Learning Toolkit+ Newsletter

Spring - Summer 2025



Université Concordia University

CENTRE FOR THE STUDY OF LEARNING AND PERFORMANCE

Contents

Learning Toolkit+ (LTK+) 4

Our Literacy Tools Continue to Attract Global Users

LTK+ Updates: Spotlight on READS

International Projects Update 5

Nepal Pilot Project

ELM in Kenya

GPE-KIX Futhering Impact

The Role of the Learning Sciences in Tackling the Learning Crisis

Knowledge Exchange 11

UNESCO

CIES Conference

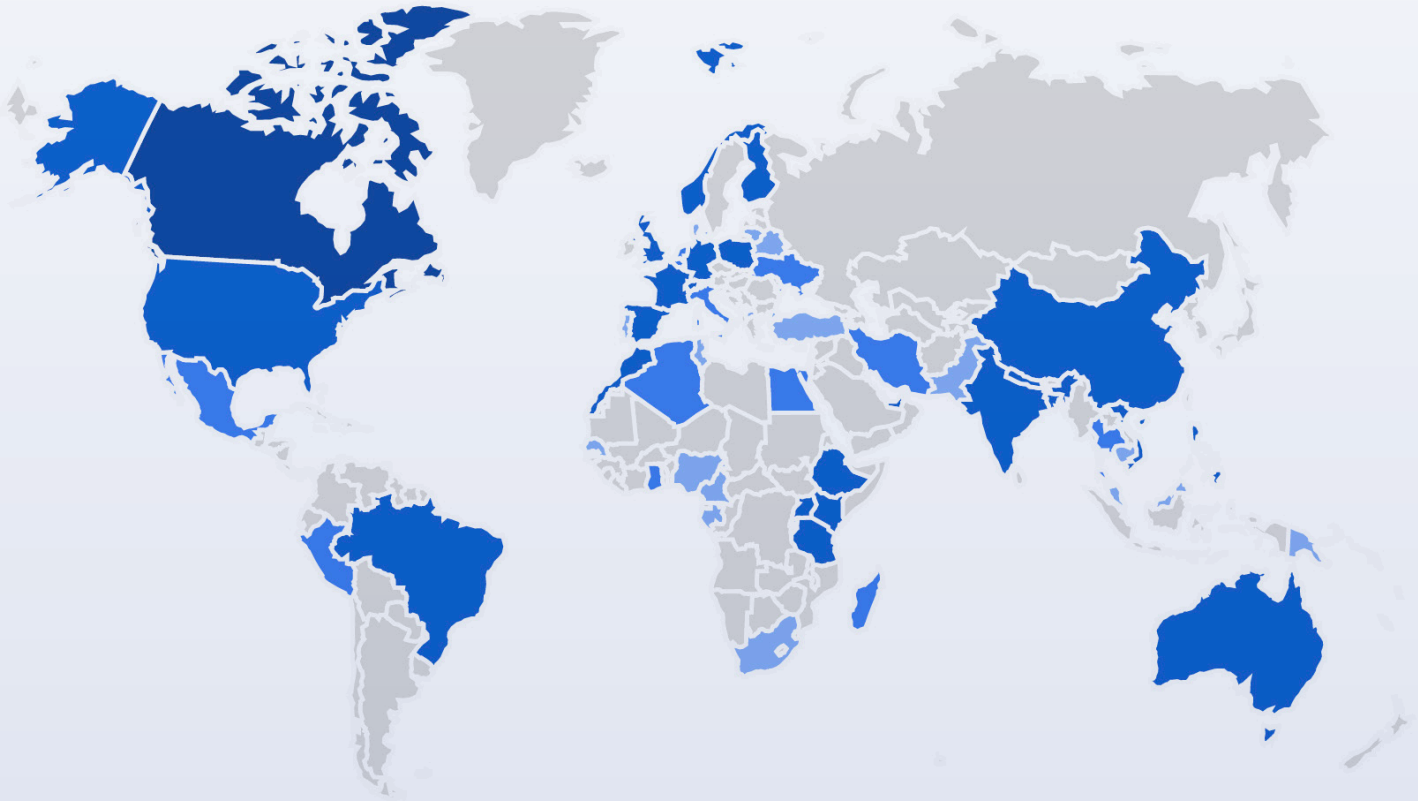
Exchanges with Aga Khan Professional Development Center Directors

