



# Analyzing the Shifting Trends of Education from Traditional Teaching to the Open Teaching- An Empirical Study with Special Reference to the Massive Open Online Course [MOOC]

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**Abstract - In education sector the trends are shifting day by day as the technological up gradation and demand of the industry came in place the targeted and specialized course content is in demand from the industry norms. The syllabus and the course structure is changing but at the slower pace in comparison to the industry demand. Traditional teaching “the classroom teaching” now has many different alternatives the students want to do more to cope up with the industry standards thus comes the student centric learning approach where the students comes in the first place and the experience and the knowledge of the teacher comes as guiding and mentoring to excel the students. Online learning and distance education programs are available these days another feather in the cap is MOOC - massive open online course, this gives the liberty to the students to learn and understand the content of their choice and as per their need and suitability of the time and place. It is an online content with certification and many course providers are there in India and internationally to fulfill the need. The author in this research paper is trying to analyze different aspects of teaching the shifting trends from “class room teaching” to the “open courseware” in reference to the MOOC, to make the understanding better the author is also floating an online questionnaire to get the views of the youth who are studying the regular course in engineering and technology as well as in other professional courses to know the shifting trends of education.**

**Keywords: Traditional teaching, class room teaching, MOOC, open courseware, shifting trends, students centric learning.**

## I. INTRODUCTION

A massive open online course (MOOC /mu k/) is an online course aimed at unlimited participation and open access via the web. In addition to traditional course materials such as filmed lectures, readings, and problem sets, many MOOCs provide interactive user forums to support community interactions

among students, professors, and teaching assistants (TAs). MOOCs are a recent and widely researched development in distance education which were first introduced in 2008 and emerged as a popular mode of learning in 2012. [1]

MOOCs are the natural evolution of OpenCourseWare, first created by the Massachusetts Institute of Technology (MIT) in 2001. The term MOOC was coined during the course "Connectivism and Connective Knowledge" by Dave Cormier, from the University of Prince Edward Island (Canada).

Another definition of MOOC: A MOOC is an online course with the option of free and open registration, a publicly-shared curriculum, and open-ended outcomes. MOOCs integrate social networking, accessible online resources, and are facilitated by leading practitioners in the field of study. Most significantly, MOOCs build on the engagement of learners who self-organize their participation according to learning goals, prior knowledge and skills, and common interests. [2]

From the origin of MOOC to the current scenario the demand and supply of the education sector for the industry has been change, MOOC is a clear, on demand, open ended, supported by world's leading universities and professors with the goal of learning along with the advantage of certification for the course. The online learning is not new in current perspective, distance learning and online learning didn't replace the tradition teaching methodology for years it has been tried and tested formula and we all are products of that. One thing is that affects the tradition learning is the course content many colleges and universities are still following the course contents in their syllabus which is been there for more than two decades or more, although there are some changes in the syllabus but they are not sufficient to fulfill the demand of the industry. There is a direct relationship between industry and academia like demand and supply therefore there are different supportive alternatives are coming up to balance the situation. Distance learning, online



learning and student centric learning are few of them along with MOOC. Alternatives are came into the picture where direct approach to the target is not feasible due to any reason, students in current scenario want to get more to get a handsome salary are reputed job in MNC to achieve this they have an cutting edge over the competition. Education sector is producing thousands of degree holders who are similar in their qualification and what they have learnt in their colleges, to make difference and raise above others they have to do something extra more than what has been taught in the traditional teaching environment. MOOC is one of the alternative available to the students and they can learn at the flexible timings as per their need and all the content and lectures are available online. In following sections of the research papers we are going to study the trends where MOOC comes in the place and will it became the game changer in the education sector.

## II. TRADITIONAL TEACHING

Traditional teaching methods are described as being teacher-oriented, in a lecture style and are inflexible. Lessons are usually taught by the teacher introducing skills using a blackboard accompanied by a verbal explanation or lecture. Practical work for students is then assigned, followed by feedback from the teacher.

A disadvantage of this traditional method is that students who have learning difficulties are unable to cope with how the lessons are delivered. Above-average students are also disadvantaged because the lessons aren't challenging enough. This means that students in either category are at an instant disadvantage compared to an average student without a learning disability. [4]

This is somewhat going through decades, the traditional way of teaching is entirely depending upon the teacher and teacher's skill how experience is the teacher so that the teacher can deliver what is expected form him/ her. Starting from the "Gurukul" to modern teaching facility one thing in the teacher centric scenario has not being changed with time that is the structure one teacher is standing in front of rows of students and shower of knowledge is spared on all of them equally, the teacher is whole and sole of the class, he came and deliver what has to be delivered, this kind of teacher entirely dependent on the teacher there is no other alternative in the class out of the class there is one alternative that is "tuitions" for the subject in which the students face difficulty. The business of imparting tuitions in every part of India has become a big business and people are doing this professionally. The growth of tuition centers in a country like India where the tradition education style is deep rooted from the ancient times from the time of "Gurukul" education system does it reflects something, a requirement of some new alternative to the traditional study,

why students are doing extra efforts to get over the edge form competition. May be they want clearer, more precise and more accurate topic description as per the demand of the industry, by the course of the time other things originates like distance learning, student centric learning, open courses etc. this indicates that now the demand is not going to be full filled by the single method of teaching we need to generate the **hybrid structure of learning environment** for sustainability.

