

AN Overview ICT Teaching Methods

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ICT Integration

- There is a difference between technology use and integration,
 - Technology use means things that are being used in a classroom that do not interact with student.
 - It is a show that is being put on only by the teacher.
 - On the other hand, Integration makes students to be involved and interested.

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ICT Integration

- The UNESCO ICT Competency Framework for Teachers (p. 21) states that:
 - The successful integration of ICT into the learning environment will depend on the ability of teachers to structure learning in new ways, to merge technology appropriately with a pedagogy, develop socially active classrooms, and encourage co-operative interaction and collaborative learning and group work.


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Using Technology	Technology Integration
Technology usage is random, arbitrary & often an afterthought	Technology usage is planned & purposeful
Technology is rare or sporadically used in the classroom	Technology is a routine part of the classroom environment
Technology is used purely for the sake of using technology	Technology is used to support curricular goals & learning objectives
Technology is used to instruct students on content	Technology is used to engage students with content
Technology is mostly being used by the instructor(s)	Technology is mostly being used by the student(s)
Focus on simply using technologies	Focus on using technologies to create and develop new thinking processes
More instructional time is spent learning how to use the technology	More instructional time is spent using the technology to learn
Technology is used to complete lower-order thinking tasks	Technology is used to encourage higher-order thinking skills
Technology is used solely by individuals working alone	Technology is used to facilitate collaboration in & out of the classroom
Technology is used to facilitate activities that are feasible or easier without technology	Technology is used to facilitate activities that would otherwise be difficult or impossible
Technology is used to deliver information	Technology is used to construct & build knowledge
Technology is peripheral to the learning activity	Technology is essential to the learning activity

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ICT Integration

- The integration of technology in the classroom involves a **planned, highly structured and purposeful** use of technology with students with the aim of engaging students and helping them develop new thinking skills.



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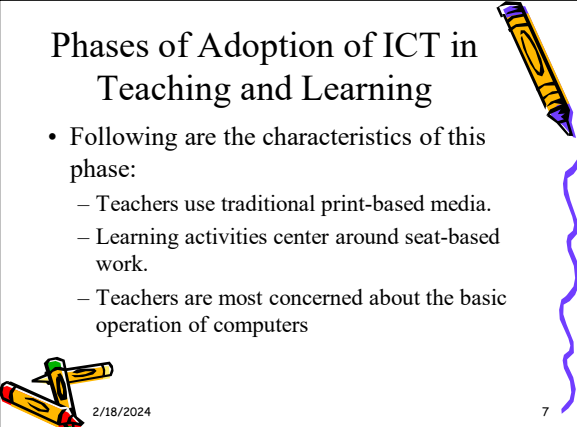
Phases of Adoption of ICT in Teaching and Learning

- Entry Phase:
 - This is the initial stage of adoption of ICT in teaching and learning process.
 - This level indicates that the educator has a level of awareness of the potential uses of ICT.
 - This is the stage when the educator first begins to experiment ICT in the classroom at a basic level for discrete lessons.

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Phases of Adoption of ICT in Teaching and Learning

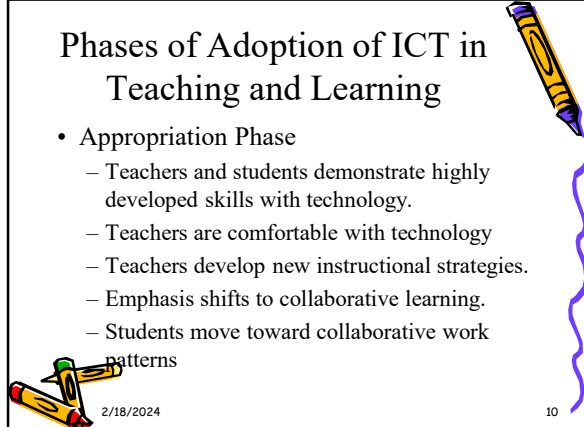
- Following are the characteristics of this phase:
 - Teachers use traditional print-based media.
 - Learning activities center around seat-based work.
 - Teachers are most concerned about the basic operation of computers



