First Grade Classroom-Level Adversity: Associations with Teaching Practices, Academic Skills, and Executive Functioning

eTale 2022

Direct associations emerged between classroom-level adversity (CLA) and controlling instruction (positive), classroom management, and academic instruction (both negative). In addition, CLA was related to 1st grade (G1) literacy (but not mathematics) directly and indirectly via classroom management (negatively) and controlling instruction (positively). There was a negative direct longitudinal association between CLA and 3rd grade (G3) executive functioning, and indirect associations with G3 literacy and mathematics through G1 teaching practices and literacy.

Authors: Tashia Abry, Kristen L. Granger, Crystal I. Bryce, Michelle Taylor, Jodi Swanson, & Robert H. Bradley

The authors examined direct and indirect associations between 1st grade (G1) classroom-level adversity (CLA), G1 teaching practices, and student academic skills and executive functioning in G1 and 3rd grade (G3). Direct associations emerged between CLA and controlling instruction (positive), classroom management, and academic instruction (both negative). In addition, CLA was related to G1 literacy (but not mathematics) directly and indirectly via classroom management (negatively) and controlling instruction (positively). There was a negative direct longitudinal association between CLA and G3 executive functioning, and indirect associations with G3 literacy and mathematics through G1 teaching practices and literacy.

- As part of young children's microsystems, the early elementary classroom (including the peer context) plays a formative role in shaping academic and cognitive development.
- Collective characteristics of the students in a classroom group (such as academic skills, aggression, and internalising behaviours) have explained unique variations in developmental outcomes (beyond that explained by said characteristic) and other individual, family, and teacher factors at the student level.
- Theoretical propositions and limited empirical research indicate teaching practices as potential mechanisms that transmit the influence of collective student characteristics.
- Transactional and person-environment systems perspectives posit that learning and development stem from interactions and relationships between an individual and other actors within a system, such as those occurring within a classroom between and among individuals, their peers and the teacher(s).

Classroom management

- High quality classroom management can be defined as teachers' effectiveness in preventing disruption, maintaining and regaining order, navigating transitions, and promoting student attention and productivity.

Controlling instruction

- Controlling instruction encompasses both directive and rigid approaches that lack individualisation and minimise student autonomy, expression, and peer interactions.

The study

The present study examined G1 CLA, a classroom-level index of multiple child and family risk factors affecting the student group.

Research questions:

1. *Is G1 CLA directly related to observed G1 teaching practices?*
2. *Is G1 CLA directly or indirectly associated with directly assessed student literacy and mathematic skills in both G1 and G3 and executive functioning in G3?*

The study participants consisted of 1073 children. Teachers reported CLA. Teachers' classroom management, controlling instruction, and amount of academic instruction were assessed

by trained independent observers. Children's literacy, mathematic skills, and executive functioning were directly assessed by trained research personnel.

Findings

- G1 CLA was significantly negatively related to G1 classroom management and academic instruction, and positively related to controlling instruction.
- G1 CLA was negatively associated with G1 literacy skills.
- Classroom management and controlling instruction were positively related to literacy skills, suggesting possible indirect effects of CLA on literacy through these teaching practices.
- G1 CLA directly predicted G3 executive functioning.
- Significant indirect associations emerged between G1 CLA, G1 management and controlling instruction, G1 literacy, and G3 literacy and mathematics.
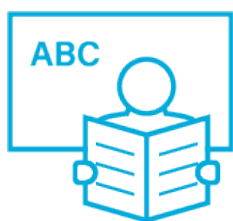
Implications

- Higher CLA was directly negatively related to classroom management and academic instruction, and positively related to controlling instruction.

- CLA indirectly influenced students' literacy and mathematics concurrently and longitudinally through influence on teaching practices.
- In the presence of the indirect associations, G1 CLA was directly and negatively related to G1 levels of student literacy and G3 levels of executive functioning.
- Teachers in higher-adversity classrooms were less effective in preventing disruption and maintaining and regaining order in their classrooms.
- The classroom context in the first years of schooling has a lasting influence on executive functioning beyond concurrent later-grade classroom milieus.
- G1 may function as a sensitive period for the formation of this important cognitive skill set.
- Both teachers and students may benefit from the purposeful diffusion of higher-adversity classroom compositions where possible.
- Teachers and students in higher-adversity classrooms may benefit more from investment compared to teachers working with more advantaged groups.

Vocabulary Learning in Primary School Children: Working Memory and Long-Term Memory Components

The aim of this study was to investigate which working memory and long-term memory components predict vocabulary learning. Short, phonologically native nonwords were learned best. Phonological sensitivity predicted learning of all nonword types (except short native nonwords), vocabulary predicted learning of only short native nonwords, and central attentional resources predicted learning of short nonwords (but not long nonwords).

Authors: Sergio Morra & Roberta Camba

The aim of this study was to investigate which working memory and long-term memory components predict vocabulary learning. A nonword learning paradigm was used in which children aged 8–10 years learned picture–nonword pairs. The nonwords varied in length and phonology. Short phonologically native nonwords were learned most effectively. Linear structural equation analyses demonstrated the influence of three constructs: phonological sensitivity, vocabulary knowledge, and central attentional resources on nonword learning. Phonological sensitivity predicted learning of all nonword types (except short native nonwords), vocabulary predicted learning of only short native nonwords, and central attentional resources predicted learning of short nonwords (but not long nonwords).

- It is universally recognised that vocabulary learning is a fundamental component of both the acquisition of

native language and learning a foreign language.

- Baddeley and colleagues (1993; 1998) proposed that phonological short-term memory has an important role in constructing representations of the phonological form of new words in both native and foreign languages.
- They used terms such as 'phonological memory skills', 'phonological loop abilities', 'phonological loop capacity', and 'phonological storage' in an interchangeable way.
- Phonological memory is most commonly measured using forward digit span and nonword repetition.
- Baddeley and colleagues suggested that nonword repetition could be a relatively pure measure of phonological loop capacity.
- However, it has been suggested that nonword repetition involves various abilities, such as speech perception, phonological encoding, segmentation of speech sounds, and programming and executing articulatory instructions.
- Nonword repetition could depend on 'phonological awareness' ('phonological sensitivity').

M capacity

- A neo-Piagetian theory of cognitive development (Pascual-Leone, 1987) posited the existence of a resource referred to as 'M capacity', which is conceived as a central attentional component of the working memory system that can be used to keep a limited number of cognitive units activated.

Study

In this study, it is hypothesised that the construct of phonological memory could be deconstructed into three components: phonological sensitivity, attentional resources (M capacity), and rehearsal. The role of the predictors is likely to vary according to the different materials to be learned.

Participants were 161 elementary school children in Italy with a mean age of 9 years 8 months.

Findings

- Learning was more effective for short nonwords and phonologically legal words.
- Learning scores increased significantly from each cycle to the next.
- The effects of length and phonology were over-additive. Learning was most effective in native short conditions, then in non-native short and then native long conditions. Non-native long words were most difficult to learn.
- Nonword repetition correlated better with phonological sensitivity measures than with the forward digit span or other variables.
- Following exploratory factor analysis, three factors accounted for 56% of the total variance. The first factor loaded most highly the four tests of M capacity, the second factor loaded the articulation rate measures that tap rehearsal efficiency, and the third factor loaded all of the measures that we hypothesised to tap phonological sensitivity. Nonword repetition loaded .80 on the third factor.
- These results support the hypothesis that phonological

memory can be decomposed into three constituents that we refer to as phonological sensitivity, rehearsal efficiency, and M capacity.

- Phonological sensitivity was the most important predictor of learning all nonword types (except the short native nonwords).
- Vocabulary only predicted learning short native nonwords.
- M capacity was a significant predictor for short nonwords (but not long nonwords).
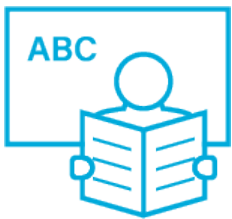
Conclusions and implications

The results of this study support the view that vocabulary learning cannot be accounted for by a single mechanism; instead, a cognitive system with several components is involved. The relative importance of these different components may vary depending on the characteristics of the words being learned. Consistent with the hypotheses, the predictor latent variables that represent the cognitive system involved in learning include both long-term memory and working memory components. Phonological memory can be decomposed into phonological sensitivity, rehearsal efficiency, and M capacity.

Bidirectional Relations Between Phonological Awareness and Letter Knowledge in Preschool Revisited: A Growth Curve Analysis of the Relation Between Two Code-Related Skills

In this study, dual-process, latent growth models were used to examine patterns of bidirectional relations between letter knowledge and phonological awareness during preschool in a sample of 358 children. Letter-name knowledge and phonological awareness were bidirectionally related, where the initial level of each uniquely predicted growth in the other.

