

UNIT 5: LEGAL FRAMEWORK FOR ICT INTEGRATION ON EDUCATION



Introduction

- Countries that have harnessed the potential of Information and Communications Technologies (ICTs) have attained significant social and economic development. In addition, they are rapidly transforming into information and knowledge-based economies.
- The importance of ICT in education cannot be over emphasized. ICT is considered to be the key to unlocking the skills and knowledge of our learners.
- It is also considered to be gateway for learning of the 21st Century skills. ICT has quickly become a valuable tool for making education management more effective.
- It is therefore important that teachers and education managers become familiar with the legal and policy framework for use of ICT in education.



Expected learning outcomes

Upon completion of this unit you will be able to:

- a) Discuss the legal framework for ICT integration
- b) Discuss the policy framework for ICT integration
- c) Discuss the education policy framework for ICT integration



Legal framework for ICT integration



REPUBLIC OF KENYA
MINISTRY OF EDUCATION

- ICT integration in education is anchored on the provision of existing policies and legal frameworks in Kenya as well as international protocols.
- In this section, we shall discuss some of them.

a) The Constitution of Kenya, 2010

- in Article 43(1) of the Constitution guarantees education as a right to every Kenyan. Article 52(1) b stipulates that 'every child has a right to free and compulsory basic education'

b) Basic Education Act, 2013

- Section 95(3) (k) of the Act provides for the promotion, development, management and governance of Education through ICT Integration and Education Management Information System (EMIS), and statutory structural adjustment.





REPUBLIC OF KENYA
MINISTRY OF EDUCATION

c) Sessional Paper No. 1 of 2019

- The sessional paper calls for integration of ICT in education, training and research; for management, teaching and learning at all levels.
- It underscores the utilization of ICT in transforming education and addresses the challenges of access, quality, relevance and equity that the education system faces.
- The paper has also articulated the need for inclusion in acquisition of ICT infrastructure, capacity building, security and management of ICTs and adaptation of digital content for learners and trainees with special needs.

d) The Technical Vocational Education and Training (TVET) Act, 2013

- The Act recommends for integration of ICT to improve access and training capacity.





REPUBLIC OF KENYA
MINISTRY OF EDUCATION



e) Science Technology and Innovation (STI) Act, 2013

- **The Act** mandates the National Commission for Science Technology and Innovation (NACOSTI) to regulate and assure quality in the science and technology sector.

f) KICD Act, 2013

- The Act provides for the development, evaluation and dissemination of curriculum and curriculum support materials which includes digital learning resources.

g) Computer Misuse and Cybercrimes Act, 2018

- The Act provides for offences relating to computer systems; to enable timely and effective detection, prohibition, prevention, response, investigation and prosecution of computer and cybercrimes; to facilitate international co-operation in dealing with computer and cybercrime matters.

h) Industrial Property Act, 2001:

- **It** provides for the promotion of inventive and innovative activities, to facilitate the acquisition of technology through the grant and regulation of patents, utility models, technovations and industrial designs.

i) Copyright Act Rev. Ed. 2014

- The makes provision for copyright in literary, musical and artistic works, audio-visual works, sound recordings and broadcasts.

j) Standards Act, Chapter 496 of the Laws of Kenya

- **It** mandates Kenya Bureau of Standards (KEBS) to, among other functions, promote standardization in industry and commerce as well as to encourage or undertake educational work in connection with standardization.

l) E-Waste Management Regulations, 2013

- The Environmental Management and Coordination has provided guidance in management of electronic waste in the country. This applies to education institutions in the disposal electronic appliances

Policy framework for ICT integration

- We have looked at the various laws that deal with different aspects of use of ICT.
- Now, let us look at policies that deal with ICT integration in education.

a) The Kenya Vision 2030

- The social pillar of Vision 2030 mandates the Ministry of Education to provide quality education that produces a highly skilled human capital with the requisite ICT skills to competitively participate in knowledge based economy.
- ICT is also identified as the catalyst to drive socio-economic transformation of Kenya into a middle income country.

b) National ICT Master Plan 2014-2017

- This was developed with the vision of making Kenya an ICT hub and a globally competitive digital economy.
- The plan highlights the need to collaborate with relevant policy makers and regulators to integrate ICT into education and training at all levels.
- Further, it indicates that one of the most effective and efficient methods of developing the ICT workforce are to integrate ICT in schools, colleges and universities curriculum for non-ICT subjects.





REPUBLIC OF KENYA
MINISTRY OF EDUCATION



c) The National Education Sector Strategic Plan (NESSP) 2018-2022

- The strategic plan provides for integration of ICT in education, training and research for management, teaching and learning at all levels.
- The plan acknowledges ICT as a priority area to achieve Sustainable Development Goal (SDG) 4.
- ICT in the education sector has been mainstreamed in both curriculum delivery and education management.
- Digital literacy has been identified as a core competence from early years of learning implying that ICTs need to be incorporated in subsequent levels of education and training.
- Education Management Information Systems (EMIS) have been developed that aim at mainstreaming data management for informed decision-making. T
- he plan emphasizes the importance of using ICT as a pedagogical tool to enhance teaching and learning.



