Online Learning in BRICS amid COVID-19

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South Africa and the BRICS: Revisiting Development Priorities

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What is online learning?

Emergency online learning	Regular online learning
• Temporary mode of teaching • Limited resources • Limited contact between student and lecturer • Minimal training for students and staff	• Learning specifically designed for online consumption • Greater engagement between staff and student • Must be equitably accessible • Not urgent • All resources are accessible • All faculty are well training in the delivery of the content

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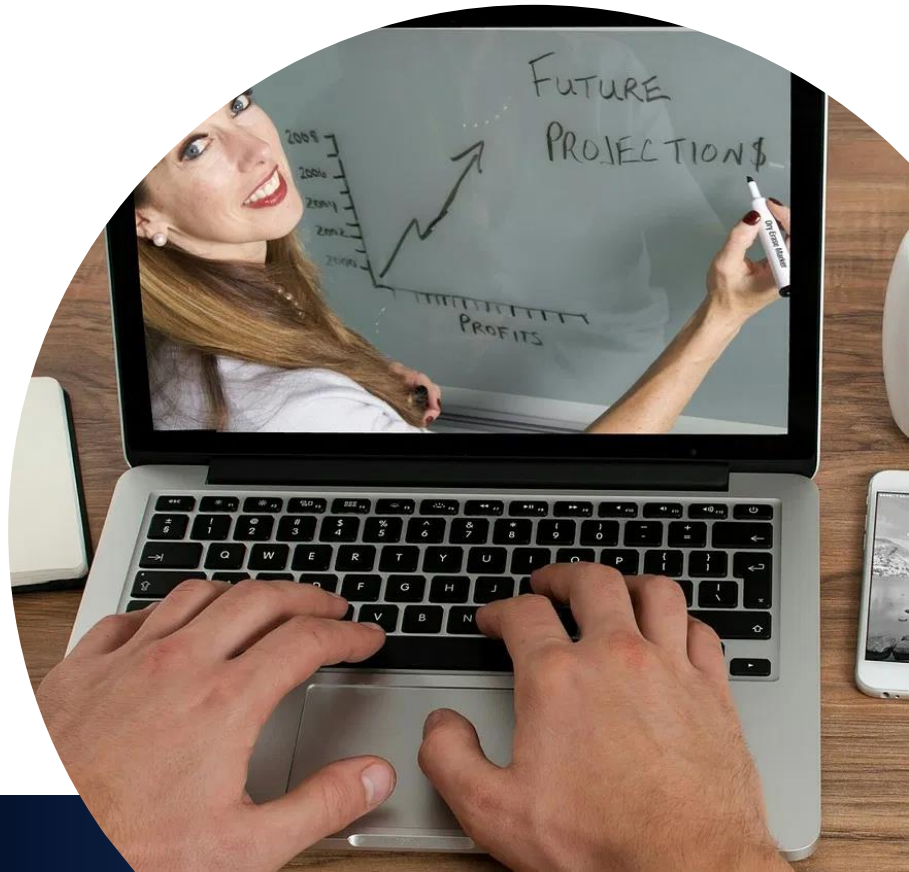
Traditional vs Mass Media

Traditional

- University operated as a business.
- Higher fees
- Synchronous, in person content delivery
- 1 Lecturer to limited number of students – limited productive engagement