Authors: Mathew D. Lerner & Christopher J. Lonigan

In this study, dual-process, latent growth models were used to examine patterns of bidirectional relations between letter knowledge and phonological awareness during preschool in a sample of 358 children. Growth models were used to quantify the unique longitudinal relations between the initial level of each skill and growth in the other skill during the preschool year. Letter-name knowledge and phonological awareness were bidirectionally related, where the initial level of each uniquely predicted growth in the other. These findings extend the evidence of the relationship between letter knowledge and phonological awareness to supra-phonemic tasks, indicating that this bidirectional relation begins at an earlier point in the development of phonological awareness than previously reported.

- Proficient reading skill is a key determinant of quality of life.
- However, in 2013, only 34% of 4th grade students and 27% of 8th grade students demonstrated proficient reading skills.
- The developmental trajectory toward the level of reading skill a child will ultimately attain appears to be determined during the first years of formal education.
- Phonological awareness is one of the strongest predictors of reading skill.
- Phonological awareness appears to emerge in an ordered developmental progression.
- First, a rudimentary awareness of sounds within words is demonstrated by the ability to detect and manipulate larger units of sound.
- Next, a more sophisticated awareness of the sounds that compose spoken language is demonstrated by the ability to detect and manipulate smaller units of sound such as phonemes.
- Letter knowledge appears to be related to the

development of phonological awareness.

- Vocabulary knowledge appears to influence the development of phonological awareness.

Study

The current study was designed to examine a) the possible bidirectional relation between letter knowledge and earlier emerging facets of phonological awareness, and b) the relationship between vocabulary size and growth in phonological awareness.

Hypotheses:

1. *Children with higher initial levels of letter knowledge were expected to experience more growth in phonological awareness throughout the preschool year than that experienced by children with lower initial levels of letter knowledge.*
2. *Children with higher initial levels of phonological awareness were expected to experience more growth in letter knowledge throughout the preschool year than that experienced by children with lower initial levels of phonological awareness.*
3. *Children with higher levels of initial vocabulary were expected to experience more growth in phonological awareness throughout the preschool year than that experienced by children with lower initial levels of vocabulary.*

Participants were 358 preschool children who were approximately 4 years of age at the start of the study.

Findings

- There were significant inter-individual differences for all outcomes at the beginning of the preschool year.
- There were significant inter-individual differences in the rate of growth for all four phonological awareness factors and letter-name knowledge.
- Vocabulary was correlated with initial status for all four phonological awareness outcomes but was unrelated to growth in any outcome.
- Children who started preschool with higher levels of blending, elision, letter-name knowledge, and letter-sound knowledge tended to experience less growth in the same skill during the preschool year than children who started the year with lower levels of these skills.
- For all phonological awareness outcomes (except rhyme), children with higher initial levels of phonological awareness experienced less growth in this factor throughout the preschool year than children with lower initial levels of phonological awareness.
- For all phonological awareness outcomes (except elision), older children experienced more growth in than younger children.
- Children with higher initial levels of letter-name knowledge experienced faster growth in phonological awareness throughout the preschool year than children with lower initial levels of letter-name knowledge.
- Higher initial letter-name knowledge was associated with slower growth in the same skill.
- Growth in letter-name knowledge was uniquely predicted by higher initial composite phonological awareness.
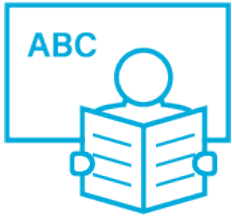
Conclusions and implications

The results of this study demonstrated that growth in two important code-related skills—phonological awareness and letter knowledge—was partially dependent on the initial level of the other skill. There were bidirectional predictive relations between the initial status of each skill and growth of the other skill throughout the preschool year. Children with initially more letter-name knowledge experienced more growth in phonological awareness, and children with initially more phonological awareness experienced more growth in letter-name knowledge.

Evidence-Based Teaching. Effective Teaching Practices in Primary School Classrooms

eTale 2022

This paper systematises the evidence regarding effective

teaching practices in primary school classrooms, with special focus on evidence from low- and middle-income countries. Accordingly, the paper provides theoretical and empirical foundations for the content of the newly developed *Teach* classroom observation tool.

Authors: Ezequiel Molina, Adelle Pushparatnam, Sara Rimm-Kaufman & Keri Ka-Yee Wong

This paper systematises the evidence regarding effective teaching practices in primary school classrooms, with special focus on evidence from low- and middle-income countries. Accordingly, the paper provides theoretical and empirical foundations for the content of the newly developed *Teach* classroom observation tool.

- A significant number of countries around the world are facing a 'learning crisis': a large share of children complete primary school without acquiring even basic reading, writing, and arithmetic skills.
- This raises the question how is it possible that after sitting in a classroom for between four and seven hours per day for five to six years, a large portion of students are still not able to read, write, or do basic arithmetic?
- A growing body of evidence suggests that the learning crisis (to a large extent) reflects a teaching crisis.
- *Teach* is a new measure specifically designed for low- and middle-income countries to begin to address these gaps in knowledge and to develop a common language of analysis of teaching practices.
- It focuses on several main elements that reflect

universal experiences that lead to learning, regardless of the culture and physical condition of the classroom.

Framework

Over the course of a teacher's lesson, *Teach* measures 1) the time a teacher spends on learning and the extent to which students are on task, and 2) the quality of teaching practices that help develop students' socioemotional and cognitive skills.

The quality of teacher practices is divided into the following subparts:

1. Classroom culture: the teacher creates supportive learning environment by treating all students respectfully, using positive language, responding to students' needs, and setting clear behavioural expectations.
2. Instruction: the teacher instructs in a way that deepens student understanding and encourages critical thinking and analysis.
3. Socioemotional skills: the teacher fosters socioemotional skills that encourage students to succeed both inside and outside the classroom by instilling autonomy, promoting perseverance, and fostering social and collaborative skills.

Evidence for the *Teach* framework

Time on learning

- Effective teachers maximise the amount of time that students spend on learning.
- Thus, *Teach* includes two observable teacher behaviours for maximising time on learning in the classroom: the teacher's provision of learning activities to most

students and students being on task.

- The evidence shows a significant positive association between teachers' instructional time and students' test scores.
- Evidence also shows that when students are on task and engaged, they learn significantly more than when they are not.

Classroom culture

- Classroom culture refers to a set of beliefs, attitudes, and behaviours jointly shared by the teacher and students.
- In *Teach*, classroom culture encompasses two elements: a supportive learning environment and positive behavioural expectations.

Supportive learning environment

- *Teach* includes four behaviours that are used to measure the extent to which the teacher is effective at establishing a supportive learning environment in the classroom:
- The teacher treats all students respectfully.
  - This promotes positive teacher–student relationships and has a positive impact on student academic achievement.
- The teacher uses positive language with students.
  - Praise and encouragement provide information to students about what is expected of them and help children to recognise that the more engaged they are on the task, the more likely they are to reach their learning goals.
- The teacher responds to student needs.
  - Responsive teachers show fairness and justice toward their students, demonstrate compassion toward students as individuals, and provide the emotional or physical support that students need

in class.
- Students whose needs are met enjoy the long-term benefits of being more engaged in school and performing better academically, socially, and behaviourally.

- The teacher does not exhibit gender bias and challenges gender stereotypes in the classroom.
  - Teacher behaviours (such as calling on students of different races and genders equally and using inclusive language) are central features of a positive learning environment and are linked with improved student achievement.
  - It is important that teachers are cognisant of their own biases and how these impact student learning.

Positive behavioural expectations

- Teachers who are consistent and positive in establishing expectations not only help students reach their academic potential but also support students' development of positive behaviour, social skills, and self-control within a safe environment.
- *Teach* includes three behaviours that measure the extent to which the teacher is effective at setting positive behavioural expectations in the classroom:
- The teacher sets clear behavioural expectations for classroom activities.
  - Studies have demonstrated that teachers who expect positive behaviours from students and set these standards help promote constructive teacher–student interactions, support the development of student socioemotional skills and self-regulation as well as helping to increase student academic success.
- The teacher acknowledges positive student behaviour.
  - The evidence is strongest for teacher praise as a

strategy to recognise students' successful behaviours. In turn, this leads to increases in correct responses, student productivity, and accuracy.

- The teacher redirects misbehaviour and focuses on expected behaviour, rather than on the undesired behaviour.
  - Teachers who redirect misbehaviour by focusing on the expected classroom behaviour (also known as 'differential reinforcement') see an increase in desirable behaviours, less aggressive and destructive classroom behaviours, and an overall reduction in classroom stress levels.

Instruction

- Effective teachers deliver content in a way that is clear and interesting to students. They engage students in varied activities that promote thinking, build in ways of assessing understanding, and offer feedback to students.
- In *Teach*, instruction encompasses four elements: 1) lesson facilitation, 2) checking understanding, 3) feedback, and 4) critical thinking.

Lesson facilitation

- Teach includes four behaviours to measure teacher effectiveness at facilitating the lesson to promote student comprehension:
- The teacher explicitly articulates the objectives of the lesson and relates classroom activities to these objectives.
  - Teachers need to: 1) develop clear and specific learning objectives for the lesson, 2) communicate the learning objectives to the class, and 3) relate classroom activities to the objectives.
  - Research shows that teachers who establish clear

and specific learning goals for each lesson use class time more effectively.

