

Al advances in education

As AI technology permeates the consumer sector, it is reshaping expectations in the educational landscape.

Its transformative potential has opened up new possibilities in teaching, learning and administration, challenging the traditional pedagogical model. However, this development has caught many educational institutions and ministries off guard, causing them to grapple with a steep learning curve to integrate into their curricula and administrative systems... with little or no policy guidance.

The rise of blended learning in the post-Covid-19 world has caused a sudden shift in education and training. It has brought out the need, more than ever, for the power and potential of technologies, such as AI, especially its capacity to facilitate remote learning and personalise the learning experience.

The Commonwealth of Learning (COL) has consistently advocated using appropriate blends of technologies in open and distance learning (ODL), prioritising accessibility for all. This approach enabled COL to support ministries and institutions in many Member States in maintaining resilience during the Covid-19 pandemic lockdowns.

COL has been at the forefront of using massive open online courses (MOOCs) for learning for sustainable development.

Our micro-courses portal, COLcommons, has engaged tens of thousands of learners. COL's recent work in virtual reality (VR) aims to incorporate experiences from working in low-bandwidth circumstances in developing countries. Women have been significant users of innovative technologies such as MobiMOOC, which blends the features of Internet technology with a delivery system via phone calls. We have also facilitated South–South co-operation in building capacity for virtual labs.

With recent developments in generative AI, we are developing innovative AI-powered learner support systems using GPT (Generative Pretrained Transformer). COL has organised expert-led webinars on the use of generative AI in education and training to highlight the opportunities and challenges for teachers and institutions. We hope that through open-source innovations, the rise of yet another digital divide in education can be avoided.

In this issue of *Connections*, we will examine how advances in AI are revolutionising the global landscape of open and distance learning and explore how unprecedented opportunities to transform education can be harnessed without losing sight of ethics and inclusion.

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COL holds Board Meeting in Vancouver



COL's Board of Governors held its annual meetings in Vancouver in late June. The meetings provided an opportunity to review progress towards achieving the results set out in the

Pacific Focal Points meeting in Fiji

The final of four regional Focal Points meetings in early 2023 concluded with eight of the nine Commonwealth Member States in the Pacific meeting in Lautoka, Fiji from 23 to 24 March. Focal Points are senior officials nominated by education ministers to keep them briefed on COL's work and provide guidance on country priorities, serving as valuable strategic advisors.

Senior officials from Fiji, Kiribati, Nauru, Papua New Guinea, Samoa, Solomon Islands, Tonga and Tuvalu participated in the meeting. The Director of the Pacific Centre for Flexible and Open Learning for Development (PACFOLD) also joined in. Professor Asha Kanwar, who chaired the meeting, highlighted the importance of building disaster resilience in education and spoke about open educational resources, as well as COL's agenda for education and climate action. The Focal Points emphasised building teachers' capacity in online learning as a priority in the region.



Strategic Plan 2021–2027. Members expressed appreciation for COL's work and impact under the leadership of COL President and CEO Professor Asha Kanwar.

Pan-Commonwealth Forum on Open Learning returns to Africa

Eleventh Pan-Commonwealth Forum on Open Learning PCF11

CommonWealTH of LearNING EDUcation and Skills development

COL and the Ministry of Education and Skills Development, Botswana, represented by Botswana Open University, will co-host the 11th Pan-Commonwealth Forum on Open Learning (PCF11) in Gaborone in the latter half of 2025.

In partnership with key institutions, COL organises the forum triennially in different parts of the Commonwealth. This will be the third held in Africa, with the most recent PCF10 co-hosted alongside Athabasca University in Calgary, Canada in 2022.

The forum is a significant global event on open, distance and technology-enabled learning, attracting hundreds of delegates from across the Commonwealth and beyond. PCF11 will be a hybrid event, with options to attend in person and virtually.

COL will be providing more information about the event in the upcoming months. Stay tuned!

Empowering Education for Pacific People

COL presented at the Conference of Pacific Education Ministers (CPEM) in Auckland, New Zealand under the theme "Empowering Education for Pacific People." CPEM's primary focus is to assess the region's progress towards the Pacific Regional Education Framework and 2030 Agenda goals. Ministerial delegations from all nine Commonwealth small island developing countries were present. Professor Asha Kanwar delivered a detailed presentation on building resilience, while COL's Vice President, Dr V. Balaji, joined the roundtable on financing. Conference organisers highlighted COL's initiatives and approaches for blue and green skills, the importance of continued investment in teacher capacity building and the need for flexibility in technical and vocational education and training (TVET) pathways.



Since 2020, COL has implemented a regional project supported by New Zealand's Ministry of Foreign Affairs and Trade to build teachers' and TVET institutions' capacity for using open, distance and flexible learning.

Canada announces a new COL project for empowering women and girls



The Honourable Harjit S. Sajjan, Canadian Minister of International Development, announced a new partnership with COL. The CAD 6 million project, between fiscal years 2023 and 2025, aims to improve the realisation of human rights for women and girls from disadvantaged communities in selected areas of five Commonwealth member states: Bangladesh, Malawi, Mozambique, Pakistan and Sri Lanka.

In thanking Minister Sajjan for this grant, Professor Asha Kanwar added, "We are grateful to the Government of Canada for promoting women's empowerment, not just here but also in countries where girls grow old before their years. We share this priority, and by focusing on leading paradigm shifts, COL can become an effective instrument for Canada to reach the last person in the queue."

