

EdTech in Malawi: A Rapid Scan

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About EdTech Hub

EdTech Hub is a global research partnership. Our goal is to empower people by giving them the evidence they need to make decisions about technology in education. Our evidence library is a repository of our latest research, findings and wider literature on EdTech. As a global partnership, we seek to make our evidence available and accessible to those who are looking for EdTech solutions worldwide.

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Abbreviations and acronyms

CDSS Community Day Secondary School

CSS Conventional Secondary Schools

ECD Early Childhood Development

FLN Foundational literacy and numeracy

GDP Gross Domestic Product

ICT Information and communication technology

ICT4D Information and communication technology for development

JCE Junior Certificate of Education

MACRA Malawi Communications Regulatory Authority

MGDS Malawi Growth and Development Strategy

MoE Ministry of Education

MoEST Ministry of Education, Science and Technology

MSCE Malawi School Certificate of Education

NESIP National Education Sector Investment Plan

ODL Open and Distance Learning

PQTR Pupil-to-qualified-teacher ratio

TPD Teacher professional development

TTC Teacher Training Certificate

TEVET Technical Entrepreneurial Vocation Education and Training

1. About this scan

EdTech Hub country scans explore factors that enable and hinder the use of technology in education. These include policies, government leadership, private-sector partnerships, and digital infrastructure for education. The scans are intended to be comprehensive but not exhaustive. Nonetheless, we hope they will serve as a useful starting point for more in-depth discussions about opportunities and barriers in EdTech in specific countries, in this case, Malawi.

This report was originally written in December 2022 and has since been updated. It is based primarily on desk research, with quality assurance provided by a team of country experts. Given how rapidly the educational technology landscape is evolving, the Hub plans to provide periodic updates. Table 1 below provides a summary of the situation regarding EdTech in Malawi.

Table 1. EdTech in Malawi

Policies	 2013 National Information and Communication Technology (ICT) Policy (†Republic of Malawi, 2013) National ICT Master Plan 2014–2031 (†Government of Malawi, 2014) 2006 National ICT Development Policy (ICT4D) (†Government of Malawi, 2006) 2016 National Education Policy (†Government of the Republic of Malawi, 2016) National Education Sector Investment Plan 2020–2030 (†Malawi Ministry of Education, 2020) Malawi 2063 (†National Planning Commission, 2020)
Infrastructures	 2.5% of primary schools in Malawi are connected to the internet, and 1.9% of primary schools offer ICT lessons (†Malawi Ministry of Education, 2022b). 10% of Malawi's national population has access to internet connectivity, and 11.2% of households have access to electricity (†Malawi Ministry of Education, 2022b). 45.5% of urban households have access to electricity, compared to 4.1% for rural households; similarly, 31.1% of urban households have internet connectivity; this number drops to 5.9% for rural households (†Malawi Ministry of Education, 2022b).
Partners and initiatives	 National Numeracy Programme (NNP), is supported by FCDO/UKAid. Building Education Foundations through Innovation & Technology (BEFIT) is supported by the organisations Imagine Worldwide, VSO, and Onebillion. National Reading Programme (NRP), now operating as the Next Generation Early Grade Reading Activity (NextGen), is supported by USAID and Chemonics International. The Skills for a Vibrant Economy (SAVE) Project and the Digital Malawi Project, are supported by the World Bank.
Covid-19 pandemic	 On 23 March 2020, the Ministry of Education in Malawi announced nationwide school closures in response to rising Covid-19 infections. The closures affected around 5.4 million students across the country. (†Minister of Education, 2020)

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¹ See https://www.imagineworldwide.org/ Retrieved 9 April 2024 ² See https://www.vsointernational.org/ Retrieved 9 April 2024 ³ See https://onebillion.org/about/ Retrieved 9 April 2024

2. Country overview

Malawi is a landlocked country in Southeastern Africa bordered by Zambia, Tanzania, and Mozambique. It is a multilingual, multi-ethnic country with a population of more than 19 million. The country's official language is English; major other languages include Chichewa (spoken by about half of the people in Malawi), Chitumbuka (spoken mainly in the northern region), and Yao and Lomwe (spoken chiefly in the southern region). See Figure 1 for a language map of Malawi. English is the official language of instruction for all public schools and colleges (†USAID, 2021). From Standard 1, students are encouraged to learn in English; from Standard 5, every subject is taught in English except Chichewa.