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Phases of Adoption of ICT in Teaching and Learning

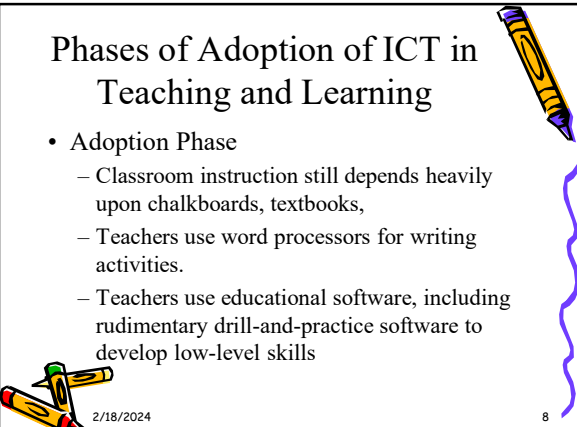
- Appropriation Phase
 - Teachers and students demonstrate highly developed skills with technology.
 - Teachers are comfortable with technology
 - Teachers develop new instructional strategies.
 - Emphasis shifts to collaborative learning.
 - Students move toward collaborative work patterns



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Phases of Adoption of ICT in Teaching and Learning

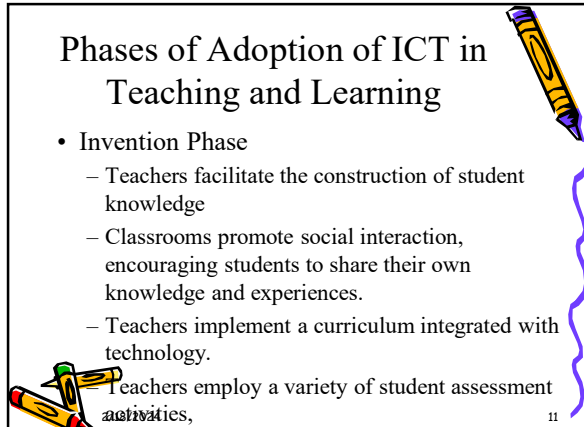
- Adoption Phase
 - Classroom instruction still depends heavily upon chalkboards, textbooks,
 - Teachers use word processors for writing activities.
 - Teachers use educational software, including rudimentary drill-and-practice software to develop low-level skills



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Phases of Adoption of ICT in Teaching and Learning

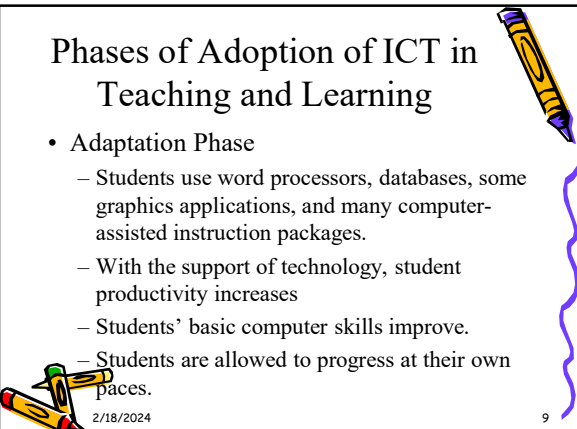
- Invention Phase
 - Teachers facilitate the construction of student knowledge
 - Classrooms promote social interaction, encouraging students to share their own knowledge and experiences.
 - Teachers implement a curriculum integrated with technology.
 - Teachers employ a variety of student assessment activities,



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Phases of Adoption of ICT in Teaching and Learning