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



d) The National Curriculum Policy, 2018

- The policy emphasizes utilization of technology to enhance innovation in the implementation of competency-based curriculum.
- It proposes development of appropriate digital content and technology in teaching and learning; and building the capacity of curriculum implementers on digital instructional methods.

e) The National ICT Policy, 2019

- The policy recognizes the need for institutions to partner in the areas of research and innovation, and universal access within an inclusive setting.

f) The Digital Economy Blueprint, 2019

- The paper emphasizes on digital skills and values that promote the vision of a digitally empowered citizenry.



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



g) Policy on Information, Communication and Technology in Education and Training, 2021

- This is the main policy document in the education sector which aims at providing guidelines on the use of ICTs in education and training. For this reason, we shall discuss it in more details than the others.
- The policy acknowledges that the provision of quality and globally competitive education is critical towards attainment of the Kenya Vision 2030.
- It recognizes the heavy investments made by the government towards provision of quality education that is accessible, relevant and equitable to all.
- It acknowledges that for education reforms to succeed, ICTs should play an integral role in the delivery of quality education.



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



- This policy provides a framework for implementation of ICT in education and training across all levels.
- It is expected that this policy will enhance access to ICT infrastructure, provision of adequate and appropriate digital resources; enhance capacity of teachers, tutors and lecturers; and enhance research and innovation.
- Subsequently the ultimate goal is to develop digital literacy competencies among learners and trainees.
- We shall discuss the following policy themes:
 - Equity and access to education
 - Quality and relevance of ICTs
 - Research and Innovation
 - ICT Security, Safety and Ethics
 - ICT in Learning Institutions and the Community
 - Resource Mobilization and partnerships:



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



i) Equity and access to ICTS:

- The policy aims at enhancing inclusive access to ICTs at all levels of education and training.
- This can be achieved through provision of comprehensive and systematic ICT infrastructure across all levels of education and training.
- Strategies to be utilized to achieve this goal include:
 - a) Facilitate acquisition of quality, relevant and adequate ICTs across all levels of education.
 - b) Facilitate provision of affordable internet connectivity to learning institutions
 - c) Promote development of local ICT in Education solutions and make software more affordable.



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



- d) Facilitate the provision of ICT assistive and adaptive technologies for learners and trainees with disabilities
- e) Facilitate and support establishment of a national education data center.
- f) Collaborate with relevant MDAs to ensure access to reliable sources of power to educational institutions to enhance usage of ICT.
- g) Promote establishment of ICT innovation centres at national and regional levels
- h) Develop a support and maintenance framework for learning institutions
- i) Support development of Institution-based ICT policies.
- j) Promote linkages within various levels of education and training.



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



ii) Quality and Relevance of ICTs:

- The policy acknowledges that ICTs have become commonplace entities in many aspects of life including provision of educational services.
- The use of ICTs in education lends itself to more learner-centered settings.
- 'The world is moving rapidly into digital media and information and the role of ICTs in education and training is becoming more significant in the 21st century.
- To maintain quality and relevance in curriculum, digital learning and assessment there is need for effective use of ICTs for Education and training, along with ICT use in the teaching learning process; quality and accessibility of education; assessment and reporting.
- There is need for robust capacity-building both at pre-service and in-service levels of training.



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



- Effective implementation of ICT in education and training therefore requires that; educators, administrators of educational institutions, technicians, policy makers and key stakeholders have the necessary knowledge, skills and attitudes.
- Some of the strategies to be employed in enhancement of quality and relevance of education include:
 - a) Promoting the use of ICTs in curriculum development and implementation across all levels;
 - b) Promoting the adaptation of ICT integrated curriculum to cater for learners and trainees with special needs and disabilities;
 - c) Promoting collaboration and partnership in curriculum development and implementation on best practices in use of ICT in education and training.



REPUBLIC OF KENYA

MINISTRY OF EDUCATION



- d) Establishing quality assurance mechanism on ICT enabled curriculum development, implementation and assessment.
- e) Promote development of digital learning resources by educators and other providers.
- f) Promote the use of open educational resources and adoption of creative commons licensing for educational learning materials.
- g) Adapt digital learning resources for learners, trainees and educators with special needs and disabilities.
- h) Enhance educator training curriculum to include skills on development of digital learning resources;
- i) Promote protection of developed digital learning resources from plagiarism and copyright infringement.
- j) Enhance availability, dissemination and utilization of developed digital learning resources





REPUBLIC OF KENYA
MINISTRY OF EDUCATION



- j) Promote use of ICTs in assessments while taking into consideration examiners and learners with special needs and disabilities.
- k) Promote archiving and backing up of assessment materials in digital format.
- l) Empower learners, educators, administrators and other stakeholders in ICT enabled assessments.
- m) Promote development and use of online assessment platforms that ensure Confidentiality, Integrity and Availability (CIA) of data.





