

## BIBLIOGRAPHY

- Abeer, W., & Miri, B. (2014). Students preferences and views about learning in a MOOC. *Procedia - Social and Behavioral Sciences*, 152, 318-323. <https://doi.org/10.1016/j.sbspro.2014.09.203>
- Agnihotri, M. A., & Pandit, A. (2020c). Overview and Future Scope of SWAYAM in the World of MOOCs: A Comparative Study with Reference to Major International MOOCs. In *Intelligent systems reference library* (pp. 169–201). [https://doi.org/10.1007/978-981-15-8744-3\\_9](https://doi.org/10.1007/978-981-15-8744-3_9)
- Agnihotri, M. A., & Pandit, A. (2020). undefined. *Intelligent Systems Reference Library*, 169-201. [https://doi.org/10.1007/978-981-15-8744-3\\_9](https://doi.org/10.1007/978-981-15-8744-3_9)
- Aldowah, H., Al-Samarraie, H., Alzahrani, A. I., & Alalwan, N. (2019). Factors affecting student dropout in MOOCs: A cause and effect decision-making model. *Journal of Computing in Higher Education*, 32(2), 429-454. <https://doi.org/10.1007/s12528-019-09241-y>
- Almatrafi, O., & Johri, A. (2019, July 1). Systematic review of discussion forums in massive open online courses (MOOCs). <https://doi.org/10.1109/tlt.2018.2859304>
- Ambadkar, R. S. (2020). E-learning through SWAYAM moocs-awareness and motivation among commerce students. *International Journal of Scientific and Technology Research*, 9(2), 3529–3538.
- Ambedkar, R. S. (2020). E-learning through SWAYAM MOOC awareness and motivation among commerce students. *International Journal of Scientific & Technology Research*, 9(2), 5329-5338. Retrieved June 3, 2021, from <https://www.researchgate.net/publication/341459682>
- Ansrsource. (2022, May 24). The promise and challenges of MOOCs. <https://ansrsource.com/the-promise-and-challenges-of-moocs/>
- Banwari, V. (2018). Role of MOOCs in Indian higher education. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 5(12), 402-407. <http://www.jetir.org/>

- Barthakur, A., Kovanovic, V., Joksimovic, S., Siemens, G., Richey, M., & Dawson, S. (2021). Assessing program-level learning strategies in MOOCs. *Computers in Human Behavior*, 117, 106674. <https://doi.org/10.1016/j.chb.2020.106674>
- Beach, R., Anson, C. M., Breuch, L. a. K., & Reynolds, T. (2014). *Understanding and Creating Digital Texts*. Rowman & Littlefield. [http://books.google.ie/books?id=eyYvBQAAQBAJ&printsec=frontcover&dq=Understanding+and+Creating+Digital+Texts&hl=&cd=1&source=gbs\\_api](http://books.google.ie/books?id=eyYvBQAAQBAJ&printsec=frontcover&dq=Understanding+and+Creating+Digital+Texts&hl=&cd=1&source=gbs_api)
- Beattie-Moss, M. (2013, June 20). Are MOOCs here to stay? Retrieved from <https://phys.org/news/2013-06-probing-moocs.html>
- Biswas, S., & Sarkar, M. (2020). MOOC: Challenges & prospects in Indian higher education. *Journal of Information and Computational Science*, 10(2). <https://www.researchgate.net/publication/364329757>
- Blackmon, S. J., & Major, C. H. (2016). *MOOCs and Higher Education: Implications for Institutional Research*. John Wiley & Sons. [http://books.google.ie/books?id=s2ADDAAAQBAJ&printsec=frontcover&dq=MOOCs+and+Higher+Education:+Implications+for+Institutional+Research&hl=&cd=1&source=gbs\\_api](http://books.google.ie/books?id=s2ADDAAAQBAJ&printsec=frontcover&dq=MOOCs+and+Higher+Education:+Implications+for+Institutional+Research&hl=&cd=1&source=gbs_api)
- Blackmon, S. J., & Major, C. H. (2016). *MOOCs and Higher Education: Implications for Institutional Research*. John Wiley & Sons. <http://books.google.ie/books?id=s2ADDAAAQBAJ&printsec=frontcover&dq=MOOCs+an>
- Bordoloi, R., Das, P., & Das, K. (2020). Lifelong learning opportunities through MOOCs in India. *Asian Association of Open Universities Journal*. <https://doi.org/10.1108/AAOUJ-09-2019-0042>
- Borrella, I., Caballero-Caballero, S., & Ponce-Cueto, E. (2022). Taking action to reduce dropout in MOOCs: Tested interventions. *Computers & Education*, 179, 104412. <https://doi.org/10.1016/j.compedu.2021.104412>
- Chapman, S., Goodman, S., Jawitz, J., & Deacon, A. (2016). A strategy for monitoring and evaluating massive open online courses. *Evaluation and Program Planning*, 57, 55-63. <https://doi.org/10.1016/j.evalprogplan.2016.04.006>

- Chauhan, J. (2017). An overview of MOOC in India. *International Journal of Computer Trends and Technology*. <https://doi.org/10.14445/22312803/IJCTT-V49P117>
- Chauhan, J., & Goel, A. (2017). An overview of MOOC in India. *International Journal of Computer Trends and Technology (IJCTT)*, 49(2), 111-120. Available from <http://surl.li/fidvq>
- Chen, Y., Gao, Q., Yuan, Q., & Tang, Y. (2019). Facilitating Students Interaction in MOOCs through Timeline-Anchored Discussion. *International Journal of Human-Computer Interaction*, 35(19), 1781–1799. <https://doi.org/10.1080/10447318.2019.1574056>
- Conole, G. (2016). MOOCs as disruptive technologies: Strategies to improve the learning experience and quality of MOOCs. *Distance Education Magazine (RED)*, (50). Recovered from <https://revistas.um.es/red/article/view/270791>
- Dai, H. M., Teo, T., & Rappa, N. A. (2020). Understanding continuance intention among MOOC participants: The role of habit and MOOC performance. *Computers in Human Behavior*, 112, 106455. <https://doi.org/10.1016/j.chb.2020.106455>
- Das, I., & Pawar, V. (2022). Massive open online courses (MOOCs) and Indian education. *Paripex-Indian Journal of Research*, Volume-Issue-7. <https://doi.org/10.36106/paripex/6204117>
- Das, M. (2018). Massive open online courses (MOOCs): A new era of higher learning. *International Journal of Research in Social Sciences*, 8(4), 295-311. [https://www.ijmra.us/project%20doc/2018/IJRSS\\_ APRIL2018/IJMRA-13567.pdf](https://www.ijmra.us/project%20doc/2018/IJRSS_ APRIL2018/IJMRA-13567.pdf)
- Dash, Manoj Kumar and Panigrahi, Manas Ranjan (2023) Development of MOOC For Swayam: A Shift in Teaching Learning Paradigm. *Journal of Global Resources*, 09 (01)
- Data Bridge Market Research. (n.d.). Massive open online courses (MOOCS) market size & statistics by 2030. Market Research Business Consulting and Strategy

Planning Firm. Retrieved from  
<https://www.databridgemarketresearch.com/reports/global-mooc-market>

[Datt, A. \(2017\). Learning to teach online through massive open online course \(Mooc\) design and facilitation. \*INTED2017 Proceedings\*.  
<https://doi.org/10.21125/inted.2017.0875>](#)

Davis, D., Chen, G., Jivet, I., Hauff, C., & Houben, G. (2016). Encouraging metacognition & self-regulation in MOOCs through increased learner feedback. In Proceedings of the LAK 2016 workshop on learning analytics for learners (Vol. 1596, pp. 17–22). Edinburg, Scotland. Retrieved from <http://ceur-ws.org/Vol-1596/>.

Deb, R. (2023). Improving Indian higher education quality: Challenges and opportunities. *Indian Journal of Public Administration*.  
<https://doi.org/10.1177/00195561221142620>

Deivam, M., & Nandhinidevi, N. D. R. (2024). Awareness and barriers of SWAYAM courses (MOOCs) among prospective teachers in Dindigul District, Tamil Nadu, India. *International Journal of Educational Sciences*, 44(1), 15-22. Retrieved from <https://www.researchgate.net/profile/Chennupati-Ramaiah->

Deng, R., & Benckendorff, P. (2021). What are the key themes associated with the positive learning experience in MOOCs? An empirical investigation of learners' ratings and reviews. *International Journal of Educational Technology in Higher Education*, 18(9). <https://doi.org/10.1186/s41239-021-00244-3>

Devi, R. (2019). Massive open online courses and challenges in India. *International Journal of Applied Research*, 5(8). <http://www.allresearchjournal.com/>

Dhamdhere, S. (2024, January 31). Study of use of an additional reading material in SWAYAM MOOC platform in India and need of learner centric personalized adaptive real-time reading material in MOOCs. *Journal of Educators Online*, 21(1). <https://doi.org/10.9743/jeo.2024.21.1.4>

Doo, M. Y., Zhu, M., Bonk, C. J., & Tang, Y. (2020). The effects of openness, altruism and instructional self-efficacy on work engagement of MOOC

- instructors. *British Journal of Educational Technology*, 51(3), 743-760.  
<https://doi.org/10.1111/bjet.12882>
- Duha, Mukhtar, Kashtwari., Zahid, Ashraf, Wani. (2019). MOOCs: The Indian Journey So Far. doi: 10.4018/978-1-5225-6292-4.CH002.
- ECSM 2017 4th European Conference on Social Media. (2017). United Kingdom: Academic Conferences and Publishing Limited.  
[https://www.google.co.in/books/edition/ECSM\\_2017\\_4th\\_European\\_Conference\\_on\\_Soc/iCZFDwAAQBAJ?hl=en&gbpv=0](https://www.google.co.in/books/edition/ECSM_2017_4th_European_Conference_on_Soc/iCZFDwAAQBAJ?hl=en&gbpv=0)
- El Said, G. R. (2016). Understanding How Learners Use Massive Open Online Courses and
- Eradze, M., León Urrutia, M., Reda, V., & Kerr, R. (2019). Blended learning with MOOCs. In *Emerging Technologies and Pedagogies in the Curriculum* (pp. 89-101). Springer. [https://doi.org/10.1007/978-3-030-19875-6\\_7](https://doi.org/10.1007/978-3-030-19875-6_7)
- Fein, A. D. (2017). Multimedia learning: principles of learning and instructional improvement in Massive, Open, Online Courses (MOOCs) (Doctoral dissertation, University of Illinois at Urbana-Champaign).
- Ferguson, R., Sharples, M. (2014). Innovative Pedagogy at Massive Scale: Teaching and Learning in MOOCs. In: Rensing, C., de Freitas, S., Ley, T., Muñoz-Merino, P.J. (eds) *Open Learning and Teaching in Educational Communities. EC-TEL 2014. Lecture Notes in Computer Science*, vol 8719. Springer, Cham. [https://doi.org/10.1007/978-3-319-11200-8\\_8](https://doi.org/10.1007/978-3-319-11200-8_8)
- Fife, M. A. (2016, January 1). *The influence of video lectures on student engagement in the University of Cape Town's first Massive Open Online Course*. <https://open.uct.ac.za/handle/11427/22800>
- French, S., Dickerson, A. L., & Mulder, R. A. (2023, December 1). A review of the benefits and drawbacks of high-stakes final examinations in higher education. <https://doi.org/10.1007/s10734-023-01148-z>
- FutureLearn. (2016, March 11). What is a MOOC? How do MOOCs work? - FutureLearn Blog. Retrieved from <https://www.futurelearn.com/info/blog/what-is-a-mooc-future-learn>

