

THE AURORA OF MASSIVE OPEN ONLINE COURSES AND ITS ILLUMINATION IN THE FIRMAMENT OF HIGHER EDUCATION

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Abstract:

The MOOCs or the Massive Open Online Courses have caused a revolution in the academia. The aim of the research paper is to provide a tangible description of the idea of MOOCs with its myriad platforms which has been converted into reality in today's academia. It will chart the course of origin, development, and evolution of MOOCs in the academia that is susceptible to fast paced changes. It will focus on the synchronic and the diachronic study of the MOOCs across a temporal dimension. The research paper will focus on the study of MOOCs across a spatial dimension juxtaposing the existence of MOOCs in a global scenario vis a vis the Indian scenario. The research paper will focus on the different kinds of MOOCs that exist in the academia and on their need-based existence. The research paper will deal with the technological dimension of the MOOCs. It will study the role of MOOCs in higher education. The research paper will delve into the concepts of blended learning and flipped classrooms in relation to MOOCs. The research paper will study the architecture of MOOCs and its structuration in the academia. It will focus on the advantages and the disadvantages of the MOOCs. The research paper will also focus on the futuristic possibility of MOOCs replacing the university education or MOOCs remaining as supplementary courses complementing the university curriculum. The research paper will delve into the marketing of the MOOCs and the generation of monetary benefits associated with it. The research paper will do a quantity versus quality study of the MOOCs which is associated with its market value and brand value. The research paper will study the standardization of the MOOCs in relation to the commodification of these courses. It will delve into the business model of such courses. The research paper will attempt to probe the fact that MOOCs are indispensable in today's educational scenario. It will study MOOCs as an important medium for data mining in relation to the demographics of the students who are the end users of them. It will also study the demographics of the designers of these courses and the instructors who are academicians from the world-famous universities. The research paper will probe the fact whether MOOCs prepare the students to be ready for the industry as competent professionals, whether they bridge the gap between the academia and the industry or not and whether they are able to deal successfully with the practical component of a particular course through remote learning or not. These are all significant areas that are to be studied and analyzed.

Keywords: Massive Open Online Courses, Synchronic Study, Diachronic Study, Blended Learning, Flipped Classrooms, cMOOCs, xMOOCs, Quasi MOOCs, Synchronous Learning, Asynchronous Learning, Data Mining, ICT (Information and Communications Technology) Enabled Classrooms etcetera.

Introduction:

The homo sapiens are presently located in the Poststructuralist era. A Poststructural analysis of MOOCs needs to be preceded by a Structural analysis. Structuralism is a literary theory that is a part of intrinsic criticism. It thrives on the ideas of a centered structure which is a composite whole with a nucleus of control. Structuralism as a theory establishes a one-to-one correspondence between literature and language thereby giving rise to the ideas of langue and parole, syntagmatic and paradigmatic relationships, as well as synchronic and diachronic studies of language and literature. These ideas may be used in the context of analyzing disciplines as well as the systems of education in the universities and in the form of MOOCs. Structuralism is a defunct theory but is useful in analyzing systems and geometric paradigms or rigid structures. Poststructuralism on the other hand is a literary or critical theory in

Literary Criticism that aims at dismantling the established structures of a system, promotes Postmodernism under its aegis which in turn blurs the distinction between high culture and low culture, promotes interdisciplinarity in the academia and in research, undermines the compartmentalization or categorization of disciplines by making the watertight compartments of disciplines porous and flexible. The boundaries of the watertight compartments of disciplines overlap thereby introducing a flux in the system of education comprising of several disciplines. There is a kind of borrowing or loaning that is introduced in terms of the epistemological grounds of various disciplines. When Postmodernism is focused upon, all the disciplines are seen to be a part of a great lump of disciplines the boundaries of which are indistinguishable thereby projecting overlapping borders, there is no structure in place as such. Thus, Poststructuralism and Postmodernism exist in accompaniment to each other, or it may be propounded that Poststructuralism is the metatheory whose offshoot is Postmodernism. An analogy can be established between the state of existence of the disciplines in the modern-day academia in this Poststructuralist and Postmodernist era and the state of existence of the educational system in the same era (Selden 51-103). There is a decentering of the educational system leading to the equal distribution of power among all the stakeholders which is in accordance with the essence of Poststructuralism. The mainstream educational system is a kind of meta system that is represented by the universities, the colleges, and the schools but there are several offshoots of this system which are peripheral systems that have existed to provide support to the main system. The main educational system is characterized by courses which are administered under the purview of the universities and are a part of the university curriculum but the peripheral educational system that functions as a support system is characterized by MOOCs or Massive Open Online Courses. These MOOCs are the offshoots of the metasystem in the academia. These MOOCs have been created to complement the basic university curriculum and to meet the fast-evolving needs of the student consumers. The MOOCs may project instances of interdisciplinarity as they may have a hybrid nature and would have come into existence by combining the epistemological grounds of various disciplines. This hybridity is the result of an overlap between the boundaries of various disciplines making the course multidimensional and dynamic. The modern-day MOOCs cater to the diversified needs of a heterogeneous community of student consumers. The fact that the MOOCs are burgeoning displays a demand for them in the market ("Massive Open Online Courses: Innovation in Education").

MOOCs (Massive Open Online Courses):

A simple definition of MOOCs is that they are courses delivered online which are highly flexible in terms of the enrolment of the students, they are accessible to all and may be cost effective or free of cost. These courses are offered by the course providers such as Coursera, edX, FutureLearn, Udacity, Khan Academy etcetera with some indigenous variants from India such as Swayam. MOOC is an acronym which refers to Massive Open Online Courses. These courses are massive as there is unlimited enrolment of students in them. These courses are open as they come with a kind of flexibility in terms of the processes related to admission of the students in them. Moreover, the flexibility of the MOOCs is due to the composition of these courses as they comprise of pre-recorded video lessons, readings, set readings, assessments, and discussion forums which can be attended by the students at their own convenience. The courses suffer from a specific handicap as there is no face-to-face interaction between the instructor or the facilitator of the course and the students studying the course. The discussion forums provide an opportunity of interaction to the students not only with the instructor or the facilitator but also with the other students who are enrolled in the course across a virtual platform. The courses do not have a strict deadline for their