- Explanation of content is clear.
  - Teachers' ability to explain concepts clearly to students also promotes academic learning outcomes.
  - Another teaching method found to be helpful is clarifying content to illustrate complicated concepts in the form of logical and/or visual representations using simple concept-maps and graphs.
- The teacher makes connections in the lesson that relate to other content knowledge or the daily lives of students.
  - Effective teachers make lesson content relevant to students by incorporating examples from their daily lives, also known as 'bridging scaffolds'. This process can not only enhance learning outcomes, but it can also promote student motivation, self-confidence, and perseverance.
  - Linking new information to prior knowledge is effective across subject areas, a finding demonstrated by a variety of key studies.
  - Another effective teaching strategy is to engage students in a discussion where they model the connections between old and new content.
- The teacher models by enacting or thinking aloud.
  - Effective teachers model their approach to problems in front of their students.
  - Beyond student gains, modelling is a means of promoting student self-efficacy and self-regulation, which is central to their learning process.
  - Enacting involves showing students the steps needed to complete a task.
  - By thinking aloud and walking students through thought processes, students are then able to take a similar approach to solving similar problems on

their own.

Checks for understanding

- Teachers play an important role in checking whether and how much students understand learning material.
- *Teach* includes three specific teacher behaviours that gauge whether the teacher is effective at checking for students' understanding:
- The teacher uses questions, prompts, or other strategies to determine students' level of understanding.
    - Asking students questions and checking the understanding of all students is a type of formative feedback that supports learning and has been identified as a critical component of instruction.
    - Other strategies shown to work include teachers presenting new material in small steps and checking student understanding by having students practice after each step.
- The teacher monitors most students during independent/group work.
    - Active monitoring and facilitation during independent and group work ensure that students are engaged and increase their learning.
    - Facilitation during in-class group work activities (such as monitoring student discussions and interjecting to clarify concepts and increase student engagement) is one of the most important principles of good teaching.
- The teacher adjusts teaching to the level of students.
    - Effective teachers are skilled at both recognising and adjusting to students' individual and collective needs. This promotes student engagement, self-regulation, and achievement.
    - The teacher's ability to teach to different student levels (known as differentiated

instruction) is grounded in Vygotsky's zone of proximal development (1978), which refers to the area between what a learner can do without guidance and what they cannot do.

- Several effective teaching strategies of differential instruction at the macro and micro levels include grouping techniques, continual assessment strategies, and tiered lessons.

Feedback

- Teachers who give consistent, periodical, and process-oriented feedback are associated with self-regulated, high-achieving students, decreased off-task behaviour and disruptive classroom behaviours, and increased academic engagement.
- Studies underscore the importance of providing feedback that is instructive, timely, referenced to the actual task, focused on what is correct, and focused on what to do next.
- Metacognitive feedback is recommended because it provides cues about the content and structure of the problem and possible solutions, whereas results feedback only provides cues related to the final outcome of the problem.
- *Teach* includes two behaviours that capture the extent to which the teacher provides feedback that promotes student comprehension:
- The teacher provides specific comments or prompts that help clarify students' misunderstandings.
  - Teacher feedback that encourages students to ask questions about the learning task or to further clarify their misunderstandings can enhance the overall learning environment of the classroom.
  - Teachers should avoid using general questions or giving general declarations that do not identify specific aspects of the problem or task to be

improved as this will only confuse students more.

- When students need clarification on content or have misunderstood a concept, it is important for teachers to address errors to avoid negative transfer and future misconceptions.

- The teacher provides specific comments or prompts that help identify students' successes.
    - It is important that teachers systematically offer positive reinforcement to students and build upon student responses to solidify these successes.

Critical thinking

- A teacher who encourages students to actively analyse and critique concepts can help enhance the learning process.
- This involves the teacher asking open-ended questions that require reasoning, explanation, or generalisation or that have more than one correct answer.
- Teacher should provide thinking tasks, such as making predictions, identifying patterns, explaining thinking from different views, making connections, and interpreting information.
- *Teach* includes three behaviours to capture the extent the teacher builds student critical thinking skills:
- The teacher asks open-ended questions.
    - Questions that focus on higher-order skills rather than management-related and information recall-related questions have been found to be effective for developing critical thinking skills.
- The teacher provides thinking tasks.
    - Teachers should encourage a deep learning approach among students by providing prompts and contextualised scaffolding, and encouraging students to ask questions, predict, and explain phenomena during activities.
- Students ask open-ended questions or performs thinking

tasks.

- Student engagement in self-explanation, or higher-order thinking is particularly effective for student learning and knowledge consolidation.
- For example, students who probe concepts by asking 'why' will enhance their knowledge of the topic, their ability to summarise key points, and their understanding of how such new information can be integrated with existing knowledge.

Socioemotional skills

- Increasing evidence shows that socioemotional skills development plays an important role in academic achievement.
- Effective teachers use techniques and strategies designed to improve children's socioemotional development. Thus, they benefit children's understanding of the people in the world around them as well as support children's ability to understand and work with people who are different from them.
- Emotional processes refer to students' knowledge, awareness, and management of emotion.
- Cognitive regulation involves students' management of their attention and inhibition of inappropriate responses.
- Social and interpersonal skills involve interpreting others' behaviours and interacting in positive ways with other people.
- *Teach* measures how teachers support student autonomy (cognitive regulation skills), perseverance (emotional processes and cognitive regulation), and social and collaborative skills (emotional processes and interpersonal skills).

Autonomy

- Effective teachers foster autonomy in the classroom by

creating opportunities for students to take ownership of their own learning by building instruction around students' interests, preferences, and choices.

- *Teach* includes three behaviours that indicate teacher's support for autonomy in the classroom:
- The teacher provides students with choices.
    - Offering students choice helps them engage more actively in learning, feel less negative emotion associated with learning, and develop their own sense of optimal challenge in academic work.
    - Autonomy support behaviours can be categorised into three types: 1) organisational autonomy support, where students are given decision-making roles in classroom management, 2) cognitive autonomy support, in which teachers support student ownership in learning, and 3) procedural autonomy support, in which students have some choice in how they present their work.
    - *Teach* focuses on cognitive and procedural autonomy support.
    - Literature suggests that interest and achievement can be enhanced if a teacher provides the right type of autonomy support and meaningful choices regarding how students learn.
- The teacher provides students with opportunities to take on roles in the classroom.
    - The literature on cooperative learning demonstrates that assigning students to specific roles in a team, rotating the roles during the course of learning, and holding individuals and teams accountable is more effective in promoting student learning than independent learning.
    - Reciprocal teaching is an often-used approach involving assigning roles to teach reading comprehension. First, the teacher facilitates reading comprehension by asking students questions and modelling how to ask questions. Next, the

teacher invites students to ask teacher-like questions to one another to support learning.

- Students volunteer to participate in the classroom.
  - The extent to which most students volunteer to participate stems from whether teachers have been successful at establishing a supportive classroom environment in which all students are comfortable and willing to take on roles in the classroom.

Perseverance

- Teachers need to encourage students to persevere through learning challenges by 1) helping them understand that their abilities and knowledge can be developed, 2) providing them with strategies for developing their abilities and knowledge, and 3) reassuring them that setbacks are an integral part of learning.
- Teachers should also encourage students to set learning goals for themselves and to persevere in their efforts to reach these goals.
- *Teach* includes three teacher behaviours that capture the extent to which teachers encourage perseverance in their students.
- The teacher acknowledges student effort, rather than focusing only on results, student intelligence, or natural abilities.
  - Effective teachers recognise student effort, not only the output of their work. In doing so, teachers can promote students' 'growth mindset' in learning; that is, the belief that intelligence is malleable rather than a fixed attribute.
  - Teachers who help children see their ability as malleable (through their instructional practices) attribute success to hard work, encourage challenges, and generate strategies for improvement using behavioural practices that can promote a growth mindset in students.

- Praise that focuses on student effort promotes learning and development.
- Effective teachers give praise that acknowledges student effort toward mastering new skills and identifies these efforts explicitly, thus encouraging a growth mindset.
- The teacher has a positive attitude toward student challenges.
  - Effective teachers have a positive attitude toward students' challenges and help them to understand that frustration and failure are a normal part of the learning process.
  - Student self-efficacy is an important driver of their approach to failure.
  - High levels of emotional support have been found to relate to higher student self-efficacy.
  - Effective teachers focus on the *process* of learning, not just the result.
- Teacher encourages goal setting.
  - By encouraging students to set goals for their learning, teachers effectively demonstrate that students need to: 1) identify goal-directed actions, 2) persist in engaging in the task despite obstacles, and 3) be encouraged to restart unfinished tasks even in the presence of more attractive alternatives.
  - Teachers also support students in their ability to delay gratification.