- G. Sammour, A. Al-Zoubi, A. Gladun, K. Khala and J. Schreurs, "MOOCs in universities: Intelligent model for delivering online learning content," *2015 IEEE Seventh International Conference on Intelligent Computing and Information Systems (ICICIS)*, Cairo, Egypt, 2015, pp. 167-171, doi: 10.1109/IntelCIS.2015.7397216.
- Gameel, B. G., & Wilkins, K. G. (2019). When it comes to MOOCs, where you are from makes a difference. *Computers & Education*, *136*, 49-60. <https://doi.org/10.1016/j.compedu.2019.02.014>
- Gregori, E. B., Zhang, J., Galván-Fernández, C., & Fernández-Navarro, F. D. A. (2018). Learner support in MOOCs: Identifying variables linked to completion. *Computers & Education*, *122*, 153–168. <https://doi.org/10.1016/j.compedu.2018.03.014>
- Gregori, E. B., Zhang, J., Galván-Fernández, C., & Fernández-Navarro, F. D. A. (2018). Learner support in MOOCs: Identifying variables linked to completion. *Computers & Education*, *122*, 153-168. <https://doi.org/10.1016/j.compedu.2018.03.014>
- Gulati S., Sharma R., & Chakravarty R. (2021). Understanding user perceptiveness and satisfaction level towards MOOCs: A comparative analysis of SWAYAM and Coursera. *Library Philosophy and Practice (e-journal)*. 6551. <https://digitalcommons.unl.edu/libphilprac/6551>
- Gulati, S., Sharma, R., & Chakravarty, R. (2021). Understanding user perspective and satisfaction level towards MOOCs: A comparative analysis of SWAYAM and Coursera. *Library Philosophy and Practice (e-journal)*, 6551.
- Gupta, K. P. (2021). Understanding learners' completion intention of massive open online courses (MOOCs): Role of personality traits and personal innovativeness. *International Journal of Educational Management*, *35*(4), 848–865. <https://doi.org/10.1108/ijem-01-2020-0042>
- Gupta, V., Chauhan, D. S., & Hanne, T. (2020). Flexible higher education through Swayam. <https://doi.org/10.4018/978-1-7998-0115-3.ch005>

Gurav, V. B., & Patil, P. B. (2019). E-learning: Courseware, MOOCs, SWAYAM, E-PG PATHSHALA. <https://doi.org/10.37591/joals.v6i1.1782>

[Hakami, N., White, S., & Chakaveh, S. \(2017\). undefined. \*Proceedings of the 9th International Conference on Computer Supported Education.\* <https://doi.org/10.5220/0006259503230331>](#)

Haumin, L., & Madhusudhan, M. (2019). An Indian based MOOC: An overview. *Library Philosophy and Practice*. Retrieved from <http://surl.li/fidwx>

Hayes, S. (2015). MOOCs and quality: A review of the recent literature. QAA. [http://publications.aston.ac.uk/26604/1/MOOCs\\_and\\_quality\\_a\\_review\\_of\\_the\\_recent\\_literature.pdf](http://publications.aston.ac.uk/26604/1/MOOCs_and_quality_a_review_of_the_recent_literature.pdf)

Hew, K. F., & Cheung, W. S. (2014b). Students and instructors' use of massive open online Courses (MOOCs): Motivations and challenges. *Educational Research Review*, *12*, 45–58. <https://doi.org/10.1016/j.edurev.2014.05.001>

[Hew, K. F., & Cheung, W. S. \(2014\). undefined. \*Educational Research Review\*, \*12\*, 45-58. <https://doi.org/10.1016/j.edurev.2014.05.001>](#)

Higher Education in India: Vision 2030: FICCI Higher Education Summit. 2013. Available from: <http://surl.li/fihzo>

Hossain, M. N., Hossain, M. Y., Bao, Y., Kumar, N., & Hoque, M. R. (2022). A proposed model to design MOOCs through the lens of addressing graduate skill gap. *Higher Education, Skills and Work-Based Learning*, *12*(5), 963–982. <https://doi.org/10.1108/heswbl-04-2021-0070>

Ichou, R. P. (2018, May 1). Can MOOCs reduce global inequality in education? *Australasian Marketing Journal*. <https://doi.org/10.1016/j.ausmj.2018.05.007>

Ingólfssdóttir, K. (2014, November 1). Impact of MOOCs and other forms of online education [Point of View]. *Proceedings of the IEEE*, *102*(11), 1639-1643. <https://doi.org/10.1109/jproc.2014.2360025>

Iniesto, F., McAndrew, P., Minocha, S., & Coughlan, T. (2016). Accessibility of MOOCs: understanding the provider perspective. *Journal of Interactive Media in Education*, *2016*(1), 1-10.

Iniesto, F., McAndrew, P., Minocha, S., & Coughlan, T. (2016). Accessibility of MOOCs:

International Implementation Scheme. (2005). United Nations decade of education for sustainable development (2005–2014). UNESCO Education Sector. <http://unesdoc.unesco.org/images/0014/001486/148654E.pdf>

Jaganatthan, G. S., & Sugundan, N. (2019). MOOCs: a comparative analysis between indian scenario and global scenario. *Int. J. Eng. Technol.* <https://www.sciencepubco.com/index.php/ijet/article/download/26758/13754>

Jagetiya, A., Challa, R. K., & Prashanthi, G. (2018). MOOCs: Education for all– on going development in India. *2018 IEEE 6th International Conference on MOOCs, Innovation and Technology in Education (MITE)*. <https://doi.org/10.1109/mite.2018.8747144>

Jordan, K. (2014). undefined. *The International Review of Research in Open and Distributed Learning*, 15(1). <https://doi.org/10.19173/irrodl.v15i1.1651>

Julia, K., Peter, V. R., & Marco, K. (2021). Educational scalability in MOOCs: Analysing instructional designs to find best practices. *Computers & Education*, 161, 104054. <https://doi.org/10.1016/j.compedu.2020.104054>

Kanjilal, U., & Kaul, P. (2016). The journey of SWAYAM: India MOOCs initiative. Retrieved from <http://hdl.handle.net/11599/2592>

Karnouskos, S. (2017). Massive open online courses (MOOCs) as an enabler for competent employees and innovation in industry. *Computers in Industry*, 91, 1-10. <https://doi.org/10.1016/j.compind.2017.05.001>

Karnouskos, S., & Holmlund, M. (2014). Impact of massive open online courses (MOOCs) on employee competencies and innovation (Dissertation). Retrieved from <https://urn.kb.se/resolve?urn=urn:nbn:se:bth-4817>

Khurana, R., Routray, S., Payal, R., & Gupta, R. (2019). Investigation of the Impact of Quality, Openness and Reputation of Massive Open Online Courses MOOCs on an Individual's Satisfaction and Performance. *Theoretical Economics Letters*, 09(04), 1167–1182. <https://doi.org/10.4236/tel.2019.94075>



- Kilgore, W., & Al Freih, M. (2016). MOOCs as an innovative pedagogical design laboratory. *International Journal on Innovations in Online Education*. <https://doi.org/10.1615/2016015210>
- Kim, S. (2016, December 14). MOOCs in higher education. IntechOpen. <https://www.intechopen.com/chapters/53197>
- Kotwal, R., Chauhan, G. S., & Ghosh, S. (2022). Challenges and opportunities in online learning amid COVID-19: A study on hearing–speech impaired students of Jammu and Kashmir. *Media Watch*. <https://doi.org/10.1177/09760911221086356>
- Kukhareenko, V. N. (2023). MOOCs: an insider’s perspective on a novel educational method with historical, organizational, participatory, and evaluative aspects. *Osvìtnij Vimìr*, 9, 59–119. <https://doi.org/10.31812/ed.610>
- Kumar, J. A., & Al-Samarraie, H. (2018). MOOCs in the Malaysian higher education institutions: The instructors’ perspectives. *The Reference Librarian*, 59, 163-177.
- Kumar, K. S., Mahendraprabu, M. (2021). Open educational practices of SWAYAM programme among research scholars. *Education and Information Technologies*. <https://doi.org/10.1007/S10639-021-10495-2>
- Kumar, K., & Mahendraprabu, M. (2021, March 16). Open educational practices of SWAYAM programme among research scholars. *Education and Information Technologies*, 26(4), 4621–4645. <https://doi.org/10.1007/s10639-021-10495-2>
- Kumar, P., & Kumar, N. (2020). A study of learner’s satisfaction from MOOCs through a mediation model. *Procedia Computer Science*, 173, 354–363. <https://doi.org/10.1016/j.procs.2020.06.041>
- [Kumar, P., & Kumar, N. \(2020\). A study of learner's satisfaction from MOOCs through a mediation model. \*Procedia Computer Science\*, 173, 354-363. <https://doi.org/10.1016/j.procs.2020.06.041>](https://doi.org/10.1016/j.procs.2020.06.041)
- [Kundu, A., & Bej, T. \(2020\). Perceptions of MOOCs among Indian State University students and teachers. \*Journal of Applied Research in Higher Education\*, 12\(5\), 1095-1115. <https://doi.org/10.1108/jarhe-08-2019-0224>](https://doi.org/10.1108/jarhe-08-2019-0224)