Recent Publications

Learning Toolkit+ (LTK+)

Our Literacy Tools Continue to Attract Global Users

Concordia's bilingual (English and French) **Literacy Portal** provides access to ABRACADABRA Lite and the READS catalogue of multinational stories (versions that are accessible without an LTK+ account), along with the teachers' and parents' resources websites and the 12 literacy teacher professional development modules.



Country of origin of people visiting Concordia's Literacy Portal website (May 2024-2025)
[Source: Google Analytics]

This past year, a large majority of visitors were from Canada, perhaps due to direct links from the **Quebec government's Open School (école ouverte)** and home schooling sites, along with the **Regroupement des Comités de Parents Autonomes du Quebec (RCPAQ)**. Links may also be found on the IDRC **GPE-KIX** and **Canadian Children's Literacy Foundation (Fondation pour l'alphabétisation des enfants canadiens)** sites.

We were also pleased to see visitors from 66 other countries consulted the Literacy Portal resources, including those from the United States, France, Kenya, Ethiopia, China, United Kingdom, Nepal, Switzerland, Germany, Brazil, India, Tanzania, Hong Kong, Australia, and Morocco.



LTK+ Updates: Spotlight on READS

In January, 2025 the LTK+ team released a patch that provided minor technical improvements and maintenance for several LTK+ tools. In addition to these, an important objective for this patch was to incorporate Nepali books to better support a new group of teachers and students using ABRACADABRA and READS. Predominently, Nepali translations for the existing stories in READS were incorporated to ensure more students were able to access and enjoy the books that have entertained and supported the development of children around the world. There are currently 168 Nepali books accessible on READS. These books are great additions to the classroom as they align with Nepal's grade 1 curriculum themes and support different reader levels.

International Projects Update

Nepal Pilot Project

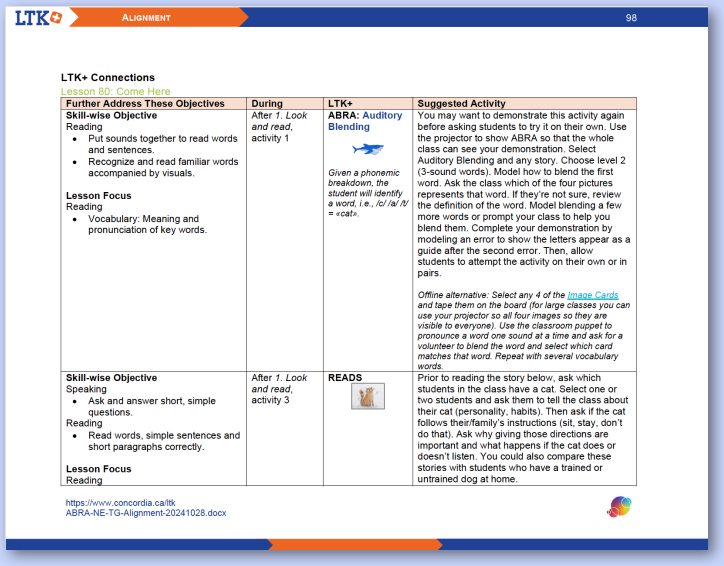
Towards the end of 2024 the Learning Toolkit+ literacy tools and accompanying Teacher Professional Development (TPD) program were brought to Nepal for the first time, as part of our Social Sciences and Humanities Research Council **(SSHRC) Partnership** initiatives. Nine grade 1 teachers from four public schools in Kathmandu were invited to participate in the pilot, which centered around an adapted literacy TPD program. Working in partnership with **Tribhuvan University** (Nepal) and **Open University** (UK), the LTK+ team at **Concordia University** revised training materials, and created an **ABRA/READS alignment guide** with suggested activities teachers could incorporate into Nepal's existing official grade 1 Teacher's Guide. Several new resources, such as worksheets and curriculum vocabulary word/image cards were also developed to support these teachers' implementation – all of which are now accessible on the **ABRA Teacher Resources** website. Along with the quest to improve literacy teaching and learning in these schools, another important goal was to continue our learnings related to integrating our literacy tools into new contexts.