Social and collaborative skills

- Positive interactions with same-age peers contribute to students' academic, psychosocial, behavioural, and emotional well-being.
- Through peer relationships and experience, children establish their concept of trust, practice critical social skills, develop a sense of their own identity,

and develop perceptions of other people and the world, with effects that last into later life.

- Teachers guide peer culture by establishing classroom norms and producing an equitable social hierarchy within the classroom.
- Teachers can create social environments in which students engage with each other, resulting in enhanced learning.
- *Teach* includes three items to capture effective teacher behaviours that have been found to support student learning through peer interactions:
- The teacher promotes student collaboration through peer interaction.
    - Cooperative learning encourages students to share ideas, see problems from different perspectives, and practice oral, language, and social skills in small groups.
    - Working in groups can help students better understand tasks than working on tasks alone.
    - When paired with peers working at a slightly higher level of knowledge, scaffolding can occur; that is, the less-skilled student's memory recall and use of learning strategies improve while also increasing the more-skilled student's self-esteem.
- The teacher promotes students' interpersonal skills, such as taking different perspectives, empathising, regulating emotion, and solving social problems.
    - Teachers play an important role in children's social and emotional development by modelling positive behaviours, providing support to students to manage strong emotions, and managing naturally occurring power imbalances that can lead to aggression and bullying.
    - Teachers promote students' interpersonal skills by facilitating their ability to take different perspectives (theory of mind [ToM] skills).
    - Effective teachers promote students' ability to

recognise and manage emotions.

- Students collaborate with one another through peer interaction.
    - Two processes of socialisation occur simultaneously in classrooms: teachers socialise students on how to behave in positive ways with one another, and students socialise each other on what is considered acceptable or not acceptable.
    - Warm peer relationships give students an opportunity to listen to each other and talk openly.
    - Peer interactions can also offer autonomy support, whereby working to understand each other's viewpoints, explaining the relevance of school work to one another, and healthy negotiation as part of group work all help students to develop a sense of autonomy.
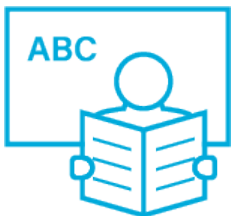
Conclusions

- There is a need to improve teacher education to move beyond a focus on teachers' content knowledge to informing teachers what they need to do in the classroom and applying evidence-based core teacher practices.
- Once teachers are trained on these practices, *Teach* can support monitoring of their enactment in the classroom, supporting teachers in improving their practices and evaluating teachers' progress.

Effectiveness of Spelling Interventions for Learners with Dyslexia: A Meta-Analysis and Systematic Review

eTale 2022

This systematic review and meta-analysis investigated the efficacy of spelling interventions for the remediation of dyslexia and spelling deficits. Results show that treatment approaches using phonics and orthographic and morphological instruction had a moderate-to-high impact on spelling performance.

Authors: Katharina Galuschka, Ruth Görgen, Julia Kalmar, Stefan Haberstroh, Xenia Schmalz & Gerd Schulte-Körne

This systematic review and meta-analysis investigated the

efficacy of spelling interventions for the remediation of dyslexia and spelling deficits. The study included 34 controlled trials that evaluated spelling interventions in children, adolescents, and adults with dyslexia and spelling deficits. Results show that treatment approaches using phonics and orthographic and morphological instruction had a moderate-to-high impact on spelling performance. Significant influence of interventions that teach memorisation strategies to improve spelling could not be confirmed.

- Learning to spell is a challenging task.
- In most alphabetic orthographies, spelling skills are more difficult to acquire than reading skills.
- Difficulties with spelling (such as adding, omitting, or substituting letters or graphemes in written words) are a common indicator of specific learning disorders and a core characteristic of dyslexia.
- The term dyslexia refers to a pattern of learning difficulties characterised by problems with word recognition, decoding, and spelling.
- Poor spelling is an obstacle for text production in the same way that difficulties in word recognition are an impediment for reading comprehension.
- Spelling not only affects writing and compositional skills but is also closely linked to reading.
- In some phases, spelling is essential for reading because it trains phoneme awareness and the alphabetic principle. In other phases, reading boosts spelling because reading exposure leads to a richer lexicon of orthographic representations.
- Phonological awareness skills and the ability to segment spoken words into phonemes is an important precursor to reading and spelling acquisition.
- It is not surprising that phonological awareness interventions (including oral tasks for recognising phonemes within words, blending phonemes into words, segmenting a word into phonemes, eliminating a phoneme

from a word, or adding a phoneme to a word) are often implemented to foster spelling and reading skills.

- Knowledge of phoneme–grapheme and grapheme–phoneme correspondences make up a self-teaching mechanism, which supports the acquisition of orthographic skills and fosters sight word reading (direct retrieval of phonology and semantics associated with a given written word form from the orthographic lexicon).
- Because of the strong influence of phoneme–grapheme and grapheme–phoneme correspondence skills on reading and spelling ability, research on reading and spelling instruction and intervention has predominantly focused on the acquisition of this fundamental knowledge.
- Such treatment approaches are often referred to as phonics interventions.
- Interventions that aim to help children with dyslexia and spelling deficits deal address the deviations from one-to-one mappings between phonemes and graphemes and provide explanations for these deviations by explicitly teaching morphological or orthographic knowledge.

Morphological knowledge

- This refers to awareness of the smallest meaningful language units.
- Morphological interventions for younger children often include the practice of inflections, whereas morphological interventions for older children often focus on derivations.

Orthographic knowledge

- This refers to understanding of the orthographic rule system that allows correct writing in terms of rules and patterns of written language.
- Interventions that foster orthographic skills mainly focus on graphotactic and phonological–orthographic

regularities.

Orthographic depth

- This is generally conceptualised as orthographic consistency: the presence of more than one pronunciation for a given letter or cluster of letters, or the presence of multiple spellings for one phoneme.
- Consistency thus measures the extent of adherence to the alphabetic principle, which varies greatly between orthographies.
- The Finnish language has been shown to be on the 'consistent' end of the orthographic consistency continuum, both in reading and spelling direction.
- English is on the opposite end of this continuum.
- The higher the number and complexity of rules, the number of exceptions, and sources of inconsistency of an orthography, the more difficult it is to impart this knowledge and to use it for the remediation of spelling deficits.
- For interventional research on spelling, it is important to know if there are treatment approaches that are less effective in one orthography than in another.

The present study

The purpose of the present review and meta-analysis is to extend the current knowledge about the effectiveness of spelling treatment approaches on reading and spelling performance of learners with dyslexia and spelling deficits.

Hypotheses:

1. *Overall, it is expected that spelling intervention is effective.*
2. *It is expected that the effects are significant for phonics, orthographic, or morphological instructions.*
3. *It is expected that more severely impaired dyslexics would benefit more from a phonics approach compared to an orthographic or morphological intervention, and the efficacy of phonics instruction will decrease with age.*
4. *It is expected that for more consistent orthographies, the effect of spelling interventions on reading and spelling would be larger than for inconsistent orthographies.*


Findings

- Of the studies evaluated, 34 met the inclusion criteria.
- In these 34 studies, the following treatment approaches were implemented: phonics intervention (n = 8), morphological intervention (n = 10), orthographic intervention (n = 7), memorisation intervention (n = 5), audio-visual cue intervention (n = 1), supportive software (n = 2), and assisted writing (n = 1).
- Results of a meta-analysis of 28 quantitative studies showed significant effect sizes of phonics, morphological, and orthographic interventions for reading and spelling outcomes.
- Effect sizes for spelling outcomes were substantially larger than for reading outcomes.
- In addition, a large and significant mean effect size for spelling outcomes was found for studies evaluating

supportive software.
- The effectiveness of phonics interventions tended to decrease with age, and the effectiveness of morphological interventions tended to increase with age.
- The efficacy of phonics interventions decreased with increasing severity, whereas the efficacy of orthographic and morphological interventions increased with increasing severity.
- Interventions conducted in the classroom tended to show a smaller mean effect size than those interventions implemented in group or individual settings.
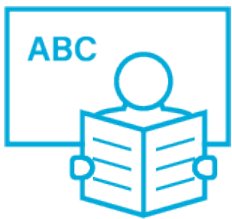
Conclusions

- It was found that spelling interventions are effective: Learners with dyslexia or spelling deficits who take part in a spelling intervention show better reading and spelling performance compared with children who received regular school practice or no spelling instruction.
- Mean effect sizes for spelling instructions involving phonics, orthographic, and morphological interventions are significantly greater than zero.
- It was not found that phonics instruction is more effective than morphological interventions in the early years of formal literacy instruction or for more severe spelling deficits.
- It seems likely that phonics and morphological and orthographic interventions are applicable across a wide age range.
- It is argued that graphotactic and orthographic–phonological spelling rules, as well as

morphological instruction, should be provided as soon as children master the basic phoneme–grapheme and grapheme–phoneme mappings and are confronted with text material for which the basic phoneme–grapheme and grapheme–phoneme mappings would lead to spelling and reading mistakes.

