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### LTK+ Update

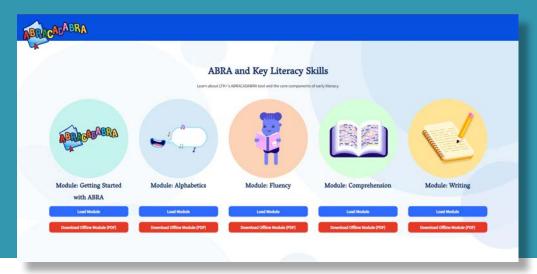
This past year, the development on the security additions and upgrades to the LTK+ suite of tools has focused on rebuilding the former Flash built-in recorder which is scattered throughout ePEARL and IS-21, upgrading the PHP version and converting over to HTTPS. Focus this year will be the redesign of teacher and student account creation.



# Teacher Professional Development Modules

Funded by <u>Concordia University</u> and designed by a team of researchers, subject matter experts, instructional designers and developers, <u>Teaching Early Literacy with the Learning Toolkit+</u> is a series of teacher professional development (TPD) learning modules freely available to the education community. The modules aim to help teachers develop their understanding of early literacy instruction, promote successful practices, and guide teachers in using the LTK+ tools in their classrooms.

In the past few months, additions and improvements were made to several of the TPD modules.



For example, we have enhanced the table of contents, making it easier to find, open, and navigate. A select few of the modules had some additional adjustments including a module glossary and the use of Google Analytics. The latter was added to track teachers' navigation and use of features and resources. The tracking data will be used to help our research team better understand teachers' experience within the modules, as well as inform our iterative design process. These changes will be tested in this year's training and if they are deemed valuable, we will apply them to the remaining modules.



Screen capture of the of the updated TPD learning module design. New features include a glossary and improved TOC design.

## International Projects

#### ABRACADABRA À CASABLANCA ET À RABBAT

Au printemps 2022, une étude exploratoire a été réalisée avec des enseignantes de l'école Ahmed Alhansali à Rabat et de l'école Almostakbal à Casablanca. Durant 8 semaines, elles ont intégré des livres et des activités de la ressource à leur enseignement. Conséquemment, 66 élèves de première année et 66 élèves de deuxième année ont appris à lire en français tout en s'amusant avec les personnages d'Abracadabra. Lors de la dernière rencontre de suivi, les enseignantes ont mentionné le dynamisme qu'ajoutait l'utilisation de la ressource à leur enseignement ainsi que la motivation des élèves à découvrir les activités. Actuellement, l'équipe de recherche (Nathalie Chapleau, Line Laplante, Monique Brodeur, Audrey Leblanc et Elsa Santos) analyse les résultats afin de poursuivre la collaboration avec les intervenants du Ministère de l'Éducation Nationale du Maroc. De plus, cette recherche nous a amené à publier quatre nouveaux livres sur la ressource LIRE en français et en arabe.

#### PROFESSIONAL DEVELOPMENT IN KENYA AND RWANDA

With continued funding from the International

Development Research Centre under the

Knowledge Innovation Exchange program

(GPE-KIX) we ventured into our third year

providing a TPD program. This program uses the

TPD learning modules as a core component and
then provides additional context-relevant
material.

The CSLP-LTK+ team worked closely with our LTK+ researchers from Wilfrid Laurier
University, and colleagues from the Aga Khan
Academies and World Vision Canada to improve last year's training program based on teacher feedback, performance, and findings of

the recent systematic reviews on online TPD. The newest rendition is a 15-week blended program on Alphabetics (i.e., letter knowledge, phonological and phonemic awareness, and phonics), that offers several opportunities to implement relevant lessons that align with the local curriculum. One of our primary goals this year was to ensure teachers had ample time to practice the knowledge gained and receive feedback from facilitators, peers, and head teachers. The hope is that this exchange will foster the development of a community of practice between participating teachers.

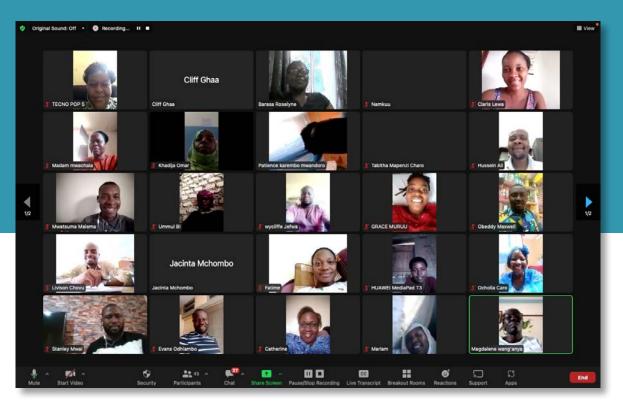
Our team plans to use the experiences and lessons learned in this Alphabetics program as a model for developing programs focused on more core literacy skills such as Reading Fluency, Comprehension, and Writing. Our project is also expanding. Training is currently underway in several Kenyan regions: Kibera, Kilifi, Kirindon, Kwale, Matete, Mombasa, and Taita-Taveta. We are also unrolling the training program in Buranga, Rwanda.