Teachers attending the second day of training

Teachers started with a 3-day training session but were further supported through monthly hybrid follow-up meetings and on-site visits. Regular in-school observations were scheduled, where the researchers' visits doubled as a method for teachers to seek guidance and encouragement.

The team is in the process of analysing the observation notes, teacher feedback, and ABRACADABRA trace data. Early evidence suggests that even a short pilot project such as this, can lead to changes in beliefs, attitude and practice. For example, teachers began to utilize their schools' labs, which previously were solely used for the benefit of older students. Teachers were pleasantly surprised to see that children who attended school irregularly, started attending regularly, were engaged in the lesson, and in some cases improved their appearance and hygiene. The participants noted literacy gains in their students, which they felt was reflected in their final exam scores.



LTK ALIGNMENT 98

LTK+ Connections

Lesson 80: Come Here

Further Address These Objectives	During	LTK+	Suggested Activity
Skill-wise Objective Reading • Put sounds together to read words and sentences. • Recognize and read familiar words accompanied by visuals. **Lesson Focus** Reading • Vocabulary: Meaning and pronunciation of key words.	After *1. Look and read*, activity 1	**ABRA: Auditory Blending** *Given a phonemic breakdown, the student will identify a word, i.e., /c/ /a/ /t/ = «cat».*	You may want to demonstrate this activity again before asking students to try it on their own. Use the projector to show ABRA so that the whole class can see your demonstration. Select Auditory Blending and any story. Choose level 2 (3-sound words). Model how to blend the first word. Ask the class which of the four pictures represents that word. If they're not sure, review the definition of the word. Model blending a few more words or prompt your class to help you blend them. Complete your demonstration by modeling an error to show the letters appear as a guide after the second error. Then, allow students to attempt the activity on their own or in pairs. *Offline alternative: Select any 4 of the Image Cards and tape them on the board (for large classes you can use your projector so all four images so they are visible to everyone). Use the classroom puppet to pronounce a word one sound at a time and ask for a volunteer to blend the word and select which card matches that word. Repeat with several vocabulary words.*
Skill-wise Objective Speaking • Ask and answer short, simple questions. Reading • Read words, simple sentences and short paragraphs correctly. **Lesson Focus** Reading	After *1. Look and read*, activity 3	**READS**	Prior to reading the story below, ask which students in the class have a cat. Select one or two students and ask them to tell the class about their cat (personality, habits). Then ask if the cat follows their/family's instructions (sit, stay, don't do that). Ask why giving those directions are important and what happens if the cat does or doesn't listen. You could also compare these stories with students who have a trained or untrained dog at home.

https://www.concordia.ca/ltk
ABRA-NE-TG-Alignment-20241028.docx

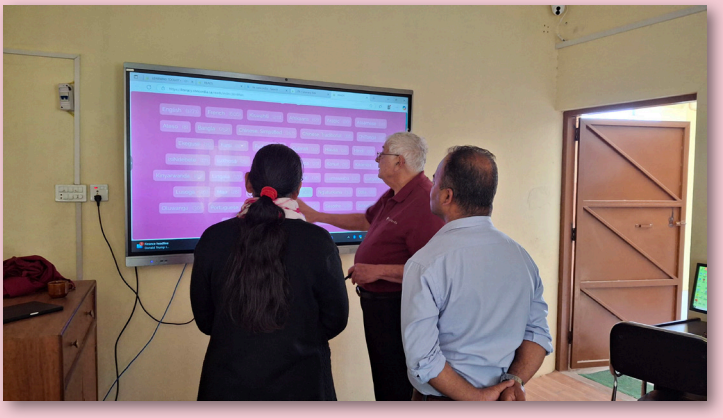
Sample page from the Nepal Alignment Guide