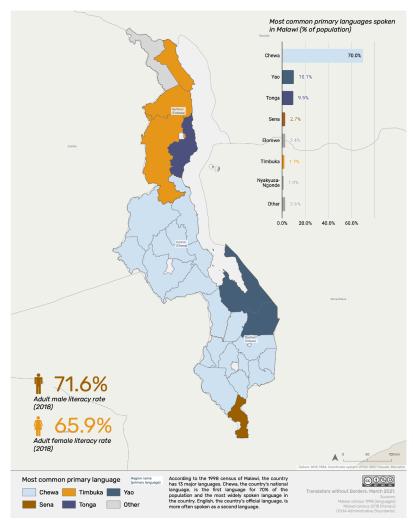


Figure 1. Language map of Malawi. Source: †Translators without Borders, 2021

Despite recent economic and structural reforms, Malawi remains one of the world's poorest countries, with its Gross Domestic Product (GDP) per capita ranking 144 out of 196 countries (†World Bank, 2022). Malawi's economy is agro-based, with agriculture contributing 37% of the national GDP (†Malawi Consulate, 2017). Eighty-five per cent of the population relies on agricultural

activities, especially rain-fed agriculture, making people susceptible to weather-related shocks (†Malawi Ministry of Education, 2020).

In recent years, Malawi has been severely burdened by health challenges including the HIV/AIDS epidemic, malaria, tuberculosis, and the recent Covid-19 pandemic (†UNICEF, 2022; †World Health Organisation, 2017). Although there is a high child and adult mortality rate, the country still maintains rapid population growth, with more than half of the population below the age of 18. Population growth puts pressure on the education and health systems, which require more strategic policy planning and implementation to ensure the country can take advantage of its potential demographic dividend (†Malawi Ministry of Education, 2020).

Malawi achieved independence from the United Kingdom in 1964 and became a presidential, multi-party democratic republic in 1994. The president is head of both the state and the government; local governments are maintained in 35 local councils in 28 districts and 7 city/municipal councils within 3 regions, with officials appointed by the central government (*Commonwealth Network, 2020).

3. Education system overview

In this section, we briefly summarise some of the core aspects of Malawi's education system, including its structure, key sector plans and relevant indicators, and additional details about the teacher workforce.

3.1. Structure of the public education system

The formal education system in Malawi follows a structure of 8-4-4: 8 years of primary education (Standards 1–8), 4 years of secondary education (Forms 1–4), and approximately 4 years of tertiary education, see Table 2 below.

Table 2. Structure of the formal education system in Malawi

Education Level	School types	Age	Certification
Primary	Primary Schools	6–13	Primary School Leaving Certificate of Education (PSLCE)
Secondary	Community Day Secondary Schools (CDSSs) or Conventional Secondary Schools (CSSs)	14–17	Malawi School Certificate of Education (MSCE); Junior Certificate of Education (JCE)
Tertiary	Primary and Secondary teacher training colleges; Technical Entrepreneurial Vocation Education and Training (TEVET) schools; colleges and universities	18–23 (or 24)	MSCE certificate is required for entry into universities and Teacher Training Institutes (TTIs); JCE or MSCE can be used for TEVET enrolment

The education sector in Malawi consists of five sub-sectors:

- Basic education, including early childhood development (ECD), complementary basic education for out-of-school youth, adult literacy, and primary education.
- Secondary education, which covers secondary schools and open and distance schools.
- Teacher education, which covers primary and secondary teacher training.

- Higher education, including higher education institutions (universities) and technical, entrepreneurial, and vocational education (TEVET).
- Support services, including various departments such as administration, planning and budgeting, human resource development, etc.

Among the five sub-sectors, formal education includes primary, secondary, and tertiary education. Informal education includes ECD, out-of-school youth, and adult literacy. The Government of Malawi plays the leading role in developing and implementing programmes in all these sub-sectors. Specifically, the Ministry of Education is responsible for primary and, secondary education, and teacher and higher education; the Ministry of Gender, Community Development and Social Welfare is responsible for ECD and adult literacy; the Ministry of Youth and Sports is responsible for out-of-school youth; and the Ministry of Labour is responsible for TEVET (†Malawi Ministry of Education, 2020; †World Bank, 2010).

Following elections in 1994, the newly elected democratic Government of Malawi declared free primary education, dramatically increasing enrolment (†Kadzamira & Rose, 2003). According to the Education Act (No.21) of 2013, "the provision of primary education in Government schools shall be free of tuition to all and compulsory for every child below eighteen years of age" (†Government of Malawi, 2013; †UNESCO, 2022). From the next academic year, the government intends to enforce free and compulsory education for the first eight years of formal education in Malawi.

3.2. Education sector plans and progress

The National Education Sector Investment Plan (NESIP) 2020–2030 (†Malawi Ministry of Education, 2020) lays out the history of Malawi's sector plans since independence. Education has been one of the top national priorities since the country's independence in 1964. The Government of Malawi has developed five education sector plans to set out goals, objectives, and strategies in different development phases, including:

- The first formal education sector plan (1973–1980) provided guidance for education development in primary, secondary, and teacher education as well as technical and vocational training. The plan prioritised secondary and tertiary education for human resource development.
- The second education sector plan (1985–1995) shifted priority from tertiary and secondary levels to primary education, increasing access, equity, and relevance of primary education.