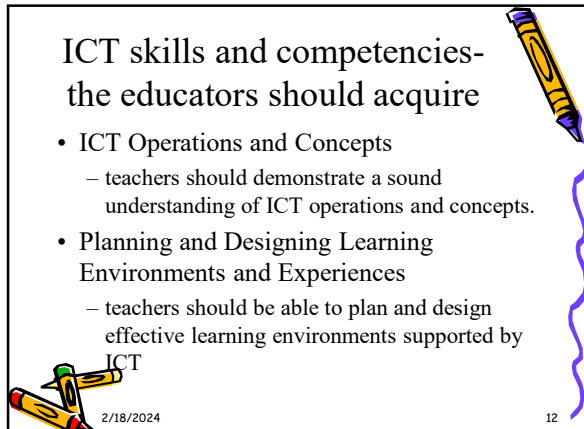
- Adaptation Phase
 - Students use word processors, databases, some graphics applications, and many computer-assisted instruction packages.
 - With the support of technology, student productivity increases
 - Students' basic computer skills improve.
 - Students are allowed to progress at their own paces.



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ICT skills and competencies- the educators should acquire

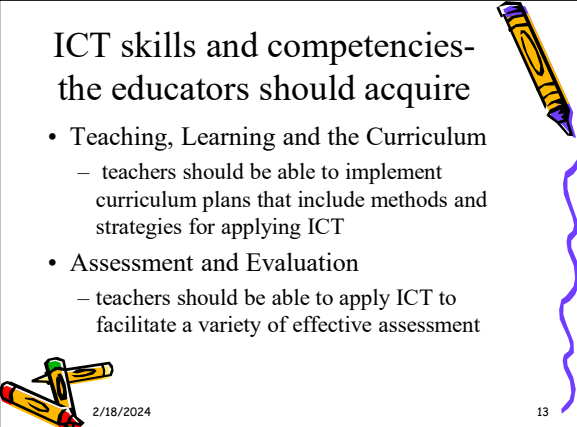
- ICT Operations and Concepts
 - teachers should demonstrate a sound understanding of ICT operations and concepts.
- Planning and Designing Learning Environments and Experiences
 - teachers should be able to plan and design effective learning environments supported by ICT



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ICT skills and competencies- the educators should acquire

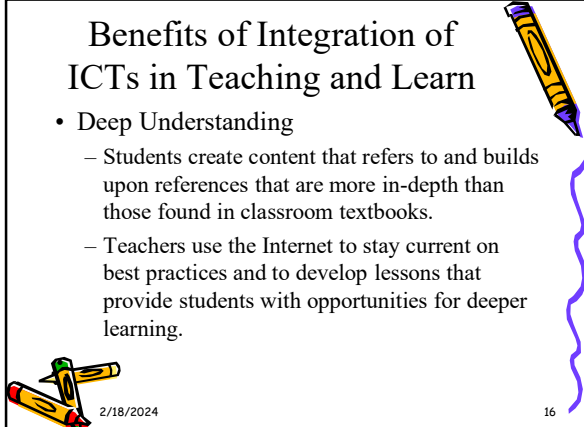
- Teaching, Learning and the Curriculum
 - teachers should be able to implement curriculum plans that include methods and strategies for applying ICT
- Assessment and Evaluation
 - teachers should be able to apply ICT to facilitate a variety of effective assessment



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Benefits of Integration of ICTs in Teaching and Learn

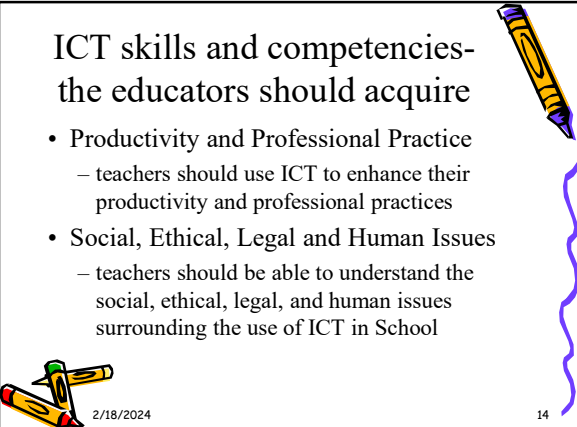
- Deep Understanding
 - Students create content that refers to and builds upon references that are more in-depth than those found in classroom textbooks.
 - Teachers use the Internet to stay current on best practices and to develop lessons that provide students with opportunities for deeper learning.