ABRA being implemented in Nepal classrooms

In March, LTK+ Lead **Philip Abrami** spent a couple of days in Kathmandu with the team from Tribhuvan University, led by **Kamal Raj Devkota**. In addition to meetings with NGO and government representatives, Phil spoke to the participating teachers and head teachers at their graduation ceremony and enjoyed visits to the pilot schools.





Phil Abrami visits participating schools to observe implementation and provide additional support for ABRA & READS

ELM in Kenya

In October 2024, researchers from **Concordia University** and **Aga Khan Academy** (Mombasa) completed a two-year project funded under our **SSHRC Partnership**. The study examined the use of the LTK+'s *Emergent Literacy in Mathematics* (ELM) numeracy tool, in public primary schools in the Mombasa region.

Grounded in research and developed with feedback from educators, ELM supports early learners in developing foundational skills in mathematics while also reducing math anxiety. It aligns closely with the goals of Kenya's Competency-Based Curriculum (CBC), which emphasizes real-life application of knowledge.





Kenyan children using ELM in their classrooms

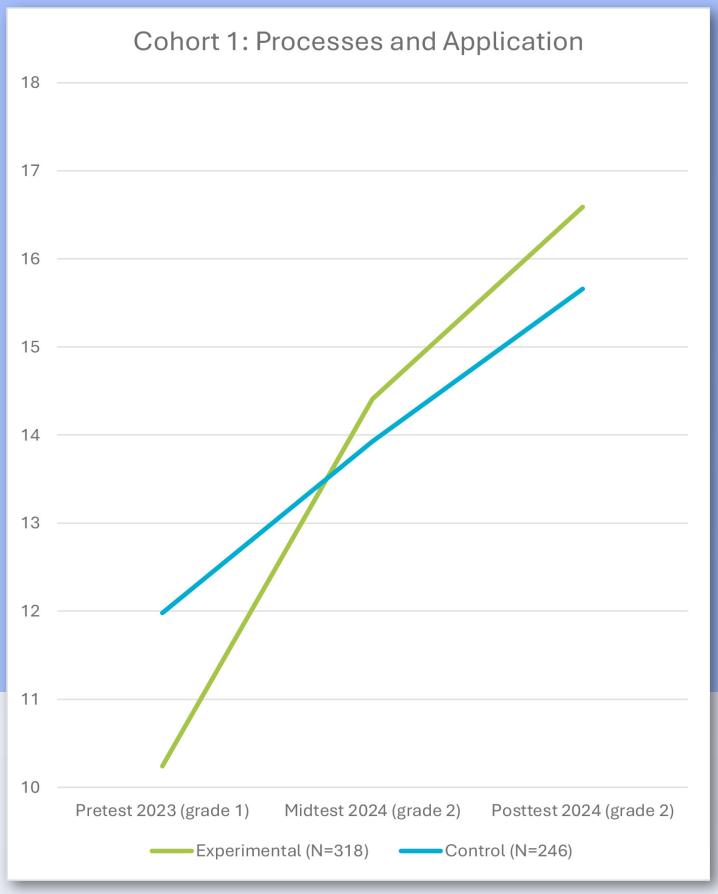
The project pursued the following objectives: a) to confirm earlier findings (**Lysenko et al., 2022**) showing ELM's positive effect on Grade 1 math achievement; b) to examine whether the benefits persist into Grade 2, and c) to identify effective strategies for helping teachers integrate ELM into everyday instruction.