Mass-media

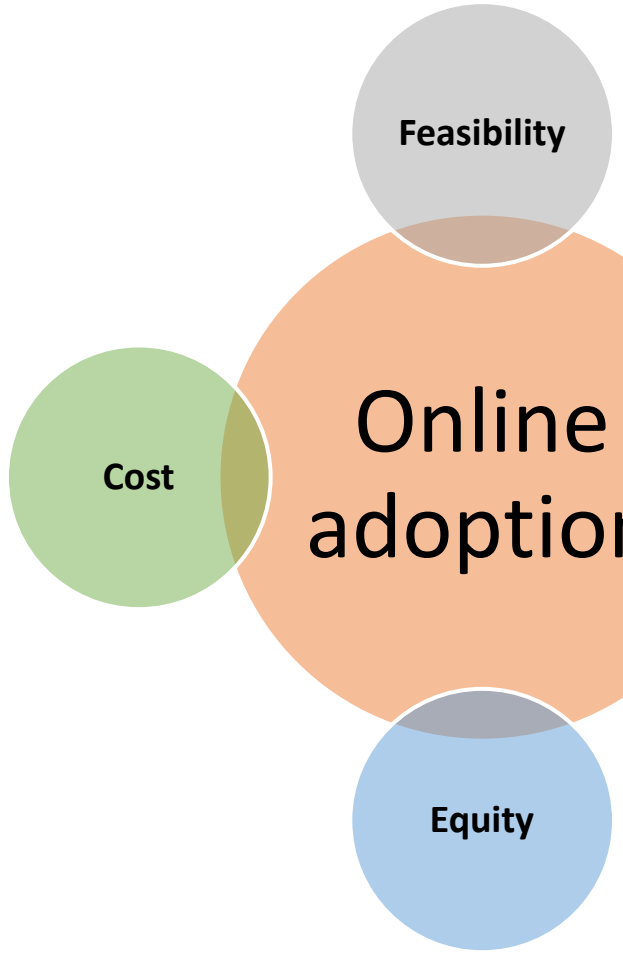
- Course provided as MOOCs styled content
- Lower cost fees
- Works better for basic level content with defined right and wrong answers
- Modular
- Asynchronous content delivery
- 1 Expert Lecturer to Many Students – contributes to decreased costs
- No travel, accommodation cost



Best Approach

- Adopt MOOCS Style Content for entry level content
- Concentrate resources for higher level subject matter with subjective answers
- Introduce Team of Teaching assistants to support the lecturer and promote engagement with students
- Ensure technology is equitably shared
- Lower costs compared to the traditional approach
- Better engagement
- Promoting employment opportunities

Critical success factors



Infrastructure
Skills
Socio-economic
Cultural

Govt funding
Tuition fees
Accommodation fees
Maintenance

Synchronous
Asynchronous
Human factor
Practical experiments
Assessments

Access
Affordability
Staff and students inputs into decision making

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Experiences in BRICS

Online Learning in Brazil

- Country offers free university education up to post-graduate level.
- No national level support for going online
- Politicians denying the seriousness of COVID-19
- 28.3 million COVID-19 cases
- 645k deaths

Brazil

Feasibility	• Many universities had to cancel online programme after connectivity challenges • Some opted for a mix of contact and online learning
Equity	• Inequality prevalent in universities • Choice to reopen was made by politicians
Quality	• Skills gap in producing asynchronous content. • Limited support offered. • Some universities are recognized for high quality online programmes.
Costs	• State not offering additional funding for education programmes. Bolsanaro pushed for drastic cuts in funding. • Universities appealed for old laptops and public fundraising to purchase sim cards. • Some universities sought out device donations from police with seized equipment