COL President at international events











"Building Workforce Resilience in Disruptive Times." Video presentation co-written with Robert Okinda, COL Adviser: Skills, to the 6th International Conference on TVET in the Caribbean. http://hdl.handle.net/11599/5362

"Rethinking Education for Innovation, Growth and Sustainability Post Covid-19." Video presentation to the Commonwealth Education Ministerial Action Group. http://hdl.handle.net/11599/5352

"Reshaping Lifelong Learning for All." Keynote address at the International Seminar on Digital Transformation Reshaping Lifelong Learning for All, Shanghai Open University. http://hdl.handle.net/11599/5341

Roundtable on Building Resilience C-0-1





"Roundtable on Building Resilience." At the Conference of Pacific Education Ministers, Auckland, Aotearoa/New Zealand.

http://hdl.handle.net/11599/5287

IN BRIEF

"Technology-Enabled Learning (TEL) -Launching of Phase 2." Keynote address at the Higher Education Commission, Mauritius.

http://hdl.handle.net/11599/5251

"Putting Innovation at the Heart of ODL: What Are the Possibilities?" Keynote address at the International Conference on Open and Innovative Education,

Hong Kong Metropolitan University. http://hdl.handle.net/11599/5375

COL President meets PM of Tonga



Professor Asha Kanwar met with the Prime Minister of Tonga, the Honourable Siaosi Sovaleni, at the Conference of Pacific Education Ministers in Auckland, New Zealand. The Prime Minister commented, "The Commonwealth of Learning is an important partner of Tonga in the education sector." Discussion included how COL can support the newly established Tonga National University.

COL meets with Fiji's Deputy PM



Fiji's Deputy Prime Minister and Minister for Finance, Strategic Planning, National Development and Statistics, the Honourable Professor Biman Chand Prasad, welcomed Professor Asha Kanwar, participants and guests to Fiji during a reception at the regional Focal Points meeting.

OER policy development in Nigeria

COL is assisting Ladoke Akintola University of Technology and other institutions in Nigeria with developing an OER policy. A recent workshop brought together approximately 60 educators, administrators and policymakers to discuss how open educational resources (OER) policy can improve and benefit education at all levels in Nigeria. Utilising COL's OER policy template, stakeholders drafted an institutional OER policy document by the workshop's end. COL is committed to supporting the implementation of OER at national and institutional levels.



Capacity building for MOOCs in Trinidad and Tobago



COL is supporting the University of Trinidad and Tobago (UTT) to strengthen its institutional capacity to design, develop and deliver massive open online courses (MOOCs), particularly in areas that contribute to national development. The three-day workshop Supporting MOOC Development at UTT, held in April 2023, brought 38 of UTT's faculty and staff together to begin building a series of MOOCs. The first, entitled Dispute Resolution and Conflict Management for Law Enforcement, will be offered in August 2023. Dr Ruby Alleyne, UTT Vice-President for Quality Assurance and Institutional Effectiveness, commented, "Thanks to the lively and engaging workshop sessions, we now have a cadre of faculty and staff who are better placed for a digital future."

Training for blended learning, Maldives



COL supported Maldives' National Institute of Education (NIE) to organise a Blended Learning Design and Open Educational Resources (OER) workshop in late May 2023. Inaugurated by the Minister of State for Education, Dr Abdulla Rasheed Ahmed, the workshop was facilitated by COL's Dr Sanjaya Mishra, Director: Education, as part of a special COL project on IT Augmentation. Through this project, available to small and least-developed Member States, COL is helping build national resilience and strengthen institutional capacities to use technology-enabled learning. Introducing and modelling green technologies for ICT in teaching and learning is a significant component. Thirty-one workshop participants from NIE and its Teaching Resource Centres across the islands participated in finding, using and remixing OER to design blended courses.

The Gambia College adopts ODL policy

COL supported The Gambia College in developing an open and distance learning (ODL) policy and strategic implementation plan. At a five-day workshop in March 2023, the 30 participants included stakeholders from the college, the Ministry of Higher Education, Research, Science and Technology (MoHERST) and the Ministry of Basic and Secondary Education. The Director of Higher Education at MoHERST, Mr Anthony Mendy, emphasised the importance of taking ownership of the policy and pledged support to The Gambia College management in finalising both the ODL policy and the strategy. He noted that the policy should guide the college in providing accessible and inclusive teacher education and professional development opportunities through ODL modalities.



Digital skills a priority for Pacific teachers

COL and PACFOLD jointly held a co-ordination meeting in Lautoka, Fiji as part of an open, distance and flexible learning (ODFL) project being implemented in the region. In her opening remarks, Professor Asha Kanwar stressed the urgency and importance of the green learning agenda and the usefulness of blue and green skills for the region. COL was also requested to expand its life skills, climate change and adaptation, and digital technology leadership course offerings.



Bank launches learning centre for Indian farmers



The Andhra Pradesh State Cooperative Bank recently unveiled a new Micro-Learning Centre (MLC) at its Cooperative Training Institute in Hyderabad, India. In a collaborative effort between the bank and COL, the facility supports farmers from Andhra Pradesh state. Equipped with a studio, meeting room and boardroom for staff and management, the MLC offers learning content employing flexible formats tailored to meet different groups' needs. Educational content can now reach tens of thousands of farmers across the state each day, helping them obtain new skill sets to solve problems in their small farms and micro-businesses. The centre will also conduct highly focused and structured micro-courses using the mobiMOOC platform.