completion which is beneficial for the students who are engaged in a profession or are interested in doing the course as an add-on or a supplementary course in addition to their main course from a university. On a temporal dimension these courses are gradually minimizing the gap between the courses offered by the university and themselves. These courses have emerged as a support structure for the courses offered by the university because they may be improvements on the existing university curriculum. These courses may be considered as a scaffolding for the courses packaged and offered by various universities. A lot of research goes into the formulation and commodification of the course content of these courses. The course content is carefully crafted focusing on the gaps in the university curriculum but at the same time these courses are administered under the aegis of one or the other university such as University of Stanford, Massachusetts Institute of Technology, Harvard University etcetera. There are MOOCs that are brought into existence by companies such as Microsoft, Google, IEEE, Linux Foundation etcetera. Udemy is a platform that offers MOOCs but the certificates that are given after the completion of the courses are not accredited whereas the certificates of the courses offered on other platforms are accredited. A key factor in terms of the flexibility of the courses is that one may be slow paced or fast paced depending on the level of difficulty of the course and the individual's ability to comprehend the content of the course. The posting of the course materials may be done in instalments thereby making the students alter their pace accordingly. The assessments may have deadlines which can make the students take them on time or in certain cases they may be deferred. These courses have proved to be extremely beneficial to the elderly students who want to upgrade themselves in a particular discipline or a specific area of a particular discipline, to the working professionals in need of upgradation of their skill sets who may not have the opportunity to enroll in a course in a university, to the researchers who are engaged in interdisciplinary research and may want to attain knowledge in a particular domain which is not their area of specialization but may not have the opportunity to enroll themselves in that course in the university. The phenomenon of frequent role reversals in the industry for the professionals has made them adapt to the burgeoning needs of the industry by enrolling in them. These courses are available online via internet and they provide valuable information not only on a particular discipline or a certain area of a particular discipline but also on the new hybrid disciplines which have come into existence because of the overlap between disciplines thereby realizing the true ideals of Poststructuralism and Postmodernism. These characteristics of the MOOCs are blurring the line of distinction between the courses produced and offered by the universities and themselves. MOOCs highlight "faculty entrepreneurship" in propelling the MOOC revolution. The analogy of sampling food before ordering the a la carte in a restaurant and the sampling of the MOOCs offered by various universities before enrolling in a particular university for an undergraduate or a postgraduate degree course is similar. Many students are known to audit courses before these courses are introduced and established in the universities. MOOCs provide a platform for blended learning as they have made a major contribution in the sphere of online education which supplement offline university education. Blended learning was a reality in the context of distance education but is being adopted as an effective pedagogical strategy in imparting education. It has become more prevalent after the pandemic. The significance of MOOCs lies in the fact that Kirkpatrick's four levels of evaluation learning model was used to measure their effectiveness by conducting a study of 250 learners which proved that the learners used the materials of study for future reference. MOOCs improve educational outcomes especially in higher education. It was recorded that less than five percent of the students would complete the course ("Massive Open Online Courses: Innovation in Education").

Demographics of the Designers and the Instructors of the MOOCs:

The demographic information of the MOOC designers is limited as public data due to privacy concerns and there is less focus on the demographics and characteristics of the designers unlike that of the online learners but they are typically experienced educators from the universities with expertise in instructional design, subject matter and online learning. The MOOC designers have their background in education. They are usually affiliated to the universities and the institutions which partner with different MOOC platforms. Their focus is on the diversity in the learning styles, cultural background and accessibility needs of the learners to create inclusive and accessible learning experiences. They usually co-design the MOOCs with learners or other stakeholders.

The demographic profile of the instructors of the MOOCs includes the profile of the traditional university faculty members with advanced educational qualifications with a special focus on specific disciplines and specialized expertise. The gender distribution of the instructors of the MOOCs is similar to that of the faculty members of the traditional university structure or system. The instructors of the MOOCs are affiliated to the universities and the institutions. They are found globally catering to the demands of some platforms and providers catering to specific regions ("Instructors' Experience of Designing MOOCs in Higher Education: Considerations and Challenges").

History of the MOOCs:

The precursor to MOOCs before the digital age was distance learning which appeared in the form of correspondence courses from 1890s – 1920s which later developed into radio and television broadcast of courses and various early forms of e-learning. In the millennium, that is, 2000s there was an increase in the online presence, open opportunities and the development of MOOCs which resulted in changes in online learning or e-learning and distance education.

The first MOOCs were a result of the open educational resources movement (OER). It was sparked by MIT Open Course Ware project. It started with the postulate from the researchers that class size and learning outcomes have no correlation. The OER movement was instrumental in establishing the Wikiversity in 2006 which provided the first open course on the platform organized in 2007. Wikiversity is known as the first of its kind open and free platform for education in the tradition of Scandinavian free adult education, Folk High School and the free school movement. The term MOOC was coined in 2008 by Dave Cormier of the University of Prince Edward Island in response to a course called *Connectivism and Connective Knowledge* also known as CCK08. CCK08 was led by George Siemens of Athabasca University and Stephen Downes of the National Research Council that consisted of 25 tuition paying students in Extended Education at the University of Manitoba as well as over 2200 online students from the public who paid nothing. The course content was available through RSS feeds. The online students participated through collaborative tools including blog posts, threaded discussions in Moodle and Second Life meetings. Stephen Downes considers cMOOCs to be more "creative and dynamic" than the xMOOCs which resemble television shows or digital textbooks. The cMOOCs were then developed, for example, Jim Groom from the University of Mary Washington and Michael Branson Smith of York College, City University of New York hosted MOOCs through several universities initiating with "Digital Storytelling" (ds106) MOOC. MOOCs offered by private non-profit institutions emphasized upon prominent faculty members offering instructions related to a course thereby expanding distance learning offerings, for example, podcasts into free and open online courses. The development of these courses give rise to E-learning platforms such

as Khan Academy, Peer -to-Peer University, Udemy and Alison (“A History of Instructional Technology”).