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ICT skills and competencies- the educators should acquire

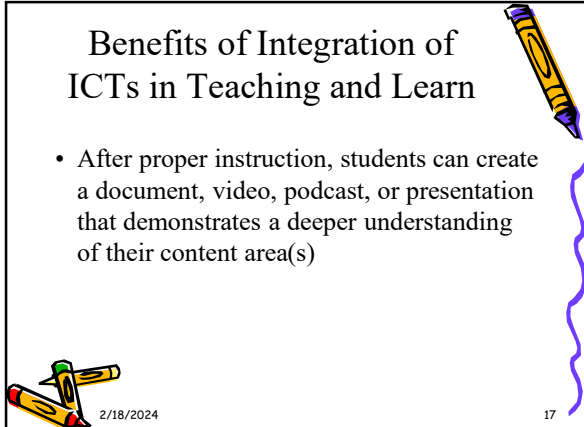
- Productivity and Professional Practice
 - teachers should use ICT to enhance their productivity and professional practices
- Social, Ethical, Legal and Human Issues
 - teachers should be able to understand the social, ethical, legal, and human issues surrounding the use of ICT in School



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Benefits of Integration of ICTs in Teaching and Learn

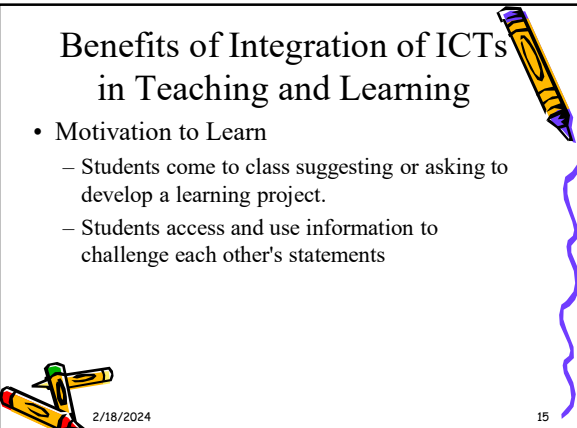
- After proper instruction, students can create a document, video, podcast, or presentation that demonstrates a deeper understanding of their content area(s)



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Benefits of Integration of ICTs in Teaching and Learning

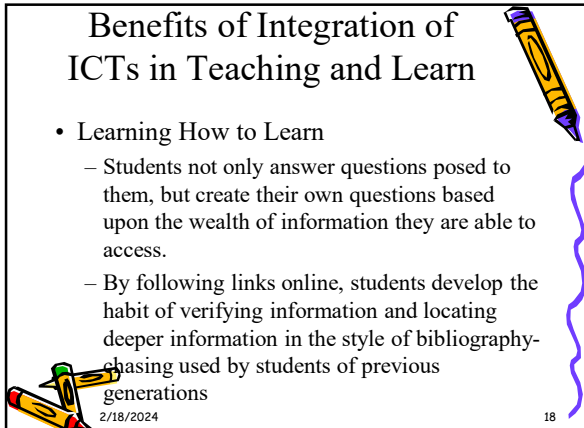
- Motivation to Learn
 - Students come to class suggesting or asking to develop a learning project.
 - Students access and use information to challenge each other's statements



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Benefits of Integration of ICTs in Teaching and Learn

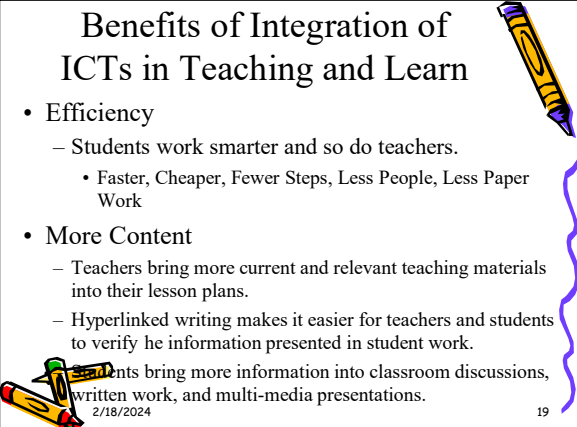
- Learning How to Learn
 - Students not only answer questions posed to them, but create their own questions based upon the wealth of information they are able to access.
 - By following links online, students develop the habit of verifying information and locating deeper information in the style of bibliography-chasing used by students of previous generations