Caribbean vocational qualifications for quality TVET



COL supported the Caribbean Association of National Training Authorities (CANTA) in reviewing and implementing the guidelines and criteria for awarding the Caribbean Vocational Qualification. CANTA co-ordinates the technical and vocational education and training (TVET) system in the 13 Caribbean Community states. COL's Skills for Work initiative promotes open, distance and flexible learning to increase access to quality and affordable skills training. One focus is building on the resilience of TVET systems by supporting ministries and regional or state agencies in developing policies, strategies and standards.

Kiribati teachers trained in OER

In Kiribati, access to quality education and teacher training is a persistent challenge. Open educational resources (OER) and digital learning offer unique solutions, as they provide costeffective, easily accessible content customisable to local contexts. As part of COL's support to the Ministry of Education and Kiribati Teachers College, over 100 teachers and teacher mentors participated in the two-day blended workshop on Innovative Teaching and Learning with OER. Participants were introduced to various concepts in OER and mobile learning.

Mr Uere Toorua, a local school principal who completed COL's Understanding OER course, said he found it "very informative... I encourage colleagues to take note of the information in the course, especially on copyright and open licensing."



Promoting distance education standards in Jamaica

The University Council of Jamaica (UCJ) has signed an agreement with COL to help UCJ develop and pilot openly licensed online materials that will build the capacities of quality assurance personnel in 35 educational institutions across Jamaica.

These materials will be designed to assist Jamaica's higher education institutions in implementing the 2022 Standards for Distance Education developed and disseminated with COL's support. Ms Althea Heron, Executive Director of UCJ, emphasised the importance of COL's support in promoting the benefits and potential of distance education. "In today's rapidly changing world, innovation has become a constant feature of the educational landscape. This means that individuals must embrace the principles of lifelong learning to stay abreast of the latest trends and developments in their fields."



Building NGO capacity, Mozambique



COL conducted a workshop in Mozambique on using OER and developing online resources for staff at Aid for the Development of People for People (ADPP). COL has partnered with ADPP to train women and girls in marginalised communities in Maputo Province in skills and facilitate opportunities for livelihoods.

The participants were introduced to the concept of OER and their contribution to equitable education systems, particularly for girls and women. One participant said, "I am in the materials development section, and it is the first time that I have learned about OER. This session will not only help ADPP to develop OER but will also help ADPP to share its learning resources."

Skills training for at-risk young men in Belize

In collaboration with COL, Belize's Ministry of Youth, Sports and Transport (MYST) is helping provide at-risk young males with comprehensive hybrid skills training that combines face-to-face education with open and distance learning (ODL).



The project, Technology Training for At-Risk Males 14–17 Years in Belize, has provided 200 young men in Belize City with an opportunity for gainful employment and helped many return to school. The initiative is offering skills training on topics such as livelihoods in agriculture, hospitality management and customer service. Participants are linked with employers for internships/ apprenticeships after the project's completion.

ODL capacity building for Zambian teachers

The Teaching Council of Zambia (TCZ) collaborated with COL to introduce an innovative teacher professional development programme using open and distance learning (ODL) methods.

The ODL programme showcased the council's commitment to incorporating modern teaching methodologies and technology into in-service teacher training sessions. TCZ has emerged as an exemplar in promoting professional development and revitalising the teaching profession.



University faculty to create OER in India

COL's Commonwealth Educational Media Centre for Asia recently supported West Bengal State University (WBSU) in organising a capacity-building workshop on open educational resources (OER).

Faculty members of WBSU, its affiliated colleges and other prominent West Bengal higher education institutions received training in utilising, curating and creating OER.



1 Tips for "powering" a blue–green agenda through technology

Technology is constantly expanding and transforming the way we live and learn. How can educators, learners and leaders of institutions who depend on technology be good stewards of the blue–green agenda?



RECOGNISE THE IMPACT THAT DIGITAL DEPENDENCY HAS ON THE ENVIRONMENT

Be mindful that although digital technologies reduce paper waste and the carbon footprint of institutions, the metals used to manufacture devices deplete the earth of non-renewable resources; the energy and infrastructure needed to support these technologies damage the environment; and the e-waste generated contains hazardous toxins and pollutants.



PRACTISE RESPONSIBLE DIGITAL CITIZENSHIP

As leaders and educators, we can minimise the environmental impact of technology by promoting, selecting and using eco-friendly technology. Choose energy-efficient devices, use digital resources, resist the urge to constantly upgrade, practise e-waste recycling and if you are an institution, implement a green cloud strategy and promote telecommuting.



LEVERAGE TECHNOLOGY TO INCREASE ACCESS TO EDUCATION AND TRAINING GEARED TOWARDS A BLUE-GREEN FUTURE

Use technology to raise awareness and empower individuals to act. Offer or participate in learning opportunities that train persons for blue and green jobs. COL courses on the Blue Economy, the Green Teacher, Climate Change, Disaster Preparedness, Sustainable Agriculture and Sustainable Development in Business are a few examples. Use technology to preserve and share Indigenous knowledge about climate, the environment and sustainable practices.



USE AND SHARE FREE OPEN-SOURCE DIGITAL TOOLS TO MONITOR AND REDUCE ENERGY CONSUMPTION

Tap into the availability of digital tools and software that allow users to track and control their energy usage. Education institutions using smart technology can identify and model how to reduce energy consumption and conserve resources.