- The third formal plan under the Policy and Investment Framework (1995–2005) aimed to increase access to education for all Malawians to ensure an equitable education system.
- The National Education Sector Plan (2008–2017), which was the first comprehensive plan developed by the Ministry of Education, covered all the education sub-sectors with three thematic areas
 - 1. access and equity
 - 2. quality and relevance
 - 3. governance and management.
- The National Education Sector Investment Plan (NESIP) 2020–2030 (†Malawi Ministry of Education, 2020) is a 10-year plan based on the Education Sector Analysis (ESA) Report (†Malawi Ministry of Education, Science, and Technology, 2019b). The plan sets out education sector goals and objectives, focusing on expanding equitable access to education, improving the quality and relevance of education, and improving governance and management (†UNICEF, 2020).

In the most recent Education Sector Plan, NESIP 2020–2030, improvement of education quality and relevance is prioritised as the key area of policy reform in all education sub-sectors. Alongside this, increasing access and enhancing systematic reforms under governance and management are also priorities. The main focus of ECD, secondary, and tertiary education is to increase access. In primary education, the emphasis is on improving learning outcomes. Furthermore, the sector plan treats girls and learners with special needs as a special category while ensuring they will be mainstreamed in all sub-sectors (†Malawi Ministry of Education, 2020).

Since the introduction of free primary education in 1994, Malawi has made notable progress in school enrolment; however, education quality failed to keep pace with increasing access. Dropout rates remain high, and learning outcomes are low (*Government of Malawi & UNICEF Malawi, 2014). Table 3 below shows some key education statistics of the country. The government has been expanding the physical capacity of the education system to keep up with demographic growth and increasing recurrent expenditures allocated to education.

Table 3. Key national education statistics (†Malawi Ministry of Education, 2020; †Malawi Ministry of Education, 2022b; †Trading Economics, 2022)

Expenditure on education	2020-2021	2021–2022
As % of GDP	5.0	4.53
As % of total government recurrent budget	26	26
Primary education gross enrolment rate (%)	2021	2022
Total	126.0	113.9
Female	128.0	109.3
Male	123.0	118.4
Secondary education gross enrolment rate (%)	2021	2022
Total	22.1	24.3
Female	21.2	23.1
Male	22.9	25.4
Tertiary education enrolment 2022	Universities	Teacher Training Colleges
Total	56,624	12,427
Total Female	56,624 23,491	12,427 6,910
	<u> </u>	
Female	23,491	6,910
Female Male	23,491 33,133	6,910 5,517
Female Male Out-of-school adolescents 2019	23,491 33,133 %	6,910 5,517 Total numbers
Female Male Out-of-school adolescents 2019 Total	23,491 33,133 % 18.56	6,910 5,517 Total numbers 341,691
Female Male Out-of-school adolescents 2019 Total Female	23,491 33,133 % 18.56 NA	6,910 5,517 Total numbers 341,691 166,620
Female Male Out-of-school adolescents 2019 Total Female Male Pupil-to-qualified teacher ratio	23,491 33,133 % 18.56 NA	6,910 5,517 Total numbers 341,691 166,620 175,071
Female Male Out-of-school adolescents 2019 Total Female Male Pupil-to-qualified teacher ratio (%)	23,491 33,133 % 18.56 NA NA 2021	6,910 5,517 Total numbers 341,691 166,620 175,071 2022
Female Male Out-of-school adolescents 2019 Total Female Male Pupil-to-qualified teacher ratio (%) Primary education	23,491 33,133 % 18.56 NA NA 2021	6,910 5,517 Total numbers 341,691 166,620 175,071 2022
Female Male Out-of-school adolescents 2019 Total Female Male Pupil-to-qualified teacher ratio (%) Primary education Secondary education Pupil to permanent classroom	23,491 33,133 % 18.56 NA NA 2021 62 37.5	6,910 5,517 Total numbers 341,691 166,620 175,071 2022 62 32.3

Literacy	Numeracy
90.3 (Chichewa) 90.4 (English)	24.9 (maths)
89.0 (Chichewa) 89.7 (English)	22.6 (maths)
45.3 (Chichewa) 96.2 (English)	77.5 (maths)
49.2 (Chichewa) 96.5 (English)	73.7 (maths)
	2020
	75.5
	68.8
	83.0
2021	2022
50	56
18.7	25
3.4	4.7
19.8	19.4
9.7	5.9
	90.3 (Chichewa) 90.4 (English) 89.0 (Chichewa) 89.7 (English) 45.3 (Chichewa) 96.2 (English) 49.2 (Chichewa) 96.5 (English) 50 18.7 3.4

3.3. The teacher workforce

The teacher workforce and teacher's professional development are vital to the quality of education. The main qualification for teachers at the primary education level is a school certificate from the Malawi School Certificate of Education (MSCE) after secondary school, followed by a two-year training programme called Initial Primary School Teacher Education (IPTE). Secondary school teachers are trained at universities or education colleges, for three types of professional qualifications: Bachelor of Education, Diploma of Education, and the University Certificate of Education. The University Certificate of Education normally takes 12 months to complete (*University of Malawi, 2022). In addition, some secondary school teachers are primary school teachers who have been selected by the District Education Manager or the Primary Education Advisors (PEAs) to teach at the Community Day Secondary

Schools (CDSS). However, these teachers are often underqualified as they were trained to teach at the primary level and may lack the requisite subject knowledge to teach at secondary schools (†Malawi Ministry of Education, Science, and Technology, 2019b).