- Laar, E. V., Deursen, A. J. A. M. V., Dijk, J. V., & Haan, J. D. (2017, July 1). The relation between 21st-century skills and digital skills: A systematic literature review. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2017.03.010>
- Lambert, S. R. (2020). Do MOOCs contribute to student equity and social inclusion? A systematic review 2014–18. *Computers & Education*, 145, 103693. <https://doi.org/10.1016/j.compedu.2019.103693>
- Li, X. F., Li, J., Qiu, J., & Sun, S. W. (2014, September 1). Discussing the characteristics of MOOCs. *Applied Mechanics and Materials*, 644-650, 6335-6338. <https://doi.org/10.4028/www.scientific.net/amm.644-650.6335>
- Lima, D. P. R. D., Gerosa, M. A., Conte, T., & Netto, J. F. D. M. (2019, December 1). What to expect, and how to improve online discussion forums: The instructors' perspective. <https://doi.org/10.1186/s13174-019-0120-0>
- Liu, M., Kang, J., Cao, M., Lim, M., Ko, Y., Myers, R., & Schmitz Weiss, A. (2014). Understanding MOOCs as an Emerging Online Learning Tool: Perspectives From the Students. *American Journal of Distance Education*, 28(3), 147–159. <https://doi.org/10.1080/08923647.2014.926145>
- Liu, M., Zha, S., & He, W. (2019, July 10). Digital transformation challenges: A case study regarding the MOOC development and operations at higher education institutions in China. *TechTrends*, 63(5), 621-630. <https://doi.org/10.1007/s11528-019-00409-y>
- [Liu, B., Xing, W., Zeng, Y., & Wu, Y. \(2020\). Quantifying the influence of achievement emotions for student learning in MOOCs. \*Journal of Educational Computing Research\*, 59\(3\), 429-452. <https://doi.org/10.1177/0735633120967318>](https://doi.org/10.1177/0735633120967318)
- [Liu, M., Kang, J., Cao, M., Lim, M., Ko, Y., Myers, R., & Schmitz Weiss, A. \(2014\). Understanding MOOCs as an emerging online learning tool: Perspectives from the students. \*American Journal of Distance Education\*, 28\(3\), 147-159. <https://doi.org/10.1080/08923647.2014.926145>](https://doi.org/10.1080/08923647.2014.926145)
- Liu, M., Zha, S., & He, W. (2019). Digital transformation challenges: A case study regarding the MOOC development and operations at higher education

- institutions in China. *TechTrends*, 63(5), 621-630.  
<https://doi.org/10.1007/s11528-019-00409-y>
- Luik, P., Feklistova, L., Lepp, M., Tõnisson, E., Suviste, R., Gaiduk, M., Säde, M., & Palts, T. (2019). Participants and completers in programming MOOCs. *Education and Information Technologies*, 24(6), 3689–3706.  
<https://doi.org/10.1007/s10639-019-09954-8>
- Ma, L., & Lee, C. S. (2018). Understanding the barriers to the use of MOOCs in a developing country: An innovation resistance perspective. *Journal of Educational Computing Research*. <https://doi.org/10.1177/0735633118757732>
- MacNeill, H., Masters, K., Nemethy, K., & Correia, R. (2023). Online learning in health professions education. Part 1: Teaching and learning in online environments: AMEE Guide No. 161. *Medical Teacher*, 1-14. <https://doi.org/10.1080/0142159X.2023.2197135>
- Madathil Warriem, J. (2018). NPTEL Local Chapters: Facilitating mainstreaming of MOOCs in higher education. In 2018 IEEE Tenth International Conference on Technology for Education (T4E) (pp. 89-92). IEEE.  
<https://doi.org/10.1109/T4E.2018.00025>
- Major, R. R., & Mira Da Silva, M. (2023). Gamification in MOOCs: A systematic literature review. *Cogent Education*, 10(2).  
<https://doi.org/10.1080/2331186x.2023.2275820>
- Malik, V., & Hooda, M. (2023). MOOCs revamping Indian higher education: Escalating access, equity, and quality. *Journal of Higher Education Theory & Practice*, 23(12).
- Mandal, D., & Yadav, V. K. (2024). Current trends of MOOCs in India: Historical background, development and challenges. *The Online Journal of Distance Education and e-Learning*, 12(1).  
<https://tojdel.net/journals/tojdel/articles/v12i01/v12i01-01.pdf>
- May, D. S. (2018, January 1). Meeting the challenges of massive open online courses in higher education. Retrieved from

- <https://digitalcommons.pepperdine.edu/etd/987/> MOOC.org. (2023, January 1). Massive Open Online Courses. Retrieved from <https://www.mooc.org/>
- Mendez, M. C., Shah, D., & Patra, S. P. (2019). *Exploring SWAYAM: How India is Making MOOCs an Integral Part of its Education System*. <https://doi.org/10.1109/lwmoocs47620.2019.8939662>
- Ministry of Education. (2022). All India survey on higher education 2021-2022. <https://aishe.gov.in/aishe/viewDocument.action?documentId=353>
- Ministry of Human Resource Development. (2020). National Education Policy (NEP) 2020. Government of India. Retrieved from [https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf)
- Mohan, M., Upadhyaya, P., & Pillai, K. R. (2020, May 15). Intention and barriers to use MOOCs: An investigation among the postgraduate students in India. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-020-10215-2>
- Mohapatra, S., & Mohanty, R. (2016). Adopting MOOCs for affordable quality education. *Education and Information Technologies*, 22(5), 2027–2053. <https://doi.org/10.1007/s10639-016-9526-5>
- Mondal, G. C., & Majumder, P. (2019). Impact of ‘SWAYAM’ towards academic achievement. *International Journal of Research and Analytical Reviews*, 6(2), 592-599. [https://www.researchgate.net/publication/372647230\\_Impact\\_of\\_Learning\\_through\\_SWAYAM\\_Study\\_Webs\\_of\\_Active\\_Learning\\_for\\_Young\\_Aspirinng\\_Minds\\_in\\_India](https://www.researchgate.net/publication/372647230_Impact_of_Learning_through_SWAYAM_Study_Webs_of_Active_Learning_for_Young_Aspirinng_Minds_in_India)
- MOOCs Revamping Indian Higher Education: Escalating Access, Equity, and Quality. (2023b). *Journal of Higher Education Theory and Practice*, 23(12). <https://doi.org/10.33423/jhetp.v23i12.6238>
- MOOCs revamping Indian higher education: Escalating access, equity, and quality. (2023). *Journal of Higher Education Theory and Practice*, 23(12). <https://doi.org/10.33423/jhetp.v23i12.6238>

- MOOCs/SWAYAM. Retrieved from <http://surl.li/fidte>, <http://surl.li/gvmziD>'Souza, R. (2023, October 16). The coming disruption in higher education in India. The India Forum. Retrieved from <https://www.theindiaforum.in/article/disruption-higher-education-india>
- Mune, C. D. (2020). *Libraries Supporting Online Learning*. Bloomsbury Publishing USA.  
[http://books.google.ie/books?id=QN\\_EEAAAQBAJ&printsec=frontcover&dq=Libraries+Supporting+Online+Learning&hl=&cd=1&source=gbs\\_api](http://books.google.ie/books?id=QN_EEAAAQBAJ&printsec=frontcover&dq=Libraries+Supporting+Online+Learning&hl=&cd=1&source=gbs_api)
- Nagasampige, M., & Nagasampige, K. (2017). *A qualitative study on usage and effectiveness of massive open online courses (MOOCs) in Indian university education system*. <https://doi.org/10.46827/ejoe.v0i0.761>
- Narmatha, P., & Balasubramaniam, M. Challenges of SWAYAM MOOCs among postgraduate students of Bharathiar University. Retrieved from <https://www.researchgate.net/publication/371700073>
- Naveen, H. M. (2022). UGC regulations on credit framework for online courses through SWAYAM, 2021. *International Journal of Scientific Research in Science and Technology*. <https://doi.org/10.32628/ijrst229438>
- Nayek, J. (2018). A survey report on awareness among LIS professionals/students about SWAYAM: A government of India initiative on e-learning. *Knowledge Librarian: An International Peer Reviewed Bilingual E-Journal of Library and Information Science*, 5(1), 39-45. <http://www.klibjlis.com/5.1.3.pdf>
- Ogunyemi, A. A., Quaicoe, J. S., & Bauters, M. (2022). Indicators for enhancing learners' engagement in massive open online courses: A systematic review. *Computers and Education Open*, 3, 100088. <https://doi.org/10.1016/j.caeo.2022.100088>
- Ossiannilsson, E., Altınay, F., & Altınay, Z. (2016). MOOCs as change agents to boost innovation in higher education learning arenas. *Multidisciplinary Digital Publishing Institute*, 6(4), 25-25. <https://doi.org/10.3390/educsci6030025>

- Pappano, L. (2012). The year of the MOOC. The New York Times. <http://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html>
- Pariyar, A., Kulathuramaiyer, N., & Bala, P. (2020). Towards Participatory MOOCs and their usage for teacher education in India. *Asian Journal of Distance Education*, 15(2), 1-7. doi:10.4324/9780429261572-7
- Park, K., So, H.-J., & Cha, H. (2019). Digital equity and accessible MOOCs: Accessibility evaluations of mobile MOOCs for learners with visual impairments. *Australasian Journal of Educational Technology*, 35(6), 48–63. <https://doi.org/10.14742/ajet.5521>
- Pathak, S. (2019). Role of massive open online courses in Indian education system. *International Journal of Advanced Research*, 7(5), 1134-1140. <https://doi.org/10.21474/IJAR01/9144>
- Patiño-Toro, O. N., Valencia-Arias, A., Fernández-Toro, A., Jiménez-Guzmán, A., & Puerta Gil, C. A. (2023). Proposed methodology for designing and developing MOOCs for the deaf community. *Heliyon*, 9(10), 204-256. <https://doi.org/10.1016/j.heliyon.2023.e20456>
- Patra, S., Dutta, A. K., & Upadhyay, P. (2024). MOOCs: Determinants of enrolment and completion rate among learners of higher education institutions in India. *Asian Journal of Education and Social Studies*, 50(4), 200-211. <https://doi.org/10.9734/AJESS/2024/v50i41323>
- Paul, P. K., Bhuiyali, A., Tiwary, K. S., Aithal, P. S., & Rajesh, R. (2018). SWAYAM: The platform for modern and enhanced online and flexible education - A knowledge survey. *International Journal of Applied Science and Engineering*, 6(2), 149-155. <https://doi.org/10.30954/2322-0465.2.2018.7>
- Ponnaiah, M., Bhatnagar, T., Ganeshkumar, P., Bhar, D., Elumalai, R., Vijayageetha, M., Abdulkader, R. S., Chaudhuri, S., Sharma, U., & Murhekar, M. V. (2022, May 13). Design and implementation challenges of massive open online course on research methods for Indian medical postgraduates and teachers –