Differences between Foreign and Indian MOOCs:

The differences between foreign and Indian MOOCs are: The foreign MOOCs are student centric in terms of the pedagogical approach and learning styles. They promote critical thinking, brainstorming, application of knowledge on the real world, peer and interactive learning, as well as discussion forums. Their goal is not to align their goals with the goals of the traditional educational system. They encourage questioning, brainstorming, multifaceted thinking, and creative problem solving. The Indian MOOCs make an attempt to align themselves with the traditional university based educational system. They are presently transitioning from receiving and maintaining theoretical knowledge to the application of knowledge on the real world, and from rote learning to critical thinking and brainstorming. They are in the process of creative problem solving and testing the efficacy of these solutions by their application on the real world. They are in the process of developing multifaceted thinking. They do not focus on active participation of the learners and discussions. The content and curriculum of the foreign MOOCs are advanced, promote interdisciplinary skills, and equip the students with practical skills to be applied in the real world. The foreign MOOCs are offered in English and other foreign languages customized for marketing the courses for global learners. The Indian MOOCs are offered in English but there is an increase in demand in providing the MOOCs in Indian languages to increase their penetration and reach among linguistically diverse learners in the Indian context. The foreign MOOCs provide standardized free participation certificates, verified certificates and specializations after an assessment that is recognized in the job market by the educational institutions and employers. The Indian MOOCs award standardized certificates after a proctored examination on the successful completion of the course. As per the regulations of University Grants Commission, there is an allowance for the credit transfer from the SWAYAM courses to the students’ academic records in their educational institutions. The foreign MOOCs experience challenges such as high dropout rates of the learners, establishment of the credibility of examinations and certifications and aligning the content of the courses with the diverse learners and job markets. The Indian MOOCs face challenges such as lack of proper technological infrastructure, digital literacy barriers, lack of courses being provided in Indian languages, and maintaining student engagement and motivation (“MOOCs: A Comparative Analysis Between Indian Scenario and Global Scenario”).

Types of MOOCs:

The three types of MOOCs are cMOOCs, xMOOCs and Quasi MOOCs which have been classified vertically as the learners may start their learning through xMOOCs then go on to cMOOCs and finally to Quasi MOOCs or they may choose any type of MOOC rather than doing a step-by-step selection:

- 1) The cMOOCs are the type of Mass Open Online Courses which are said to be “connectivist” MOOCs and they are based on a “connectivist philosophy” or on “connectivism” and have been created by Downes which refers to a social platform or a digital space that focuses on collaboratively sharing and building knowledge within a community of people. These co-learners aim at creating meaning together rather than being led by a centralized leader or a teacher. The loosely built online community of learners share content in an area of shared interest through social media platforms or through personal interaction leading to the building of knowledge infrastructure. In the case of cMOOCs, teaching learning process is simultaneous

among the co-learners, and they are instrumental in creating diverse networks of learners (“What is cMOOC?”). In cMOOCs, the learner’s role is active, the instructor’s role is that of a facilitator or co-learner, the learning theory is that of connectivism, the pedagogy is knowledge construction, the delivery of knowledge is through personal learning environment, there is self-assessment or peer assessment, certification is rarely done for the courses offered and it has a non-profit business model (“A New Ecology for Learning: An Online Ethnographic Study of Learners’ Participation and Experience in Connectivist MOOCs”). The learning outcomes of cMOOCs are developing digital, social and intellectual skills associated with the web. The thematic foundation of cMOOCs is based on that they are open and forward looking, knowledge is to be built through experience and on the debate of ideas, analysis and model identification. The learners of cMOOCs have digital skills’ prerequisites (“Overview of E-Learning Platforms for Teaching and Learning”).

- 2) The xMOOCs are the type of MOOCs which are extended Massive Open Online Courses and are based on the research-based content provided by the universities and the other educational institutions to aid online learning (“MOOCs, cMOOCs and xMOOCs: Definition and Explanation”). In xMOOCs, the learner’s role is passive, the instructor’s role is that of a “guide on side” or that of a “sage on video stage”, the learning theory is that of behaviorism or cognitivism, the pedagogy is knowledge duplication, the delivery of knowledge is through learning management system, there is external assessment or instructor assessment, certification is usually done for the courses offered, it has a profit-making business model (“A New Ecology for Learning: An Online Ethnographic Study of Learners’ Participation and Experience in Connectivist MOOCs”). The learning outcome of xMOOCs is to acquire knowledge. The thematic foundation of xMOOCs is elementary or is a reality where knowledge is formalized, stable and a delimited introductory course. The learners of xMOOCs form a large audience and have fewer digital skills (“Overview of E-Learning Platforms for Teaching and Learning”).
- 3) Quasi MOOCs are the type of the Massive Open Online Courses which are created on demand from the associations and the corporations for their own purposes (“How to make your own MOOC! (Well...quasi-MOOC)”).

The two types of MOOCs which are classified horizontally are: MOOCs which make use of synchronous learning and MOOCs which make use of asynchronous learning. MOOCs which make use of synchronous learning make the students join an online class at a specific time each week and the MOOCs which make use of asynchronous learning allow the students to view the instructional materials anytime online during a specific time span. During synchronous online learning the students attend classes virtually each week with instructors and classmates, they participate in real-time discussions during class time and improve their presentation skills. During asynchronous online learning the learners must complete work each week on schedule, receive immediate feedback on quizzes, schedule group work when it is most convenient for everyone. There are certain overlapping features of synchronous and asynchronous learning such as attending classes from anywhere, communicating regularly with instructors and maintaining network with classmates (“What’s the Difference Between Asynchronous and Synchronous Learning?”). The MOOCs make use of both synchronous and asynchronous learning or else make use of any one type of learning thereby making the classification horizontal rather than vertical.

The Technological Dimension of the MOOCs:

The technological dimension of the MOOCs encompasses various online tools and platforms to deliver and support learning experiences for them. There are key features of the technological dimension of the MOOCs such as accessibility, scalability, online platforms, tools, flexibility, interactivity, supporting technologies, Personal Knowledge System, lifelong learning and open education. The designing of MOOCs ensures their accessibility across diverse temporal, spatial, institutional and organizational barriers. The scalability of MOOCs supports a large number of learners and participants to learn from them simultaneously. The scalability of the MOOCs has also enhanced the online platforms to accommodate a large number of users or learners and content delivery. MOOCs use online tools such as Learning Management System (LMS), video platforms, discussion forums and social media. The choice of tools used for content delivery, communication, assessment and collaboration by the MOOCs may vary such as some MOOCs may prefer centralized institutionally owned systems whereas other MOOCs adopt distributed user centered approaches using social software. The MOOCs provide flexibility and interactivity to the learners they offer self-paced and modular learning to the learners. The interactive elements such as provisions for interactive whiteboards, discussion forums, quizzes, peer feedback mechanisms engage the learners interactively. The technological dimension of the MOOCs has personalized the learning experience. The supporting technologies that have made MOOCs possible are educational applications, video streaming, content management systems and communication platforms. The MOOCs incorporate Personal Knowledge Management skills that help learners to manage learning processes and utilize online tools for the construction of knowledge. The learners have preferences for certain online tools that they integrate into their learning activities. MOOCs provide the opportunity for lifelong learning and open education. The MOOCs have revolutionized knowledge assessment and evaluation. They offer tools to assess the transfer of knowledge and retention which are as follows: quizzes, automated tests that include both multiple choice questions and essay type questions, formative assessments (exit tickets, assignments, presentations etcetera), peer grading and instructor assessment. A number of technical challenges are faced by MOOCs such as low completion rates, no personalized attention to the learners, the technological barriers, the integration of Artificial Intelligence (AI) and Machine Learning (ML) into MOOCs to provide personalized learning experiences and automated support. Virtual Reality (VR) and Augmented Reality (AR) are being explored to create immersive learning experiences and hands-on simulations ("The Technological Dimension of a Massive Open Online Course: The Case of the CCK08 Course Tools").