"There are so many activities that we learn on that course, which are very helpful to our learners".

- Teacher who received our TPD training in 2021

"I would recommend to every teacher. I've realized that learning starts mainly with literacy."

- Teacher who received our TPD training in 2021



Screen capture of one of the online zoom sessions with Kenyan teachers. Sessions were recorded and shared for the teachers unable to attend.

This year we will also be collecting student literacy achievement data using the Group Reading Assessment and Diagnostic Evaluation (GRADE) instrument with over 1000 students from Kilifi, Kirindon, Matete and Mombasa schools. The objective is to learn to what extent literacy instruction by teachers who have received our TPD program has a positive impact on their students' literacy development.



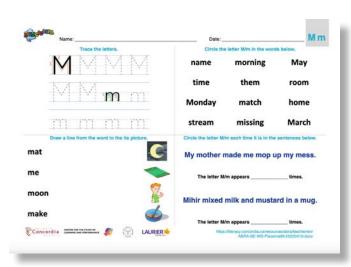
Kenyan children participating in GRADE pre-test.



Rwandan children participating in GRADE pre-test.

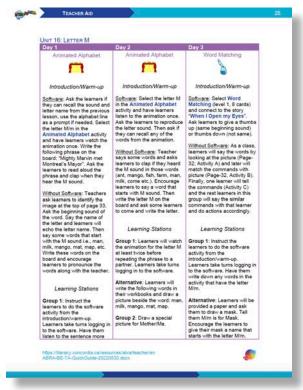
#### **BANGLADESH**

School closures for most of the past year prevented the LTK+ team from implementing ABRA in classrooms. Instead, we worked with the ABRA Coordinator, **Babu Bhuiya** at the **Aga Khan Academy (Dhaka)** and our subject matter experts from **Wilfrid Laurier University** in Canada, to develop a multiweek teacher guide. The guide was designed to align National Curriculum and Textbook Board (NCTB) content and ABRA activities. The guide offers 30 short units, flashcards, and several worksheets. Each unit spans



Sample placemat activity

three days and lists several activities using the ABRA software, activities outside of the software, and indicates relevant NCBT textbook pages. This coming year, the <a href="Teaching Early Literacy with the Learning">Teaching Early Literacy with the Learning</a>
<a href="Toolkit+">Toolkit+</a> program will be piloted with a dozen teachers, with plans to implement our literacy tools in a series of classrooms now that the schools are back in session.



Excerpt from the Bangladesh ABRA Quick Guide

#### **NUMERACY IN KENYA**

In 2021-22, with funding from the **Social Sciences** and Humanities Research Council, the LTK+ team continued use of ELM in five Mombasa schools with seven Grade 1 teachers in preparation for a student validation study that will be conducted in 2023. ELM has been used and studied in Mombasa and Western Kenya for many years, however the objective this past year was to learn more about how teachers may be supported as they integrate ELM into the new competency-based curriculum, especially those with large class sizes with high student-computer ratios. Based at the **Aga Khan Academy (Mombasa)**, LTK+ Coordinator, **Clifford Ghaa** served as the

facilitator for this project, visiting schools on a weekly basis, equipped with a portable lab. Cliff writes, "The learners were always happy to see the mobile lab arrive at the school. In some instances, learners would run to the school gate to welcome us whenever they saw us arrive, if not, we'd notice the joy and smiles they wear to the computer labs, ready for their lessons. Access to ELM made the learning fun for the learners and it also made it possible for the teachers to go through the concepts they have covered in class. The idea of school visit was well celebrated by both the learners and the teachers."



Classroom photo from Burhaniya



Classroom photo from Mwijabu

## Library Outreach

For a number of years, the LTK+ team has been working with Caroline Makokha, a National Librarian in Kenya who has designed a Doorstep Literacy program that brings children books and laptops equipped with the LTK+. She writes, "Digital literacy has become one of the best approaches for rural outreach. The use of modern technology makes young learners excited and fosters their life-long learning. The use of the literacy tools within the LTK+, especially the digital stories in READS, has been a great way to engage with children in remote areas within the Kilifi County. Story narratives especially the "How" or "Why" in the stories really excites them. This helps young learners to reconnect with an age-old African traditional way of oral story telling."

Recently Caroline visited the Umoja Primary School situated in Migadini-Mombasa County. The school caters to many children from the surrounding slums. The school has a population of 1850 learners, so catering to their learning needs is a great challenge. Having outreach reading programs brought much joy and motivated them to enjoy reading. Watch a video of this activity <a href="here">here</a>.