SUPPORT BUSINESSES WHOSE MODELS, PRODUCTS AND SERVICES SAFEGUARD THE PLANET'S NATURAL RESOURCES

Support companies that: have direct links to the blue and green economies; develop sustainable technology solutions; implement green IT practices; and are transparent about the materials they use and how they reduce waste. By supporting companies that prioritise sustainability, institutions can help drive innovation and promote practices that support the blue and green economies.

Advancing developm technolog

"Technology is leading to various innovations in teaching and learning. But technology by itself is an invention. It is only when technology is 'domesticated' according to specific needs and contexts that innovations happen."

Al training for teachers in Uttar Pradesh, India



The Uttar Pradesh (UP) government has recently started a project to introduce an AI curriculum in schools. In partnership with the Commonwealth Educational Media Centre for Asia (CEMCA) and the UP government, they are developing a curriculum for AI in early education. It is set in the framework of

India's "AI for All" initiative, which emphasises inclusion and empowerment.

UNESCO's *Beijing Consensus on Artificial Intelligence and Education* places the teacher in a central role. Governments are still considering steps to integrate AI in various stages of learning, especially in schools.

The northern state of Uttar Pradesh in India is the country's most populous. The state runs approximately one million schools, employing nearly ten million teachers.

Teacher training is the first step in the effort. CEMCA has identified the Massachusetts Institute of Technology's Day of AI as the primary OER for developing a MOOC for teachers in the government schools of UP. Entitled Introduction to AI for Foundational Stage Teachers and Students, this self-paced MOOC has five modules and can be completed in about two weeks.

Monica S. Garg, Additional Chief Secretary of the UP government, leads the initiative. She says, "AI in early education is an emerging subject globally. Training teachers to impart AI education is essential in enabling them to teach AI to students in kindergarten and primary schools."

Teacher training will be followed by designing an AI curriculum for all schools in the state, covering children at all levels.

Teachers gained from learning about Al applications



COL's six-week self-paced course Introduction to AI is designed to introduce and explain many of the key concepts of AI and show learners how the tools are being used now and potentially in the future. The course offering includes an AI-driven helpdesk to assist learners with troubleshooting while navigating Moodle, the learning management system used for the course.

Information technology teacher **Akeem Cyrus** of Grenada has been interested in AI for over five years, having experienced a taste of it in China in 2017. Mr Cyrus has long searched for something self-paced and affordable and was curious when he saw the course flyer. He described the course as useful and discovered applications for AI in both of his professions: teaching and farming.

Since taking the course, he has seen numerous opportunities to integrate AI into his teaching, his students' assignments and his farming. Akeem said he would also love to use AI to monitor his land, particularly when he cannot get on the ground daily. "The course opened my eyes to a few things that I never thought AI was a

part of."

Fellow learner and Science and Maths teacher in Seychelles, **Vicky Aglae**, found the course gave her more insight into how people can work with various types of AI.

She sees an opportunity to use AI to supplement her students' learning, making the courses as entertaining and interesting as possible to keep her students engaged.



g learning for ent through

Online training for skills leads to successful employment and enterprise development



Paul Mutemi is a beneficiary of a COL–Coursera Skills for Work scholarship — an initiative to close the skills gap for in-demand and high-demand jobs in Commonwealth Member States.

Paul's scholarship provided him with a self-paced, flexible learning experience offered

virtually on the Coursera platform.

He said that the COL scholarship was an eye-opening and enlightening experience. "I have learned from experts in the tech industry and, as well, got soft skills that helped me relate with colleagues and grow," Paul remarked.

Paul's hard work in the courses has paid off, and he recently earned an excellent job opportunity with the Mastercard Foundation as an Associate Lab Technologist in Kenya.

Derrick Ngigi is the Managing Director of Ycenter Shambah Solutions, a technology-based agribusiness solutions company in Kenya. He details how, two years ago, a group of determined students sat together in a small university classroom, fuelled by a shared vision to revolutionise the agritech space. However, they faced a significant challenge: a lack of the necessary



skills and capital to turn their idea into a reality. They then enrolled in the COL Udemy programme, providing the students with an invaluable opportunity to learn the relevant courses needed to build an Internet of Things soil-testing device.

According to Mr Ngigi, "The impact of this technology has been nothing short of remarkable, benefiting over 1,000 farmers and creating a ripple effect of positive change in the agricultural industry. It represents hope, progress and a brighter future for those who depend on the land for their livelihoods."



COL webinars on the role of ChatGPT in education

Highlighting the rapid growth of generative AI and its far-reaching impacts on education, COL presented a series of open webinars and panel discussions to help bring clarity and understanding to this game-changing technology.

The webinar ChatGPT: Implications for Teaching and Teacher Training introduced a Commonwealth-wide panel of experts in digital learning, ICT in development, teacher education and the application of AI in education to deliberate the transformative potential of AI tools, such as ChatGPT, in the context of teaching and teacher training, especially in developing country contexts. The potential of generative AI to advance inclusion in education was a highlight of the discussions.

The webinar Challenges, Opportunities and Worries: The Responsible Use of Generative AI examined the potential of generative AI for the education systems of different countries and for their learners while exploring the responsible use of generative AI. Discussion points included how a number of teachers and other education stakeholders have demonstrated the capacity of AI to interpret educational content, construct innovative lesson plans and facilitate dynamic learning environments. The promise of generative AI for transforming education and training in resourcelimited contexts was highlighted.