The Role of the MOOCs in Higher Education:

The MOOCs play a very important role in higher education primarily by being a scaffolding to the main system of university-based education. The existence of MOOCs has introduced flexibility in the educational system by providing opportunities to those learners to update and upgrade themselves who are not a part of the formal educational set-up. It provides a scope of lifelong personalized learning. The MOOCs have introduced interdisciplinarity in the higher education and research. The technological basis of MOOCs has provided the learners in higher education, and the academicians an opportunity to be initiated into technological advancement on a global level. The standardized certificates that are provided to the learners on the completion of the course lend credibility to the courses undertaken as a part of MOOCs. The MOOCs provide the background knowledge to progress further with education at the higher level and academic research. The onset of the MOOCs has popularized the audio lectures, video lectures, podcasts, synchronous learning,

asynchronous learning, flipped classrooms, gamification (using points, badges, leaderboards etcetera), formative assessments, Project-Based Learning (PBL), online simulations, hands-on activities, interviews etcetera. The MOOCs facilitate interaction among the learners in the higher education across virtual platforms and online forums. The Socratic Method is to provide questions to the students in order to guide the students to deeper understanding. The MOOCs are cost effective and are accessible to all in terms of course content and technology. The attendance is not mandatory while studying the courses offered by the MOOCs. The MOOCs offered by reputed institutions or organizations embolden the brand name of the educational institution or the parent university or else the corporate organization and register a global presence. The MOOCs have transcended the temporal and the spatial barriers. They cater to various learning styles of the online learners in higher education. The MOOCs have revolutionized instructional design. The feedback system of the MOOCs provides the online learners with an opportunity to provide testimonials regarding the online course undertaken as a part of them. The learners are exposed to the state-of-the-art pedagogical techniques and world class faculty members within the purview of the course undertaken as a part of the MOOCs (“MOOCs in Higher Education: Current Trends in India and Developed Countries”).

Blended Learning and Flipped Classrooms:

Both the blended learning and flipped classrooms are two important and outstanding forms of learning and they involve both the university-based education that is primarily offline and the MOOCs that are primarily online. The blended learning introduces a hybrid mode of learning that combines traditional classroom-based learning involving direct instruction and face-to-face interaction as well as online learning activities and materials. They offer flexibility, convenience, interactivity, enhanced engagement with the students, personalization of learning, improved outcomes, increased learner satisfaction ratio, better knowledge retention, effective use of classroom time, and scope for interactive simulations, video, and online assessments (“Blended Learning: A Potential Approach to Promote Learning Outcomes”). The flipped classrooms may be integrated into university-based curriculum or they may be a part of the MOOCs. They invert the model of traditional learning by providing video lectures and online reading materials to the learners prior to the actual classes so that they are well versed in them and learn the application of knowledge, and apply it in discussions in the classrooms. The prerequisite for the flipped classroom is creation of digital materials as a part of the in-class instructional design. The learners are equipped to face challenges related to problem solving as a result of the flipped classrooms. The assessments too are appropriately designed for pre-class learning and in-class application (“Flipped Classroom Approach”).

The Architecture of the MOOCs:

The architecture of the MOOCs is broad and expansive and as mentioned before it is a scaffolding for the mainstream system of the university-based education. The architecture of the MOOCs has the following components namely Learning Management System, content delivery infrastructure, interactive learning tools, big data and analytics in order to generate and interpret data related to the learner behavior, cloud computing to make the online learners or users utilize cloud platforms such as AWS, Azure and Google Cloud for scalability, reliability and cost-effectiveness in dealing with a large number of online learners, innovative assessment tools to map the understanding of the students and a well-designed User Interface (UI) and User Experience (UX) for intuitive and engaging learning experience. The key features related to the MOOCs are: They are scalable as they have the capacity to accommodate a large number of concurrent learners from various walks of life with diverse

demographics, and defying the barriers of time and space. They are accessible to the learners across a virtual platform and make education handy even for the differently abled. The MOOCs are flexible in terms of the pace of the online learners and their diverse styles of learning, they buttress interactivity among the learners, they are cost-effective and secured as they protect learner data while ensuring a safe learning environment (“The Architecture of MOOCs Platform Based on Virtual Technology”).

Marketing of the MOOCs:

The marketing of the MOOCs is dependent on the fact that these courses are packaged in a way that commodifies them in the market and contributes to the generation of revenue. The courses are created after methodical and meticulous survey of the academia and the market is studied so that they cater to the demands of the online learners or users. The MOOCs have dominated the scenario as a result of digitalization, the increase in the popularity of the online courses and the need for continuous professional development and career advancement. They offer certificates that sometimes lead to university degrees. They are used for corporate training thereby providing flexible and cost-effective learning solutions. They are advertised and marketed in the social media. The social media profiles are created for the MOOCs and the MOOCs may also utilize the existing university profiles. The MOOCs utilize platforms such as Facebook, Twitter, YouTube, and Instagram. The relevant channels are tagged, high quality visuals and engaging content are used for the social media marketing of MOOCs. Video marketing through YouTube, URLs describing video marketing, tagging and descriptions go a long way in terms of promoting MOOCs. The e-mail marketing of the MOOCs segments audience based on their interest to deliver targeted content. The online learners are kept in the communication loop with appropriate updates, relevant learning opportunities and the upcoming events. The content marketing of the MOOCs depends on the development of a blog, sharing of news, statistics and updates about these courses. The prospective learners are invited through free content, blog posts, webinars etcetera. The paid advertising strategically places the advertisements on platforms such as Google, LinkedIn, Instagram, YouTube etcetera for an increase in the engagements and enrollments. There are referral programs that incentivize online learners when they refer new learners for enrollment in the MOOCs. The feedback in the form of testimonials that generate data in relation to the MOOCs for analysis also promotes them. The social learning in the form of interactions and collaborations among the learners leveraged by the MOOCs promotes them. The course outcomes are highlighted to promote the MOOCs. The provision of providing discounts and incentives to the new online learners and referral perks provided to the existing online learners promote the courses. The hosting of webinars that disseminate information regarding the courses promote these courses. The MOOCs are developed and hosted on limited budgets that focus on organic marketing strategies for them. The market in which the MOOCs operate is competitive requiring differentiation and effective marketing. The infrastructure limitations are addressed in relation to the accessibility of the MOOCs for online learners in the rural and the underdeveloped areas by addressing infrastructure limitations that may in turn advertise the MOOCs. The personalized learning experiences, social learning, and incentives engage online learners and in turn promote these courses (“7Ps of Marketing Mix in MOOCs Environment”).

