DIGITAL CONTENT VS ONLINE COURSES – THE BIG DEBATE

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This century is raising the bar of education higher under the influence of modern technological environment.

Digital learning is transforming traditional educational into a flexible and efficient means in meeting the needs of ever-evolving modern society.

In the wake of rapid development in information technologies there have been changes in curriculum diversity in embracing digital content.
“The average digital birth of children happens at about six months.” (Steve Wheeler, 2012)
The critical debate

• Can digital content replace the traditional learning materials?
• Do online courses deliver quality education?
What is digital learning

• Digital learning is the educational approach that integrates technology, connectivity, content and human resources.

• Digital technologies bring museums, libraries, and archives together to enhance

• However effective processes, practices, and infrastructure are essential components of successful digital learning.
Current status

• The use of technology and online courses in educational institutions is increasing rapidly however instructors lack the requisite technological skills
• There is more of learning about technology, rather than with technology.
• Most instructors see technology as one more thing they need to add on, rather than a part of the learning process.
• This issues raise skepticism on the quality of online courses.
What needs to be done

- In order to realize the benefit of online courses and digital content educators must look at the whole scenario in terms of:
  1. outcomes,
  2. adoption and
  3. engagement.
“A school is not a fast-food outlet. ----.”

- Chris Woodhead
(2009)
“Education is about teaching students, not subjects” (Dave Truss)

• The objective for any technology in education is to support, motivate and enhance student learning.

• There are fundamental questions considering what technology and content to use.

  1. what do you want to achieve?
  2. which technology is appropriate?
  3. What should good digital learning environments contain to stimulate and motivate students to learn?
  4. What strategies and resources are needed to meet the needs of students without compromising quality?
Learning outcomes provide students with guidance on how to direct their learning as well as to describe what they are learning.

They are like headlights that help the instructor and students know the content value and where a course is going.

They serve as a psychological contract between the instructor and students.
ADOPTION OF DIGITAL CONTENT INTO THE CURRICULUM

“I never teach my students. I only provide the conditions in which they can learn” (Albert Einstein)

• We have placed so much focus on hardware, connectivity and rudimentary technology skills that our schools and students have not yet begun to realize the full potential of digital learning
• The curriculum should motivate and encourage learners to learn with greater depth by experiencing both autonomy and competence.
• When students work on a meaningful digital learning tasks their intrinsic motivation levels rise
Ensure that individual differences are acknowledged.
In adapting digital content into the curriculum the most basic premise should be building a learning community and to facilitate the exchange of ideas, information, and feelings among the members of the community.

Every lesson should be designed to include questions for discussion or response among groups of students, rather than simply representing one way transmission of "knowledge."
• Usability and localization of digital content is significant.

• An online course curriculum should provide multiple means of representation, give students various ways of acquiring, processing, and integrating information.

• Provide multiple means of action and expression and demonstrating learning.

• The strength of the digital content in the curriculum is one that allows students to both locate and construct information.

• This information is organized, transmitted, received and shared using a variety of delivery platforms and accessible through a range of devices.
Content balance is critical
INCREASING ENGAGEMENT

• “I am convinced that the best learning takes place when the learner takes charge” by Seymour Papert

• One of the shortcomings of online courses is a loss of social relationships and sense of community that is usually present on the ground courses.

• Students should learn with and from one another, collaboratively, and instructors structure topics, provide expertise, and works closely with students.

• The instructor is directly and actively involved in facilitating collaboration and group interaction among the learners, on a daily basis.
Massive open online courses (MOOCs) have captured the interest and attention of academics and the public.

Online learning has now triggered critical discussion across many universities and MOOCs has been hailed as transformative and a game changer (Leckart, 2012).
• In adapting **digital content** for its delivery via online learning there are two aspects which are a fundamental part of the learning process;

1. Functionality of the **contents**

2. The actual **controlled navigation** requirements that the learner needs in order to acquire high level knowledge.
How can this be achieved?

- The content should be presented in such a way that students can engage in autonomous research and learning, allow for collaborative learning, and encourage subject mastery.
- Create a variety of assignments and group work probably structured on a weekly basis.
- Instructor’s engagement through making clarification, giving feedback and even motivating learners.
This is what it is

Curriculum

Learning outcomes
Digital content
Activities

Learning platform

Instructor

Students
Cont.

• Creating content
• Filtering and selecting content
• Organising content
• Using and repurposing content
• Broadcasting
The case of Rwanda

- In 2008 one laptop per child (OLPC) initiative was introduced in primary schools.

- The initial pilot in 2007 in a school in Rwamagana demonstrated the capacity of young children to quickly master the basics of these laptops. This provided a sound foundation to scale up the programme in Rwanda.

- The OLPC programme has deployed school servers loaded with digital content developed in alignment to the National curriculum for P4, P5 and P6.

- This digital content is interactive, animated and graphically rich to enhance students’ interest and attention in subjects like Science, Mathematics and English.

- The main aim is to provide students and teachers with content which is used in regular class time to study Science, Mathematics and English.
• Since its launch in 2008, the OLPC programme has so far deployed over 200,000 laptops in 409 schools across the country.

• These deployments are directly followed up by the training of teachers and lead students on ICT basics using the XO laptops.

• The University of Rwanda is currently developing a mode of the African Virtual University (AVU) which is a Pan African Intergovernmental Organisation initiative whose main focus is to increase access to higher education through the innovative use of Information and Communication Technologies.
Challenges

• With any online application, there is the issue of bandwidth and infrastructure.
• Technology is tricky to implement in respect to infrastructure? Networking? Cybersecurity? etc.
• The issue of right policies on online courses, politics or perception is still an hindrance.
• Student and stakeholders trust on the quality of online courses.
• All technologies change rapidly and faculty must be made aware of and participate in these changes if they make sense for our online teaching.
• Test and use software to engage students in simulations pertinent to their field
• Examine and use social media outlets to engage students in both on-ground and online courses
• Greater institutional effort and support is needed
CONCLUSION

• There is an excellent opportunity for institutions to integrate quality digital contents in online courses: In achieving this three elements are very critical

• **Learning Process**
The most important aspect of any online course, is the pedagogy and andragogy involved with the instruction. Technology alone cannot replace the presence of an instructor and the instructor cannot be effective without proper curriculum design with meaningful content that is aligned to clear learning outcomes.

• **Community**
An effective learning community that fosters effective relationships between students and the instructors, among students themselves and the course content. Good technology/platform can facilitate this.

• **Student Engagement**
It all depends on the content and how it is structured in the curriculum and the role of the instructor