From 2007 to 2017, the Ministry of Education implemented the National Strategy for Teacher Education and Development (NSTED 2007–2017). In 2018, the Ministry of Education developed the Continuous Professional Development Framework and Teacher Management Strategy (TMS) to strengthen teacher training and management (†Malawi Ministry of Education, Science and Technology, 2019a). The ministry also partnered with organisations to implement professional development programmes for teachers. For example, the Malawi Teacher Professional Development Support funded by USAID was a three-year project to provide primary school teachers training, coaching, and support (†USAID, 2011). With support from the World Bank, Malawian universities and the government also provide open and distance learning (ODL) programmes for untrained student teachers in remote schools (†World Bank, 2015).

Despite recent achievements in teacher education, there is still a shortage of qualified primary school teachers. According to the National Education Sector Plan, the target for the pupil-to-qualified-teacher ratio (PqTR) is to achieve 60:1 in 2030 (†Malawi Ministry of Education, 2020). Enrolment to study for the primary teacher training certificate (TTC) increased from 3,749 in 2008 to 7,373 in 2018. Although there was a significant improvement in the PqTR from 92:1 in 2009 to 62:1 in 2022, the goal is yet to be met (†Malawi Ministry of Education, 2022b). A total of 118,314 teachers are required to meet the PqTR target by 2030 as enrolment will also increase throughout the years (†Malawi Ministry of Education, 2020). Additional challenges for the teacher workforce include inadequate infrastructure, poor performance management, underqualified TTC tutors, lack of female teachers, lack of promotional systems for teachers, poor teacher management with inequitable deployment, and poor allocation of teachers within schools (†Kayuni & Tambulasi, 2007; †Malawi Ministry of Education, Science, and Technology, 2019).

4. ICT Infrastructure

ICT infrastructure development is listed as one of the priority areas in the National ICT Policy. The government recognises the importance of ICT infrastructure as the base for communication and electronic service delivery and stresses that the country's ICT infrastructure is underdeveloped, especially in rural areas (*Republic of Malawi, 2013). Through the Malawi Communications Regulatory Authority (MACRA), the Government of Malawi has been working to strengthen ICT infrastructure with public investment and public-private partnerships. For example, the Regional Communication Infrastructure Program Malawi Project aims to improve broadband internet connection access, quality, and affordability (*Global Infrastructure Hub, 2021). The Digital Malawi Project funded by the World Bank supports long-term, comprehensive investment in Malawi's digital transformation (*Public Private Partnership Commission, 2021).

According to the 2019 National Survey on Access and Use of ICT by households and individuals, only 10% of the national population has access to internet connectivity and 11.2% of households have access to electricity. Table 4 presents more detailed data on digital service access and device ownership in Malawi from the national survey. There is a big gap between urban and rural areas in access to ICT services and devices. Gender inequality also persists in terms of access to digital technologies. Low levels of electrification, high cost of internet and electronic devices, and lack of digital skills prevent most Malawians from utilising the country's digital infrastructure (†World Bank, 2021a).

Table 4. Digital service access and device ownership in Malawi, 2019 (†National Statistical Office, 2020; †World Bank, no date)

Service, device by household (%)	National	Urban	Rural
Electricity	11.2	45.5	4.1
Internet connectivity	10.0	31.1	5.9
Fixed telephone	0.2	0.9	0.0
Computer	3.5	15.6	1.2
TV	11.6	44.3	5.4
Radio	46.3	73.2	41.2
Service, device by individual (%)			
Ownership of mobile phone	43.2	72.3	37.3
Use of mobile phone	65.0	87.3	60.5
Use of internet	14.6	40.7	9.3

Few schools have access to ICT infrastructures and lessons. In Malawi, only 2.5% of primary schools are connected to the internet, and only 1.9% of primary schools offer ICT lessons (*Malawi Ministry of Education, 2022b). Figure 2 presents the provision of ICT infrastructure and instruction in primary schools within different districts.

Figure 2. *ICT provision in primary schools. Source:* †Malawi Ministry of Education, 2022b: p. 29.