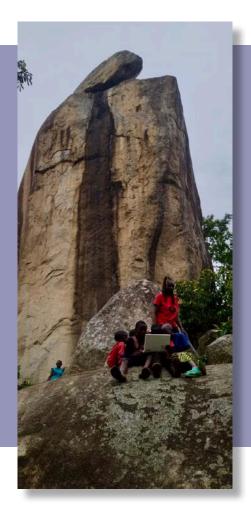


Excited children participating in the Doorstep Literacy program

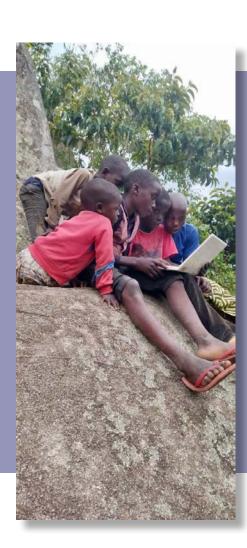
#### LTK+ ON THE ROCK

Caroline's latest adventures had her visit the town of Illesi in the Kakamega county. She writes, "Access to digital information can be limited especially in rural areas, yet my desire is to help learners from humble backgrounds. In Illesi stands a tall rock, with a solemn head resting on the weary broad shoulders and a column from top to bottom that streams tears. Villagers guard it as they believe when it cries, it

is a good omen, symbolising a good harvest ahead. When it stops crying many rituals are performed, to cast out demons which might hinder success or rather bring drought. A number of pilgrimages are made as it is of religious importance. On this rock, I had an opportunity to empower young learners using the LTK+. It was an adventure rising up against the odds to promote literacy!"



Children engaged with LTK+ during the Doorstep Literacy program



## **Knowledge Exchange**

#### **CONFERENCES**

On December 28-30, 2021, members of the Global Hub team (**WaGioko, Kiforo, Iminza, and Ghaa**) and various LTK+ Ambassadors participated in the **Kenya Primary Schools Headteachers Association** 

- 17th Annual Delegates Conference. This annual conference is an opportunity for over 26,000 primary school head teachers to present, showcase and discuss diverse issues pertaining to quality education in Kenya. This forum provided an excellent platform for sensitizing, exposing and enticing the Kenyan school heads on the KIX project objectives and activities. Over 80 head teachers provided their contact information to the Global Hub team and expressed interest for subsequent follow-up.





Our team participated in the 66th annual meeting of the **Comparative and International Education Society** (CIES), the largest and the oldest association of researchers and practitioners with the commitment to international education and cooperation. Inspired by the theme of Illuminating the Power of Idea/ lism, the 2022 conference ran between April 18-22 in the city of Minneapolis, Minnesota. This event was an opportunity for the team to report and reflect on our experiences as one of the twelve Knowledge and Information Exchange (KIX) global projects funded by the **Global** Partnership for Education (GPE) and hosted by the International Development Research Council (IDRC) in Canada.

Two discussion papers and one pre-conference panel presentation were our team's contribution to this event (citations follow). Namely, **Del Col** and **Wade** et al reported on the case studies that illustrate NGO-Academic relationship built to bridge the gap between research such as academic theory-building and practice such as NGO actions to implement interventions. Successes and challenges of collaboration between the academics and NGOs were also

discussed. In their paper, **Head** et al. overviewed the design of our online teacher professional development (TPD) program geared to improving teachers' early literacy instruction. The implementation experience in Kenya during the pandemic and post-pandemic years (2020-2021) informed further iterations of the TPD as the team have been learning how to effectively scale up our literacy teacher education initiative. Focussing on the adaptation of innovations as part of the scaling process, Lysenko and the members of the other seven KIX projects, individually and collectively reflected on how these projects navigated and adapted in different political, economic, social and cultural contexts as well as the challenges they faced in the process.



**Del Col, N., Wade, A.**, & Changamire, V. (2022, April 21). Academic -NGO Research Partnerships in International Development: Two case studies in Africa, Asia and America. Paper presented at the annual conference of Comparative and International Education Society. Minneapolis, MN.

**Head, J., Biddle, J. Wade, A., Lysenko, L., Abrami, P.C., & Iminza, R.** (2022, April 22). Scaling up a Literacy Educational Innovation: A Comparison of Teacher Education Models. Paper presented at the annual conference of Comparative and International Education Society. Minneapolis, MN

Amaro, D., Buchbinder, N., Castillo-Canales, D., Comba, R., Janigan, T., **Lysenko, L.**, ...... (2022, April 18). Adaptation of education innovations in the Global South: Reflections from Knowledge and Innovation Exchange projects. Preconference workshop at the annual conference of Comparative and International Education Society. Minneapolis, MN



#### LATEST PUBLICATIONS

Arshad-Ayaz, A., Naseem, M. A., Inyega, J. (In press). Using technology for learning: Generalizable lessons from the qualitative research on technology integration in Kenyan educational system. Frontiers in Educational Technology.