- Descriptive analysis of inaugural cycle. *BMC Medical Education*, 22(1).  
<https://doi.org/10.1186/s12909-022-03423-6>
- Porter, S. (2015, January 1). Additional benefits of MOOCs. Elsevier eBooks, 99-103.  
<https://doi.org/10.1016/b978-0-08-100048-9.00015-9>
- Porter, S. (2015, November 5). What are MOOCs. Retrieved from  
<https://www.sciencedirect.com/science/article/pii/B9780081000489000019>
- Pramanik, S. (2018). Attitude of post-graduate students towards SWAYAM: Indian version of MOOCs. *Harvest*, 3(1), 33-38. <http://www.harvestjournal.net/wp-content/uploads/2018/07/Sharmistha.pdf>
- Pratim Das, P. (2023). Perspective Chapter: MOOCs in India – Evolution, Innovation, Impact, and Roadmap. *IntechOpen*. doi: 10.5772/intechopen.1001972
- Purkayastha, N. P. N., & Sinha, M. K. (2021). Unstoppable Study with MOOCs during COVID-19 Pandemic: A Study. *Social Science Research Network*.  
<https://doi.org/10.2139/ssrn.3978886>
- R. Drake, J., T. O'Hara, M., & Seeman, E. (2015). Five Principles for MOOC Design: With a Case Study. *Journal of Information Technology Education: Innovations in Practice*, 14, 125–143. <https://doi.org/10.28945/2250>
- Raffaghelli, J. E., Cucchiara, S., & Persico, D. (2015). Methodological approaches in MOOC research: Retracing the myth of Proteus. *British Journal of Educational Technology*, 46, 488–509. doi:10.1111/bjet.1227910.1111/bjet.2015.46.issue-3
- Raheem, B. R., & Ghafar, Z. N. (2023, July 25). The major challenges and opportunities of e-learning for teachers and students in COVID-19 pandemic: A descriptive study. <https://doi.org/10.57185/joss.v2i7.85>
- Raja, M. A. S., & Kallarakal, T. K. (2021). COVID-19 and students perception about MOOCs: A case of Indian higher educational institutions. *Interactive Technology and Smart Education*, 18(3), 450-474.  
<https://doi.org/10.1108/ITSE-07-2020-0106>
- Ramirez-Montoya, MS. (2020). MOOCs and OER: Developments and Contributions for Open Education and Open Science. In: Burgos, D. (eds) *Radical Solutions*

and Open Science. Lecture Notes in Educational Technology. *Springer*, Singapore. [https://doi.org/10.1007/978-981-15-4276-3\\_10](https://doi.org/10.1007/978-981-15-4276-3_10)

Rhoads, R. A., Camacho, M. S., Toven-Lindsey, B., & Lozano, J. B. (2015). The massive open online course movement, xMOOCs, and faculty labor. *The Review of Higher Education*, 38(3), 397-424. <https://doi.org/10.1353/rhe.2015.0016>

Sagar, R. P. (2021, May 17). How e-learning & MOOCs would be the future of education. Retrieved from <http://surl.li/fuodh>

Sahoo, P. K., Sahoo, N., & Devi, U. (2019). *A Study of Higher Education Students Awareness of MOOC (SWAYAM) Programme and Usefulness of a Teacher Education Course offered through SWAYAM*. <http://dspace.col.org/handle/11599/3333>

Samantaray, N. (2021, March 30). UGC issues guidelines regarding online courses, allows universities to offer 40% semester courses on SWAYAM. Times of India. <https://www.timesnownews.com/education/article/ugc-issues-guidelines-regarding-online-courses-allows-universities-to-offer-40-semester-courses-on-swayam/738791>

Sammour, G., Al-Zoubi, A., Gladun, A., Khala, K., & Schreurs, J. (2015). MOOCs in universities: Intelligent model for delivering online learning content. *2015 IEEE Seventh International Conference on Intelligent Computing and Information Systems (ICICIS)*, 167-171. <https://doi.org/10.1109/IntelCIS.2015.7397216>

Sanchez-Gordon, S., & Luján-Mora, S. (2019). Design, implementation and evaluation of MOOCs to improve inclusion of diverse learners. In M. Khosrow-Pour (Ed.), *Accessibility and diversity in education: Breakthroughs in research and practice* (1st ed., pp. 52–80). IGI Global. <https://www.igi-global.com/chapter/design-implementation-and-evaluation-of-moocs-to-improve-inclusion-of-diverse-learners/240972>

Santandreu Calonge, D., Aman Shah, M., Riggs, K., & Connor, M. (2019). MOOCs and upskilling in Australia: A qualitative literature study. *Cogent Education*, 6(1), 1687392. <https://doi.org/10.1080/2331186x.2019.1687392>



- Sanzgiri, J. (2020). MOOCs for development? A study of Indian learners and their experiences in massive open online courses (Doctoral dissertation). The Open University.
- Sanzgiri, J. (2020, February 7). MOOCs for development? A study of Indian learners and their experiences in massive open online courses. <https://doi.org/10.21954/ou.ro.00010f94>
- Sathiyamoorthy, R., Ramesh, V. L., Chettri, M., Ziephru, S., & Kamath, R. (2023). Enablers and barriers to online education in India: A systematic review. *International Journal of Educational Reform*. <https://doi.org/10.1177/10567879231202485>
- Schmid, L., Manturuk, K., Simpkins, I., Goldwasser, M., & Whitfield, K. E. (2015). Fulfilling the promise: Do MOOCs reach the educationally underserved? *Educational Media International*, 52(2), 116-128. <https://doi.org/10.1080/09523987.2015.1053288>
- Seethamraju, R. (2014, January 1). Effectiveness of using online discussion forum for case study analysis. <https://doi.org/10.1155/2014/589860>
- Shah, J., Khanna, M., & Deshpande, R. (2022). Extending information system success model with customer experience: A MOOC system evaluation. *Business Perspectives and Research*. <https://doi.org/10.1177/22785337221092836>
- Shakya M, Shrestha S, Manandhar R 2016. Awareness of MOOC Among College Students: A Study of Far Western Region of Nepal. International Conference on IT4D. From <[https://www.researchgate.net/profile/Manoj\\_Shakya/publication/306057436\\_Awareness\\_of\\_MOOC\\_Among\\_College\\_Students\\_A\\_Study\\_Of\\_Far\\_Western\\_Region\\_of\\_Nepal/links/57acb04a08e7a6420c30bb5/Awareness-of-MOOC-Among-College-Students-A-Study-Of-Far-West-ern-Region-of-Nepal.pdf](https://www.researchgate.net/profile/Manoj_Shakya/publication/306057436_Awareness_of_MOOC_Among_College_Students_A_Study_Of_Far_Western_Region_of_Nepal/links/57acb04a08e7a6420c30bb5/Awareness-of-MOOC-Among-College-Students-A-Study-Of-Far-West-ern-Region-of-Nepal.pdf)> (Retrieved on 28 September 2023).
- Shakya, M., Shrestha, S., & Manandhar, R. (2016). Awareness of MOOC among college students: A study of far western region of Nepal. In *International*

Conference on IT4D, Kathmandu, July. Retrieved from <https://www.researchgate.net/profile/Manoj>

Shapiro, H. B., Lee, C. H., Roth, N. E. W., Li, K., Çetinkaya-Rundel, M., & Canelas, D. A. (2017, July 1). Understanding the massive open online course (MOOC) student experience: An examination of attitudes, motivations, and barriers. <https://doi.org/10.1016/j.compedu.2017.03.003>

Sharma, R., & Sharmiladevi, J. C. (2022). An overview of Indian MOOCs. *Annual Research Journal of SCMS*, 10, 31-42. <https://scmspune.ac.in/journal>

Shewale, R. (2021b). Awareness of MOOC Swayam Among Library and Information Science Professionals: A Survey. *Research Review International Journal of Multidisciplinary*, 6(2), 7–13. <https://doi.org/10.31305/rrijm.2020.v06.i02.003>

Singh, A., & Kakkar, K. B. (2023). Program inclusive, credit-based SWAYAM MOOCs in higher educational institutions of India: A review. *International Journal of Educational Development*, 97, 102-727. Available from <http://surl.li/kmvpq>

Singh, G. (2022a). Quality of MOOC for teachers' professional development: Participants' perception. *The Online Journal of Distance Education and e-Learning*, 10(1), 134-147. <https://tojdel.net/journals/tojdel/articles/v10i01/v10i01-15.pdf>

Singh, G. (2022b). Why do MOOCs fail on completion Rate? An Analysis of SWAYAM Courses. *Indian Journal of Educational Technology*, 4(1), 111–123. [https://ciet.nic.in/IJET\\_January\\_2023/index.html#page=1](https://ciet.nic.in/IJET_January_2023/index.html#page=1)

Singh, N.(2019). SWAYAM – Indian MOOCs: An insider's perspective. *Journal of Distance Education*, 14(1), 47-55. Available from: <http://surl.li/hiede> AICTE, MHRD. (2017, June 1). Guidelines for Development & Implementation of SWAYAM

Singh, T., Sikarwar, M., Gupta, M., & Vishnoi, S. (2022). SWAYAM platform of distance learning: A perceptual study. *International Journal of Management and Humanities*. <https://doi.org/10.35940/ijmh.h1458.048822>

- Sivakumar, R. (2017). Computer awareness among student–teachers. *Journal of Contemporary Educational Research and Innovations*, 7(4), 156-160. Retrieved June 9, 2021, from <https://www.researchgate.net/publication/326356421>
- Sonwalkar, J., & Maheshkar, C. (2015, August 15). MOOCs: A massive platform for collaborative learning in a globalized way. Retrieved from <https://www.jmra.in/article-details/711>
- Soy, S. S. (2019). A study on the awareness of MOOCs among students of higher learning in Paschim Bardhaman district of West Bengal. *International Journal of Research in Social Sciences*, 9(1), 708-719. <https://www.indianjournals.com/ijor.aspx?Target=ijor:ijrss&volume=9&issue=1&article=049>
- Sra, P., & Chakraborty, P. (2018). Opinion of computer science instructors and students on MOOCs in an Indian university. *Journal of Educational Technology Systems*. <https://doi.org/10.1177/0047239518797085>
- Stracke, C. M., & Trisolini, G. (2021). A Systematic Literature Review on the Quality of MOOCs. *Sustainability*, 13(11), 5817. <https://doi.org/10.3390/su13115817>
- Stracke, C. M., & Trisolini, G. (2021). A Systematic Literature Review on the Quality of MOOCs. *Sustainability*, 13(11), 5817. <https://doi.org/10.3390/su13115817>
- Strait, M., & Yang, M. (2020). Cognitive load and online course quality: Insights from designers in a higher education context. *British Journal of Educational Technology*, 52(2), 584–605. <https://doi.org/10.1111/bjet.13043>
- Stratton, C., & Grace, R. (2015). Exploring linguistic diversity of MOOCs: Implications for international development. *Proceedings of the Association for Information Science and Technology*, 53(1), 10. [https://doi.org/10.1002/pr2.2016.14505301071+Higher+Education:+Implications+for+Institutional+Research&hl=&cd=1&source=gbs\\_api](https://doi.org/10.1002/pr2.2016.14505301071+Higher+Education:+Implications+for+Institutional+Research&hl=&cd=1&source=gbs_api)
- Suleman, A., Hosueh, M., Fernández-Luque, L., Gabarron, E., Wan, M., Singh, O., Traver, V. S., Li, Y.-C. J., & Syed-Abdul, S. (2016). Lessons learnt from a MOOC about social media for digital health literacy. 2016 38th Annual