## III. STUDENT CENTRIC LEARNING

The term student-centered learning refers to a wide variety of educational programs, learning experiences, instructional approaches, and academic-support strategies that are intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students and groups of students. [5]

Student-centered learning, also known as learner-centered education, broadly encompasses methods of teaching that shift the focus of instruction from the teacher to the student. In original usage, student-centered learning aims to develop learner autonomy and independence by putting responsibility for the learning path in the hands of students. Student-centered instruction focuses on skills and practices that enable lifelong learning and independent problem-solving. Student-centered learning theory and practice are based on the constructivist learning theory that emphasizes the learner's critical role in constructing meaning from new information and prior experience.

Student-centered learning puts students' interests first, acknowledging student voice as central to the learning experience. In a student-centered learning space, students choose what they will learn, how they will learn, and how they will assess their own learning. [6]

Why the concept of student centric learning evolved, there could be number of reasons a few can be stated as follows:

*Students want flexibility* –students require flexibility in learning the other system is not flexible at all like in due dates, opportunities for extensions, accelerated course completion options, and asynchronous activities. Many times students meet conflicting responsibilities at home, work, and school. The flexibility is the key factor that originates form a decades of adjustment and work according to the rigid educational system.

*Student want prior knowledge as difference maker*– Prior experience should be welcomed and encouraged whenever possible for assignment credit to allow students to accelerate assignment completion. Online and other courses should be built to allow students to share relevant personal and professional experience and promote inclusion of prior learning whenever possible. As student centric learning environment in



which the students come first and their knowledge should be acknowledged.

*Students want to be socially active* – with the facilities to connect all the like-minded people in the world through Whatsapp, Facebook and other social sites where the students can share their experiences. Students need opportunities to engage with other students and faculty, courses should promote rich student-to-student and instructor-to-student interaction through discussion board, social media, and group activities. Effective student social engagement in the course is like supercomputing on the subject matter from all over the world.

True student-centered learning requires more than just an increase in technology implementation. It represents a shift in the educational culture toward a system that supports technology for standards-based learning and real-world problem solving. As a system transitions to a student-centered approach, educators can more effectively apply technology to improve learning outcomes and help students develop the skills for college and career readiness.

Student-centered learning moves students from passive receivers of information to active participants in their own discovery process. What students learn, how they learn it and how their learning is assessed are all driven by each individual student's needs and abilities.

#### IV. ONLINE TEACHING/ LEARNING

Online learning is education that takes place over the Internet. It is often referred to as “e-learning” among other terms. However, online learning is just one type of “distance learning” - the umbrella term for any learning that takes place across distance and not in a traditional classroom. Distance learning has a long history and there are several types available today, including:

- Correspondence Courses: conducted through regular mail with little interaction.
- Telecourses: where content is delivered via radio or television broadcast.
- CD-ROM Courses: where the student interacts with static computer content.
- Online Learning: Internet-based courses offered synchronously and/or asynchronously.
- Mobile Learning: by means of devices such as cellular phones, PDAs and digital audio players (iPods, MP3 players).

In online teaching and learning the student is usually on a computer reading or viewing the curriculum or completing assignments. The student is usually at home or in a computer lab as compared to sitting in a classroom with desks and a teacher in front of the room. The teacher is usually in some type of office setting which could be at a school or office or home. The content is usually not in print, but, often the digital textbook

is still the base curriculum. What the teacher is doing with the content and the strategies used to teach online is where there is a considerable difference as compared with a textbook or technology enhanced teacher. The following tools (and there are many others) are utilized by an online teacher: email, instant messaging, online dropbox, some type of course management system, online gradebook, online discussion boards, chat rooms, online video conferencing and the host of Web 2.0 tools such as blogs, wikis, videos and podcasts that can be used both as the curriculum and as student work. [7]

The main components of an online learning environment are as follows:

- *Schedule*: For posting and viewing deadlines, events, etc.
- *Announcements*: For posting current information to all students.
- *Syllabus*: For creating and posting the course syllabus.
- *Modules*: For publishing and viewing course content in sections.
- *Assignments*: For posting, submitting, and grading student work.
- *Discussion Board*: For asynchronous discussions, group work, and collaboration.
- *Private Messages*: For private communication between students and/or the instructor.
- *Chat*: For real-time, synchronous conversation in written form.
- *Tests & Quizzes*: For authoring and administering exams, quizzes, surveys, etc.
- *Gradebook*: For posting and managing student grades.

The online learning environment is structured, inflexible, close ended, limited, evaluation and accreditation oriented process where the students are engaged to complete a course away from regular class room teaching process but it is having many similarities to the traditional approach. The only flexibility in here is the students is not physically present in the class room.