Quality Versus Quantity of the MOOCs:

In the MOOCs, their quality should be balanced by their quantity. The MOOCs have democratized the education. The quality in MOOCs is a result of the effective high quality content delivery that is well-structured, has meaningful content, is engaging and relevant. The

pedagogical design of the MOOCs is methodical, meticulous, modular, time bound with clear objectives, outcomes, interesting learning activities and penetrating assessments. The MOOCs have introduced interactive learning in the form of forums, discussions, and collaborative projects. They have introduced a supportive environment for the online learners in the form of technical assistance, timely feedback, and access to resources. They induce meaningful engagement through gamification, personalization and relevant real-world applications. The quantity of MOOCs ensures their reach to a large number of online learners making them accessible to many. They accommodate a large number of learners despite being cost-effective. The low-cost model of MOOCs makes them affordable and accessible to a large number of people and plug the gap between the academia and the learners. The challenge related to the balance of quality versus quantity index is straining of resources on which MOOCs are based leading to reduced instructor-student interaction, limited opportunities of peer-to-peer interaction, difficulties in the evaluation of learners. This challenge may be addressed by adopting technology-enhanced learning, development of new pedagogical approaches and focus on learner engagement and motivation (“Quality Criteria in MOOC: Comparative and Proposed Indicators”).

Standardization Versus Commodification of the MOOCs:

Standardization and commodification of the MOOCs refer to their evolution to meet the quality benchmark by creating uniform structures and by packaging them for the purpose of trading in the market. The standardization of the MOOCs improves their consistency and quality by revolutionizing the formats, assessment methods and learning outcomes across different platforms and institutions. It has provided clarity to the online learners, has ensured easier transferability of credits for them, and has caused a rise in the credibility of the MOOCs. The flip side of the standardization is that it stops creativity and innovation by bringing in uniformity in the learning needs and preferences that are diverse. On the other hand, commodification treats the MOOCs as commodities that are marketable in the marketplace and a source of revenue generation and competitive positioning. The commodification of the MOOCs has seen the investment of the capital in their development leading to more resources for course creation and better infrastructure. The commodification of the MOOCs may reduce the educational value of them to promote profits leading to superficial learning experiences, high costs and a focus on marketing rather than quality education. The relationship between standardization and commodification of the MOOCs may be oppositional and may lead to the maintenance of quality of the MOOCs but their high prices may restrict access to them. Commodification of the MOOCs may inspire the designers to design better MOOCs, but their educational content may dip, and their pedagogical concerns may be overlooked (“The Commoditization and Standardization of Higher Education”).

Business Models of the MOOCs:

The business models of the MOOCs are freemium as per this model of the MOOCs the basic courses are free but premium features have an associated cost, the other model is that of corporate training where the corporate organizations pay for the courses that have been customized for their employees, and the partnerships with the universities and the institutions where the courses are created in collaboration with the academia tailored to the needs of the students and the staff who are the members of the academia. The other business model could be freelance learning by the online learners who are not affiliated to any organization or institution but at the same time want to expand their knowledge base or want to be engaged in freelance research (“Business Models for MOOCs”).

Data Mining in the MOOCs:

The data mining in the MOOCs is to mine the available data in relation to them that involves discovering hidden patterns, trends, and knowledge within the datasets (student activity logs, forum discussions, quiz scores, assignment submissions, and video viewing patterns) generated by the MOOC platforms using different data mining techniques. These data mining techniques are sentiment analysis that analyzes student feedback in the form of forum posts, comments etcetera to assess the sentiments of the students towards the course content, instructors, specific topics etcetera, text analysis that helps to analyze textual data such as forum posts, assignments etcetera to identify paradigms, trends, and key themes, clustering studies the behaviors and performance of the students in groups to identify different learning profiles, association analysis refers to finding and establishing the correlation between the different learning activities and the performance of the students such as watching videos by the online learners of a course and completing a given quiz, and regression analysis involves the correlation between various factors such as prior knowledge engagement and student outcomes. The significance of data mining in relation to MOOCs involves predictive analysis that is used to predict student performance, identify potential dropouts and address challenges, it helps to improve course design and delivery by tapping into student behavior and feedback, induce personalized learning more effectively by taking cognizance of student learning styles and preferences and by allowing creation of personalized learning paths and recommendations, through providing enhanced support to the students based on student interactions and performance data and by content optimization by making the learners attuned to different types of content namely videos, quizzes and readings (“Application of Data Mining in MOOCs for Developing Vocational Education: A Review and Future Research Directions”).

Structural Analysis of the MOOCs:

Structuralism is considered to be an intellectual movement and methodology in the Social Sciences that analyses Languages, Literatures, human cultures, and various other disciplines. It forms the basis of the epistemology of many disciplines such as Linguistics, Anthropology, Literary Theory etcetera on the basis of underlying structures and relationships. Structuralism is associated with renowned thinkers and academicians such as Ferdinand de Saussure (1857-1913), Claude Lévi Strauss (1908-2009), Tzvetan Todorov (1939-2017), Vladimir Propp (1895-1970), Roland Barthes (1915-1980) etcetera (Selden 51-52).

Structuralism presupposes that any discipline, text, perception, or idea has a conceived underlying structure which may or may not be perceived and it is embedded in a network or a system of relationships (Selden 51-52). The system of MOOCs too is conceived to be a structure in the form of a network and this network is embedded in a larger network which is in relationship to the system of education provided by the universities. The system of MOOCs attains meaning as it is different from the system of education provided by the universities. It is a system that cannot be perceived. The system of MOOCs may be considered to be an organic whole as each MOOC caters to a particular discipline or an interdisciplinary or multidisciplinary purpose thereby bringing the whole gamut of disciplines into its purview like the system of university education.