REPUBLIC OF KENYA

MINISTRY OF EDUCATION



iii) Research and Innovation:

- The policy acknowledges that technology is evolving and educationists as well as learners need to continually conduct research on how various emerging technological innovations can be used in use of ICT education and training.
- Research is critical in the development of an inclusive education in order to come up with innovative and effective technologies that meet the needs of all learners.
- A conducive ICT learning environment provides learners and educators with opportunities for research and innovation in ICTs.
- It also increases competitiveness in the process of research, innovation and entrepreneurship.
- ICTs have the potential to facilitate creation of knowledge and provide various channels of sharing this knowledge online and offline.



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



- The policy advocates for research in use of ICTs in education and training be conducted to inform evidence based decision making.
- Research and innovation in ICTs present an opportunity to transform education and training in our learning institutions so as to prepare learners and educators for a knowledge-based economy.
- The strategies to be used to encourage research and innovation in use of ICT in education include:
 - a) Promoting research and innovation in the use of ICTs for curriculum development, implementation and assessment.
 - b) Promoting creativity and innovation in use of ICT in education and training.
 - c) Facilitating research and innovation in the use of ICTs for management of data in education and training..



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



- d) Promoting access to equitable and inclusive education and training through research and innovation in ICTs.
- e) Promoting research and innovation in the use of ICTs to transform learning and teaching environment for global competitiveness
- f) Institutionalizing research and innovation in the use of ICT in education and training



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



iv) ICT Security, Safety and Ethics:

- The policy states that the government has continued to invest heavily in ICTs in education with the aim to positively impact on learning, teaching and management.
- In the age of “knowledge economy” information in all its forms has become a highly valuable asset and therefore needs to be carefully collected, securely stored and ethically used.
- The use of ICTs in teaching and learning can pose a great risk if ethical and safety issues are not well addressed.
- These issues range from unauthorized access to data, generation and sharing of inappropriate content as well as infringement on the rights of others.
- When people act contrary to national values they create a risk to ethos and online security of the citizenry.



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



- The policy states that the government has an obligation to protect the integrity of the user, data, processes and ICT infrastructure.
- In addition parents/guardians and other stakeholders in education and training have a role to play in safety and ethical use of ICTs.
- To enhance security, safety and ethical use of ICT in education and training, the policy recommends the following strategies:
 - a) Collaboration with Ministries, Departments and Agencies to enforce standards and guidelines on ICT security, safety and ethics in line with existing national and international legislations
 - b) Enhancing partnerships, networks, linkages and collaboration mechanisms in ICT security, safety and ethics



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



- c) Establishing mechanisms for vetting of digital learning resources to ensure security, safety and ethics in liaison with other relevant agencies in education and training
- d) Enhancing safe, secure and ethical use and management of data collected and generated while using ICTs in education
- e) Capacity building the users of ICTs in education on safe, secure and ethical use of data
- f) Establishing mechanisms to support digital trust for ICT enabled environment.



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



v) Resource Mobilization and partnerships:

- The government has continued to fund and mobilize resources to support use of ICT in Education and training.
- Various ICT programmes have been initiated to encourage use of ICTs in education and training.
- Effective utilization of ICT in education needs investment in capacity building, ICT infrastructure, research and innovation.
- However, such investment is capital intensive that requires adequate and sustainable resource mobilization through a multi sectoral-approach.
- Public-Private Partnership and Bilateral arrangements by the government have in the past enhanced resource mobilization and improved support structures for ICTs in education.



REPUBLIC OF KENYA

MINISTRY OF EDUCATION



- Therefore, there is a need for improved resource mobilization through harmonized collaboration with various stakeholders, parental and community participation.
- To enhance resource mobilization and foster partnerships for efficient use of ICTs in education and training, the policy recommends the following strategies:
 - i. Enhancing budgetary allocation for use of ICT in Education and training;
 - ii. Enhancing coordination of public and private partnerships for ICT resource mobilization across all levels of education and training;
 - iii. Promotion of public and private partnerships for provision of assistive and adaptive ICT resources across all levels of education;
 - iv. Strengthening parental and community participation in resource mobilization for ICTs in education and training.



REPUBLIC OF KENYA
MINISTRY OF EDUCATION



CONCLUSION

- In this Unit, we have looked at the legal and policy framework of ICT in education.
- We have examined the various laws that touch on use of ICT in education.
- We have also looked various policies that address the use of ICTS in education.
- We can conclude that the use of ICT in education is well anchored on the law and there are policy guidelines on the same and education managers and teachers need to be aware of this framework