- International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), 5636-5639. <https://doi.org/10.1109/EMBC.2016.7592005>
- Sun, Y., Guo, Y., & Zhao, Y. (2020). Understanding the determinants of learner engagement in MOOCs: An adaptive structuration perspective. *Computers & Education*, 157, 103963. <https://doi.org/10.1016/j.compedu.2020.103963>
- Sun, Y., Ni, L., Zhao, Y., Shen, X., & Wang, N. (2018). Understanding MOOC continuance: An empirical investigation. *British Journal of Educational Technology*, 50(6), 3156-3174. <https://doi.org/10.1111/bjet.12724>
- SWAYAM EOI: Proposal for course development. (n.d.). Retrieved from <https://swayam.inflibnet.ac.in/>
- Swayam: Latest news & videos, photos about swayam. (2023, February 22). Economic Times. Retrieved from <https://economictimes.indiatimes.com/topic/swayam>
- Tang, S., Lei, U., & Wei, H. Q. (2024). The effect of learning strategies adopted in K12 Schools on student learning in massive open online courses. *Journal of Computer Assisted Learning*, 40(3), 990-1005. <https://doi.org/10.1111/jcal.12932>
- Thoughtful Learning. (2015, August 17). What are 21st century skills? Retrieved from <https://k12.thoughtfullearning.com/FAQ/what-are-21st-century-skills>
- Toth, C. T. (2019). MOOCs im Kontext von Persönlichkeit und Prokrastination. In *Massive Open Online Courses und die Psychologie des Lernens* (pp. 29-106). Springer. [https://doi.org/10.1007/978-3-658-26296-9\\_3](https://doi.org/10.1007/978-3-658-26296-9_3)
- Trehan, S., Sanzgiri, J., Li, C., Wang, R. & Joshi, R. (2017). Critical discussions on the Massive Open Online Course (MOOC) in India and China. *International Journal of Education and Development using ICT*, 13(2), Open Campus, The University of the West Indies, West Indies. Retrieved May 23, 2024 from <https://www.learntechlib.org/p/180647/>.
- Trehan, S., Sanzgiri, J., Li, C., Wang, R., & Joshi, R. (2017). Critical Discussions on the Massive Open Online Course (MOOC) in India and China. *International*

*journal of education and development using information and communication technology, 13, 141-165.*

Ucha, C. R. (2023). Role of course relevance and course content quality in MOOCs acceptance and use. *Computers and Education Open, 5, 100147.* <https://doi.org/10.1016/j.caeo.2023.100147>

UGC (2016). UGC Credit Framework for Online Learning Courses through SWAYAM)Regulation,2016. New Delhi, the 20th July,2016, The Gazette of India, no.295, retrieved from [https://www.ugc.ac.in/pdfnews/4064990\\_UCG-\(Credit-Framework-for-Online-Learning-Courses-through-SWAYAM\)-Regulation,-2016.pdf](https://www.ugc.ac.in/pdfnews/4064990_UCG-(Credit-Framework-for-Online-Learning-Courses-through-SWAYAM)-Regulation,-2016.pdf)

understanding the provider perspective. *Journal of Interactive Media in Education, 2016(1), 1-10.*

UNESCO (2017) ‘Unpacking Sustainable Development Goal 4 Education 2030’, Paris: UNESCO. <http://www.unesco.org/ulis/cgi-bin/ulis.pl?catno=246300> of Computer Assisted Learning, 29(5), 403-413. <https://doi.org/10.1111/jcal.12029>

Veletsianos, G. (2017). Toward a generalizable understanding of Twitter and social media use across MOOCs: Who participates on MOOC hashtags and in what ways? *Journal of Computing in Higher Education, 29(1), 65–80.* <https://doi.org/10.1007/s12528-017-9131-7>

Vijayakumar, V., & Rekha, R. (2023). A study on awareness towards MOOC-Swayam course among student teachers. *International Journal of Creative Research Thoughts, 11(6), 294-300.* <https://ijcrt.org/papers/IJCRT2306862.pdf>

Virani, S. R., Saini, J. R., & Sharma, S. (2020). Interactive learning environments. *Interactive Learning Environments, 1-17.* <https://doi.org/10.1080/10494820.2020.1817760>

Voogt, J., Erstad, O., Dede, C., & Mishra, P. (2013, September 9). Challenges to learning and schooling in the digital networked world of the 21st century. *Journal*

- Waks, L. J. (2016). The evolution and evaluation of massive open online courses. <https://doi.org/10.1057/978-1-349-85204-8>
- Wan, L., Shoumei, X., & Shu, A. (2020, July 1). Toward an understanding of university Students continued intention to use MOOCs: When UTAUT model meets TT model. <https://doi.org/10.1177/2158244020941858>
- Wang, Y., Li, Y., Hu, X., Xu, Y., Liang, X., & Lei, C. (2022). Massive open online courses role in promoting United Nations sustainable development goals. 2022 IEEE Learning with MOOCS (LWMOOCS). <https://doi.org/10.1109/lwmoocs53067.2022.9927947>
- Wei, X., & Taecharungroj, V. (2022). How to improve learning experience in MOOCs: An analysis of online reviews of business courses on Coursera. *The International Journal of Management Education*, 20(3), 100675. <https://doi.org/10.1016/j.ijme.2022.100675>
- Why They Drop Out. *Journal of Educational Computing Research*. <https://doi.org/10.1177/0735633116681302>
- Yang, Q., & Lee, Y. (2020). The critical factors of student performance in MOOCs for sustainable education: A case of Chinese universities. *Sustainability*, 13(14), 8089. <https://doi.org/10.3390/su13148089>
- Yin, Y. (2016). Chinese learners' perceptions of MOOCs: A case study [Doctoral dissertation, Heinrich Heine University Düsseldorf]. Retrieved from <https://d-nb.info/1113748001/34Kukharenko>,
- Yuan, L., Powell, S. J., & Olivier, B. (2014). Beyond MOOCs: Sustainable online learning in institutions. <https://e-space.mmu.ac.uk/619736/>
- Zaraunkar, R. S. (2022). Use of MOOCs for skill development of LIS professionals in Goa (Doctoral dissertation, Goa University).
- Zhan, Z., Fong, P., Mei, H., Chang, X., Liang, T., & Ma, Z. (2015). Sustainability education in massive open online courses: A content analysis approach. *Sustainability*, 7(3), 2274-2300. <https://doi.org/10.3390/su7032274>

Zheng, Q., Chen, L., & Burgos, D. (2017). Conclusions of construction and development of MOOCs in China. In *The Development of MOOCs in China* (pp. 277-288). [https://doi.org/10.1007/978-981-10-6586-6\\_14](https://doi.org/10.1007/978-981-10-6586-6_14)

Zhu, B., Zheng, Y., Ding, M., Dai, J., Liu, G. and Miao, L. (2023), "A pedagogical approach optimization toward sustainable architectural technology education applied by massive open online courses", *Archnet-IJAR*, 17 (3), 589-607.

## APPENDICES

### Attitude Scale for Students

**Dear students,**

The researcher is conducting a study on the topic “**A study on Institutional Practices and Students Attitude toward MOOCs Implementation in the Higher Education Institutions of Assam.**” This attitude scale is developed to collect data for the same purpose. You are requested to please spare some of your valuable time to give your responses to the statements in the scale. The information provided by you will be kept confidential and will be used for the purpose of this study only.

#### Instruction

This is a five-point attitude Scale consisting of 44 statements related to different dimensions of the SWAYAM program. Please read each statement carefully. There are no right or wrong answers in the scale. Please response to all the statements given in the scale by putting tick marks (√) in the appropriate column against each statement.

#### Section I: Basic Information

**Instruction:** Please give your feedback for the space which is provided against each question.

Q1.	Name:
Q2.	Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Others
Q6.	Location <input type="checkbox"/> Urban <input type="checkbox"/> Semi-urban <input type="checkbox"/> Rural
Q7.	Stream: <input type="checkbox"/> Humanities <input type="checkbox"/> Commerce <input type="checkbox"/> Science <input type="checkbox"/> Technical <input type="checkbox"/> Vocational <input type="checkbox"/> Others (Specify_____).
Q8.	Source through which you came to know about SWAYAM MOOCs <input type="checkbox"/> Teacher <input type="checkbox"/> Family <input type="checkbox"/> Friend <input type="checkbox"/> Internet <input type="checkbox"/> Newspaper <input type="checkbox"/> Any other (Please specify)_____
Q9.	Number of programmes you enrolled under SWAYAM platform <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 or more



## Section II: Attitude Scale for students

**Instruction:** In this section, you need to put a tick mark (✓) against each statement which is given below:

(**Note:** SA= Strongly Agree, A= Agree, UD =Undecided, D =Disagree and SD =Strongly Disagree)

Sl. No	Statements	SA	A	UD	D	SD
1	Taking SWAYAM MOOCs is less costly than pursuing formal education.					
2	SWAYAM MOOCs supplement other courses of the university.					
3	It also supports the educational needs of students belonging to remote areas.					
4	It provides opportunities to develop a broad interest in a diverse range of subjects.					
5	It helps students find appropriate courses of their interest.					
6	SWAYAM MOOCs allow students to learn at their own convenience.					
7	The knowledge acquires through SWAYAM MOOCs is inadequate.					
8	SWAYAM MOOCs help students active engagement in the learning process.					
9	The course material is ideal for students requirements.					
10	The duration of course is too long					
11	The MOOCs course instructors are proficient in their content knowledge.					
12	SWAYAM MOOCs encourages innovative teaching methods.					
13	The course content is updated.					
14	The quality of the course content is of very low standard.					
15	SWAYAM MOOCs provide opportunities for students to get the diversity of learning material.					

16	SWAYAM MOOCs enhance classroom learning even better.					
17	In this course students pass with minimal efforts.					
18	SWAYAM MOOCs promote effective communication abilities					
19	Its leads to the development of harmful social media habits					
20	Course instructors use ineffective pedagogy.					
21	MOOCs courses create high academic pressure on students.					
22	It helps to improve problem-solving ability among the learner.					
22	It encourages cooperation among the learners.					
24	It promotes critical thinking ability among the learner.					
25	SWAYAM MOOCs encourage rote learning.					
26	It encourages self-learning.					
27	It does not promote experiential learning					
28	Discussion forums are well organized by the instructors.					
29	Course instructor timely responds to the queries.					
30	Course Instructors' feedback is constructive.					
31	Students participate actively in discussions forums					
32	I am satisfied with the interactive online discussion.					
33	The courses use multiple methods to assess student performance					
34	MOOCs assessment mechanism for learners is ineffective.					
35	SWAYAM MOOCs offer individual attention to every learner					
36	Learning materials are logically organized in MOOCs courses					
37	The final evaluations are of high quality in nature					
38	Assessments are not well-instructed.					