Chapleau, N. et Santos, E. (soumis, juillet 2021). Apprendre à lire et à écrire en Afrique francophone : une étude de cas rapportant des pratiques d'enseignants à Dakar. Cahiers d'études Africaines. France.

Gu, H., Yao, J., Bai, P., Zhou, L., Cheung, A. C., & Abrami, P. C. (2021). Does Abracadabra help improve the English reading ability of Chinese elementary school students? A quasi-natural experimental study. Science Insights Education Frontiers, 9(2), 1221-1240. https://doi.org/10.15354/sief.21.or041

Gu, H., Yao, J., Zhou, L., Cheung, A.C.K., & C. Abrami, P. (2021). A quasi-experimental study of a web-based English literacy tool for Grade 3 students in China. ECNU Review of Education, 4(1), 84-107. https://doi.org/10.1177/2096531120972709

Guo, X., Cheung, A, Abrami, P., Wade, A. (2022). Examining the impact of ABRACADABRA(ABRA), as a gamed-based online literacy program, on primary school students in rural Hunan, China. Educational Technology Research and Development. [Manuscript under revision]

Guo, X., Cheung, A., Abrami, P.C., & Wade, A. (2022). Teachers' perceived challenges of using technology to teach through the lens of activity theory: Lessons from rural China. [Manuscript submitted]. Teacher and Teaching.

Iminza, R., Lysenko, L., Wade, A., & Abrami, P.C. (2022). Implementing interactive literacy software in Kenya early childhood education classes. International Journal of Education and Develo pment Using ICT. 18(1), 55-66. http://ijedict.dec.uwi.edu/viewissue.php?id=64

Lysenko, L., Abrami, P.C. & Wade, A. (in press). Sustainability and scalability of digital tools for learning: the Learning Toolkit Plus in Kenya. Canadian Journal of Learning and Technology.

Lysenko, L., Wade, C. A., Abrami, P. C., Iminza, R., & Kiforo, E. (2022). Self-regulated learning in Kenyan classrooms: A test of a process e-portfolio. International Journal of Instruction, 15(3), 63-82. https://www.e-iji.net/dosyalar/iji\_2022\_3\_4.pdf

Lysenko, L., Abrami, P., Wade, A., Kiforo, E., & Iminza, R. (2022). Emergent Literacy in Mathematics (ELM): Learning numeracy with interactive technology in Kenya grade-one classes. [Manuscript under review]. International Journal of Innovation in Science and Mathematics Education.

Uribe-Banda, C., Wood, E., Gottardo, A., Wade, A., Iminza, R., & WaGioko, M. (2021). Evaluating teachers' learning, perceptions, and cultural differences following professional development for early literacy software. Canadian Journal of Learning & Technology, 47(2), 1–19. https://doi.org/10.21432/cjlt27952

Wood, E., Vica, C., Gottardo, A., Iminza, R., Kiforo, E., & Wade, A. (2022). Perceptions and pedagogical considerations in professional development training for integration of an early literacy program in Kenya. Oxford Education Review. https://doi-org.lib-ezproxy.concordia.ca/10.1080/03054985.2021.2018999

#### **EXTERNAL PUBLICATIONS**

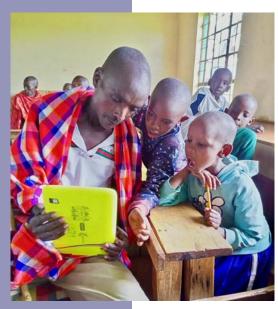
Arciuli, J., & Bailey, B. (2021). The promise of comprehensive early reading instruction for children with autism and recommendations for future directions. Language, Speech and Hearing Services in Schools, 52, 225-238. https://doi.org/10.1044/2020\_LSHSS-20-00019

Gutierrez, A., Lowe, K., & Guenther, J. (2021). Indigenous student literacy outcomes in Australia: A systematic review of literacy programmes. Asia Pacific Journal of Teacher Education, 49(1), 37-60.

Nair, A., & Dubé, A. K. (2021). Overcoming barriers to remote learning: Computer assisted instruction to enhance mathematical word problem solving.

Technology, Mind & Society, https://assets.pubpub.org/
qtd55gcf/41634565320290.pdf

Vousden, J. I., Cunningham, A. J., Johnson, H., Waldron, S., Ammi, S., Pillinger, C. Savage, R., & Wood, C. (2021). Decoding and comprehension skills mediate the link between a small-group reading programme and English national literacy assessments. British Journal of Educational Psychology, Advance online publication. https://doi.org/10.1111/bjep.12441



World Vision Kenya: ABRA Parent session



Learning Toolkit
www.concordia.ca/ltk

**CSLP** 

www.concordia.ca/cslp

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