Technology in Education

How Much is TOO MUCH…??

Topics of Discussion

01 **A Peek at the Tech World**

- Present state and immediate future of technology in education

02 **Adoption - What and What Not?**

- Algorithm for decision making

03 **Adaption - How?**

- A simple sequential guide to implementation

04 **Conclusion**

- Take Home Message

Present State & Immediate Future

Technology Categorization

Academics

Hardware & Software

Administration

Technology in Administration

ERP – Enterprise Resource Planning

Basic Areas Covered by All Software

- Admissions and student data
- Attendance management and reporting

- Management
  - Finance
  - HR
  - Purchase, Stores, Inventory management
  - Generation of various reports

Support Services

- Security
  - CCTV, ID cards, Child Tracking

- Transport – GPS enabled
- Parental Collaboration - SMS, WhatsApp, CCTV Feed

- Marketing
- Media and Social Media - Website, FB page, YouTube Channel

Technology in Administration

- No direct influence on ‘Academic Performance’
- Decision making depends on multiple factors
    - Location, branches, finances, staff readiness

- Multiple options available – varying costs
- Look for customization and scalability

Technology in Academics

The Transition

Type and Source of Content

Books

Digital Content

- **Wikipedia**
- **Audios**
- **Videos**
- **Animations**
- **Mind Maps**
- **Lectures**
- **Experiments**
- **Projects**

Companies Providing Digital Content

Cp
Adobe Captivate 2017

moodle

iSpring Suite
Easy Tools for Busy People

docebo®
THE E-LEARNING ECOSYSTEM

Blackboard
learn+

ATUTOR®
Learning Management Tools

DOKEOS
eLearning made easy

ILIAS®
OPEN SOURCE
PLATFORM FOR
E-LEARNING

Chamilo
E-Learning & Collaboration Software

The Transition

Classroom Structure

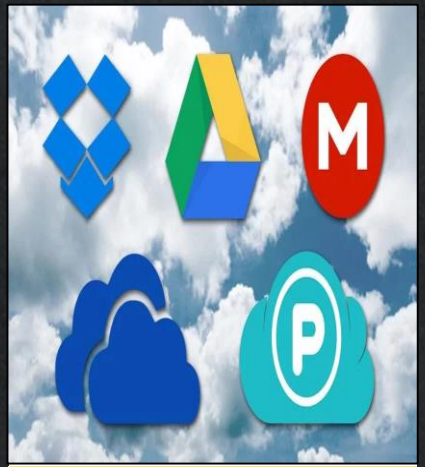
Blackboard

Smart Board and Tablets

The Transition

Collaboration

Online Community



Cloud Storage

MOOCs

Massive Open Online Courses

Personalized Learning

Skill Development

Technical

Technological

Soft Skills

Life Skills

MakerSpace - Integrated Learning and Skill Development

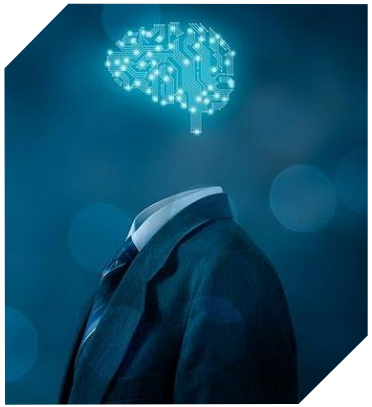
combines features of

- Science Labs
- Art Studios
- Computer Labs
- Robotics
- Electronics
- Wood Work
- Metal Shops

The Future

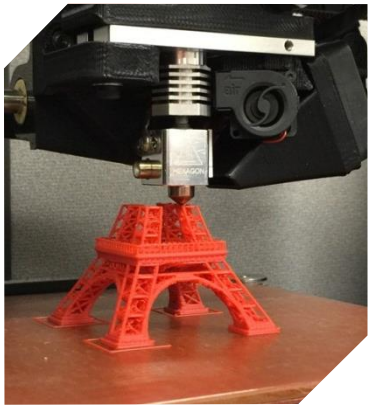
Future Technology Being Customized for Learning

Virtual Reality



Artificial Intelligence

3D Holograms



Robotics & 3D Printing

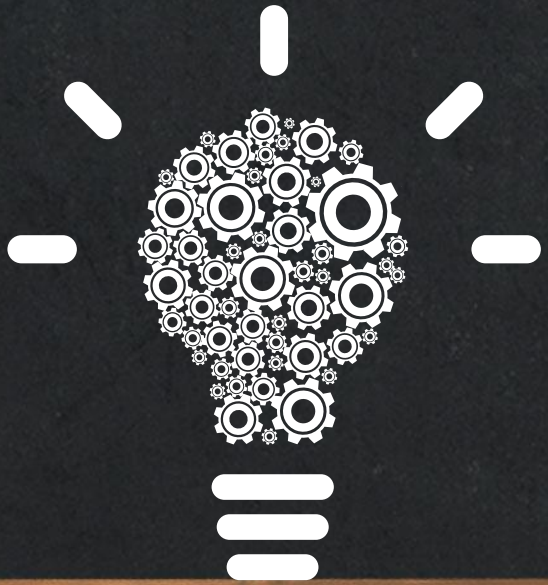
Adoption of Technology

A Few Points to Ponder

Is Education only about Knowledge and Skills?