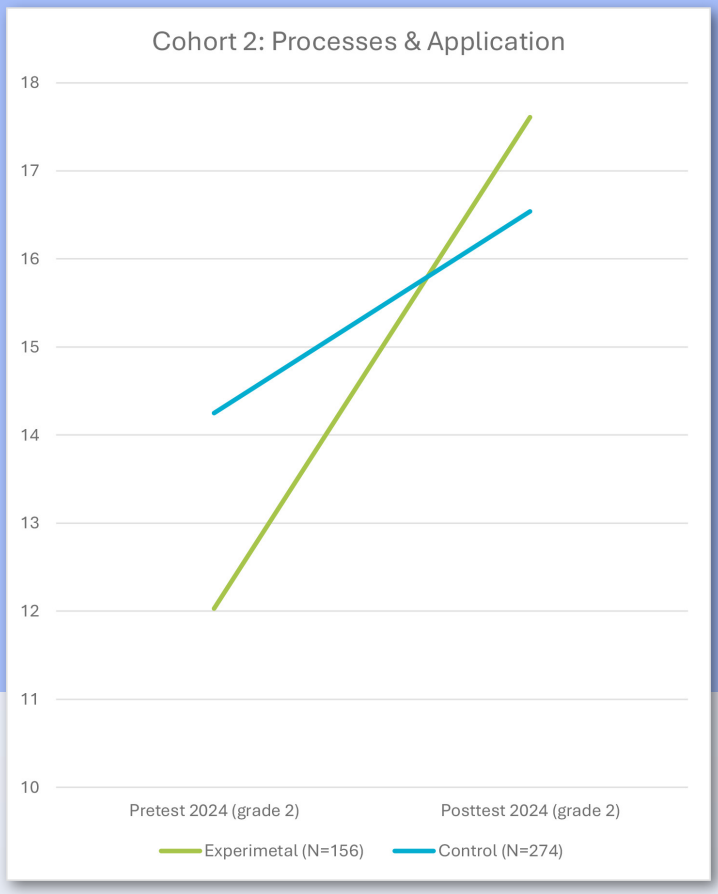
In the first year, cohort 1 was formed with 12 Grade 1 classes who used ELM during math lessons, while 11 comparison classes followed traditional instruction. The same teachers and students continued into Grade 2 in the second year. New teachers and students joined in year two, forming cohort 2 of 5 experimental and 6 control Grade 2 classes.

Student progress in mathematics was measured using a standardized assessment (GMADE, ***Group Mathematics Assessment and Diagnostic Evaluation***). Cohort 1 completed it in January 2023 (pretest), then again in January and September 2024 (midtest and posttest). Cohort 2 were tested in January and September 2024 (pretest and posttest).

Results showed significant growth for all students, but those in ELM classrooms—both girls and boys—made stronger gains, especially in solving word problems. These tasks required students to listen to a story and apply multi-step reasoning and operations to find the correct answer. These findings are particularly relevant to the CBC's emphasis on bridging theoretical learning with real-world problem solving.
ELM appears to not only strengthen basic skills but also support the development of more advanced competencies, critical for lifelong learning and success.

Figures below show that on these tasks, the ELM students outperformed their control peers by 23 and 29 percentile points respectively.





A comprehensive system of support to experimental teachers remained in the hands of our local team of LTK+ coordinators, **Clifford Ghaa** and **Livison Chovu**. They trained experimental teachers from both cohorts on the ELM software and its pedagogy. Then, along with school-based ambassadors (specially trained teacher in each experimental school) who made weekly class visits, they facilitated bi-weekly meetings. The latter were shaped by teachers' pedagogical needs and ELM-generated implementation data. A WhatsApp group supported communication of teachers outside meetings.