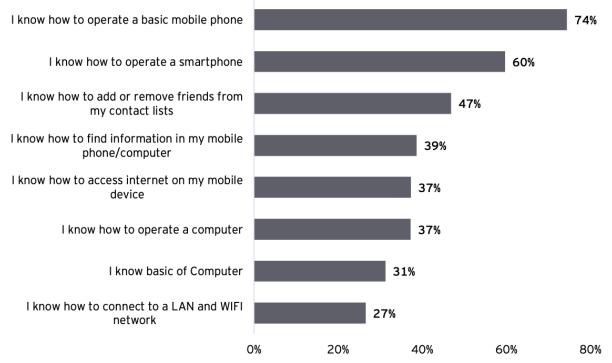
		Number of	Percentage of	Number of	
		School that	School that	Schools	Percentage of
	Total Number of	offer ICT	offer ICT	connected to	Schools connected
District	Schools	Lessons	Lessons	the Internet	to the Internet
Chitipa	189	2	1.1%	2	1.1%
Karonga	186	2	1.1%	2	1.1%
Rumphi	208	2	1.0%	3	1.4%
Mzimba North	287	2	0.7%	5	1.7%
Mzimba South	323	2	0.6%	3	0.9%
Mzuzu City	67	5	7.5%	7	10.4%
Nkhata Bay	210	1	0.5%	2	1.0%
Likoma	10	0	0.0%	0	0.0%
Kasungu	388	4	1.0%	4	1.0%
Nkhotakota	174	0	0.0%	0	0.0%
Dowa	254	1	0.4%	1	0.4%
Ntchisi	157	0	0.0%	0	0.0%
Salima	179	3	1.7%	3	1.7%
Mchinji	228	1	0.4%	20	8.8%
Lilongwe City	314	14	4.5%	10	3.2%
Lilongwe R. East	283	1	0.4%	2	0.7%
Lilongwe R.West	283	8	2.8%	11	3.9%
Dedza	267	5	1.9%	5	1.9%
Ntcheu	254	8	3.1%	8	3.1%
Mangochi	339	6	1.8%	7	2.1%
Balaka	174	1	0.6%	1	0.6%
Machinga	202	7	3.5%	6	3.0%
Zomba Urban	23	1	4.3%	0	0.0%
Zomba Rural	202	1	0.5%	1	0.5%
Blantyre City	282	18	6.4%	18	6.4%
Blantyre Rural	200	0	0.0%	1	0.5%
Mwanza	66	0	0.0%	0	0.0%
Chikwawa	203	9	4.4%	24	11.8%
Nsanje	112	2	1.8%	4	3.6%
Chiradzulu	98	5	5.1%	1	1.0%
Thyolo	212	1	0.5%	3	1.4%
Mulanje	183	0	0.0%	1	0.5%
Phalombe	99	15	15.2%	13	13.1%
Neno	94	0	0.0%	2	2.1%
Total	6750	127	1.9%	170	2.5%

On a more positive note, Malawi has a relatively well-developed foundation for digital infrastructure (†Hettinger et al., 2021). Thirty per cent of the population lives within 10 km of fibre nodes, and nearly all of the population lives within 50 km of fibre nodes. Eighty-eight per cent of people have access to either 3G or 4G signals. It is estimated that an additional 10% increase in mobile broadband penetration in Malawi could lead to a USD 189 million increase in GDP per year (†International Telecommunications Union, 2020).

According to the Digital Skills Ecosystem and Gap Assessment conducted by Ernst & Young (*Ernst & Young, 2021), digital literacy in Malawi remains very low. More than 60% of the Malawian population lack the skills needed to access the internet on mobile devices or operate a computer. Fifteen per cent of the

population have no digital foundational skills. Furthermore, a gender gap persists in digital literacy; foundational digital competencies of females in most of the parameters are below the national average, with 20% of females having no digital skills whatsoever.

Figure 3. Foundational Digital Skills in Malawi. Source: †Ernst & Young, 2021: p. 52.



5. EdTech policies and strategy

5.1. National ICT policies

The most recent national ICT policy issued by the Government of Malawi is the National ICT Policy, published in 2013 (†Republic of Malawi, 2013). It promotes the use of ICT at all school levels to increase access to and quality of education, enhance ICT literacy, and improve education management systems (†Saka, 2021). The policy aims to develop the ICT sector in Malawi by promoting universal access to ICT services and the use of ICT in all sectors. It provides an integrated framework for ICT-led socio-economic development policy and implementation. Key priorities of the policy include ICT infrastructure development and human capital development through increasing access to education. This document was informed by the 1998 Communications Sector Policy, the 2002 Science and Technology Policy, and the 2013 Digital Broadcasting Policy. To operationalise the 2013 National ICT Policy, the government issued a draft National ICT Master Plan for 2014–2031. The plan spans 18 years and is split into four separate plans with strategies and interventions to promote implementation (†Government of Malawi, 2014).

The Malawi Growth and Development Strategy (MGDS) is a series of five-year plans to guide the country's development (†World Bank, 2021b). In MGDS III 2017–2022 (†Government of Malawi, 2017), a set of medium-term expected outcomes and corresponding strategies were identified for strengthening ICT infrastructure (see Table 5 below).