What is the Effect on 'Body' and 'Soul'?

Will we not need schools in the future?



What will be the status of Student-Teacher relationship?

What is the stand taken by Islamic Shariah On Technology?

Algorithm for Decision Making

01 - Is it Inevitable?

Ex: Digital Content

Is it going to become universal?
Is there any alternative?

Algorithm for Decision Making

02 - Is it Important?

Ex: Tablets for kids

Is it an improvement or is it just ‘old wine in a new bottle’?
Will it improve student performance?
Will it ease the teachers’ work?

Algorithm for Decision Making

03 - Is it Islamic?

Ex: Online Community

Is it Shariah Compliant?
Does it corrupt the mind, body or soul?
What are the control mechanisms?
Who decides ‘right’ and ‘wrong’?

Algorithm for Decision Making

04 - Is it currently **Implementable?** Ex: Tinkering Lab

Do you have the Time and Money?
Do you have necessary support infrastructure?
Are your teachers ready?

Adapting to Change

Set Time Bound Sequential Targets

- Farz
- Wajib
- Sunnah
- Nafl
- Mustahab
- Mubaah

- Makrooh
- Haraam

Level 1 – Must for All

- Computer Lab
  - Planned Curriculum
  - Trained Teacher
  - Teach Typing

Reading and Writing Tool

Level 2 – Preferable for All

- Audio-visual aids
  - Projectors in classroom
  - Portable trolleys
- Digital content for teachers
  - Free online content
  - One time purchase customized content
  - DO NOT buy commercial content

Portable Trolley

Level 3 – Preferable, But Not a Necessity

- Smart Board and interactive screens
- Assessment and evaluation – data and report generation

- Skill development Labs
  - Collaboration with industry
  - Customize
  - Do not commercialize

Smart Marker

Level 4 – Better to Wait

- Digital content for students
  - Needs monitoring
  - Safety issues
  - Ethical issues

- Virtual Lab, 3D Holograms, VR, AI, 3D Printing, Makerspace
  - All are in experimental stage
  - No proven results
  - Adverse effects not yet publisized

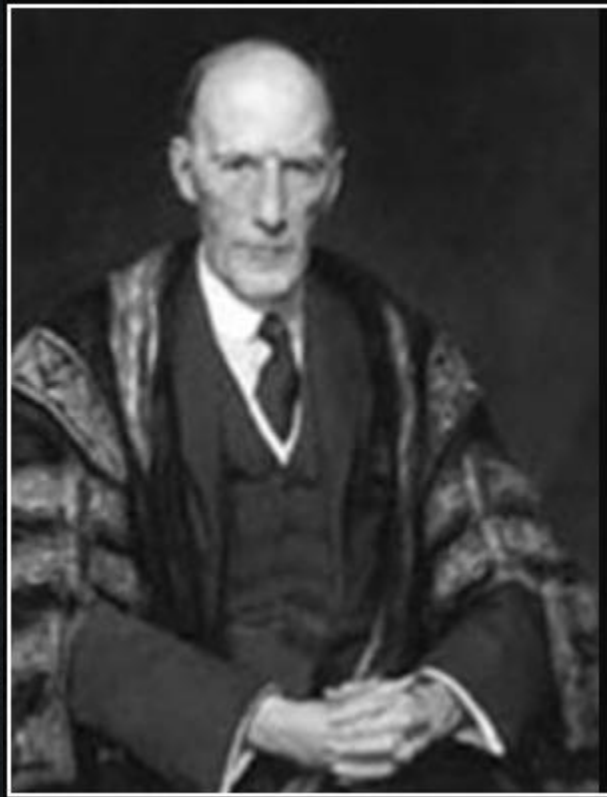
Conclusion – Take Home Message

01 Technology in Education is in
a Stage of Transition / Revolution

02 Focus on Tarbiyah is Missing
Importance of Teacher is Undermined
Technology is only a Tool. User is More Important.

03 Everything New is Not For You
Follow the 4i Algorithm

04 Better to Adapt Early Than Being Outdated
Set Time Bound Sequential Goals



From inability to let well alone; from too much zeal for the new and contempt for what is old; from putting knowledge before wisdom, science before art and cleverness before common sense; from treating patients as cases; and from making the cure of the disease more grievous than the endurance of the same, Good Lord, deliver us.

— Sir Robert Hutchison —

AZ QUOTES

Jazakallahu Khair