ELM teachers attending a "Refresher" session in 2023

To help augment the use of ELM, classrooms were provided with additional hardware where needed and further Kenya-oriented multimedia resources were designed and posted to the **ELM Teacher Resources** website.

The analyses of teacher and classroom data suggest high levels of uptake among the ELM teachers. For instance, teacher self-reports revealed they spent more time on advanced mathematical concepts—decomposing numbers, place value, data, and number lines, as compared to those teachers who did not use ELM. The experimental teachers were also seen to use more student-centered approaches, resulting in greater student engagement in their math instruction and overall lesson quality.

The ELM trace data, which tracks student use of the ELM activities, confirmed there was greater interaction by students with the more advanced concepts. The team was very pleased to learn that the average time a student spent on ELM correlated positively with richer mathematics instruction, student engagement, and perhaps most importantly, the student GMADE post-test scores.

All of these results were coupled with increased collaborative peer support and a growing sense of ownership over the program. Thus, ELM instruction can be impactful, sustainable, and scalable within Kenya's Competency-Based Curriculum, when coupled with the use of a rich mathematics TPD program, structured support, and accessible and relevant resources.



A teacher helps a student use ELM



An ELM teacher explains her lesson to Faraan Mithani, Partnership Manager at Aga Khan Schools



Teachers hold up their ELM certificates



Teachers & families who attended graduation

GPE-KIX Futhering Impact

In early 2025, the LTK+ team at the **Aga Khan Academy (Mombasa)** and **Concordia University** were very pleased to be awarded a modest, six month Furthering Impact grant as a follow up to our ***Using Technology to Improve Literacy in the Global South*** GPE-KIX initiative. This fund was established primarily as a means to support previous grantees in the mobilization of knowledge and to increase the uptake and sustainability of the evidence generated from the original grant.

With interest expressed by three government agencies, the **Ministry of Education**, **Teacher Services Commission**, and **ICT Authority** from the Taita Taveta county in Kenya, plans unfolded quickly for the training of curriculum support officers, quality assurance support officers, and ICTA technicians. The objective was to ensure they were well equipped to provide ongoing pedagogical and technical support to the teachers who graduated from our blended literacy TPD program in 2022-2023 and were using the LTK+ tools in their early literacy instruction. Classroom observations were conducted by the officers and these data are currently being analyzed. The LTK+ team hopes to gain more insight into what motivates teachers to "stick with" implementing an educational innovation they have introduced into their teaching practice and how best to support them in doing so.

The Role of the Learning Sciences in Tackling the Learning Crisis

The Learning Toolkit+ team recently released a **video** that begins with a success story from a remote community in Western Kenya, showing one teacher's journey incorporating the LTK+ literacy tools—ABRACADABRA and READS into her lessons that started many years ago and the lasting impact her instruction has had on her students. Part 2 of the video discusses the important role the learning sciences has to play in addressing the learning crisis in Low and Middle Income Countries (LMICs), and specifically how evidence-based and proven literacy and numeracy tools within the LTK+ along with teacher development, have resulted in substantial student learning gains. Additional funding is needed to maintain and expand these results to support the LMICs' progress towards UNESCO's Sustainable Development Goal 4 by 2030.



Screen capture of the "LTK+ and the Learning Crisis in LMICs" video

Knowledge Exchange

UNESCO

In December 2024 LTK+ lead, **Philip Abrami** presented our GPE-KIX literacy results from Kenya and Rwanda at the two day UNESCO Learning Forum. As well, this past year Philip Abrami and **Larysa Lysenko** have each served on the two UNESCO working groups-- one on foundational literacies and the other on technologies for learning.

CIES Conference

In March 2025, **Anne Wade** presented with longstanding collaborator, **Nancy Del Col** (World Vision Canada) and Haein Park (World Vision Korea) at the Comparative and International Education Society's **annual conference** in Chicago. The presenters discussed three initatives including the use of Learning Toolkit+ in Rwanda and Kenya, with recommendations for future integration of technologies into learning environments.