- Support was not found for the hypothesis that with increasing orthographic consistency, the intervention effects would increase.
- The analysis revealed moderate effect sizes on spelling performance for interventions that were implemented in group settings, indicating that intervention in small groups could be an efficient alternative to individual instruction.

A Review of Literacy Interventions for Adults with Extensive Needs for Supports

eTale 2022

Adults with disabilities can be helped to learn and to improve their literacy skills by beginning with high expectations, building instruction around each individual's goals, and using

systematic, integrated instruction.

Authors: Susan R. Copeland, Jessica A. McCord, & Ashely Kruger

Source: Copeland, S.R., McCord, J.A., & Kruger, A. (2016). A review of literacy interventions for adults with extensive needs for supports. *Journal of Adolescent and Adult Literacy, 60*(2), 173–184. DOI: 10.1002/jaal.548

Adults with disabilities can be helped to learn and to improve their literacy skills by beginning with high expectations, building instruction around each individual's goals, and using systematic, integrated instruction.

- Acquiring literacy skills is critical for all adults.
- Literacy can empower an individual to be an active citizen in the democratic process, open up educational and employment opportunities that can lead to economic stability, facilitate health and well-being, create access to recreation and leisure activities, and enhance self-confidence.
- In this review, the population of individuals who require assistance across all aspects of their lives is considered. This includes individuals with intellectual disability (ID), autism spectrum disorder (ASD), or multiple disabilities.
- Instruction for adults should consider their typically pragmatic, problem-centred orientation to learning.
- Motivation, self-direction, and task/learning organisation all appear to play important roles in the experiences of most adult learners.
- Many adults with disabilities did not receive appropriate, individualised, systematic, and sustained literacy instruction while they were in school and therefore did not acquire literacy knowledge and skills.
- It is recognised that literacy learning is a lifelong process, not something that ends when compulsory education stops.

- Literacy encompasses both the skills needed to make meaning out of symbols (e.g. decoding and encoding text) and the broader uses of literacy within an individual's life.

Present study

This review first investigates instructional interventions to teach acquisition of the skills needed to read. Second, it focuses on describing and evaluating the types of literacy instruction programmes available to adults. Therefore, it sought to describe the participants in this area of research, the types of literacy targets represented, the types of interventions used, and the outcomes of these interventions.

Participants In total, 169 adults aged between 18 and 57 years participated in the studies. Participants in 14 studies had a primary diagnosis of ID, and participants in three studies had a primary diagnosis of ASD.

Findings

- Many of the reviewed studies focused on multiple literacy targets and combined more than one instructional strategy or approach into an intervention package.
- Intervention targets fell into three general categories:

word identification (with and without a focus on word meaning); reading or listening text-level comprehension of narrative or expository text; and multiple literacy targets taught within integrated instruction.

- The primary intervention categories were behavioural strategies, which used tightly controlled presentation of items to be taught and strategic use of reinforcement; visuals (such as symbols); strategy-based interventions; and multiple-component interventions.

Behavioural strategies

- Time delay begins by simultaneously showing and reading/defining a word and asking the student to repeat the word/definition. The teacher then presents the word but waits a specified number of seconds for the student to respond before providing a prompt.
- Participants learned to read and provide definitions of label words and were able to generalise these skills across novel products (but not across settings).

Visuals

- Researchers in three studies specifically examined whether pairing visuals (such as pictures or symbols) with text helped adults learn literacy skills.
- Participants with lower reading levels benefited more from using symbolised text than those with higher skill levels.

Strategy-based interventions

- The repeated reading intervention Reread-Adapt and Answer-Comprehend (RAAC) increased participants' fluency (correct words per minute) immediately following the intervention as well as their accuracy in answering factual and inferential comprehension questions.
- By teaching summarising, questioning, clarifying, and predicting, the use of strategies after the intervention

increased and showed significant transfer of comprehension skills to standardised measures of reading comprehension.
  - Teaching use of question words, prediction, and retelling helped to increase reading accuracy, fluency, and comprehension on standardised measures.

Multiple-component interventions

  - Instruction in phonological awareness, word identification, syntax rules, and text and narrative reading comprehension improved the experimental group's performance with word identification in oral production and silent reading and comprehension at the sentence level (but not narrative comprehension).
  - Teaching phonological awareness, phonics knowledge, sight word vocabulary, understanding of text structure, and ability to compose text all improved discrimination of beginning sounds, acquisition of nine sight words, concepts about print, and confidence with literacy tasks.
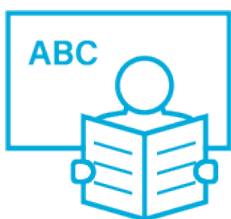
Implications

  - All the reviewed studies documented an improvement in participants' literacy skills across widely varying interventions, demonstrating that individuals with extensive support needs can acquire new literacy skills well into adulthood.
  - Comprehension is the purpose of reading; therefore, it is encouraging that over half of the studies reviewed

focused on teaching reading comprehension and vocabulary knowledge instead of focusing solely on word recognition.

- Teaching for comprehension from the beginning of word recognition instruction, and using instructional materials based on adults' interests, are both likely to increase engagement and meaning making, and to facilitate comprehension.
- Strategies such as graphic organisers might also support short-term memory.
- Writing as a component of literacy instruction should be included.
- It is recommended to teach for transfer and generalisation by linking instruction to student's interests and life.

Education in Sub-Saharan Africa

eTale 2022

This article examines current trends in education in Sub-Saharan Africa, for example, high enrolment rates after the introduction of free basic education, the challenges of retaining pupils in the system, poor levels of attainment, and

prevailing factors in the region that affect the teaching process and profession.

Author: Sylvia C. Kalindi

This article examines current trends in education in Sub-Saharan Africa, for example, high enrolment rates after the introduction of free basic education, the challenges of retaining pupils in the system, poor levels of attainment, and prevailing factors in the region that affect the teaching process and profession.

- Education has many benefits, such as improved health, increased per capita income, and sustained democracies.
- Inasmuch as education is a human right, only some people in Sub-Saharan Africa have the privilege of being educated.
- Most children (especially girls) are still deprived of the right to education.

Background

- The 1960s and early 1970s marked a post-independence era for most countries in Sub-Saharan Africa, which were characterised by economic boom.
- Later, due to economic crises, governments were forced to make choices that restricted public education.
- As a result, developing countries experienced a sharp decline in the quality of education provided in institutions of learning from the 1980s onwards.
- The World Bank (2009) emphasised the need for good quality, free primary education, stating it as the basis of governments' poverty reduction strategies.

Pre-primary schooling

- Preschools play an important role in preparing the student for primary education by imparting the emotional, intellectual, and social skills necessary to succeed at school.
- Despite this positive outlook, pre-primary education is still considered a luxury for nearly all children.
- In 2006, nearly 9 million children were enrolled in pre-primary education in Sub-Saharan Africa.
- Despite this, the average gross enrolment ratio remained low (at 14% in 2006) with significant regional disparities.

Primary education

- In Sub-Saharan Africa, primary education usually spans a period of 6–7 years.
- For most children, this is the first time they set foot in a classroom and enrolment age across the region varies between 6 and 7 years.
- In some countries such as Tanzania, Zambia, and Madagascar, the average primary net enrolment between 1999 and 2006 increased from 56% to 70%.
- Successful strategies noted in several countries have included ambitious school construction programmes in rural areas, the abolition of school tuition fees, and targeting disadvantaged groups such as orphans and vulnerable children.
- In some West African countries, the enrolment results have been less positive, especially for girls.
- Nonetheless, enrolment disparities within countries are also very pronounced and sometimes even greater than between countries.
- In general, children living in urban areas are enrolled at higher rates than their rural counterparts and gaps tend to increase as they progress through their educational career.

- In 2006, almost one-third of the school age population in Sub-Saharan Africa, (approximately 35 million children) were not enrolled in schools.
- Compared to other regions in the world, countries in Sub-Saharan Africa have low enrolment rates and strong gender disparities and inequalities.
- In addition, Sub-Saharan Africa has the lowest primary completion rates compared to other regions of the world.
- Factors such as disease, hunger, child labour, and distant schools result in children being absent from school and eventually dropping out.
- However, over the past 30 years, the percentage of both boys and girls completing primary school in the Sub-Saharan region has increased.
- Primary completion rates in the region vary from as low as 8% for girls and 19% for boys in Niger to as high as 90% for girls and 86% for boys in South Africa.

Secondary education

- Depending on the country, young people are generally expected to enrol into secondary school from the age of 12 or 14 and are expected to be in the system for 6 or 5 years, respectively.
- While participation in primary education is expanding, access to secondary education remains limited for most young people in Sub-Saharan Africa.
- Despite of the increasing number of enrolments in secondary education, 78 million of the region's secondary school age children were not enrolled in secondary school in 2006.
- On average, countries with extremely low secondary enrolment also have a relatively low primary enrolment as well as a significant gender imbalance.
- Transition from lower to higher secondary is a critical dropout point in most countries in Sub-Saharan Africa.
- Like primary education, within-country inequalities in

secondary education are even more marked than those between countries.
- Rates for secondary school attendance and survival to the final grade are marked by disparities related to household wealth and language.

