## Physical, Digital and Virtual Anywhere & Many Wares

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Roads & Automobiles





### Movies > Back to Theatre > A roaring Boxoffice Success





Online Education







based colleges will be significantly less important due to technology

"Bill Gates is wrong". "College Campuses will not fade away"

**Larry Atkins** 

Journalist, Professor, Lawyer, Author ...

<u>Bill Gates Is Wrong. College Campuses</u> <u>Will Not Fade Away | HuffPost College</u>

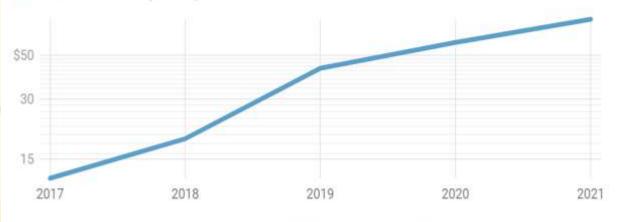


Harward **Business** School -Online **Education** Revenue is very close to **On-Campus Students Fee** Revenue.

#### HBS Online Revenue Now Exceeds \$75 Million A Year

Revenue from Harvard Business School's online courses and programs hit a record \$76 million in fiscal 2021, a 31% increase over the \$58 million achieved in fiscal 2020 and only \$5 million less than Harvard's traditional on-campus executive education revenue of \$81 million in 2021

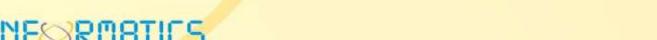
HBS Online Revenue (Millions)



https://poetsandquants.com/2022/04/18/harvards-online-course-revenue-

nearly-matches-its-traditional-exec-ed-business/

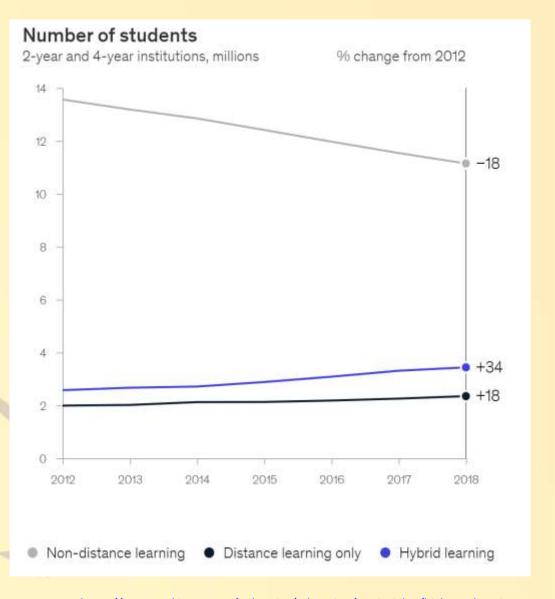
Source: Harvard Business School 2021 Annual Report • Get the data • Created with Datawrapper





Higher education
enrollment:
Inevitable decline
or online
opportunity?
November 2020 |
Data Insight.
Mckinsey Report

Students have been transitioning away from traditional in-person programs, while enrollments in distance learning only and hybrid learning have continued to rise steadily.





https://www.mckinsey.com/industries/education/our-insights/higher-education-enrollment-inevitable-decline-or-online-opportunity

Top In-Person
Vs Online
Learning
Statistics &
Trends in
2023

- 70% of students agree that online classes are better than traditional classroom settings (Source: University of the Potomac)
- Since 2020, 98% of Universities have moved its classes online (Source: Higher Ed Partners)
- 77% of academic leaders believe online education is equal or superior to learning in the classroom
- Elearning can help students retain between 25% and 60% more information (Source: eLearning Industry)
- Online learning uses 87% less energy and 85% fewer CO2 emissions per student compared to learning in a traditional setting (Source: The Open University in Britain)
- eLearning requires 40% to 60% less time learning than traditional classrooms (Source: Brandon-Hall Group)
- An online degree is more than \$10K cheaper than a traditional on campus degree (Source: Education Data Initiative)