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Table 5. ICT infrastructure development outcomes and strategies (†Government of Malawi, 2017)

Outcome	Strategy
Increased access to information and communications services	Promoting the participation of community broadcasting stations, private couriers and privately owned telecommunications service providers
	Improving the regulatory framework of the ICT sector
	Developing public online services
	Promoting community ICT and multipurpose information centres
Well-developed ICT broadband	Improving broadcasting distribution, content, and coverage
infrastructure service provision	Creating a conducive environment to attract investment in ICT infrastructure and services
	Enhancing enforcement of ICT regulation to protect the public from undesirable effects of ICT
	Promoting integration of ICT into core sector policies, strategies, and operations
	Developing a reliable, fast, adaptive, and robust ICT infrastructure
Increased stock of ICT-skilled and industry-ready workforce in public	Intensifying ICT research, education, and training in all sectors
and private sector institutions	Developing capacity to generate reliable and accurate local content

5.2. EdTech-related policies and strategies

In 2006, the Government of Malawi issued the Malawi National ICT Development (ICT4D) Policy, in which ICT deployment in education was emphasised under the key theme of human capital development. Four objectives were outlined:

- To facilitate the deployment of ICT in the education system to improve access, quality, relevance, and delivery of education at all levels
- To achieve universal basic ICT literacy and improve the level of ICT literacy across the country
- To transform Malawi into an information- and knowledge-driven ICT-literate nation
- To improve the management of education systems through the utilisation of ICT.

Under each objective, strategies to promote ICT in Education were laid out, which spanned from providing ICT skills training, facilitating collaboration between the Ministry of Education and other partners, and promoting virtual teaching and learning (*Government of Malawi, 2006).

In the National Education Sector Investment Plan 2020–2030, the use of technology was mentioned as part of different strategies to improve the quality of education at different levels, which include (†Malawi Ministry of Education, 2020):

- Using digitised teaching and learning materials to improve literacy and numeracy
- Constructing infrastructure such as technology centres
- Conducting trainings on computerised teaching aids
- Establishing platforms with digital curriculum
- Enhancing learning outcomes through the use of ICT-enabled pedagogy.

In the 2016 National Education Policy, quality and equitable access to Open and Distance Learning (ODL) is listed as one of the priority areas, emphasising enhancing ICT use in education (*Government of the Republic of Malawi, 2016). The National Education Policy recognises challenges to ICT in Education, including poor and inadequate ICT infrastructure, limited and unreliable

internet connectivity, and lack of appropriate management structures in ODL institutions. The policy statement of ODL includes plans to:

- Expand equitable access to ODL for learners at all levels
- Develop efficient governance structures and management systems for ODL institutions
- Align regional, national, and international ODL academic programmes
- Enhance use of ICT

The national ODL policy is linked to the Malawi National Education Sector Plan (2008–2017) and the Malawi Growth and Development Strategy (2017–2022). Both emphasise the integration of ICT in education. The ODL policy supports the improvement of the country's ICT infrastructure and policies, with strong ties to different education sectors at all levels of the education system (*Isaacs & Mohee, 2020).

In the Joint Sector Review Meeting (†Malawi Ministry of Education, 2022a) hosted by the Ministry of Education in November 2022, the need for a blended, face-to-face and digitised education strategy was emphasised to accelerate education transformation and achieve the Malawi 2063 vision. (†National Planning Commission, 2020) A set of strategies for ICT integration in Education was proposed, which include (†Malawi Ministry of Education, 2022b):

- Reducing the cost of data for education content
- Introducing digital skills training throughout the education system
- Expanding digital loans and grants
- Establishing local education technology development centres
- Establishing an Education Programs Delivery Unit (ePDU) to enhance sectoral coordination, systems approach, resource mobilisation, and efficiency
- Coordinating and expediting school infrastructure development programmes that are ongoing and in the pipeline
- Implementing the National Broadband Strategy and the "Connect a School" programme
- Digitalising all curricula and implementing a national scale-up of proven education technologies to enhance early grade teaching and learning
- Strengthening the data and accountability system for mutual partner accountability on learning outcomes

6. Key education players

Below, we list some of the key education stakeholders and partners working within the education system in Malawi. This includes key government agencies as well as non-governmental organisations.