Structuralism posits that meaning is not inherent in the componential parts but in the entire whole (Selden 51-52). The way these components are organized in the form of a structure and relate to each other within a system, they lend meaning to the whole system. The MOOCs are embedded in a structure and each MOOC caters to the needs of a particular

user thereby forming an expansive network. These MOOCs are essential to sustain the network and they form individual units in the network and the network or structure is incomplete without them. Similarly, the system of university education has courses that are integral components in this system without which the functionality of the system gets affected. Each MOOC in the network of MOOCs and each course in the system of university education are interconnected to each other and they are defined by their interconnectedness.

Structuralism foregrounds binary oppositions, thus, the “either/or” status of the structure of university education vis a vis the structure of MOOCs (Selden 51-52). The structure of university education is the main system and the structure of MOOCs is the peripheral or alternative system.

Structuralism foregrounds a structure of language and literature called *langue* and a particular utterance or text that belongs to this structure that is said to be *parole* (Selden 51-52). Similarly, in the case of the structure of MOOCs, the structure itself is called the *langue* and a particular MOOC is called a *parole* whereas the structure of the university education is a *langue* and an individual course that belongs to the same structure is a *parole*.

Structuralism refers to the syntagmatic relationships that represent horizontal, sequential, and linear order of elements in a sentence of a language while paradigmatic relationships represent vertical, and substitutive relationships between the elements of a sentence in a language in the context of Linguistics (Selden 51-52). The idea of syntagmatic and paradigmatic relationships is used in Literary Criticism in the case of texts because the texts have a structure that display both syntagmatic and paradigmatic relationships. The syntagmatic relationships of a text may display the horizontal, sequential, and chronological relationship between the events in a text that are meant to be arranged in a way to give rise to the meanings in relation to the text. The paradigmatic relationships in a text are the vertical and substitutive relationships as many texts are episodic so the events in a text may display a taxonomic feature such as the events in a text may be grouped under climax or anticlimax and may be substituted by other events of a similar kind. In the case of MOOCs, the system or structure of MOOCs may display syntagmatic relationships as when several MOOCs form a part of a broader course and those MOOCs are arranged in a horizontal, sequential and linear order and if a particular course is not completed or accomplished then the next course cannot be done so the completion of the broader course is not possible. The MOOCs also display paradigmatic relationships that are vertical but may or may not be substitutive. In Coursera, a broader course on Anatomy has a vertical relationship with courses such as Musculoskeletal and Integumentary Systems, Cardiovascular, Respiratory and Urinary Systems, Human Neuroanatomy, and Gastrointestinal, Reproductive, and Endocrine Systems as they exhibit taxonomic features since they are grouped under Anatomy. None of these courses under Anatomy can be substituted as they form a package under the broader course labelled Anatomy. Similarly, a course offered by the university such as B. A. English (Honors) will comprise of papers in History of English Literature, Biographies of Literary Personalities, Poetry, Drama, Essays, Novels, Short Stories and Literary Criticism divided into several periods would display syntagmatic and paradigmatic relationships between the different papers as they are arranged horizontally and vertically, they are sequential and chronological in relationship to each other as they occur simultaneously in a semester of the course. The completion of the course is possible when all the papers have been studied in a linear manner. The papers in a course are arranged in a vertical relationship as in each semester of the course a certain number of papers are to be studied and completed that culminates in B.A. English (Honors) course. The papers in a course are not substitutive because they are fixed and cannot be substituted by other papers of the same kind as syllabus revision by a particular university will be required for the substitution of papers.

Structuralism foregrounds the synchronic and diachronic approaches to studying Language and Literature (Selden 51-52). The synchronic approach to the study of Language or Literature basically studies a Language or a Literature at a point in time whereas the diachronic approach to the study of a Language or a Literature studies a Language and a Literature across a temporal continuum. The synchronic study of the MOOCs and the university courses study these courses in terms of their structure and functionality such as pedagogical techniques (peer teaching and learning and gamification), use of specific technologies (video lectures and interactive simulations), learner demographics and engagement patterns in the case of MOOCs and content, delivery, syllabi, teaching methods, assessment strategies, student learning outcomes etcetera in the case of university based courses at a certain point in time whereas the diachronic study of the MOOCs and the university courses study the evolution of these courses over a period of time. The diachronic study of MOOCs examines the evolution of the MOOC platforms, the changes in the pedagogical approaches from xMOOCs to cMOOCs, the demographics of the learners, their participation patterns, the evolution of MOOC content and delivery methods as well as the effect of MOOCs on higher education and lifelong learning. The diachronic study of the university-based courses focuses on examining content, teaching methods, delivery, learning outcomes, course catalogs, syllabi, relevant documents, curriculum etcetera. Such a study also investigates the causes for the transition of importance or significance of certain courses to the others and also of certain topics to the other topics.

Post-Structural Analysis of MOOCs:

Poststructuralism had its birth in the late 1960s from the womb of Structuralism. Structuralism contained the seeds of Poststructuralism within it that germinated by signaling the demise of Structuralism. The key figures of Poststructuralism are Jacques Derrida (1930-2004), Michel Foucault (1926-1984), and Roland Barthes (1915-1980) (Selden 70-71). Poststructuralism challenges the idea of fixed, inherent meanings. Poststructuralism is a literary theory that critiques Structuralism by emphasizing on the instability of meaning/s and by providing a substantial role to the readers, viewers, and end users in terms of interpreting texts (Selden 70-71). In the arena of education, the poststructuralist analysis of MOOCs project them as diverse, alternative, expansive and open ended with open access to knowledge. The corpus of knowledge that is conveyed through MOOCs and is made accessible to the end users may be interpreted in diverse ways thereby foregrounding the instability of meanings and producing innumerable number of pathways for personalized learning. Poststructuralism challenges the stable structures emphasizing the fluidity of language, culture, and identity (Selden 70-71). The MOOCs have challenged the stable structure of formal academic education provided by the universities and has provided a support structure to it that has benefited those who are not enrolled in formal education ensuring the fluidity of both the systems to provide umpteen number of opportunities to the learners for transitioning from one system to the other, promoting interdisciplinarity and for upgrading oneself. Poststructuralism rejects the idea that the meaning is derived from fixed, binary relationships as presented by Structuralism (Selden 70-71). The manifestation of this attribute is seen in the “either/or” status accorded to the courses offered by the universities and the MOOCs but the two kinds of courses are complementary to each other and should be pursued in accompaniment with each other thereby maintaining an “and” status rather an “either/or” status. Poststructuralism emphasizes on difference and deconstruction as well as projects the role of “*différance*” in creating meanings which are not inherent but constructed through the interplay of signs and their relationships to other signs (Selden 70-71). Deconstruction foregrounds the instability and contradictions within stable structures of

