-emotional problems.

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P29: Language Skills as Early Indicators to Detect Spanish Students at Risk of Learning Difficulties

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University of Oviedo

Students with poorer language skills are more likely to have literacy difficulties, as language and pre-literacy skills are fundamental to achieve appropriate reading performance. Therefore, monitoring students' language skills could be of great benefit in the early identification of reading difficulties. This study aims to analyse student's language skills, focusing on the level of key aspects such as vocabulary, morphological awareness, oral comprehension, and reading skills. 93 children (44 students at risk of Learning Difficulties and 49 normotypical students) aged 6-12 years ($M = 105$ months; $SD = 18.78$) participated in this study and were administered different tests to measure language, reading and cognitive capacities. Comparative analyses revealed statistically significant differences between the two groups (Group at risk of Learning Difficulties vs. Control Group) in the level of vocabulary, the handling of morphemes and the oral comprehension skills. These results would help to identify early indicators with predictive value which could be useful for designing timely interventions.

P30: Effective phonological awareness intervention using gamification strategies: A study with children at-risk of reading difficulties

Salvador, Alves-Martins

Center for Research in Education, ISPA—Instituto Universitário

Considering the interdependent relationship between phonological awareness and reading acquisition, numerous studies focus on interventions aimed at developing this skill to overcome potential difficulties. In Portugal, however, phonological training activities that potentially benefit students with initial reading acquisition problems and based on educational gamification principles are not commonly used by primary school teachers in their classrooms. This research aims to assess the impact of a Phonological Awareness Program (PAP), especially designed to engage children in learning using gaming-based activities adapted to classroom contexts, on phonemic awareness, spelling and reading performance of first-graders at-risk of reading difficulties. The participants were thirty-five children with low scores in vocabulary, letter knowledge, and phonemic awareness, randomly assigned to experimental (PAP) or control conditions. Pre- and post-tests on phonemic awareness, spelling and reading were administered. The Phonological Awareness Program included activities such as rhyming, syllabic and phoneme identification, analysis, segmentation, reconstruction, and manipulation, all enhanced through gamification techniques. Statistically significant differences were found between the experimental group (PAP) and the control group for all measures. These findings emphasize the importance of incorporating phonological awareness activities in primary classroom settings, developed to actively involve children in learning, particularly for students at-risk of reading acquisition.

P31: Development of a Dyscalculia Assessment Battery for Portuguese Children

Alturas, Santos, Alves, Camacho

Faculty of Psychology and Education Science, University of Porto

The International Classification of Diseases (ICD-11) defines dyscalculia as a specific learning disorder characterized by difficulty in acquiring and developing mathematical and arithmetic skills. These skills include numerical sense, memorization of numerical facts, exact calculation, fluent calculation, and mathematical reasoning. The lack of appropriate evaluation tools preclude an effective assessment and intervention in dyscalculia cases. This often results in negative school experiences and repeated failures in mathematical tasks, which can contribute to a fear of failure and diminished self-esteem (Haberstroh & Schulte-Körne, 2019). This study aims to develop and validate a comprehensive test battery for assessing dyscalculia in Portuguese children. To that end, we will sample 200 second-grade children from a Portuguese school cluster, who will undertake several tasks (e.g., numerical stroop, arithmetic test, digit span) individually administered by a research assistant. Given the limited exploration of this topic in the Portuguese context, this study will raise primary school teachers' and other school practitioners' literacy about dyscalculia assessment, thus facilitating early identification and effective targeted interventions for dyscalculia. References: Haberstroh, S., & Schulte-Körne, G. (2019). The diagnosis and treatment of dyscalculia. *Deutsches Ärzteblatt International*, 116(7), 107. <https://doi.org/10.3238/arztebl.2019.0107>

P32: Spelling, working, and procedural memory: differences between developmental language disorder and typical development

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Recent research has stated that early oral language acquisition difficulties relate to reading and writing difficulties. Children with developmental language disorder (DLD) experience difficulties with several dimensions of language. This study focuses on the specific difficulties of children with DLD in spelling. The goal was to investigate the relationship between working memory (WM) and procedural memory (PM), and spelling and language outcomes were examined in these children in the written production of Spanish-speaking children with DLD. A total of 30 children with language difficulties (Mage = 11;9) were compared with age-matched children (Mage = 11;8). Participants composed a written story, the texts were transcribed and analyzed to categorize spelling errors. Auditory working memory was assessed using the digit repetition subtest of the WISC-V. Procedural memory was assessed using a free version of a Serial Reaction Task (SRT) in software format. Results showed that children with DLD produced more spelling errors and their memory skills (WM and PM) were lower than age-matched children. Likewise, there was a significant correlation ($p < 0.05$) between the variables in both groups, which could contribute to the developmental profile of PM, WM, and spelling skills in school stages. In addition, significant differences ($p < 0.05$) were observed between the mean scores achieved in the two groups that make up the sample. This study highlights the need to emphasize early oral intervention, memory skills, and language-related processing skills to help prevent written language difficulties.

P33: The forest is a school

Clementina Rios

CIIE and IPLUSO-ESEL

The absence of real interactions and experiences in nature since childhood distorts the knowledge that children build about reality. Outdoor education has, however, sought to counter this problem. This study encompassed forest school sessions with preschool and primary school children in a forest, aiming to understand the educational potential of the forest during childhood through regular immersion, exploration and group work sessions. The results reveal multiple impacts, e.g., new learning methods through contact and experimentation with and in nature, with peers, numeracy, natural sciences, literacy, etc. As regards literacy, children acquired and/or developed vocabulary (related to the local ecosystem), reading (discovering letters in the forest; reading stories/poetry about forest animals outdoors; oral sharing of experiences in the forest) and writing skills (creation of narratives about experiences, emotions, actions in the forest; construction of environmental awareness posters). In short, the forest awakened curiosities and encouraged learning, allowing children to read and give meaning to the world. It was also shown that the early development of the ability to read the world favours understanding phenomena, relationships, children's role in society, and the potential of their actions on Earth.

P34: PhyVerBEr – Understanding, Describing and Explaining Physics

Knapp, Boeckmann

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This study comprises a survey of physics teachers in Styria, Austria, addressing the requirements of the new curriculum for secondary schools. This curriculum places particular emphasis on language education and reading and demands their implicit integration into physics classes. The significance of language education in the physics curriculum, as outlined in the Federal Legal Information System (Rechtsinformationssystem des Bundes [RIS] 2023), highlights the overarching theme of "Language Education and Reading" and the general didactic principle 7, "Language-sensitive subject teaching takes place in all subjects." However, previous studies (Vojříř & Rusek, 2021) indicate that the curriculum's impact largely depends on the teachers and individual schools. Therefore, the survey aims to capture the attitudes of physics teachers towards the new curriculum, especially their perception of language education and reading. Due to the movement towards language-aware subject teaching, the importance of linguistic operators in various tasks, including reading tasks, has increased (Abraham & Saxalber, 2016; Reitbrecht & Sorger, 2018). The survey also examines teachers' familiarity with these operators, such as describing and explaining. Furthermore, the survey investigates whether and how teachers incorporate these operators into their exam tasks. This study aims to provide insights from the teachers' perspective on the current implementation of the new curriculum and to assess the extent to which language education and reading are integrated into physics instruction.