Learning achievement/educational quality

- High enrolment because of the abolition of school tuition fees in Sub-Saharan Africa have compromised the quality of basic education.
- Student competency in numeracy and literacy as well as national examinations have provided good indicators of quality regarding school attainment.
- While literacy improves with schooling, the correlation between the two is far from perfect in most countries in Sub-Saharan Africa.
- For example, in Tanzania, 1 in 5 (20%) pupils who finish primary education cannot read at 2nd grade level in Kiswahili and only 5 in 10 (50%) children can read in English on completion of primary school.
- Results from regional assessments have highlighted poor learning outcomes in Sub-Saharan Africa.
- In general, it has been observed that large numbers of children who reach the final grade in primary school have weak literacy and numeracy skills.
- Factors that may explain poor attainment levels in the Sub-Saharan region include teacher shortages, overcrowded classrooms, poor teaching, primary language interference, lack of printed material in local languages, illiterate parents, and lack of parental support in the learning process.

Teachers and factors affecting the teaching process

- The way teachers are recruited, trained, and deployed

across schools is vital for improving learning outcomes.

- The introduction of free basic education in Sub-Saharan Africa automatically resulted in more children in classrooms thereby increasing the pupil—teacher ratio.
- This situation is compounded by significant teacher shortages, especially in rural areas.
- Trained teachers are in short supply in many countries in the region and the teacher shortage is often an indication of inadequate investment in education.
- At the primary level, teacher education is often fragmented, incomplete, and in some cases non-existent.
- For many countries in the region, investment in education is inadequate because governments depend heavily on external funding to support basic education policy and practice.
- Due to financial constraints, some countries in the region cannot deploy teachers straight out of colleges and universities for a long time.
- The use of unqualified teachers brings severe deficiencies that outweigh the financial advantages.
- Those with limited professional education are likely to provide lower quality education, and the fact that they are deployed in rural, understaffed schools means that children's attainment levels are adversely affected, further emphasising rural—urban inequalities.
- However, several countries are making progress toward having and recruiting well-trained teachers in primary schools.
- However, many educated teachers do not demonstrate the desired teaching approaches.
- Possible reasons for this could be the poor teaching conditions that teachers are exposed to, such as lack of accommodation, physically inadequate classrooms, a lack of furniture and teaching materials, and a high pupil—teacher ratio, all of which make it impossible to apply their newly learned teaching skills.
- Due to low salaries and poor conditions of service in

most of Sub-Sharan Africa, the status of the teaching profession is declining.

- This ultimately leads to severe retention problems coupled with high rates of absenteeism.
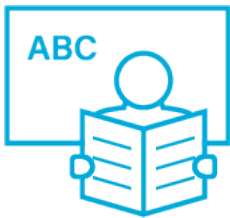
Conclusions

- The abolition of primary school tuition fees in the mid-1990s has had a positive effect on allowing more children access to basic education.
- The increased number of pupils leads to challenges such as a lack of classrooms and appropriate furniture, a lack of resources such as student books and teachers' manuals, and lack of trained teachers all of which ultimately lead to questions about the quality of the education offered.
- A further issue identified was the lack of morale experienced by teachers due to low salaries, lack of incentives for progression in the profession, and generally poor working conditions.
- This led to high rates of attrition and absenteeism, and to fill the gap governments resorted to cheap labour in the form of volunteers and contract teachers.
- To fully achieve universal primary education, it is cardinal for governments in the Sub-Saharan region to establish good collective bargaining structures and ultimately to allocate more funding for the construction of new classrooms.
- Teacher training also requires enhancing to ensure the presence of qualified teaching personnel who can teach not only academic but also vocational subjects to

prepare those who drop out with some life skills.

- The general working conditions of teachers (including salaries, housing, and other incentives) needed to attract teachers to rural areas should be improved.
- The in-service component of the upgrading programme should be closely monitored and consistently evaluated to allow for adequate mentoring of students.

How to Motivate Adults with Low Literacy and Numeracy Skills to Engage and Persist in Learning: A Literature Review of Policy Interventions

eTale 2022

This literature review examines current evidence on policy interventions for adults with low literacy and numeracy proficiencies to identify what has so far proven to motivate adults to join and persist in basic literacy and numeracy learning. The author identifies three approaches which seem

promising in helping to address individual learners' needs: 1) adapting instruction to learners' needs by means of regular assessment (formative assessments); 2) complementary e-learning (blended learning); and 3) contextualisation of basic skills provision both at work and home (workplace learning and family literacy). The central challenge is to apply this evidence.

Author: Hendrickje Catriona Windisch

This literature review examines current evidence on policy interventions for adults with low literacy and numeracy proficiencies to identify what has so far proven to motivate adults to join and persist in basic literacy and numeracy learning. The author identifies three approaches which seem promising in helping to address individual learners' needs: 1) adapting instruction to learners' needs by means of regular assessment (formative assessments); 2) complementary e-learning (blended learning); and 3) contextualisation of basic skills provision both at work and home (workplace learning and family literacy). The central challenge is to apply this evidence.

- Individuals with weak literacy and numeracy proficiencies are more likely to be in low-paid jobs or unemployed, tend to have poorer health and civic engagement levels, and are less likely to improve their skills through adult education and training.
- Interest in basic skills education for adults has increased in member countries of the Organisation for Economic Co-operation and Development (OECD).
- A considerable number of adults in participating countries possess only limited literacy and numeracy

skills.
- Often those concerned will have performed poorly at school and due to this experience have a negative perception of education; they may lack awareness of their deficiencies or be embarrassed to admit them.
- Even for those interested in tackling their weaknesses, it may be hard to translate that interest into action.
- For basic skills programmes to be effective, they need to motivate adults to take part, convey basic skills, and encourage learner persistence. Moreover, the acquired basic skills need to be sustained through use and applied in good jobs.

Basic skills and employment

- Per-capita income is higher in countries that have large proportions of adults who reach the highest levels of literacy and numeracy proficiency.
- Basic skills play a central role in enabling workers to adapt to technical and economic change and to advance professionally.
- Individuals with lower numeracy and literacy proficiencies are more likely to report poor health, to believe they have little impact on political processes, and participate less in associative or volunteer activities.

The benefits of literacy and numeracy interventions for low-skilled adults

- There is only limited evidence of the capacity of adult literacy and numeracy programmes to produce meaningful socioeconomic returns.
- Basic skills training can be delivered in a variety of ways.
- Literacy and numeracy programmes in isolation may achieve little.

- More plausibly, basic skills training linked to occupational skills and work-based learning has the potential to support adults on a self-sustaining trajectory.

Building awareness and sustaining motivation

- Adults with low literacy and numeracy skills are less likely to engage in adult education and training.
- It is difficult to reach those most in need of basic skills support.
- Motivation needs to be developed partly by building awareness of weak basic skills.
- This can be substantially assisted by developing greater public awareness of the implications of weak basic skills, the scope for skills improvements, and information and guidance about learning opportunities among the adults directly concerned and their immediate contacts.
- Local social networking can help reach those who require basic skills support.
- Using financial incentives to motivate adults to engage in basic skills learning yields mixed results: whilst encouraging participation of adults intrinsically interested in learning, it does not often yield positive outcomes among participants extrinsically motivated by financial incentives or requirement.
- Support, guidance, and follow-up can reduce dropout rates.
- Evidence shows the positive impact of assistance with childcare, transport, access to social services, and measures to avoid wage loss and unemployment during course participation.
- Evidence also underlines the importance of initial skills assessment and induction at the start of a

programme when learners are most likely to withdraw, together with continued guidance throughout the programme.

- When adults withdraw from a course, this is sometimes only a temporary response to life pressures. Training providers therefore need to remain in touch with these individuals, seek to support them during the break (perhaps with distance learning), and entice them back to complete the programme.

The teaching profession

- Literacy and numeracy teachers need to be well-prepared.
- Positive attitudes among teachers and a personalised focus on learners can make a positive difference.
- Volunteer staff often play an important role in literacy and numeracy teaching.
- Volunteers are often familiar with course participants and their life circumstances, and their support can be vital. But since they may lack necessary pedagogical skills, their support needs to be supported by at least minimal training.