6.1. Government agencies

Table 6. Government partners in EdTech

Ministry/Agency	Role and responsibilities around EdTech
Ministry of Education (MoE) ⁴	 Develop strategies and education policies related to ICT integration in education Develop and implement ICT learning programmes in the formal education system Provide ICT devices and resources to schools Set up online education management systems and digital learning platforms
Ministry of Information & Digitalization⁵	 Develop government policy and strategy within the sector; plays an oversight role for MACRA Address national priorities for economic growth and poverty reduction through the development and coordination of national policies related to ICT strategies
Open, Distance and e-Learning (ODeL) Department, within MoE	 Develop, implement and monitor open distance and e-learning policies, strategies, standards, and initiatives Coordinate with both internal and external partners to ensure the effective implementation of ODeL programmes Develop and disseminate study materials on academic ODeL programmes
Directorate of Science, Technology and Innovation (DSTI)	■ Promote ICT as a tool in providing education services

⁴ See https://www.education.gov.mw/index.php Retrieved 16 April 2024

⁵ See https://www.education.gov.mw/index.php Retrieved 16 April 2024 Edtech in Malawi: A Rapid Scan

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Ministry/Agency	Role and responsibilities around EdTech
Department of Information Systems Technology and Management Services (DISTMS)	■ Implement ICT policy and services
The Malawi Communications Regulatory Authority (MACRA) ⁶	 Regulate the ICT sector and advance ICT services Develop and implement ICT strategies and programmes Ensure ICT service delivery Promote universal access to ICT services
Directorate of Teacher Education and Development (DTED)	 Develop and implement Guidelines on ICT, science, and technology for teachers and curriculum development Construction of ICT laboratories in teacher training institutions Institutionalise alternative modes of teacher training, such as ODL; implement and monitor ODL
Malawi College of Distance Education (MCDE), under the Directorate of Open Distance & E-Learning	 Train ODL practitioners to provide more learning opportunities for students Offer online training courses for teachers Promote e-learning in open and distance learning
National Commission for Science and Technology (NCST) ⁷	 Provide science and technology (S&T) advice to the government and other stakeholders Promote, support, coordinate, and regulate the development and application of science, technology, and innovation Advise the government and other stakeholders on all science and technology matters
Presidential Delivery Unit	 Organised a digitalisation lab to develop new national ICT and digitalisation policies (†The Presidential Delivery Unit, 2020)

 ⁶ See https://macra.mw/ Retrieved 16 April 2024
 ⁷ See https://www.ncst.mw/ Retrieved 16 April 2024
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6.1. Non-governmental agencies

Table 7. Non-governmental partners

Organisation	EdTech programme in Malawi
The World Bank	 Skills for a Vibrant Economy (SAVE) Project MW Skills Development Project Malawi Education Reform Program Project
Cambridge Education	Key implementer of the National Numeracy Programme (NNP)
Voluntary Service Overseas (VSO)	 Building Educational Foundations through Innovation & Technology (BEFIT) Unlocking Talent project
One Billion	OnecourseBuilding Education Foundations through Innovation & Technology (BEFIT)
Imagine Worldwide	 Building Education Foundations through Innovation & Technology (BEFIT)
Computers for African Schools, Malawi	 Supply computers and develop e-learning labs for Malawian schools
Foreign, Commonwealth & Development Office (FCDO)/UKAid	 SchoolNet Africa⁸ National Numeracy Programme (NNP) Girls' Education Challenge (GEC)
USAID	■ NextGen
UNICEF	African Drone and Data AcademyJoint Programme on Girls' Education
Save the Children	 Tisewere Interactive Radio Instruction (IRI) programme
Malawi National Commission for UNESCO	 Capacity building through community radios Skills and Technical Education Programme (STEP)

⁸ https://schoolnetafrica.net/445.0.html Retrieved 19 November 2023 Edtech in Malawi: A Rapid Scan

7. Notable education interventions

Below, we list a number of past and active education interventions in Malawi, many of which include an EdTech component.

7.1. Key EdTech initiatives in Malawi

Table 8. EdTech initiatives in Malawi

Name	Year	Funded by	Focus	Description
National Reading Programme (NRP)	2016–2021	USAID	Foundational literacy and numeracy (FLN), Girls, Teacher professional development (TPD)	The National Reading Programme (NRP), initiated by the Government of Malawi, sought to improve reading performance for learners in Standards 1–4 and ensure that at least 50% of learners who complete Standard 4 can read. The project was focused on increasing the quality of early literacy instructions during primary school years and improving reading instructions for young children, especially girls and students with disabilities (†USAID, 2018; †USAID, 2022).
National Numeracy Programme (NNP)	2020- ongoing	FCDO / UKAid, Cambridge Education	FLN	The National Numeracy Programme (†NNP, 2023) initiated by the Government of Malawi, is a programme led by the Ministry of Education and Cambridge Education, and funded by UKAid. It aims to improve early maths performance for Standards 1-4, to ensure a solid foundation in basic numeracy skills.
BEFIT	2023- ongoing	Imagine Worldwide, VSO, Onebillion,	FLN	Building Education Foundations through Innovation & Technology (BEFIT) (†Malawi Ministry of Education, 2023) is a child-directed, tech-enabled learning programme that aims to improve foundational literacy and numeracy skills for learners