Anne Wade presents at the conference



The presenters gather for a group photo

Exchanges with Aga Khan Professional Development Center Directors

In September 2024, the Heads of the Professional Development Centers within the Aga Khan Academies from India, Bangladesh, Maputo and Mombasa came together in Mombasa to share information about their various initiatives and learn from one another. As part of this conference, the team visited various LTK+ schools to observe the integration of ELM and ABRACADABRA into lessons and hear about the teachers' experiences using technology-based strategies.



PDC staff being introduced to the LTK+

Recent Publications

Gottardo, A., Wood, E., Biddle, J., Urquhart, N., Ghaa, C., Kiforo, E., Iminza, R., WaGíokò, M., Korir, E., Brassard. L., Wade, A. & Abrami, P. (under review). Back to paper: When technology use is not an option for literacy instruction. ***Cogent Education.***

Gottardo, A., Wood, E., Maniraguha, J.B., Ghaa, C., Chovu, L., WaGíokò, M., Wade, A., & Abrami, P.C (under review). Teaching teachers about the science of reading: A teacher professional development program in Rwanda targeting the teaching of early literacy skills. ***Society for Scientific Studies in Reading.***

Leblanc, A., Chapleau, N., Laplante, L., & Lachance, M. (under review). Retombées d'une recherche collaborative sur le développement professionnel d'enseignantes au premier cycle du primaire au Maroc. ***Revue hybride de l'éducation.***

Lysenko, L., Abrami, P.C., Gottardo, A., Wood, E., & Wade, A. (under review). Using the reading sciences and technology for teaching and learning in the Global South. ***Journal of Learning and Instruction.***

Chapleau, N. et Santos, E. (in press). Apprendre à lire et à écrire en Afrique francophone : une étude de cas rapportant des pratiques d'enseignants à Dakar. ***Éducation comparée et internationale. Canada.***

Wood, E., Santhosh, E.G., Gottardo, A., Battaglia, N., Chovu, L., Ghaa, C., Wade, A., & Vogel, N. (in press). Kenyan teachers' experiences of an online professional development program across rural, peri-urban, and urban settings. ***International Journal of Teaching and Learning.***

Battaglia, N., Wood, E, Gottardo, A., Chovou, L., Ghaa, C., Santhosh, E., Vogel, N., Wade, A., & Abrami, P.C. (2025). Examining the effectiveness of an online blended professional development program for Kenyan teachers: Learning about alphabetics and fluency. ***Education Sciences***.15 (6), 709. **https://doi.org/10.3390/educsci15060709**

Chapleau, N., Leblanc, A. & Skelling-Desmeules, Y. (2024). Rapport des résultats de la recherche de l'étude réalisée en 2023 au Maroc. Soutenir l'apprentissage de la lecture et de l'écriture au royaume du Maroc avec ABRACADABRA. Document inédit.

World Vision Canada. (2024, March 13). ***Innovative technology improves children's learning.*** **https://www.worldvision.ca/stories/education/innovative-technology-improves-childrens-learning**

Learning, collaboration and growth: Recent PDC highlights at the Aga Khan Academy Dhaka. (Dec. 8, 2024). **https://www.agakhanacademies.org/dhaka/learning-collaboration-and-growth-recent-pdc-highlights-aga-khan-academy-dhaka**

Concordia

These projects have been funded by:

GPE KIX
KNOWLEDGE INNOVATION EXCHANGE

IDRC · CRDI
International Development Research Centre
Centre de recherches pour le développement international

Canada

Social Sciences and Humanities Research Council of Canada
Conseil de recherches en sciences humaines du Canada

Learning Toolkit
www.concordia.ca/ltk

CSLP
www.concordia.ca/cslp

Acknowledgements
Content: Jennifer Head, Larysa Lysenko, Anne Wade
Design: Constanza Roman Silva
© 2025 CSLP/CEAP