39	SWAYAM MOOCs assessments boost study habits.					
40	SWAYAM MOOCs certificates are of less value.					

## Questionnaire for Students

Dear students

The researcher is conducting a study on the topic “**A study on Institutional Practices and Students Attitude toward MOOCs Implementation in the Higher Education Institutions of Assam.**” This Questionnaire is developed to collect data for the same purpose. You are requested to please spare some of your valuable time to give your responses to the statements in the scale. The information provided by you will be kept confidential and will be used for the purpose of this study only.

Name:	
Gender:	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Others
Location	<input type="checkbox"/> Urban <input type="checkbox"/> Semi-urban <input type="checkbox"/> Rural
Stream:	<input type="checkbox"/> Humanities <input type="checkbox"/> Commerce <input type="checkbox"/> Science <input type="checkbox"/> Technical <input type="checkbox"/> Vocational <input type="checkbox"/> Others (Specify_____).

Instruction: Please put a tick mark (✓) on the correct option and write your detail response on the open ended question

1. Do you think that lack of quality content is one of the problems in MOOCs course?
  - Yes
  - No
  - Can't say
  
2. Is the quality of audio that was used in the MOOCs course is good?
  - Yes
  - No
  - Can't say
  
3. Is the language barrier among the learner create difficulty in the implementation of

SWAYAM MOOCs?

- Yes
- No
- Can't say

4. Is the Graphics which are used in the MOOCs course is appropriate?

- Yes
- No
- Can't say

5. Is the syllabus for SWAYAM MOOCs course very vast?

- Yes
- No
- Can't say

6. How can the quality of course content in MOOC courses be improved? Give your suggestion.

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7. Do you think that exam-oriented approach creates problems in the implementation of

SWAYAM (MOOCs)?

- Yes
- No
- Can't say

8. Do you think that lack of continuous active engagement in the discussion forum creates problems smooth functioning of SWAYAM MOOCs?

- Yes
- No
- Can't say

9. Do you think that absence of lab work is the major drawback in the implementation of SWAYAM (MOOCs)?

- Yes
- No
- Can't say

10. Are the assignments creating hurdles in the implementation of MOOC through SWAYAM?

- Yes
- No
- Can't say

11. Do you face any problems with credit transfer at the end of the course?

- Yes
- No
- Can't say

12. How can the quality of assessment and discussion forum be improved? Give your suggestions

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13. Do you think that Lack of time creates an obstacle to the implementation of SWAYAM MOOCs?

- Yes
- No
- Can't say

14. Do you think that lack of individual instruction is one of the major drawbacks in th implementation of SWAYAM MOOCs?

- Yes
- No
- Can't say

15. Do you think that lack of creativity creates problems in the implementation of SWAYAM MOOCs?

- Yes
- No
- Can't say

16. Do you think limited availability of resources to access courses creates barriers to the implementation of SWAYAM MOOCs?

Yes

No

Can't say

17. Do you feel that lack of trained teachers is one of major drawbacks in the implementation of SWAYAM MOOCs?

Yes

No

Can't say

18. How can the learning strategies be improved? Give your suggestions.

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19. Do you feel that due to lack of Students interest, they are not participating in the SWAYAM MOOCs?

Yes

No

Can't say

20. Do you think that the cost of examination fees creates trouble in the implementation of SWAYAM MOOCs?

Yes

No

Can't say

21. Do you think that insufficient prior knowledge about the topic creates obstacles in the implementation of SWAYAM MOOCs?

Yes

No

Can't say

22. Do you think that lack of motivation creates difficulty in the implementation of SWAYAM MOOCs?

- Yes
- No
- Can't say

23. Do you think that technical issues create hurdles in the implementation of SWAYAM MOOCs?

- Yes
- No
- Can't say

24. Do you think that over-the-course expectations create trouble for the implementation of SWAYAM?

- Yes
- No
- Can't say

25. Do you face any problems from the educational administration in implementation of SWAYAM MOOCs?

- Yes
- No
- Can't say

26. Any other suggestion related to MOOC courses of organized through SWAYAM portal?

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### Questionnaire for SWAYAM Coordinator

**Dear Madam/sir**

The researcher is conducting a study on the topic “**A study on Institutional Practices and Students Attitude toward MOOCs Implementation in the Higher Education Institutions of Assam.**” This questionnaire is developed to collect data for obtaining information on institutional practices and Students attitude toward MOOC courses. You are requested to please spare some of your valuable time to give your responses to each of the items in the questionnaire. The responses provided by you will be kept confidential and will be used for the purpose of this study only.

**Instruction:** Please give your feedback for the space which is provided against each question

#### PERSONAL INFORMATION

1.	Name (Optional)
2.	Gender <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Others
3.	Designation _____ -
4.	Working Area <input type="checkbox"/> Administrative <input type="checkbox"/> Academic <input type="checkbox"/> Other

#### **Section I: Institutional Practices towards SWAYAM**

**Instruction:** In this section, you need to put tick mark (✓) against each statement which is given below.

#### **Adoption of MOOCs**

6.	Is your university adopting MOOCs under SWAYAM portal? <input type="checkbox"/> Yes <input type="checkbox"/> No. If no what are the reasons? _____ _____ _____
	Do your university have specific policies and guidelines on practice of MOOCs programme?



7.	<input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, please give link or mention it briefly) _____ _____ _____
8.	Do your university develop any MOOCs programme? <input type="checkbox"/> Yes <input type="checkbox"/> No
9.	Are you aware of different SWAYAM National Coordinators? <input type="checkbox"/> Yes <input type="checkbox"/> No
10.	Are you aware of UGC Amendment 2021 related to SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No
11.	Have you participated in any workshops related to MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please mention it briefly _____ _____ _____
12.	Is there any request coming from students to adopt SWAYAM MOOCs in your university? <input type="checkbox"/> Yes <input type="checkbox"/> No
13.	Do you think up to 40% of courses available on the SWAYAM portal are encouraging enough for the students to opt for SWAYAM MOOCs? <input type="checkbox"/> Yes (If Yes, how) _____ _____ <input type="checkbox"/> No (If No, what are the reasons) _____

	<hr/> <hr/>
14.	<p>Have you organised any awareness programs for students with regard to MOOCs?</p> <p><input type="checkbox"/> Yes (Please mention it briefly)</p> <hr/> <p><input type="checkbox"/> No</p>
15.	<p>Have you organised any training program for SWAYAM course coordinators regarding designing MOOCs?</p> <p><input type="checkbox"/> Yes (Please mention briefly)</p> <hr/> <p><input type="checkbox"/> No</p>
16.	<p>What kind of professional development/support did you provide to other MOOC instructors? (put tick mark as many as applicable)</p> <p><input type="checkbox"/> Assigned advisory role</p> <p><input type="checkbox"/> Provided MOOC-related books, reports, and</p> <p><input type="checkbox"/> Organise training program in online pedagogy</p> <p><input type="checkbox"/> Provided training in technology tools for making video lectures</p> <p><input type="checkbox"/> Provided an informal demonstration of the features, activities, or tools of your MOOCs to colleagues or others</p> <p><input type="checkbox"/> Other (please specify)</p> <hr/> <hr/> <hr/> <hr/>
<b>Promotion of MOOCs</b>	
17.	<p>In what ways is SWAYAM Coordinator promoting SWAYAM MOOCs in higher education institutions?</p>
a.	<p>Informal promotions (by faculty) :( Please tick as many as applicable)</p> <p><input type="checkbox"/> Use personal and professional conversations</p> <p><input type="checkbox"/> Colleagues in other geographical areas</p> <p><input type="checkbox"/> Influencers and professional associations</p> <p><input type="checkbox"/> Alumni networks and students</p> <p><input type="checkbox"/> Special lectures by industry experts</p>

b.	<p>Formal Promotion (by universities/ institutions) Please tick as many as applicable</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Institutional magazines</li> <li><input type="checkbox"/> Newsletters and bulletins</li> <li><input type="checkbox"/> Campus notice boards</li> <li><input type="checkbox"/> Posters</li> <li><input type="checkbox"/> Community publications</li> <li><input type="checkbox"/> Intranets and mailing lists</li> <li><input type="checkbox"/> Organize workshops, seminars and talk shows</li> <li><input type="checkbox"/> On the homepage of universities website</li> <li><input type="checkbox"/> Publicize in traditional media like newspapers and TV commercials</li> <li><input type="checkbox"/> Use TVCs and radio jingles produced by UGC</li> </ul>
c.	<p>Use Social Media (by faculty &amp; universities/ institutions/students): (Please tick as many as applicable)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Promotion of online communities/forums on related subject areas</li> <li><input type="checkbox"/> Ask influential individuals to share through social networks</li> <li><input type="checkbox"/> Use of Social Media networks like Whats App, Twitter, Facebook, etc</li> <li><input type="checkbox"/> Blogs and articles in related forums</li> </ul>
18.	<p>Facilities available for the participants to ensure that physical facilities required for the MOOCs under SWAYAM portal. (Please tick on all that apply)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Laboratories,</li> <li><input type="checkbox"/> Computer facilities</li> <li><input type="checkbox"/> Libraries</li> <li><input type="checkbox"/> Monitoring Cell</li> <li><input type="checkbox"/> Others _____</li> </ul>
20.	<p>Are there any incentives provided to the teachers for developing SWAYAM Course?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes (Please mention it briefly) _____ _____</li> <li><input type="checkbox"/> No</li> </ul>
<b>Monitoring</b>	
21.	<p>Is there any database available for those students who are joining different MOOCs under SWAYAM portal?</p>

	<input type="checkbox"/> Yes <input type="checkbox"/> No
22.	<p>Is there any monitoring of student's progress who have registered on the SWAYAM platform from your university?</p> <input type="checkbox"/> Yes (Please mention it briefly) _____ _____ _____ _____
	<input type="checkbox"/> No
24.	<p>If yes, How is student progress/participation monitored or tracked? (Put tick marks as many as applicable)</p> <input type="checkbox"/> Moderator feedback <input type="checkbox"/> Unit-based progress <input type="checkbox"/> Peer or group member reports <input type="checkbox"/> Personal tracking from instructor <input type="checkbox"/> Personal tracking from course instructor <input type="checkbox"/> Self-evaluation <input type="checkbox"/> Weekly or daily reports offered by learning analytics Other (Please describe): _____ _____ _____
23.	<p>Are there any incentives provided to the students for participating in SWAYAM MOOCs course?</p> <input type="checkbox"/> Yes (Please mention it briefly) _____ _____ _____
	<input type="checkbox"/> No
<b>Section II: Problem and challenges towards SWAYAM MOOCs</b>	
<b>Instruction:</b> In this section, you need to put tick mark (✓) against as many applicable options which are given below.	