The COL webinar Artificial Intelligence and Open Education: A Critical Studies Approach explored the application and teaching of AI in open education from a critical studies and human rights perspective. Uses of AI should be understood in the three dimensions of institutions, teachers and learners.

In all, the online series provided participants with an opportunity to learn about the advantages, as well as limitations, of ChatGPT in higher education while also offering a new perspective on the role of teachers in the AI education paradigm.

Our Commonwealth



Accelerating the digital agenda at Botswana Open University

By Professor Kgomotso H. Moahi, Acting Vice Chancellor, Botswana Open University

COL has been a partner of BOU from its earlier days as BOCODOL. Some degree programmes originated in COL partnerships. BOU has been a leading partner in VUSSC. Great advances have been made in educational technology, with centre stage taken by virtual and augmented reality, artificial intelligence, big data analytics, the Internet of Things, and Cloud computing. These are well suited for distance education, as they can enhance interaction and engagement between students and staff, advance selfdirected learning and learner-centredness and provide access to a plethora of digital multimedia resources.

Botswana Open University (BOU) has always been mindful of keeping pace, as its first strategic plan focused on building a technology-enhanced university. Key to this aim was the Strategy for Technology Enhanced Learning, Teaching, Assessment and Student Support (STELTASS), which enabled BOU's swift pivot to online delivery during the Covid-19 pandemic.

From its inception, BOU has adopted emerging technologies to enhance access and increase student engagement, while being alive to the inequalities engendered by uneven skills and connectivity. BOU aims to be a technology-enhanced and globally recognised open university with decentralised systems, efficient service delivery, innovative solutions and a focus on student experience and academic excellence. Through technology, BOU can reach the unreached and the marginalised, aided by adequate funding and robust government policies on technology infrastructure.

Like many higher education institutions, BOU has moved to digital learning platforms such as Moodle. This technology integration has, to a large extent, ameliorated the challenges of distance learning for students, such as the isolation and demotivation caused by limited student–teacher and student–student interactions. BOU has developed several applications, including an app providing offline access to information on academic programmes and services, and other pertinent information. Through the e-Ethical clearance system, students can apply online for ethical approval of their research instead of travelling to a regional campus. Distance learning students require robust student support services such as academic and psychosocial counselling. BOU has developed an e-counselling system that obviates the need for students to travel and links students with the appropriate person(s) for their sessions.

Nationally, BOU has played a critical role in accelerating the digital education agenda. The university was pivotal in developing the national e-education policy framework submitted to the government and in building teachers' capacity for integrating technology into teaching and learning. BOU continues to advocate for an open educational resources repository that will encompass educational materials ranging from open schooling to tertiary education.

Amidst these great achievements have been challenges, including limited infrastructure, connectivity access issues, change management and BOU's financial constraints. The Covid-19 pandemic revealed severe inequalities in digital access and skills among staff and tutors. An e-tutor model was developed to guide them in the adjustment, and continuous training and capacity building were undertaken. Students were also inducted into how best to work with online content. Effort is needed to improve online formative and summative assessments and adopt a curriculum design for enhancing academic integrity.

The Government of Botswana has committed to connecting all villages to the Internet through the SmartBotswana project, which means that more people will have access to BOU's services. BOU has long researched how best to deliver products and services to its clientele. The foundation is set, and the goal is to continuously evolve and improve.

From 2023 to 2028, BOU will work to become an "inclusive open university" focused on ensuring equity and access to education for all, whatever the circumstances. Research and innovation will be key, as will having the necessary financial and human resources. BOU will continue identifying opportunities for partnerships, collaboration, best practices sharing and joint projects for improved services.

Celebrating International Women's Day

In a video message celebrating International Women's Day, Professor Asha Kanwar explained COL's role in promoting gender equality in education and training through digital innovation and technology. As an intergovernmental organisation focused on promoting learning for sustainable development through the use of technologies, COL has developed innovations to advance gender equality in education and training. Some examples include the Lifelong Learning for Farmers programme, which uses basic mobile phones to provide short audio lessons in local languages on agriculture and financial literacy to women farmers, leading to empowerment and economic gains.

Additionally, COL's CommonwealthWiseWomen programme employs a range of technologies, including WhatsApp, to link eminent women with girls in remote regions to provide mentoring and support. However, more is needed to keep women and girls in step with developments in technology, such as generative artificial intelligence and robotics. COL will continue to provide solutions that work in different contexts and promote enabling policies that help women transcend discriminatory barriers, while raising community awareness for supporting girls' education.



Skills for better livelihoods in the Pacific

COL has developed a comprehensive skills-building training programme that is now widely offered throughout Fiji's Western, Northern and Central divisions. The training is focused on young women, providing access to alternative learning opportunities to help improve their livelihoods. Using the blended learning approach, additional youths were able to participate across the country. More than 300 youths attended training in skills development areas such as soapmaking, business management, oil infusion, organic farm management and food processing. The programme taught youths not to rely on only one income source, but to grow and diversify their skills. This valuable training equipped them with new skills and opened doors to potential income opportunities and small business start-ups.

Losena Nasarau, one of the attendees from Fiji, said, "After the training, I have been able to learn the properties of soap ingredients and the recipe to make soap. I cannot wait to start my own business selling soap."