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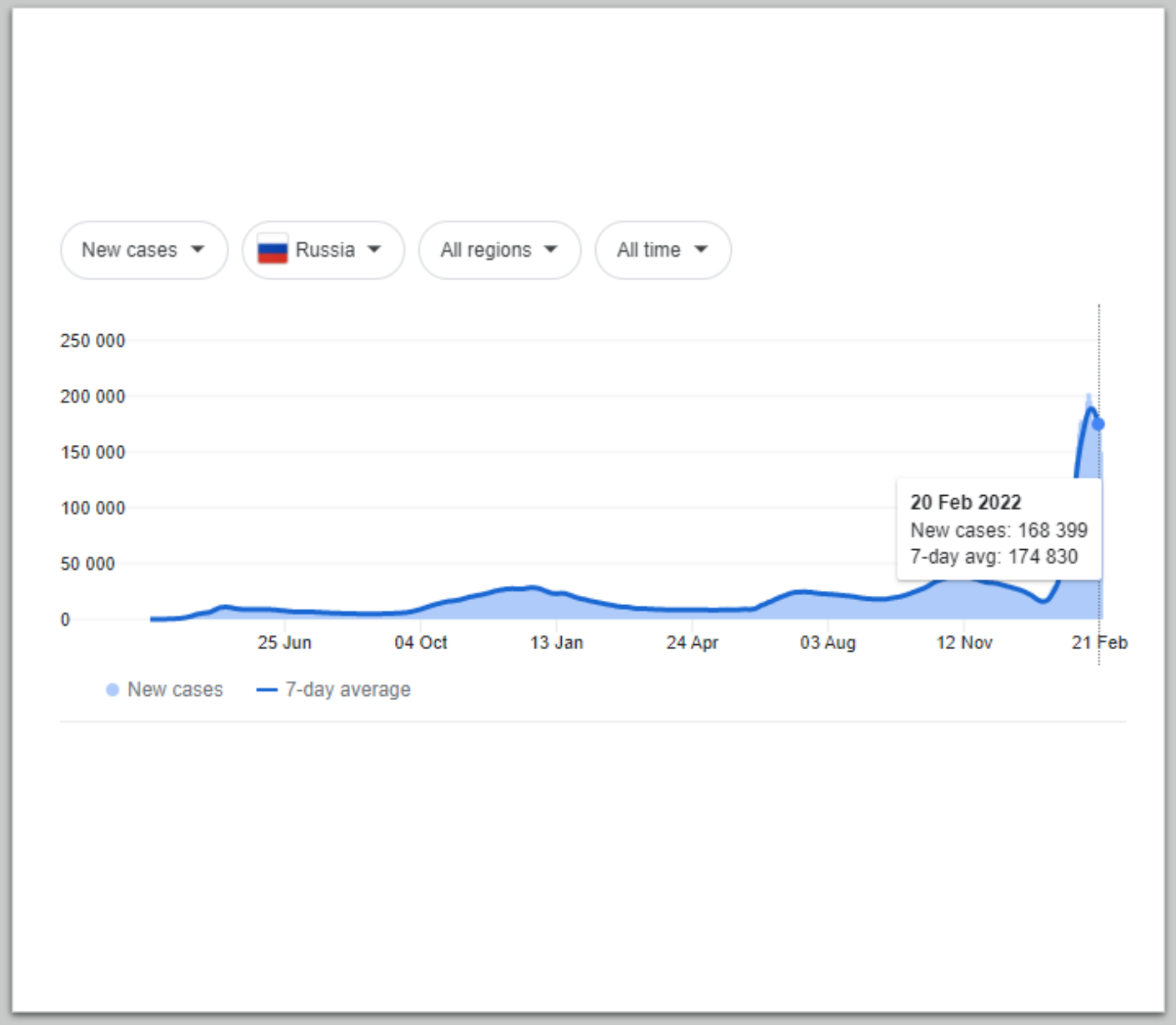
Online Learning in Russia

- Size of country made it difficult to manage the transition
  - Large number of communication networks
  - High number of universities
- Went online in March 2020 – opted for blended learning by Oct 2020
- Focus on high-quality blended learning resources
- 15.3 million COVID-19 cases
- 339k deaths



Russia

Feasibility	• Comparatively smooth transition to online tech. Had remote learning platforms before COVID. • Dorms were provided with additional bandwidth. No device or data supported provided to students.
Equity	• Most students with similar levels of access and skill • Minimal participation in decision making reported
Quality	• Lecturers comfortable with new tech • Provided teaching assistants to engage with students more closely • Laboratory work has continued in person. • Quality is assessed based on the accumulation of credits, not mode of study. • Russian universities rising up the University Rankings – 47 in top global 100 for respective fields • Students arguing that there is a drop in quality / Management disagree
Costs	• Some students are calling for reduction in costs of education due to distance learning. • Cost of tuition based on staff salaries and equipment/materials

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Online Learning in India

- Universities closed in March 2020 and were forced to attempt online learning.
- 39,000 colleges catering to 27.5 million under graduate students
- India has mix of private and public universities
- 42.9 Million Cases/ 1.38 billion people
- 512k Deaths