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Benefits of Integration of ICTs in Teaching and Learn

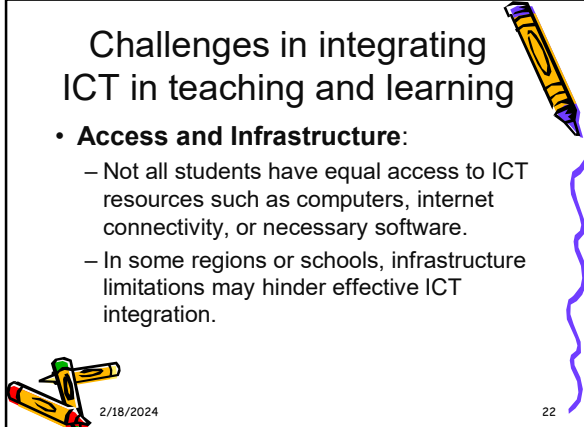
- **Efficiency**
 - Students work smarter and so do teachers.
 - Faster, Cheaper, Fewer Steps, Less People, Less Paper Work
- **More Content**
 - Teachers bring more current and relevant teaching materials into their lesson plans.
 - Hyperlinked writing makes it easier for teachers and students to verify the information presented in student work.
 - Students bring more information into classroom discussions, written work, and multi-media presentations.



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Challenges in integrating ICT in teaching and learning

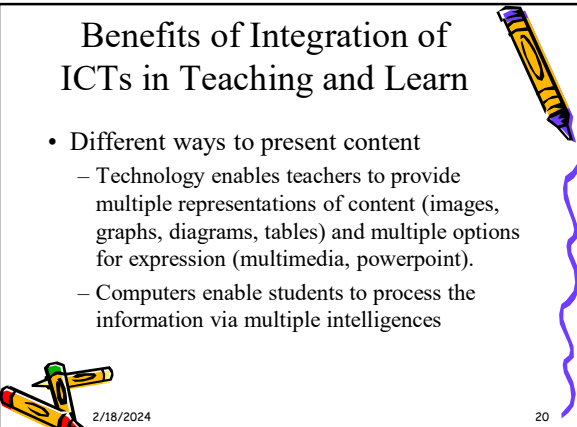
- **Access and Infrastructure:**
 - Not all students have equal access to ICT resources such as computers, internet connectivity, or necessary software.
 - In some regions or schools, infrastructure limitations may hinder effective ICT integration.



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Benefits of Integration of ICTs in Teaching and Learn

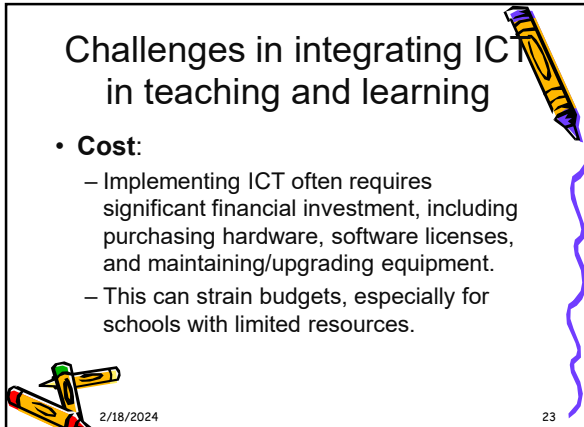
- **Different ways to present content**
 - Technology enables teachers to provide multiple representations of content (images, graphs, diagrams, tables) and multiple options for expression (multimedia, powerpoint).
 - Computers enable students to process the information via multiple intelligences