CEMCA and UNESCO raise climate change awareness



Commonwealth Educational Media Centre for Asia is collaborating with UNESCO on two unique initiatives: a Sustainable Development Goals (SDGs) Fellowship and a Curriculum on Climate Change for Community Radio (CR) Broadcasters. The fellowship allows CR broadcasters to highlight newsworthy and under-reported grassroots stories related to the SDGs.

The content-creation process is participatory. The SDG Fellows contribute to the curriculum, which is designed to fill the gap in structured learning programmes for people working in community radio. The SDG Fellows will be trained to use storytelling as a compelling medium to increase communities' awareness of climate change and how to take effective action.

ODL and TEL training for Ghanaian educators



With support from COL, Tamale College of Education in Ghana organised a three-day workshop on open and distance learning (ODL) and technology-enabled learning (TEL) in May 2023. This provided a platform to raise awareness and share insights into the institution's need to implement ODL effectively. The workshop offered a general introduction to ODL and TEL, practical teaching and assessment strategies using ODL, online communication and collaboration tools, as well as the role of open educational resources. The 40 participants also engaged in interactive sessions, hands-on activities and discussions on ODL implementation.

COL is working with various teacher education institutions to develop institutional policies and strategies for implementing ODL and TEL for both pre-service and in-service programmes. Through such collaborations, partner institutions can better harness the full potential of ODL methodologies to address the challenge of teacher shortfall and improve the quality of teachers trained.

People

NEW FOCAL POINT



UGANDA Mr Timothy Ssejjoba Ministry of Education and Sport FIJI Mr Vilitati Togavou Ministry of Education, Heritage and Arts

NEW COL CHAIRS



COL is pleased to announce the appointment of six new Chairs for the period 2023 to 2026:

- Professor Shironica P. Karunanayaka The Open University of Sri Lanka
- Dr Mark Nichols Te Pūkenga – New Zealand Institute of Skills and Technology
- **Professor John Traxler** University of Wolverhampton, United Kingdom
- Professor Geesje van den Berg

University of South Africa

- Professor Denise Whitelock The Open University, United Kingdom
- Professor Michalinos Zembylas Open University of Cyprus

Chairs were selected from numerous applications received from various open and distance learning (ODL) experts in the Commonwealth. The COL Chair programme is designed to (i) facilitate the development of effective ODL and technologyenhanced education and training through advocacy, research and capacity building across the Commonwealth; (ii) strengthen regional co-operation; and (iii) provide visibility for COL in the field. COL Chairs are honorary positions hosted by universities within the Commonwealth.

In Memoriam: Professor Daniel Kgwadi (1967–2023)



Professor Daniel Kgwadi, formerly a member of the COL Board of Governors, passed away on 30 April 2023. Trained as a physicist, Professor Kgwadi was an accomplished educator and administrator. In 2005, he became the first rector of the Mahikeng Campus of the newly formed North-West University (NWU) in South Africa. He went on to serve as Vice-Chancellor of the NWU for eight years before moving to the Vaal University of Technology. His influence can be seen in the institutional transformation and growth of ODL programmes at the NWU during his tenure.

Sports for skills development



Commonwealth Educational Media Centre for Asia (CEMCA) is collaborating with Pro Sport Development (PSD) to create the massive open online course (MOOC) Developing 21st-Century Skills through Sports.

CEMCA and PSD organised a consultation to discuss the draft outline of the MOOC and elicit feedback from physical education practitioners — the MOOC's target audience.

The MOOC will be 12 to 14 hours long with four modules. Its objective is to train physical education practitioners to use sports as a medium for helping learners develop essential modern skills such as problem solving, critical thinking, creativity, team building and leadership.

Enhancing learner support in Sierra Leone



With COL's assistance, Sierra Leone's Freetown Polytechnic conducted a workshop to build academic and administrative capacity to establish ODL learner support services. Dr Samba Moriba, Principal of Freetown Polytechnic, emphasised the significance of ODL learner support services in creating a nurturing, inclusive environment that helps learners overcome barriers, develop necessary skills and succeed in their educational pursuits, despite the physically distant and asynchronous nature of ODL programmes.

COL is committed to assisting such institutions in establishing support services that address ODL learners' diverse needs. As a result of the workshop, Freetown Polytechnic developed a manual on ODL learner support services, covering key aspects.

Unleashing the power of open schooling in Botswana

Over the past three years, COL's Open Schooling portfolio has supported Botswana Open University's College of Open Schooling with its digital migration process.

To ensure out-of-school youths know what opportunities they can access, how to do so and the potential benefits, COL supported an outreach initiative in the Kang Region last year under the banner Empowering Business Studies and Mathematics through OER and Open Courses. After receiving requests from other regions in Botswana, COL conducted another series of outreaches, accessed by 480 new or potential students and 120 teachers. The initiative has equipped teachers with the latest pedagogical strategies, teaching methodologies and curriculum alignment techniques, enabling them to deliver highquality instruction and remain current with their students' evolving needs. As Botswana continues to embrace OER and open courses, the future of education is bright, with empowered teachers and inspired learners at the forefront of educational innovation and excellence.



TVET toolkit for the Pacific

COL is supporting technical and vocational education and training practitioners for nine Commonwealth countries in the Pacific to continuously acquire professional development skills via the online Pacific TVET Professional Development Toolkit for youth employment. Five partner institutions are implementing continuous professional development (CPD) projects using the toolkit.