		Government of Malawi		in Standards 1–4 in Malawi. The intervention model was adapted from the 'Unlocking Talent' initiative led by VSO and has been successfully implemented in over 250 schools across Malawi since 2014. At full scale, BEFIT is estimated to be serving 3.5 million children per year across all 5,770 public primary schools in Malawi.
NextGen	2022–2027	USAID, Chemonics International	FLN	The Next Generation Early Grade Reading Activity ¹⁰ (NextGen) initiative builds on the progress to date of Malawi's National Reading Programme towards improving the delivery of high-quality early primary reading instruction in all Malawian primary schools.
Digital Malawi Project	2017–2022	Government of Malawi, World Bank	ICT infrastructure	Digital Malawi Project, ¹¹ (†Public Private Partnership Commission, 2019) also known as the Digital Foundations Project, aims to promote Malawi's digital transformation by improving access to ICT infrastructure and enhancing digital governance. The project also includes smaller initiatives to improve youths' digital literacy and skills and strengthen the digital infrastructure of research centres in Malawi.
Skills for a Vibrant Economy (SAVE) Project	2021–ongoing	World Bank	Skills training	The Skills for a Vibrant Economy (SAVE) project, launched by the World Bank and the International Development Association, aims to provide opportunities for skills training and development for tertiary education institutions. The project focuses especially on digital skills and technology (†World Bank, 2021c).

⁹ See https://www.vsointernational.org/our-work/inclusive-education/system-strengthening/unlocking-talent-through-technology Retrieved 19 November 2023

¹⁰ See https://chemonics.com/projects/sustaining-the-legacy-of-holistic-education-in-malawi/ Retrieved 19 November 2023

¹¹ See https://www.pppc.mw/projects/digital-foundations-project Retrieved 19 November 2023

7.2. Key EdTech initiatives that focus on foundational literacy and numeracy (FLN)

Table 9. Comparisons between notable FLN programmes in Malawi

Initiative	Timeline	Geographic scope	Target group	Intervention design/outputs
BEFIT	2023–2029	3.5 million children across all 5,770 public primary schools in Malawi	Learners in Standards 1–4 in primary school	 Provide children with solar-powered tablets, which have software installed that offers an evidence-based curriculum Establish solar power systems in primary school to provide renewable energy Provide ICT training for teachers
NNP	2020–2024	Over 1,100 schools in different regions of Malawi (2022–2023)	Learners in Standards 1–4 in primary school	 Train teachers in mathematics instruction by providing teacher guides and monthly learning circles on classroom practice Provide maths learner workbooks for students Conduct formative assessment to gather evidence on student learning
NextGen	2022–2027	All public primary schools in Malawi	Learners in Standards 1 and 2 in primary school	 Improve primary-level classroom instruction quality Design and apply performance standards and benchmarks to track early grade reading achievements Provide evidence-based, gender-sensitive early grade reading materials to teachers and students

8. EdTech development during the Covid-19 pandemic

On 23 March 2020, the Malawi Ministry of Education announced the closure of all schools, colleges, and universities in response to rising rates of Covid-19 infections (†Malawi Minister of Education, 2020). School closures put over 5.4 million children, youth, and adults out of school nationwide (†Gondwe, 2020). Schools reopened in phases from September to October 2020, yet in late January 2021, they closed again for about five weeks due to rising cases. Schools were fully or partially closed for 26 weeks (†Kidman et al., 2022).

The Covid-19 pandemic has led to an unprecedented focus on distance learning for policy interventions in Malawi, with different levels of implementation. Two months after school closures, radio lessons for primary school learners started airing on radio stations as a part of the Emergency Radio Education Programme (EREP) led by MoEST with support from UNICEF Malawi, Education Cannot Wait Fund, and Global Partnership for Education (GPE). EREP provided radio-based distance learning lessons for students from Standards 1–8, covering subjects such as mathematics, English, Chichewa, science, and technology. In addition to radio content, MoEST partnered with international organisations and local service providers to develop television content and online learning materials (†Gondwe, 2020).

9. Looking ahead

The current EdTech landscape in Malawi has room for a lot of growth, with the potential to shape and transform the country's education system. Under the national development strategy 'Malawi 2063', it is crucial to drive digitalisation across different sectors, particularly education, to enable progress towards the country's long-term vision for an inclusively wealthy and self-reliant nation. Consequently, the Government of Malawi has expressed policy interests and supported EdTech initiatives, with the Ministry of Education establishing a designated department focused on open, distance and eLearning policies and initiatives.

The government's commitment to providing quality education for all students has attracted partners and international organisations to invest in large-scale education initiatives nationwide. Some of these initiatives have already integrated EdTech components (e.g. BEFIT). With ongoing efforts to strengthen ICT infrastructure in the country, and a strong buy-in for EdTech from both the government and partner organisations, Malawi has embarked on a journey to harness the power of technology to provide quality education for all students.

Moving forward, there is a pressing need to coordinate resources and support in the education ecosystem to advance education initiatives in Malawi. Some key areas that require specific attention include foundational literacy and numeracy, teacher professional development in primary and secondary education, and skills development in tertiary education and for out-of-school children and youth. The Government of Malawi requires technical and strategic support to effectively structure and defragment existing and prospective projects.

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