	<b>Course Content</b>
24.	<p>What are the remunerations or motivation do you get for implementing SWAYAM MOOCS?</p> <p><input type="checkbox"/> Additional compensation</p> <p><input type="checkbox"/> Administrator support or encouragement</p> <p><input type="checkbox"/> Colleague support or encouragement</p> <p><input type="checkbox"/> Technical support</p> <p><input type="checkbox"/> Teaching or service recognition</p> <p><input type="checkbox"/> Valuable item for annual faculty productivity reports</p> <p><input type="checkbox"/> Financial incentives</p> <p><input type="checkbox"/> Other (please specify) _____</p> <p>_____</p> <p>_____</p>
25	<p>Is the quality of audio used in the MOOCs course is good?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Can't say</p>
26	<p>Is the language barrier among the learner create difficulty in the implementation of SWAYAM MOOCs?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Can't say</p>
27	<p>Are the graphics used in the MOOCs course appropriate?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Can't say</p>
28	<p>Is the syllabus for MOOCs course very vast?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Can't say</p>
29	<p>What challenges do you face while developing MOOCs? (put tick mark against as many as applicable options )</p> <p><input type="checkbox"/> Inadequate knowledge of e-learning program</p>

	<ul style="list-style-type: none"> <li><input type="checkbox"/> Improper setting of objectives</li> <li><input type="checkbox"/> Pre-requisite infrastructure</li> <li><input type="checkbox"/> Proper guidance</li> <li><input type="checkbox"/> Technical support</li> <li><input type="checkbox"/> Funds</li> <li><input type="checkbox"/> Strategies to engage Students interaction</li> <li><input type="checkbox"/> Time limitation of designing SWAYAM MOOCs</li> <li><input type="checkbox"/> Tracking Students learning progress</li> <li><input type="checkbox"/> Lack of experienced teacher</li> <li><input type="checkbox"/> Other (Please describe):</li> </ul> <hr/> <hr/> <hr/>
30	<p>How can the quality of course content in MOOC courses be improved? Give your suggestions:</p> <hr/> <hr/> <hr/> <hr/> <hr/>
	<b>Assessment and Discussion forum</b>
31	<p>Do you think that exam-oriented approach creates problems in the implementation of SWAYAM (MOOCs)?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Can't say</li> </ul>
32	<p>Do you think that lack of continuous active engagement in the discussion forum creates problems in smooth functioning of SWAYAM MOOCs?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Can't say</li> </ul>
33	<p>Do you think that absence of lab work is the one of the major drawback in the implementation of SWAYAM (MOOCs)?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> </ul>

	<input type="checkbox"/> Can't say
34	Are the assignments creating hurdles in the implementation of MOOC through SWAYAM? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
35	Do you face any problems with credit transfer at the end of the course? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
36	How can the quality of assessment and discussion forum be improved? Give your suggestions : _____ _____ _____ _____
	<b>Learning Strategies</b>
37	Do you think lack of time creates an obstacle in the implementation of SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
38	Do you think lack of individual instruction is one of the major drawbacks in the implementation of SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
39	Do you think lack of creativity creates problems in the implementation of SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
40	Do you think limited availability of resources to access courses creates barriers in implementation of SWAYAM MOOCs?

	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
41	Do you feel lack of trained teachers is one of the major drawbacks in the implementation of SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
42	How can the learning strategies be improved? Give your suggestions: <hr/> <hr/> <hr/> <hr/> <hr/>
<b>Relevance of SWAYAM MOOCs</b>	
43	Do you feel that due to lack of Students interest, they are not participating in the SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
44	Do you think that the cost of examination fees creates trouble in the implementation of SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
45	Do you think insufficient prior knowledge about the topic creates obstacles in the implementation of SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
46	Do you think lack of motivation creates difficulty in the implementation of SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say



47	<p>Do you think technical issues create hurdles in the implementation of SWAYAM MOOCs?</p> <p><input type="checkbox"/>Yes</p> <p><input type="checkbox"/>No</p> <p><input type="checkbox"/> Can't say</p>
48	<p>Do you think over-the-course expectations create trouble for the implementation of SWAYAM?</p> <p><input type="checkbox"/>Yes</p> <p><input type="checkbox"/>No</p> <p><input type="checkbox"/> Can't say</p>
49	<p>Do you face any problems from the educational administration in implementation of SWAYAM MOOCs?</p> <p><input type="checkbox"/>Yes</p> <p><input type="checkbox"/>No</p> <p><input type="checkbox"/> Can't say</p>
50	<p>How did you try to overcome the challenges you faced while implementing SWAYAM MOOCs in your institution?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

### Questionnaire for SWAYAM Course Coordinator

**Dear Sir/Madam**

The researcher is conducting a study on the topic “A study on Institutional Practices and Students Attitude toward MOOCs Implementation in the Higher Education Institutions of Assam”. This questionnaire was developed to collect data for the same purpose. You are requested to please spare some of your valuable time to give your responses to the statements in the scale. The information provided by you will be kept confidential and will be used for the purpose of this study only.

**Section I: Basic Information**

**Instruction:** Please give your feedback for the space which is provided against each question

#### PERSONAL INFORMATION

	Name:
	Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Others

	Name of the Institute:
	Designation:
	Area of teaching: <input type="checkbox"/> Technical <input type="checkbox"/> non-technical <input type="checkbox"/> Academic <input type="checkbox"/> Others (Please specify)
	Qualification: <input type="checkbox"/> Master's degree <input type="checkbox"/> Ph.D. <input type="checkbox"/> Any other
	Under which National Coordinators do you work: <input type="checkbox"/> UGC <input type="checkbox"/> NPTEL <input type="checkbox"/> IGNOU <input type="checkbox"/> CEC <input type="checkbox"/> NCERT <input type="checkbox"/> NIOS.

### Section II: Institutional Practice towards SWAYAM MOOCs

**Instruction:** In this section, you need to put a tick mark (✓) against each statement which is given below.

1.	<p>Is your university adopting MOOCs under SWAYAM portal?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No. If no what are the reasons? _____</p> <p>_____</p> <p>_____</p>
2.	<p>Are you aware of different SWAYAM National Coordinators?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
3.	<p>Are you aware of UGC Amendment 2021 related to SWAYAM MOOCs?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
4.	<p>Do your university have specific policies and guidelines on practice of MOOCs programme?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p>(If yes, please give link or mention it briefly) _____</p> <p>_____</p> <p>_____</p> <p>_____</p>

5.	<p>Have you trained to other MOOC instructors in regard to designing or teaching SWAYAM MOOCs?</p> <p><input type="checkbox"/> Yes ( If Yes, Please mention it briefly) _____          _____          _____</p> <p><input type="checkbox"/> No</p>
6.	<p>Have you provided suggestions to other MOOC instructors in regard to designing SWAYAM MOOCs?</p> <p><input type="checkbox"/> Yes (If Yes, Please mention it briefly) _____          _____          _____</p> <p><input type="checkbox"/> No</p>
7.	<p>Have you participated in any workshops related to MOOCs?</p> <p><input type="checkbox"/> Yes  <input type="checkbox"/> No</p> <p>If yes, please mention it briefly _____          _____</p>
8.	<p>Have you participated in any orientation programme related to SWAYAM MOOCs?</p> <p><input type="checkbox"/> Yes (If Yes, Please mention it briefly) _____          _____          _____</p> <p><input type="checkbox"/> No</p>
9.	<p>Did teaching a MOOC significantly impact your teaching philosophy?</p> <p><input type="checkbox"/> Yes (If yes, How) _____          _____          _____</p> <p><input type="checkbox"/> No</p>
10.	<p>Have you organised any awareness programs for students with regard to MOOCs?</p> <p><input type="checkbox"/> Yes (Please mention it briefly)          _____          _____          _____</p>

	<input type="checkbox"/> No
11.	<p>Do you think up to 40% of courses available on the SWAYAM portal is encouraging enough for the students to opt for SWAYAM MOOCs?</p> <p><input type="checkbox"/> Yes (If Yes, how) _____</p> <p>_____</p> <p><input type="checkbox"/> No (If No, what are the reasons) _____</p> <p>_____</p>
12.	<p>Have you promote SWAYAM MOOCs in your institutions?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No. If no what are the reasons? _____</p> <p>_____</p> <p>_____</p>
a.	<p>If Yes, Please answer the following question</p> <p>Informal promotions (by faculty) :( Please tick as many as applicable)</p> <p><input type="checkbox"/> Use personal and professional conversations</p> <p><input type="checkbox"/> Colleagues in other geographical areas</p> <p><input type="checkbox"/> Influencers and professional associations</p> <p><input type="checkbox"/> Alumni networks and students</p> <p><input type="checkbox"/> Special lectures by industry experts</p>
b.	<p>Formal Promotion (by universities/ institutions) Please tick as many as applicable</p> <p><input type="checkbox"/> Institutional magazines</p> <p><input type="checkbox"/> Newsletters and bulletins</p> <p><input type="checkbox"/> Campus notice boards</p> <p><input type="checkbox"/> Posters</p> <p><input type="checkbox"/> Community publications</p> <p><input type="checkbox"/> Intranets and mailing lists</p> <p><input type="checkbox"/> Organize workshops, seminars and talk shows</p> <p><input type="checkbox"/> On the homepage of universities website</p> <p><input type="checkbox"/> Publicize in traditional media like newspapers and TV commercials</p> <p><input type="checkbox"/> Use TVCs and radio jingles produced by UGC</p>
c.	<p>Use Social Media (by faculty &amp; universities/ institutions/students): (Please tick as many as applicable)</p> <p><input type="checkbox"/> Promotion of online communities/forums on related subject areas</p> <p><input type="checkbox"/> Ask influential individuals to share through social networks</p>

	<input type="checkbox"/> Use of Social Media networks like Whats App, Twitter, Facebook, etc <input type="checkbox"/> Blogs and articles in related forums
13.	<p>What kind of professional development/support did you get from your institution ?(put tick mark as many as applicable)</p> <input type="checkbox"/> Assigned advisory role <input type="checkbox"/> Provided MOOC-related books, reports, and <input type="checkbox"/> Organise training program in online pedagogy <input type="checkbox"/> Provided training in technology tools for making video lectures <input type="checkbox"/> Provided a link to your MOOCs as an example to others <input type="checkbox"/> Provided an informal demonstration of the features, activities, or tools of your MOOCs to colleagues or others <input type="checkbox"/> Other (please specify) <hr/> <hr/>
14.	<p>Are there any incentives get from your instution for developing SWAYAM Course?</p> <input type="checkbox"/> Yes (Please mention it briefly) <hr/> <input type="checkbox"/> No
16.	<p>Is there any database available for those students who are joining your MOOCs programme?</p> <input type="checkbox"/> Yes <input type="checkbox"/> No
17.	<p>In what ways is instructor-learner interaction encouraged in your MOOC? (put tick mark as many as possible)</p> <input type="checkbox"/> Online discussion forum <input type="checkbox"/> Personal email <input type="checkbox"/> Phone call <input type="checkbox"/> MOOCs Platform message <input type="checkbox"/> Social media connections (e.g., Facebook, Twitter) <input type="checkbox"/> Virtual Meeting <input type="checkbox"/> Others <hr/> <hr/>
18.	<p>How is student progress/participation monitored or tracked? (put tick mark as many as possible)</p> <input type="checkbox"/> Moderator feedback