In Fiji, Pacific Polytech trainers are applying it to develop descriptors for 13 micro-courses related to construction. Lecturers at the University of Samoa are using toolkit resources to build a distance learners' course manual on how to grow and maintain plants in containers from seeds. Staff at the Ituani Vocational Skills Centre in Vanuatu used the toolkit to implement a project to enhance trainers' knowledge and skills. The toolkit activities include competency-based assessment, designing and developing open educational resources, providing skills training using blended learning approaches, building and strengthening relationships with industries and promoting TVET as a pathway for all learners.



Celebrating ten years: Reflections on COL's Journal of Learning for Development



In March 2023, COL published the first issue of the tenth volume of the *Journal of Learning for Development* (JL4D) — a forum for the publication of research with a focus on innovation in learning and its contribution to development.

As explained by Dr Sanjaya Mishra, it has three main characteristics:

- it showcases how learning for development works
- it focuses on innovation, with a special emphasis on, but not exclusively limited to, open and distance learning
- it provides a space for publications by both established and early career scholars.

In the last four years, some of the most engaged themes have been: how OER can be leveraged to support technology-enabled learning; the concept of learning for development; and the innovative ways technology can be harnessed to address the needs of different contexts.

According to Dr Tony Mays, COL's Education Specialist: Open Schooling, the use of appropriate technology tailored for context is a recurring theme, but we need to keep thinking about the why (learning for development) and the how (technologyenabled), and keep evaluating what we are achieving (lessons of experience and research) in order to close the feedback loop into improved practice.

Professor Alan Tait was the founding Editor-in-Chief and stepped down from that role in 2016 (although remaining involved as Emeritus Editor thereafter).

Ms Anne Gaskell took over as Chief Editor from Volume No. 2 in July 2016, and her final editorial was in 2019.

Professor Santosh Panda became Chief Editor from the first issue of 2020. He has noted a growing emphasis on understanding better how technology-enabled learning can contribute to learning for development.

In 2022, COL updated to the latest version of the Open Journal System. It has been linked with ORCID (a persistent digital identifier), has registered with Scopus (in addition to several other databases with which the journal affiliates) and added permanent links for each article.

COL thanks our Chief Editors for their guidance, the authors for entrusting us with their publications and our growing list of reviewers for their support of the journal and its authors.

Contributions are invited for the *Journal of Learning for Development*, which focuses on innovations in learning — in particular, but not exclusively, open and distance learning and its role in development. Contributions can take the form of

research articles, case studies, commentaries and reports from the field. Please visit the journal's website for more details and to submit work: www.jl4d.org

Fair Comment



By Dr T.V. Prabhaka Advisor IT Banaras Hindu University Varanasi, India COL Chair 2019–2021

"Al is poised to take education to the next level by providing significant capabilities."

Embracing the AI revolution: transforming education for the future

Artificial Intelligence (AI) has been a promising technology for quite some time, but it thoroughly burst into the mainstream with the introduction of ChatGPT. Suddenly, everyone is talking about generative AI, artificial general intelligence and singularity (the point when AI becomes more intelligent than human beings). So how will these advancements affect our daily lives, our job security and even our existence? And what do they mean for education?

Educators have always been early adopters of technology. We use computers extensively for various purposes, such as creating and consuming content, delivering courses, conducting research and managing learning processes. We have even transformed computer games into educational tools. Now, AI is poised to take education to the next level by providing significant capabilities.

At the heart of learning lies the interaction between teacher and student. In an ideal scenario, the teacher is fully aware of the student's background and learning abilities, enabling them to tailor the learning materials to suit each learner's specific needs. The teacher should be available 24/7, and the learning materials should be accessible in multiple formats, including lecture videos, audio summaries, strategy games and assessments. In simple terms, AI technologies can make all these possibilities a reality.

AI also has the potential to enhance all aspects of education, including teaching, learning, assessments and management, thereby impacting all the stakeholders involved: teachers, students, parents, educators and administrators.

For teachers, the first step is creating lesson plans, which can easily be handled by generative AI, allowing for customisation to cater to students with diverse backgrounds. AI can also assist in creating engaging lessons by providing relevant slides, notes, assignments and assessments. Furthermore, AI can help alleviate the burden of correcting assessments, often a major bottleneck for teachers. For students, the prospects are even more fascinating. They can expect an AI bot to be available anytime to assist them with their lessons and clarify any doubts they may have. The personalised tutor can not only help with the current lesson, but also provide supplementary material from previous lessons, if needed, and all at a flexible pace. Students with special needs are expected to benefit tremendously from such technology.

Analytics will experience a significant boost with the integration of AI at various points. School administrators will be able to assess the effectiveness of teaching and learning, identify areas of improvement and provide assistance to both students and teachers. Parents will gain insights into their child's progress and development.

However, while these advancements hold great promise, there are several aspects that need to be addressed. First and foremost, we must ensure that humans remain involved in the educational process, not only to oversee the implementation of AI but also to ensure its humane nature. With the abundance of data, concerns about privacy and bias need to be carefully managed.

When discussing AI in education, it is also crucial to determine what should be taught about AI itself in schools. Beyond the technical aspects of how AI works, it is equally important to address the moral, legal and societal implications of the impending AI revolution.

In conclusion, we are entering an era of both great interest and great challenges for society as AI continues to revolutionise education. The potential benefits are substantial, but we must navigate these advancements thoughtfully and responsibly.