India

Feasibility	• 10% of universities don't have any online learning platforms. • Top 100 Indian universities attempted a online learning transition • Online learning abandoned in certain universities due to connectivity challenges, now needs to be authorized to restart the programme. • Several staff per university have died from COVID • Issues with consistent electricity, cellphone coverage, and available devices • Partial or full closures remain in many universities
Equity	• Unequal distribution of ICT mirroring levels of inequality • Private universities have fared better, with better resources. • 35 million students affected by shutdowns • Poor students have insufficient space for learning at home • Online examinations have been particularly difficult – notable case of a lady committing suicide after a power failure during an exam.
Quality	• Low level of preparedness to adopt new tools among students and lecturers • Students have low levels of interaction with staff and peers • 85% of students believed the COVID protocols led to learning loss • Learning backlog may take up to 3 years to address.
Costs	• Are calls for the government and private sector to boost investment in higher education

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Online Learning in China

- Rapid transition to online learning
- Govt enforced staff training in 2020 Chinese New Year break, at the start of lockdown
- Since have had a mass rollout of online programmes. Beijing Normal has 3000 online courses.
- 108k reported cases (1.4 billion people)
- 4,636 Deaths

China

Feasibility	• Universities rapidly adopted new platforms • Universities set up smart classrooms, with recording equipment for livestreams or interactive learning • Were able to maintain the academic year with minimal interruptions • No delays to the curriculum
Equity	• Students in rural areas supported by businesses – allowed to use buildings to access internet. • More uniform levels of equality • Decision to adopt online learning followed a national govt directive • Foreign students have been unable to return to China
Quality	• Contact learning has resumed in many universities, but online variants remain • Chinese students are reportedly highly satisfied with online learning and learning platforms • Learning facilitators assist lecturers. A study shows that universities need to acknowledge their role to a greater degree. • Focus on developing the autonomy of students and promoting their involvement in class time.
Costs	• Chinese government invested in training for staff and students • Substantial private investment in booming EdTech sector – with complementary tutoring programmes that integrate AI

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Online Learning in South Africa

- Contact Learning was halted in March 2020 due to lockdown level 5
- Widespread lack of access
- Better connectivity in dorms
- Online learning a short-term emergency fix
- 3.6 million cases (59 million people)
- 98.8k deaths

South Africa

Feasibility	• Moved online with issues of access experienced • Some universities with international students on scholarship made arrangements to find local accommodation with WIFI. Had better support.
Equity	• High levels of inequality exacerbated in universities • Poor students are excluded, 38% couldn't buy food, 50% reported communication challenges • Insufficient participation in decision making – staff and students are resistant • Some dependent on physical distribution of materials • Some VPN systems are not accessible on all mobile networks
Quality	• Limited levels of skills. Some universities have dedicated call centres to assist staff and students. • Some students found better support from Career Guidance counsellors who became more accessible via email and Zoom. • Interaction between student and staff has been limited. • Lecturers and tutors had to be available to students during office hours, online • Night data bundles required students to take on odd study patterns. • Some 'teach' via Whatsapp and FaceBook
Costs	• Provision of some data and zero-rating university resources • Universities had to individually negotiate with mobile service providers.

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Best Practices

- China introduced mass skills development programmes at pace
  - Managed to coordinate well with the private sector and utilize technology
- Russia introduced supporting teaching assistants at scale
- South Africa introduced comparatively larger data bundle support
- University of Pretoria introduced a Mobile Learning App to support learning when there were electricity cuts – provide offline content
- More accessible Careers Guidance offices in South Africa
- Is a need to promote student/educator engagement in decision making

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Recommendations

- Need to transition towards a hybrid education model
  - Interactive online learning could address the access challenge
  - Mass investment in digital infrastructure is key (including devices, network coverage, data plans for academic and student body)
  - Promote teaching assistant integration
  - Mass training for lecturers and students is needed before commencement of online programme
  - Prioritize student/educator engagement in decision making processes
  - Promote coordination with the private sector
- BRICS Universities, through the BRICS Network University or BRICS University League to continue to promote knowledge sharing engagements
  - Sharing information related to lesson designs, training strategies and promoting equitable access is crucial
  - Need mechanisms to promote BRICS / Africa knowledge exchanges

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Thank you

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