meanings (Selden 70-71). The MOOCs have gained importance as they operate differently from the educational curriculum of the universities hence, they are meaningful for the learners and are in demand. They provide the necessary support to the structure of university based educational system by reducing the dependence of the learners on the formal educational system. The MOOCs in a way have subverted or deconstructed the structure of university education by providing a viable alternative to the main system of education. Although it is not advisable to demolish or dismantle the old, centered structure of university education totally as in the future the MOOCs may not be able to prove themselves to be a viable substitute of university education due to loopholes existing in the system of MOOCs such as lack of foolproof assessment systems that can prevent cheating and plagiarism as well as establish the credibility of the assessment system. Poststructuralism is characterized by fluidity of meaning thereby rejecting the notion of fixed or objective meaning reinforcing that meaning is transitory, contextual, and susceptible to individual interpretation (Selden 70-71). The MOOCs have made an emergence in the global educational scenario as there is a need for strengthening interdisciplinary or multidisciplinary research in the academia and in the corporate world which in turn strengthens the spine of the university education and also draws its substance from the university curriculum of education thereby knowing about the existing gaps or aporia in the same system. There is fluidity in meanings attributed to the MOOCs as they are seen not only as a support structure of the university based educational system but also as a system having flexibility, providing opportunities to those learners who are not a part of the mainstream educational system but want to update and upgrade themselves as well as prefer independent learning, it prioritizes interdisciplinary and multidisciplinary research in the academia and the industry, it opens the avenues of learning for those learners.

Poststructuralism acknowledges language to be a system of signs composed of a signifier and a signified and the relationship between the two is arbitrary (Selden 70-71). The MOOCs too have two attributes, the concept on which a particular MOOC is based and the language in which the concept or idea is conveyed. The relationship between the two, that is, the concept and the language is arbitrary as a particular MOOC based on a concept or an idea may be conveyed in any language. Similarly, for a course offered by a university. Poststructuralism foregrounds the concept of intertextuality as it is based on the interconnectedness of the texts and the way meaning is created through different texts (Selden 70-71). The MOOCs form a network and there are many MOOCs that are a part of the hybrid disciplines and many of the courses are interdisciplinary or multidisciplinary in nature like the courses offered by the universities. Poststructuralism explores the relationship between power and knowledge and establishes that knowledge is shaped by power structures (Selden 70-71). The system of MOOCs has emerged as there is a need for such kind of a system that functions as a support structure to the main system of university education.

Postmodern Analysis of MOOCs:

Poststructuralism is seen to be a “metatheory” of which Postmodernism is an offshoot. This theory is used to describe a widespread current in art and literature and it is also a worldview. The postmodern culture is understood by critics such as Ihab Hassan (1925-2015), Jean François Lyotard (1924-1998), Frederic Jameson (1934-2024), and Gerald Graff (b. 1937-). The postmodern times have rejected elitism (Selden 72). This trend is manifested in the case of the MOOCs as the MOOCs have a complementary existence in relation to the pre-university courses, the undergraduate and the postgraduate level courses offered by the universities. The courses offered by well-reputed universities at the undergraduate and the postgraduate levels have a brand name and a value in the market which can be directly

converted into a job in a posh multinational or corporate organization. They help the students to get placement in the job market. The organizations too insist on the graduates and the postgraduates having a graduate or a postgraduate degree from an elite university for employment. The MOOCs although offered by well-reputed universities and corporate organizations reject this kind of elitism which is associated with the universities and the university degrees. They provide certificates in the cases of certain courses thereby rejecting the elitism associated with the university degrees. The certificates received on the completion of the MOOCs are not as valuable as the university degrees received on the completion of the courses in the job market but the MOOCs help to overcome the gap between the industry and the academia and also help to provide updates to graduates and postgraduates in their respective fields. The existence of the MOOCs has subverted the elitism of the courses offered by the universities. The MOOCs are cost effective and may or may not have time restrictions whereas the courses offered by the universities are expensive, and time bound. The MOOCs have broken into the educational scenario as a viable alternative.

Postmodernism displays a kind of anti-authoritarianism (Selden 72) which is displayed in the academia by the MOOCs which are instrumental in subverting the authority of the courses offered by the universities. Moreover, the MOOCs have come as a boon to the students, scholars and researchers who do not have the opportunity to sit in the classrooms anymore as they help them to upgrade themselves whichever field they may be in, they are cost effective, they maintain a symbiotic association with the courses offered by the universities as they complement them and close the existing gaps in the university curriculum, they form a scaffolding to buttress the structure of the university courses, they come with a lesser number of constraints in terms of time and space, the formalities associated with enrolling in these courses are also limited, they are discussion oriented and the courses are flexible in terms of their evolutionary ability. Thus, they are anti-authoritarianism and do away with the authority of the courses offered by the university at the various levels. There is lack of flexibility in terms of change in these courses and their evolutionary abilities as courses or course structures are changed over a long period of time. The courses offered by the universities have certain loopholes that cannot be plugged easily so the need for MOOCs has been felt, these courses have more weightage in comparison to the weightage provided to the MOOCs as per the traditional point of view. There are constraints related to time and space in relation to the courses offered by the university although blended learning involving offline and online classes has become a reality for the courses offered by the universities.

Postmodernism focusses on participation (Selden 72) which is illustrative in the case of the MOOCs as MOOCs can be participative in terms of content and in relation to the administering of the course to the learners. The content of the MOOCs is packaged keeping in mind the demands of the learners and there is a further customization of the courses depending on the needs of the learners. The content of the MOOCs is commodified so that it can be marketed in the global market. The teaching techniques have also been customized keeping in mind the demands of the learners as a result there are pre-recorded video lessons, readings, set readings, assessments, and discussion forums which call for participative teaching and learning. The participative teaching learning process is now not unique to the MOOCs as Postmodernism rejects the traditional idea of uniqueness but have off late been adopted by the universities in terms of formulation of the various courses or the syllabi of the different courses making them need based, utilitarian, and customizable.