For further reading:

Office of Educational Technology (2023). *Artificial Intelligence and the Future of Teaching and Learning: Insights and Recommendations.* US Department of Education.



New Resources

Cybersecurity Training for Teachers

Cybersecurity Training for Teachers is an introductory course providing essential knowledge to educators and parents for navigating online safety. It focuses on cultivating the safe use of digital learning technologies amid the growing shift towards online education, particularly in developing country contexts. This course material is available as an accessible digital book.

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Cybersecurity Training for Teachers

Machine Learning for Everyone

Machine learning (ML) is a subset of artificial intelligence that enables computer systems to learn and improve from experience without being explicitly programmed. It is done by developing computer programs that can access data and use it to learn for themselves. This course material presents ML concepts and techniques and the relation of ML to our everyday life in a way that anyone can understand.





Authentic Assessment for Online Learning: **Course Material**

This course material provides an overview of learning designs to help learners conceptualise authentic assessments. Upon completion of this course, learners are equipped with the knowledge and practical strategies to design learnercentred digital assessment focusing on academic integrity, engagement, authenticity and deep learning in the e-learning environment.



https://opentextbooks.colvee.org/ cybersecuritytrainingteachers/

Advanced Cybersecurity **Training for Teachers**

Advanced Cybersecurity Training for Teachers is a high-level course designed to equip educators with advanced skills to defend against cyber threats in digital learning. It not only instructs participants on how to protect digital learning spaces but also promotes the adoption of best practices for a secure online learning experience. This course material is available as an accessible digital book.



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Advanced Cybersecurity **Training for Teachers** (ACTT)

http://hdl.handle.net/11599/5377

COL's open access repository surpasses one million users

OAsis, the Commonwealth of Learning's open access institutional repository, has reached one million active users, as per data sourced from Google Analytics over the last 12 months. This platform has been a source of high-quality research and educational content, including open textbooks, course materials and an extensive collection of open educational resources.

OAsis has also provided an invaluable platform for scholarly papers, books and presentations, contributing to global academic discourse and enabling researchers, educators and learners to share and access knowledge on COL's areas of interest and competence.

https://oasis.col.org/

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#TECHtrends



Open-source in generative AI holds a promise for universities in developing countries

Generative AI is a widely used term thanks now to ChatGPT, which is based on a Large Language Model (LLM) called Generative Pretrained Transformer. In general, the use of LLMs in education can be transformative. For instance, they can be used to create intelligent tutoring systems capable of providing personalised learning experiences to students. These systems can answer students' questions, provide explanations and even generate practice problems. LLMs can be used to translate OER into local languages, making education more accessible.

Educators have noted some challenges when LLMs are used extensively in teaching. Concerns include the accuracy of outputs, implicit and explicit biases, and cultural appropriateness of the outputs. While some of the explicit biases can be addressed, there is no clarity on the removal of implicit biases.

A major concern is privacy. It has been shown that an adversary can extract/reconstruct the exact training samples from the LLMs, which can lead to the revelation of personally identifiable information. Ethical concerns in AI include how the training data for an LLM was acquired. It should be a concern for educators that use the models.

Recent models of GPT are commercial and cannot be repurposed. Open-source LLMs have emerged as promising tools, especially for developing countries. These models, pre-trained on vast amounts of data, can be finetuned to perform various tasks, from language translation to answering complex questions, making them a versatile asset in the educational sector. Like open-source software, they can offer a wide range of services in education with a lower cost of ownership. They can be downloaded and hosted locally. Some can be run using consumer-grade computers in an institutional network.

Several open-source LLMs are available today, and the number is growing. Bloom is the largest LLM available in the open-source domain with about 176 billion parameters. It can generate outputs in 46 human languages and 13 programming languages. Four different models in the family of Large Language Model Meta AI (LLaMA), owned by Meta (parent of Facebook), have been made available to the public — the largest having 65 billion parameters, pre-trained with quality data. LLaMA2 is a fully open LLM.

Pre-training LLMs is a resource-intensive process, often requiring significant computational power and financial investment. However, when in the open domain, these models allow third parties, researchers and practitioners to fine-tune them in using their institutional or private data to accomplish their AI tasks. This approach reduces the cost of leveraging LLMs, making them accessible to institutions with limited resources, such as universities in developing countries. The process of fine-tuning can also help address some of the concerns about accuracy or explicit biases.

Among the new open-source LLMs, Vicuna 13B is gaining popularity. It is a fine-tuned version of LLaMA, and some claim that it is comparable in performance to GPT-4 and Google Bard. The cost of fine-tuning Vicuna 13B was about USD 300.

A significant development is the release of Falcon 40B by the Institute of Innovation in the United Arab Emirates. It is a pre-trained model with high-quality data of about 750 billion words or about a trillion tokens. As a foundational LLM, it can be fine-tuned for any task. A lower version with seven billion parameters is also available, which can be run at a reasonable cost. Falcon 40B is an example of how a nationally co-ordinated effort can invest in creating its own high-quality LLM for unrestricted use.

The Russell Group of universities in the UK recently published a statement of principles for using generative AI in education. The principles include promoting AI literacy, building staff capacity, adapting AI tools and systems and maintaining academics while sharing best practices, rigour and integrity.

Open-source LLMs can help universities adhere to these principles and ethics of AI. They can also be offlined and used in universities, which can fine-tune them for performing relevant AI tasks.

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