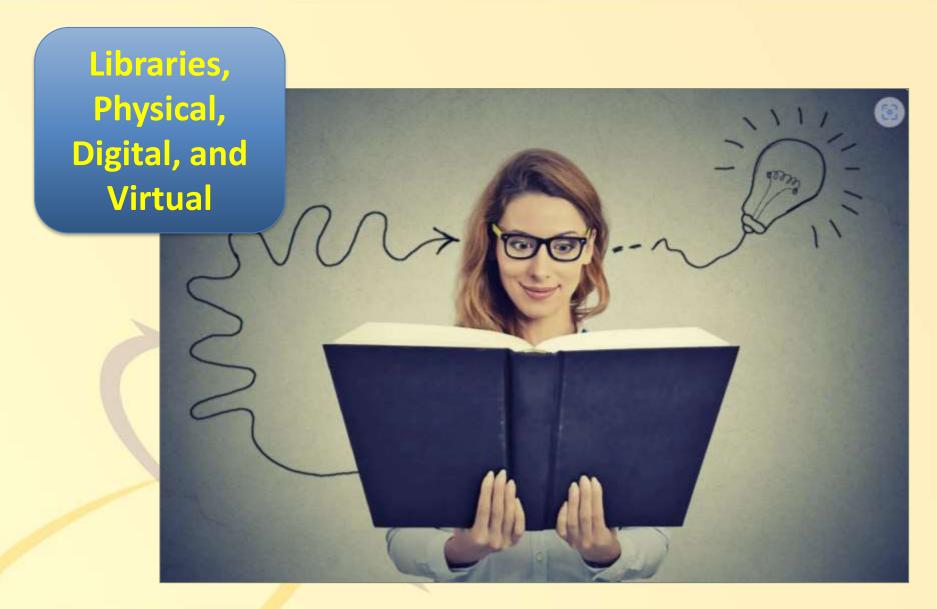


## INDIA Online Education Market

- In 2023, Online Education revenue projected US\$5.76bn.
- By 2018, Revenue: US\$14.65bn.
- (Annual growth rate (CAGR 2023-28) at 20.53%)
- Average revenue per user projected US\$35.99 in 2023.
- By 2028, No. of users: 287.6 mil.
- User penetration in Online Education 11.3% in 2023.

2003 - US expected to generate US\$74.8 Bil.







Non-stop
Transforma
tional
Changes in
Libraries
are nonstop.

- Early Campus pioneers of in Technology Adaptation
- Massive digitization Initiatives
- Online before Internet
- CD-ROMs
- Faster internet penetration
- Aggressive Drivers of OA Initiatives
- Increasing Research Support IRs,
   RDM and Open Science initiatives
- New initiatives in making library a learning hub
- Library Networks and Consortia initiatives.
- Innovative Experiments with new Technologies enhancing the value of physical libraries.



Some emerging Technologies to watch

#### Augmented Reality

https://m.youtube.com/watch?v=aBaDrQRs8eA

- Metaverse
- https://www.bing.com/videos/riverview/relatedvideo?&q=Metav ersese+in+libraries&&mid=63C7F1761E48944B7BB063C7F1761E48 944B7BB0&&FORM=VRDGAR
- Digital Twins
- Generative AI and the LLMs



# Physical with Digital and Virtual

- Knowledge is Virtual, Information/Data are Real
- Ambient space an essential need for study and learning.
- LIBRARY call it whatever name the natural choices to serve this need as a community space learning, study and research.
- Digital is the medium for all future content creation and management activities.



## In Conclusion

- Technologies are used to solve real-world problems as they keep evolving. For the world of learning and research technologies are bringing in new and better ways to improve our abilities to learn better and do research faster.
- Learning spaces will continue to be shared by Physical and Digital complementing each other.
- Physical and Virtual will co-exist enhancing learning and research all through the civilization
- Human will habitually will keep adapting with every evolutionary changes