Postmodernism produces open, discontinuous, improvisational, indeterminate, or aleatory structures (Selden 72). When the structuration of the MOOCs is analyzed, it is found to be open as a number of learners can enroll in these courses, the enrollment is either free of

cost or cost effective. They are open because they are customizable and susceptible to vigorous changes in content, structures, and techniques of administering thereby customizing the content, structures and techniques of administering based on market trends and the needs of the users. The structures of the MOOCs are discontinuous as they are either offered in the form of isolated short courses or may be a component course that is linked to the other component courses to form a meta course or a course at large. These component courses may be episodic and discontinuous, or they may maintain the continuity thereby upholding the unity of the meta course or the course at large. MOOCs are improvisational as they undergo rapid changes, or they are revised depending on the demands of the users and their efficacy as viable commodities in the market. MOOCs are said to be indeterminate as many of these courses are interdisciplinary in nature and have a kind of inherent novelty in them. MOOCs are aleatory or random structures as they supplement or are complementary to the mainstream structure of the university curriculum and are there to plug in the loopholes that exist in the university curriculum. They are usually perceived as foundation courses or add on courses or the value-added courses. There is a method in their randomness, and they form a crucial support structure for the courses offered by the universities. On the other hand, the courses offered by the universities have a fixed and a rigid structure with a fixed student intake capacity, the fee structure may or may not be cost effective but is never free and is not easily customizable as changes in the courses offered by the universities are the results of careful deliberations and are time bound. These courses are not readily customizable or are not susceptible to vigorous or rapid changes in terms of the content, the structures, and the techniques of administering these courses. There is a set trajectory to be followed in relation to the courses offered by the universities, these courses are carefully hierarchized, and a learner must navigate through several levels such as 10+2 level, undergraduate level, postgraduate level, doctoral level, and postdoctoral level to be educated. These levels and the courses offered at these levels are in continuity with each other. These courses are not rapidly improvisational. It takes time to improvise novelty and changes in these courses due to the serpentine pathways in the networks of bureaucratic processes. These courses are rarely interdisciplinary in nature but there are some interdisciplinary disciplines that have surfaced and are offered by the universities because of the fusion of epistemological grounds of two or more disciplines and due to the change in the market trends.

Postmodernism emphasizes on decentering of any conceived structure and illustrates the theme of the absent center (Selden 72). In the context of the MOOCs, they can be a product of decentralization of the educational structure dominated by the universities which constituted the locus of power and control. The decentering caused the MOOCs to burgeon as a support structure to the main structure of the courses offered by the universities. The decentering was the result of the realization of the limitations of the courses offered by the universities in terms of time and space constraints, cost, duration, pedagogy, work life balance of the learners, flexibility in terms of multiple entry and exit points etcetera.

Postmodernism rejects the traditional aesthetics of beauty and uniqueness (Selden 72 and 73). The structure of education has two parts the main structure that comprises of the education provided by the universities and the peripheral structure or the scaffolding that comprises of the MOOCs. The main structure of the education provided by the universities is neat, tidy, hierarchized, taxonomically sound with no offshoots that make it clumsy whereas the peripheral structure which supports the main structure is gargantuan, expansive, evolutionary, transformative, need based, nonhierarchic, amorphous, and has different offshoots with disorganized learning pathways. The peripheral structure of MOOCs rejects the traditional aesthetic of beauty and uniqueness by bringing in interdisciplinarity, fluidity among disciplines, flexibility, self-reflexivity, and enormity. It is burgeoning based on the

needs of the end users. Despite the MOOCs being the support structure of the main structure of university education, it subverts the efficacy of a university education by providing the same knowledge as provided by a university education although packaged differently. In this case, knowledge is the content that is the focus of the educational system and the choice of package or the method of providing the education is dependent on the demands prevalent in the market and the influence of tradition in the field of employment. Nowadays, the résumés of the prospective candidates in search of jobs exhibit a postmodern characteristic of fusion of main and peripheral structures as the candidates in their résumés provide evidence of not only undertaking education offered by the university but they also provide proof of undertaking MOOCs.

The postmodern experience stems from a sense of ontological uncertainty (Selden 72). The ontological uncertainty refers to the state when a new experience doesn't fit nicely into existing mental models of how things work and remembered experiences. There is ontological uncertainty in the case of MOOCs as they themselves despite their diversity and corpus of knowledge may not be enough on their own to secure jobs and some of the platforms do not even provide standardized and accredited certificates that may be useful in the job sector.

ICT (Information and Communications Technology):

ICT that refers to "Information and Communication Technology" makes use of technology to handle information and facilitate communication. It has revolutionized the pedagogical techniques used in the classrooms to provide education in the universities. The enabled classrooms in the universities are a result of the influence of the MOOCs on the university-based system of education. ICT has created and advanced the MOOCs to the present stage of development.

Conclusion:

The MOOCs have emerged on the horizon of education as a lifeline and they perform a crucial duty by providing a robust support structure to the mainstream educational system. The idea of distance education under the aegis of various universities had always been a reality and had provided education at a subsidized rate to those learners who were not able to join the formal system of education to get educated. The distance education has donned a new mantle of MOOCs in the new age with technological advancement. The MOOCs are significant in bridging the academia industry gap by making the online learners, industry ready and providing the supplementary education to complement the mainstream educational system. They are often foregrounded as value added course or an add-on course in the university curriculum. They support a large number of learners and offer an assortment of courses across a vast number of disciplines. The practical training is a component of many of the courses but it becomes a formidable challenge in the case of the MOOCs as it requires offline facilities. The MOOCs have introduced interdisciplinarity in the academia and made the courses multifaceted and diversified by embedding them in various contexts. The MOOCs have done a serious service to the learning communities during the time of the pandemic by making education cost-effective and accessible. The evolution of the MOOCs is continuous as the need for them is diverse and burgeoning. They have become indispensable to the mainstream university-based educational system but they cannot yet substitute the main university-based system and may not be able to do so in the future as well despite their advancement and a spurt in the need for them as a crucial scaffolding to the main system. They have to deal with challenges related to credibility, standardization, accreditation, costs, reliability, assessments, online learners who are demanding etcetera. The prospects of the

MOOCs are rosy but their role as a support structure is fixed and significant. The deconstruction of the university-based educational system is not possible as the structure of the system of the MOOCs is not having the credibility it should have and is not able to replace it. Moreover, none of the structures should be dismantled as they may prove crucial for educational purposes in the future or may give rise to brand new structures that are a fusion of the new and the old structures.

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