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Challenges in integrating ICT in teaching and learning

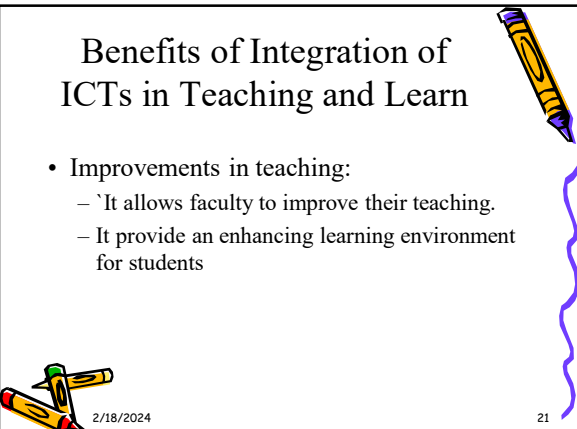
- **Cost:**
 - Implementing ICT often requires significant financial investment, including purchasing hardware, software licenses, and maintaining/upgrading equipment.
 - This can strain budgets, especially for schools with limited resources.



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Benefits of Integration of ICTs in Teaching and Learn

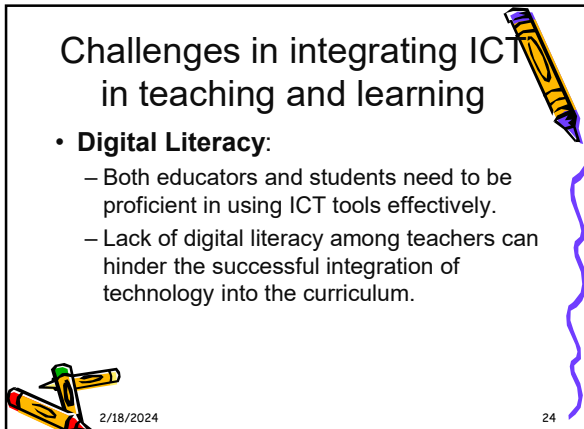
- **Improvements in teaching:**
 - It allows faculty to improve their teaching.
 - It provide an enhancing learning environment for students



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Challenges in integrating ICT in teaching and learning

- **Digital Literacy:**
 - Both educators and students need to be proficient in using ICT tools effectively.
 - Lack of digital literacy among teachers can hinder the successful integration of technology into the curriculum.



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Challenges in integrating ICT in teaching and learning

- **Professional Development:**

- Teachers require training and ongoing support to effectively use ICT tools in their teaching practices.
- Professional development programs are essential to ensure educators are equipped with the necessary skills and knowledge.



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Challenges in integrating ICT in teaching and learning

- **Privacy and Security Concerns:**

- The use of ICT in education raises privacy and security concerns, particularly regarding the protection of student data and maintaining a safe online learning environment



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Challenges in integrating ICT in teaching and learning

- **Resistance to Change:**

- Some teachers may be resistant to incorporating ICT into their teaching methods due to fear of technology, concerns about job security, or a preference for traditional teaching methods.



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Challenges in integrating ICT in teaching and learning

- **Infrastructure Stability and Technical Support:**

- ICT systems need to be reliable and stable to support uninterrupted teaching and learning. Schools must have adequate technical support to address issues promptly and ensure smooth operation of ICT infrastructure.



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Challenges in integrating ICT in teaching and learning

- **Quality Content and Resources:**

- Finding high-quality digital resources and educational software that align with curriculum standards can be challenging.
- It requires careful evaluation and selection to ensure the content is relevant, accurate, and engaging.



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Challenges in integrating ICT in teaching and learning

- **Equity and Inclusion:**

- Integrating ICT should not exacerbate existing inequalities.
- Ensuring equitable access to technology and addressing the digital divide is crucial to prevent widening educational disparities.



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Challenges in integrating ICT in teaching and learning

- Addressing these challenges requires a concerted effort from policymakers, educators, administrators, and other stakeholders to create an enabling environment for successful ICT integration in education.



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Questions



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