	<ul style="list-style-type: none"> <li><input type="checkbox"/> Unit-based progress</li> <li><input type="checkbox"/> Peer or group member reports</li> <li><input type="checkbox"/> Personal tracking from instructor</li> <li><input type="checkbox"/> Personal tracking from course instructor</li> <li><input type="checkbox"/> self-evaluation</li> <li><input type="checkbox"/> Weekly or daily reports offered by learning analytics</li> <li><input type="checkbox"/> Other (Please describe): _____</li> </ul>
19.	<p>In what ways do students get feedback in the course? (put tick mark as many as possible)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Instructor feedback</li> <li><input type="checkbox"/> Moderator feedback</li> <li><input type="checkbox"/> Outside expert feedback</li> <li><input type="checkbox"/> Peer feedback</li> <li><input type="checkbox"/> Self-feedback</li> <li><input type="checkbox"/> System feedback</li> <li><input type="checkbox"/> Assignment rubrics</li> <li><input type="checkbox"/> Other (Please describe): _____</li> </ul>
20.	<p>Which of the following did you receive when teaching a SWAYAM MOOC? (put tick mark as many as possible)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Monetary benefit</li> <li><input type="checkbox"/> Administrator support or encouragement</li> <li><input type="checkbox"/> Colleague support or encouragement</li> <li><input type="checkbox"/> Technical support</li> <li><input type="checkbox"/> Teaching or service recognition</li> <li><input type="checkbox"/> Other (please specify) _____ _____</li> </ul>

### Section III: Problem and challenge towards SWAYAM MOOCs

**Instruction:** In this section, you need to put tick mark (✓) against as many as possible each statement which is given below

1	<p>What is your motivation for teaching SWAYAM MOOCs? (put tick mark as many as possible)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Career development</li> <li><input type="checkbox"/> Commitment to open education</li> <li><input type="checkbox"/> Curiosity</li> <li><input type="checkbox"/> Institutional branding</li> <li><input type="checkbox"/> Institutional pressure</li> <li><input type="checkbox"/> Expand my professional network</li> <li><input type="checkbox"/> Financial incentives</li> <li><input type="checkbox"/> Learn new pedagogy</li> <li><input type="checkbox"/> Looking at the success of other MOOC instructors</li> <li><input type="checkbox"/> Passionate about the content</li> <li><input type="checkbox"/> Personal branding and reputation</li> <li><input type="checkbox"/> Other (please specify)</li> </ul> <hr/> <p>—</p>
2.	<p>Do you think that lack of quality content is one of the problems in MOOCs course?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Can't say</li> </ul>
3	<p>Is the quality of audio that was used in the MOOCs course is good?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Can't say</li> </ul>
4	<p>Is the language barrier among the learner create difficulty in the implementation of SWAYAM MOOCs?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Can't say</li> </ul>
5	<p>Is the Graphics which are used in the MOOCs course is appropriate?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Can't say</li> </ul>
6	<p>Is the syllabus for SWAYAM MOOCs course very vast?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> </ul>

	<input type="checkbox"/> No <input type="checkbox"/> Can't say
7.	<p>What are the challenges do you face While developing MOOCs? (put tick mark as many as possible)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Inadequate knowledge of e-learning program</li> <li><input type="checkbox"/> Improper setting of objectives</li> <li><input type="checkbox"/> Pre-requisite Infrastructure</li> <li><input type="checkbox"/> Proper Guidance</li> <li><input type="checkbox"/> Technical support</li> <li><input type="checkbox"/> Funds</li> <li><input type="checkbox"/> Strategies to engage Students interaction</li> <li><input type="checkbox"/> Time limitation of designing SWAYAM MOOCs</li> <li><input type="checkbox"/> Tracking Students learning progress</li> <li><input type="checkbox"/> Lack of experienced teacher</li> <li><input type="checkbox"/> Other (Please describe): _____</li> </ul>
8	<p>How can the quality of course content in MOOC courses be improved? Give your suggestion.</p> <p>_____</p> <p>_____</p> <p>_____</p>
9	<p>Do you think that exam-oriented approach creates problems in the implementation of SWAYAM (MOOCs)?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Can't say</li> </ul>
10	<p>Do you think that lack of continuous active engagement in the discussion forum creates problems smooth functioning of SWAYAM MOOCs?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Can't say</li> </ul>
11	<p>Do you think that absence of lab work is the major drawback in the implementation of SWAYAM (MOOCs)?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Can't say</li> </ul>



12	<p>Are the assignments creating hurdles in the implementation of MOOC through SWAYAM?</p> <p><input type="checkbox"/>Yes</p> <p><input type="checkbox"/>No</p> <p><input type="checkbox"/> Can't say</p>
13	<p>Do you face any problems with credit transfer at the end of the course?</p> <p><input type="checkbox"/>Yes</p> <p><input type="checkbox"/>No</p> <p><input type="checkbox"/> Can't say</p>
14	<p>How can the quality of assessment and discussion forum be improved? Give your suggestions</p> <p>-----</p> <p>-----</p> <p>-----</p> <p>-----</p> <p>-----</p>
15	<p>Do you think that Lack of time creates an obstacle to the implementation of SWAYAM MOOCs?</p> <p><input type="checkbox"/>Yes</p> <p><input type="checkbox"/>No</p> <p><input type="checkbox"/> Can't say</p>
16	<p>Do you think that lack of individual instruction is one of the major drawbacks in the implementation of SWAYAM MOOCs?</p> <p><input type="checkbox"/>Yes</p> <p><input type="checkbox"/>No</p> <p><input type="checkbox"/> Can't say</p>
17	<p>Do you think that lack of creativity creates problems in the implementation of SWAYAM MOOCs?</p> <p><input type="checkbox"/>Yes</p> <p><input type="checkbox"/>No</p> <p><input type="checkbox"/> Can't say</p>
18	<p>Do you think limited availability of resources to access courses creates barriers to the implementation of SWAYAM MOOCs?</p> <p><input type="checkbox"/>Yes</p> <p><input type="checkbox"/>No</p> <p><input type="checkbox"/> Can't say</p>
19	<p>Do you feel that lack of trained teachers is one of major drawbacks in the implementation of SWAYAM MOOCs?</p> <p><input type="checkbox"/>Yes</p> <p><input type="checkbox"/>No</p>

	<input type="checkbox"/> Can't say
20	How can the learning strategies be improved? Give your suggestions. ----- ----- ----- -----
21	Do you feel that due to lack of Students interest, they are not participating in the SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
22	Do you think that the cost of examination fees creates trouble in the implementation of SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
23	Do you think that insufficient prior knowledge about the topic creates obstacles in the implementation of SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
24	Do you think that lack of motivation creates difficulty in the implementation of SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
25	Do you think that technical issues create hurdles in the implementation of SWAYAM MOOCs? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
26	Do you think that over-the-course expectations create trouble for the implementation of SWAYAM? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
27	Do you face any problems from the educational administration in implementation of SWAYAM MOOCs?

	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't say
28	Any other suggestion related to MOOC courses of organized through SWAYAM portal? -----



शिक्षा विभाग/DEPARTMENT OF EDUCATION  
तेजपुर विश्वविद्यालय/TEZPUR UNIVERSITY

(A Central University established by an Act of Parliament)

नपाम, तेजपुर - 784 028/Napaam, Tezpur - 784 028

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F.No. 6/6-4/2023/PC/02

Date:19 /01/2023

TO WHOM IT MAY CONCERN

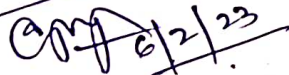
This is to certify that Mr. Ramanath Gorain is a research scholar of the Department of Education, Tezpur University pursuing his Ph.D. in Education. He is conducting a research entitled "A study on Institutional Practices and Students' Attitude toward MOOCs Implementation in the Higher Education Institutions of Assam" under the supervision of Dr. Pratima Pallai, Assistant Professor, Department of Education, Tezpur University. This research is a part of his doctoral degree. He needs to collect data from students and faculty of your department. The purpose of collecting data is purely for research based. Thus, I kindly request you and your esteemed faculty of the department to facilitate his interviews, administration of questionnaires and avail his all the necessary information for the purpose of his research.

I assure you that there will be no misuse of this information and the source of this information will be kept concealed. I hope that in light of above-mentioned events you will allow his to have this information. I shall be very thankful to you for this kind favor.


To,

All Deans /HODs/ Coordinators;

The above application is self explanatory. Kindly help and guide Mr. Ramanath Gorain for his PhD research topic.



Prof. (Dr.) Ankur Ganguly  
Dean- Academics  
Royal Global University  
Guwahati, Assam, India

 19/01/2023  
Prof. Nil Ratan Roy  
Head  
Department of Education  
Head,  
Department of Education  
Tezpur University



## **ASSAM DON BOSCO UNIVERSITY**

Tapesia Gardens, Kamarkuchi, Sonapur – 782 402, Assam, INDIA

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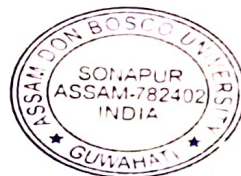
### **Permission letter for data collection**

Mr. Ramanath Gorain, research scholar of the Department of Education, Tezpur University, is permitted to collect data related to MOOC usage by the students of Assam Don Bosco University. ERP in-charge of Assam Don Bosco University is requested to facilitate the data collection process, through Google sheet.

Mr. Ramnath Gorain is requested to acknowledge the contribution by Assam Don Bosco University, in his thesis.

  
Registrar  
Assam Don Bosco University

Registrar  
Assam Don Bosco University  
Tapesia Gardens, Sonapur  
Assam-782402, INDIA





शिक्षा विभाग/DEPARTMENT OF EDUCATION  
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 19/01/2023

**Prof. Nil Ratan Roy**  
**Head**

**Department of Education**  
**Head,**  
Department of Education  
Tezpur University

Allowed  
J. Kalita 2/2  
Head, 2001034.

# A Study on Institutional Practices and Students' Attitude toward SWAYAM MOOCs Implementation in the Higher Education Institutions of Assam

*by* Ramanath Gorain

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