Using the right tools and techniques

- Formative assessment can contribute to the learning progress.
- Formative assessment is a teaching approach that adapts instruction to learners' needs by means of regular assessment.
- It is assessment *for* learning in contrast to assessment *of* learning.
- Basic skills deficiencies among adults often present a 'patchwork' effect, where an individual might be defeated by one simple task while having no problem with another more complex task.
- Accordingly, instruction tailored to individual

- learners' needs is particularly helpful.
- E-learning outside the classroom can complement tutor input.
- Some research suggests that electronically supported learning (e-learning) is a cost-effective way of overcoming various obstacles to literacy and numeracy learning.
- E-learning can reinforce both skills in information and communication technologies (ICT) and basic skills and can even reach 'hard-to-reach' learners.
- Online approaches need to be twinned with tutor input through face-to-face contact or via telephone or email to support motivation in a blended learning approach.
- A contextualised approach to basic skills learning has certain advantages.
- A contextualised approach means including basic skills with vocational training or linking them to family life or the workplace.
- This approach is more likely than other approaches to engage adult learners who have negative feelings about classroom learning.
- It can help retain adult learners, positively change their attitudes towards further education and training, improve their self-confidence and their parenting and employability skills, and enable them to achieve literacy and numeracy and/or vocational qualifications.
- Basic skills linked to an occupational skill are more likely to be sustained through use in the workplace.
- Implementing contextualised teaching approaches is demanding: it requires a holistic, organisational approach and necessitates team teaching in the classroom among literacy and numeracy teachers and vocational instructors. This is more costly than running single-teacher classrooms.
- Family literacy programmes promote both child literacy and numeracy and adults' parenting capacity.
- Studies found that both parents and children benefited

from participation; however, children gained basic skills to a higher degree than their parents.
- Parents benefited more in terms of parenting skills, employment, and self-confidence.
- Literacy and numeracy provision in the workplace can help employees and employers.
- Employer engagement is as important as government financial support.
- Research shows that learning programmes initiated and supported by employers and supervisors are those that survive in the long term.
- Trade unions can also play a significant role in enrolling learners in work-based courses.
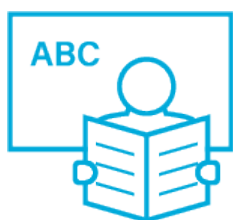
Conclusions

- The literature suggests that understanding the various learning motivations of adults with literacy and numeracy challenges (as well as their barriers to learning) is crucial for the design of outreach strategies and courses that motivate adults to engage and persist in learning.
- To increase participation and learner persistence, assistance with childcare, transport, measures to avoid wage loss and unemployment during course participation, and guidance services can all make a difference.
- Formative assessment to adjust instruction to the learners' needs has been found to be particularly helpful.
- Contextualised approaches to basic skills learning, such

as combined basic and vocational skills training, family literacy programmes, and basic skills provision in the workplace, can help engage those with negative feelings about classroom learning.

Integrating the Socially Constructed Pedagogy in Non-School-Based Adult Literacy Classes

eTale 2022

This study sought to explore the integration of socially constructed pedagogy in adult literacy classes. The findings show a concentration of school-based reading and writing literacy skills, with minimal emphasis on the application of these skills in real life. The study concluded that the ideal platform for integrating socially constructed pedagogy in adult literacy classes is by adhering to the adult learning principle of beginning from the perspective of the adult learners, rather than applying a one-size-fits all approach.

Author: Noah Kenny Sichula

Source: Sichula, N.K. (2018). Integrating the socially constructed pedagogy in non-school based adult literacy classes. *Multidisciplinary Journal of Language and Social Sciences Education, 1*(1), 243–278.

This study sought to explore the integration of socially constructed pedagogy in adult literacy classes. The study focused on teaching farming literacies to small scale farmers and sought to answer two research questions: 1) how do adult literacy learning facilitators socially construct pedagogy? and 2) how is socially constructed pedagogy integrated into teaching about farming literacies? This study followed a qualitative research approach and data was collected through face-to-face interviews and class observations. The findings show there was a concentration on school-based reading and writing literacy skills with minimal emphasis on the application of these skills in real life. In addition, not all facilitators were able to socially construct pedagogy because they lacked appropriate training. For those who were able to construct pedagogy, they applied it in a situated manner, largely characterised by locally-generated resources and practices. This approach was seemingly responsible for fostering a sense of belonging and ownership of the teaching and learning activities experienced by the adult learners. It was concluded that the ideal platform for integrating socially constructed pedagogy in adult literacy classes is to adhere to the adult learning principle of beginning from the perspective of the adult learners, rather than applying a one-size-fits all pedagogy.

- The focus of many studies on literacy pedagogy has concentrated on school-based pedagogy for children and in higher education.
- Non-school-based adult literacy learning is ingrained with a type of pedagogy that is mediated by the sociocultural context of the adult learners.
- Research has linked the success of adult literacy

learning programmes in most rural parts of developing countries to developing pedagogy that should be based on the everyday literacy practices of the people.
- Adult literacy learning should refer to teaching adult learners to improve their already existing literacy practices and not to teaching to them discrete skills such as reading and writing.
- Socially constructed pedagogy should relate to the creative, innovative uses of locally-situated resources to support teaching and learning.

Present study

The purpose of this study was to explore how socially constructed pedagogy was incorporated in non-school-based adult literacy classes in the Mkushi District of Central Zambia.

Research questions:

1. *How do adult literacy learning facilitators socially construct pedagogy?*
2. *How is socially constructed pedagogy integrated into teaching about farming literacies?*

Methods

The research sites and participants were selected through purposive sampling. The rationale for the purposive selection of Mkushi District was based on its concentrated farming activities within the entire Central Province. The research participants were adult literacy learning facilitators who were interviewed and observed. The collected data was analysed

using inductive thematic analysis.

The conceptualisation and provision of adult literacy learning in Zambia

- In Zambia (as well many other countries) there is a narrow conceptualisation that literacy simply means the skills of reading and writing.
- Essentially, there is compelling evidence from research regarding the importance of conceptualising and applying literacy as a social practice.
- This approach produces considerable progress in improving literacy practices among learners compared to the discrete skills-based approach.
- Sadly, the new adult literacy learning curriculum in Zambia has simply considered adult literacy as the ability to read, write, and perform numerical calculations.
- It is important for all adult literacy practitioners in the country to realise that the 21st century paradigm of literacy and learning has emerged from socio-culturally based research.
- This presents the following ideas: 1) multi-literacies as opposed to a single view of literacy, and 2) teaching and learning are learner-centred as opposed to teacher-centred and have been found beneficial for improving both teaching and learning.

Pedagogy

- Traditionally, pedagogy has been associated with the teaching and learning processes of children.
- The meaning of the concept is said to be composed of two Greek words, paidos (child) and agogus (leader).
- To consider pedagogy as being only concerned with teaching children is limited in content and scope.
- Therefore, the concept of andragogy was developed to explain teaching and learning related to adults.

However, its definition and meaning are not clear; thus, pedagogy is used for all categories of learners (children, youths, and adults).

- Literature on the conceptualisation of pedagogy reveals two dominant views: 1) pedagogy is considered only in relation to teaching, and 2) pedagogy is considered a science concerned with teaching processes associated with all learners.
- The emphasis on learner-centred pedagogy reflects important implications for the understanding of how socially constructed pedagogy can be integrated into non-school-based adult literacy learning.
- Adult educators should apply socially developed pedagogy from the perspective of their adult learners.
- Thus, adult educators are expected to possess two forms of knowledge associated with pedagogy: content knowledge and pedagogical knowledge.
- Content knowledge is understood as knowledge of the subject area possessed and ordered within the mind of a teacher.
- Adult educators should use their understanding to help adult learners in generating new knowledge and understanding.
- Pedagogical knowledge relates to the knowledge that is essential to all educators for effective teaching and learning.
- The nature of pedagogical knowledge is made up of knowledge on general instructional methods that is unique to educators and teachers.
- It provides an understanding of what teachers know about teaching and what they teach to specific learners.
- It also encompasses the teacher's knowledge of the learners in terms of their abilities, learning strategies, aspirations, and prior knowledge.
- This knowledge is also based on understanding ways of presenting information through explanations, illustrations, examples, and demonstrations to enable

others to understand the subject matter.

- It is also associated with understanding aspects related to learning difficulties.
- Trained educators are expected to construct pedagogy creatively and innovatively based on the prevailing learning circumstances or situation.

Socially constructed pedagogy

- This relates to the use of material and any other useful resources found in the learning context to support teaching and learning.
- There is a global shift in emphases from teacher-centred to learner-centred pedagogy, banking education to posing problems, and surface learning to deep learning.
- Adult educators are expected to have a clear knowledge of the adult learners in terms of their occupations, status, motivations, and knowledge of the subject matter to meet the goals of each learner.
- Knowledge and understanding of the content are the two most important elements that facilitate the shaping of goals and objectives to achieve the desired changes in learners.
- Beneficial life experiences play an important role in shaping pedagogy and aid the success of an educational activity.
- Pedagogy should be considered in situated terms and specific to the learning goals.

