

Reviewing the Progress Made In Usage of Digital Tools in Indian Education: A Case Study

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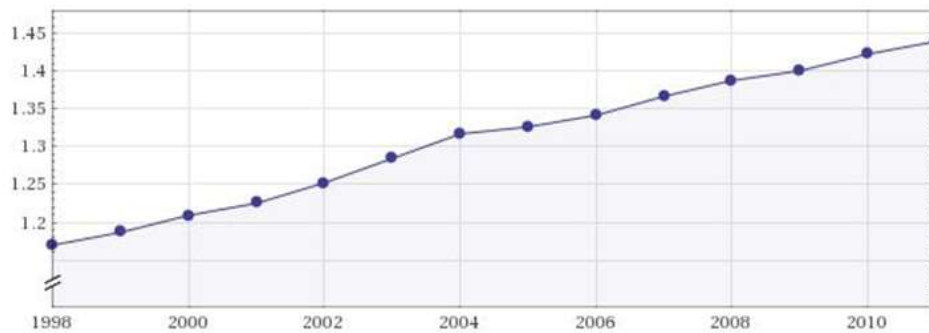
Abstract: With Globalisation Acting As A Potent Force In The World, There Exists Rich Possibilities For Education Advancement. The Emergence Of Technology Like The Internet Which Facilitates Synchronous And Asynchronous Communication In Multiple Ways And Often In Multi Sensory Ways Has Made The World Closer. It Also Allows For Education To Reach The Disadvantaged Sections Of The Society Where Education Was Difficult To Implement. This Paper Discusses The Same In A Detailed Manner And The Progress Made By India In Integrating Such Digital Tools In The Education System.

Keywords: Globalisation, Education, Internet, Technology

It Can Be Seen That The Proportion Of Population Enrolled In Education Is Increasing Year. However The Gross Enrollment Ratio Is Still Relatively Low At 20%(2011) Estimate We See That There Is A Dropout At Every Stage Of Education. .We Have Also Seen The Emergence Of Globalisation As A Force In The World With People Travelling For Work And Pleasure Throughout The World. Similarly Internet As A Technology Has Emerged As A Possible Alternative To Other Forms Of Communication. This Can Be Seen From The Emergence Of Huge Social Media Giants Which Are Now Publicly Listed Companies.

1.439 billion people (2011 estimate)

Students history:



(from 1998 to 2011) (in billions of people)

Source: Wolfram Alpha.

Gross Enrollment Ratio:

20.52% (2011 estimate)

primary school	724.1 million people (49% of all students) (2015 estimate)
secondary school	579.2 million people (39% of all students) (2015 estimate)
college	183 million people (13% of all students) (2011 estimate)
total	1.439 billion people (2011 estimate)

Internet Also Provides The Unique Opportunity For Education To Scale Up To Levels Not Witnessed Previously. This Phenomenon Is Known As MOOCS Or Massively Open Online Courses. The Promise Of MOOCS Is Getting Better Day By Day, With Possibilities Of Certifications And Credit Transfer By The Government Through Platforms Like SWAYAM And NPTEL. This Will Facilitate Lifelong Learning Among The Students/ Population Paving The Way For The Development Of The Individual And The Society Together. MOOCS Is Especially Good For People Who Are Not In A Position To Travel Due To Various Factors Such As Disabilities Or Old Age. They Can Now Participate In The Education System By Contributing As A Teacher Or As A Learner. It Is Possibly Beneficial To The Environment As Well As It May Cut Down On Travelling And Transport Which Often Is A Major Source Of Pollution. Internet Provides For Synchronous And Asynchronous Interactions Which Is Especially Good For Educational Purpose. The Barriers However Exist In Terms Of Low Literacy In Digital Skills Of Both Teachers And Students Which Needs To Be Developed To Get The Full Benefits Of Using The Internet. Also Internet May Not Be Suitable For Vulnerable Groups Of People Such As Children As There Exist Several Malicious Websites And People On The Internet. Considering The Above Factors, Internet Needs To Be Integrated At Least At Higher Education Level And Maybe Even Primary Education So As To Facilitate Lifelong Education. There Exist Social, Economic, Gender, Linguistic, Different-Ability Barriers For People To Access Education On A Lifelong Basis. However Now Digital Tools Like The Smart Phone And The Internet Allow For Lifelong Education Even While Employed:

The Government Has Also Started "National Academic Depository (NAD)" Which Is A National System To Facilitate Academic Institutions To Digitally, Securely And Quickly Issue Online Academic Awards To The Students Directly In Their Online NAD Account. The Student Can Access Certificate At Any Time And Authorize Employers, Banks To View And Verify The Certificates. This Reduces Or Eliminates The Need To Carry Originals, Submit Attested Photocopies, Wait For Verification Of Documents.

IIT Kanpur Has Developed Mookit, A Powerful MOOC Management System, Can Be Used To Offer Online Courses At Any Scale, From Micro To Massive. Its Unique Architecture Makes It Highly Customizable And Cost-Effective At Any Scale. It Is Already Being Used For 18+ ONLINE COURSES 120000+ Learners By Source: <https://www.mookit.co.in>

The Government Has Also Started SWAYAM As An Instrument For Self-Actualisation Providing Opportunities For A Life-Long Learning. Here Learner Can Choose From Hundreds Of Courses, Virtually Every Course That Is Taught At The University / College / School Level And These Shall Be Offered By Best Of The Teachers In India And Elsewhere. It Has Got Transferable Credit System.

Source: <https://swayam.gov.in/>

Similarly NPTEL Provides E-Learning Through Online Web And Video Courses Various Streams.

The National Programme On Technology Enhanced Learning (NPTEL) Provides E-Learning Through Online Web And Video Courses In Engineering, Sciences, Technology, Management And Humanities.

It Provides Certification Exam For A Nominal Fee.

Source: <https://onlinecourses.nptel.ac.in/explorer>

There Is A Demand-Supply Mismatch In Terms Of Education Seats In The Country. For Example, Many Engineering And Management Seats Are Vacant While There Is Less Supply Of Medical Seats. This Pattern Might Change Over Years.

Hence Technology Enabled Education Can Facilitate Choice Based System Over A Lifetime

The Problem Of Accessibility Can Be Overcome Using Digital Tools: Everyone Is Special And Differentlyabled.

Software Like Text To Speech, Instant Translation, And So On Available At Real Time Execution Speeds On The Internet, Can Facilitate Learning For Our Differentlyabled Learners And Teachers.

Similarly Exams Have Been Improved By The Use Of ICT. There Is More Transparency And. These Are Difficult To Manipulate. Similarly Solutions To The Exams Are Uploaded On The Internet And Guarantee Full Transparency

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