Theoretical framework of the present study

- This study was underpinned by two sociocultural learning theories: the social practice view of literacy and the theory of social constructivism (for both, learning and pedagogy are socially situated).
- The social practice theory views literacy from a broader perspective as socially situated practices.
- According to this theory, literacy practices develop

- socially within the cultural context of the people and are mediated by language and symbols.
- The implication of viewing literacy as social practices (LSP) to this study is that the literacy taught in the adult literacy classes should be viewed as situated literacies rather than universal literacy skills.
- Social constructivism is a theory grounded in informal situated learning practices and regards learning as social processes mediated by language and culture.
- The learning context familiar to the learner is important in enhancing learning and can be achieved by setting a zone of proximal development (ZDP).
- This refers to an activity-based environment in which the educator or peers who are more knowledgeable assist learners to achieve what they cannot do on their own.
- Pedagogically, adult learning should be characterised by adult learners sharing their language and culture with their educators who adopt a more flexible and less authoritative role.
- Practically, educators should organise adult learners into pairs or groups to perform tasks and offer the necessary support to adult learners at any point.
- Informal learning practices should be essential for accommodating adult learners' interests.
- Instructions should be learner focused, learner-goal based, and possibly learner—educator co-constructed.
- The advantage of using a social and group interactive learning process is that it provides opportunities for adult learners to engage in discussions through which they may construct new knowledge.
- It can be said that educators using this model scaffold learning by creating opportunities for the genuine engagement of adult learners in the learning processes.

Findings

- The findings of this study demonstrate a concentration on school-based literacies that has been incorporated with elementary language literacies.
- Conversely, the national policy on community development and the 2012 national curriculum framework on adult literacy provision in Zambia emphasises farming, civic, and entrepreneurial literacy competencies in non-school-based adult literacy classes in rural areas.
- The starting point in the social construction of pedagogy (in view of the social practice of literacy) should be to identify and integrate the farming literacies of adult learners in the different contexts of adult literacy classes.
- The primary focus should be on areas that require improvements identified by the adult learners themselves.
- The study revealed that facilitators only minimally attempted to socially construct pedagogy.
- Expository pedagogy was applied in the teaching of literacy in a teacher dominated manner and was primarily based on lecture teaching.
- Efforts to socially construct and integrate pedagogy in the teaching of literacy was evidenced by using situated resources, which included local knowledge and practices to formulate learning content.
- Local language shaped the medium of instruction, whereas local narratives, daily life activities, drama, songs, and role play shaped the pedagogical strategies.
- The facilitators indicated that this approach had helped them to remain effective in their teaching.

- They added that the approach demonstrated how solving learning challenges among the adult learners had considerably increased the speed of learner improvement.
- Some adult learners were able to relate reading and writing to helping their children with school homework, religious activities such as bible studying, daily communications through text messaging, and small-scale trading with related transactions.
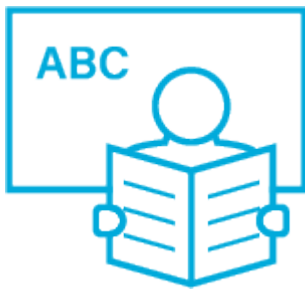
Conclusions

- Adult learners are self-directed, experientially based learners, problem-centred, task-centred, and life-centred learners.
- People engaged in adult literacy learning are essentially engaged in the generation of knowledge situated in the context within which it is generated.
- Social learning is important for the construction and application of socially situated pedagogy.

Pedagogical Practices in Non-

Formal Adult Literacy Classes in Zambia

This article presents a study conducted in Katete District, Eastern Zambia that explored 1) the pedagogical practices used in this context, and 2) facilitators' choices of certain teaching methods. Literacy classes were dominated by the teacher-centred lecture method. Researchers found that lecture-based instruction, when applied in a participatory manner, could produce considerable gains in learning. However, the authors contend that many learners would have benefited more from a learner-centred approach.

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In Zambia, adult literacy education is mainly provided in the form of non-formal literacy classes with a general emphasis on the economic aim of alleviating poverty. Exploring the pedagogical practices used in this context and facilitators' choices of certain teaching methods, this article presents a study that was conducted in Katete District, Eastern Zambia. Data was collected through interviews, observations, and focus group discussions with literacy managers, facilitators, and adult learners. Literacy classes were dominated by the

teacher-centred lecture method. Researchers found that lecture-based instruction, when applied in a participatory manner, could produce considerable gains in learning. However, the authors contend that many learners would have benefited more from a learner-centred approach. In sum, the authors conclude that the pedagogical practices applied fell short of international pedagogical standards for both adult and non-formal learning.

- Non-formal adult learning refers to meaningful lifelong learning activities that are organised and conducted outside the formal education framework and meet the learning goals of adults in different contexts.
- In Zambia, adult literacy education is mainly provided in the form of non-formal literacy classes, with a general emphasis on the economic aim of alleviating poverty.
- In practice, both provision and focus are guided by geographical location.
- The government of the Republic of Zambia has directed that learner-centred pedagogy should be used in all adult literacy classes in the country.
- Our rationale for investigating the application of pedagogy in adult literacy classes was twofold: first, literacy is an important aspect of everyday communication and human development as a whole and second, pedagogy plays an important role in both the acquisition of new literacies and the improvement of literacy practices.

Present study

This article presents the findings of a study on pedagogical practices used in non-formal adult literacy classes in Katete District, Zambia. The aim of this study was to explore pedagogical practices in relation to international standards of non-formal and adult learning pedagogies and from the perspective of literacy as social practice (LSP), whereby reading and writing are embedded in the real-life contexts of the learners.

Research questions:

1. *What pedagogical practices are used in non-formal adult literacy education in Zambia?*
2. *How do the facilitators select the teaching and learning methods?*

Methods

The study followed a qualitative research methodology. Participants were literacy managers, facilitators, and adult learners in two literacy programmes: the government-run literacy programme and the Tikondane literacy programme. Literacy managers and facilitators were interviewed, classes were observed, and adult learners participated in learner-focused discussions in Cicewa. The data were analysed through inductive thematic analysis.

Pedagogical perspectives that framed the study

Standards of adult learning pedagogy

- Adult learning pedagogy is rooted in instrumental, humanistic, experiential, social, and transformational learning theories.
- Adult learners are characterised by diverse backgrounds, needs, and aspirations.
- In principle, adult learning is centred more on individual need than on collective or group learning needs.

- Successful learning is only possible when educators carefully design and select teaching and learning strategies to address individual needs while remaining committed to the teaching and learning process.
- Educators are expected to use interactive pedagogical strategies and identify individual learners' difficulties, abilities, and prior learning experiences. Concurrently, they also decide how best to help individual learners in their quest to acquire new knowledge and skills.
- Effective adult learning requires a teaching and learning approach which incorporates participatory pedagogies that are learner centred.
- Learner-centred pedagogy fosters a collaborative approach to teaching and learning, in which learners are valued as partners in the generation of knowledge, not merely as recipients of information provided by their teachers.
- Educators should create a teaching and learning environment that encourages learners to actively engage in class, prompting them through self-directed and reflective learning to consider how they wish to utilise the skills and knowledge acquired in class.
- Learner-centred pedagogy reflects a democratic approach to teaching and learning in which learners take ownership of the learning process.

Standards of non-formal learning pedagogy

- The idea behind non-formal learning is to promote learner-centred, pedagogical environments for active learning that are socio-culturally appropriate and that match the interests and aspirations of learners.
- The instruction methods used in non-formal learning are better adapted to learners than those used in formal learning, because they operate on the principle of flexibility and occur in a variety of settings with

learners of different orientations.

- A learner-centred pedagogy in a non-formal learning environment involves creating and increasing opportunities for learners to actively participate in class while supporting them to conduct purposive, self-directed, learning activities.

Findings

- Instruction methods depended on the lesson and topic in hand.
- Interviewees said that a lesson on literacy skills requires the use of teacher-centred lecture instruction, whereas non-literacy-based lessons involve the use of focus group discussions, narratives, drama, and role play.
- Some facilitators used songs for learners to remember the lesson they had studied.
- While most considered teacher-centred lecture instruction to be important in teaching literacy skills, some attempted to incorporate participatory methods aimed at enhancing learners' acquisition of literacy skills.
- Some learners preferred learning literacy skills in a similar manner to children in primary school.
- Some learners said they would prefer a method where the teacher writes on the board and allows learners to write in their books, because it could help them to learn faster than just talking.
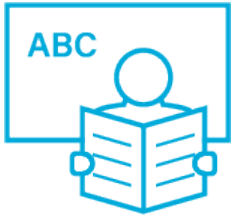
Conclusions

- While some facilitators discussed teaching from the perspective of learners' needs and using participatory methods, in reality most lessons were teacher-centred, consisting of dictation and drill exercises.
- The idea that literacy learners are illiterate and ignorant was an influencing factor in the facilitators' choice of instruction methods.
- They considered teacher-centred lecture instruction the best method for teaching literacy to adult learners who were unable to read and write.
- Some facilitators preferred a combination of lecture and participatory methods.
- However, even with this combination, the aim was to enhance learners' understanding of the lesson and not to help them apply what was being taught.
- The study concluded that little is occurring with regard to the application of the learner-centred pedagogy to meet the expectations of the 2012 curriculum framework on pedagogy in adult literacy learning in Zambia.
- Thus, authors of the study suggest the application of a holistic approach to adult literacy learning programmes in Zambia.
- This would include reconceptualising literacy in line with the 21st-century view of literacy as a multiple situated practice and aligning instructional methods with the roles of learners and their learning goals.