#### V. MOOC

MOOC, Massive open online course as the name depicts that this course is catering thousands of students worldwide. The MOOC is different from online learning but the platform is the same which is being used by online learning “Internet” but the approach is different it emphasis more on learning rather than evaluating and accreditation of the course content. MOOC was designed by MIT first after that many for profit and not for profit organization offered many courses worldwide to cater the needs of the students. The benefit of the MOOC is it is available online, many top rated and world class universities are associated with their experienced faculties to deliver the lectures and students are free to engage themselves into the



course and they can opt for certificate of completion of course if the course is paid and if they pay the required fee.

The question raises how is MOOC different if people are paying the fee for the content or for the certificate, the big difference maker in MOOC is at MOOC there are courses available with both Free and paid option, students can learn from the faculties from the top rated and world class universities this is beneficial for those students who cannot go physically to attend abroad due to any reason here at MOOC session they can be befitted with the expertise of those faculties at ease at home with their flexible timings.

MOOC courses aren't fixed into traditional term and semester models of the university, so they can start any time and can be of any length. That makes the MOOC compelling for short-term courses that are highly focused on a topic or a series of courses that might build towards a deeper understanding in a knowledge area.

If we try to elaborate the abbreviation MOOC in details we can better understand the reason of MOOC's existence. MOOC is a product which is being produced due to demand of the need of learning. The explanation of MOOC is as follows:

*Massive*

It should allow access to a very large number of students, much larger than a face-to-face class, or a traditional online course. In addition, the course should be prepared to accept changes in the number of students in several orders of magnitude, for example, going from 1,000 to 100,000 students, without a major problem for operation.

*Open*

Open has several meanings in MOOCs. On one hand, the course should be open to everyone and should not require some prerequisites such as possession of a qualification or a level of performance in earlier studies. On the other hand, the access to educational resources (videos, lecture notes) should be free (but other things, like being able to ask direct questions to the teacher, the correction of the activities, or obtaining a certificate at the end of the course may have an economic cost). Open is also often interpreted as it does not make use of a closed learning platform, but educational resources are hosted in different places like websites, blogs, wikis, or multimedia repositories. Finally, "open" is also often interpreted as the course makes extensive use of open content, and in turn, content generated by the course is also published open so it can be reused by others. This latter interpretation of "open" is the least fulfilled nowadays, as the most successful MOOCs are organized by companies, such as Coursera or Udacity, who have little interest in sharing their courses open.

*Online*

The course is done remotely via the Internet and does not require physical attendance at a classroom. This feature is essential for anyone from anywhere in the world with an Internet connection can participate in these courses.

*Course*

It should have some learning objectives to be achieved by students after certain activities within in a given period of time (therefore, it should have a beginning and an end). In addition, it should have some quizzes and exams to assess the knowledge acquired by students. And there should be some kind of interaction between students and teachers in every possible way (student-student and student-teacher). [3]

VI. HOW MOOC IS DIFFERENT FROM ONLINE EDUCATION

MOOC is with the mission to help anybody who wants to learn, there is very thin line of difference in between them. Most universities have offered online courses for many years and the basic technologies involved – video lectures, discussion forums, tests, and the like – are the same we have used with on-campus and distance students. The only difference is the scale, the massiveness of the students gathered from all over the world to participate and learn. MOOC courses are same online courses but with a difference. To make a better understanding the differences please follow the table showing the major differences.

Table1: Differences between MOOC and online courses.

MOOC	Online course
<ul style="list-style-type: none"> <li>A technological design that facilitated the dissemination of the activities of participation through one or more platform.</li> </ul>	<ul style="list-style-type: none"> <li>Used an e-learning platform with a set number of functions</li> </ul>
<ul style="list-style-type: none"> <li>Open environment</li> </ul>	<ul style="list-style-type: none"> <li>Closed environment</li> </ul>
<ul style="list-style-type: none"> <li>Massive participation</li> </ul>	<ul style="list-style-type: none"> <li>Limited participation</li> </ul>
<ul style="list-style-type: none"> <li>Free access to contents and paid for certificate</li> </ul>	<ul style="list-style-type: none"> <li>Registration fee</li> </ul>
<ul style="list-style-type: none"> <li>Support of community and of the instructors</li> </ul>	<ul style="list-style-type: none"> <li>Majority support of the teaching staff</li> </ul>
<ul style="list-style-type: none"> <li>Range of communication tools used including the use of social network</li> </ul>	<ul style="list-style-type: none"> <li>Communication through forums, e-mail etc.</li> </ul>
<ul style="list-style-type: none"> <li>Emphasis on learning poem rather than evaluation and accreditation</li> </ul>	<ul style="list-style-type: none"> <li>Evaluation and accreditation oriented program</li> </ul>
<ul style="list-style-type: none"> <li>Depend upon the platform, periodical sessions are open automatically</li> </ul>	<ul style="list-style-type: none"> <li>Offered at very specific moments of the academic year</li> </ul>





In the last three years, over 25 million people from around the world have enrolled in Massive Open Online Courses (MOOCs) offered by Coursera, EdX, and other platforms. [8]

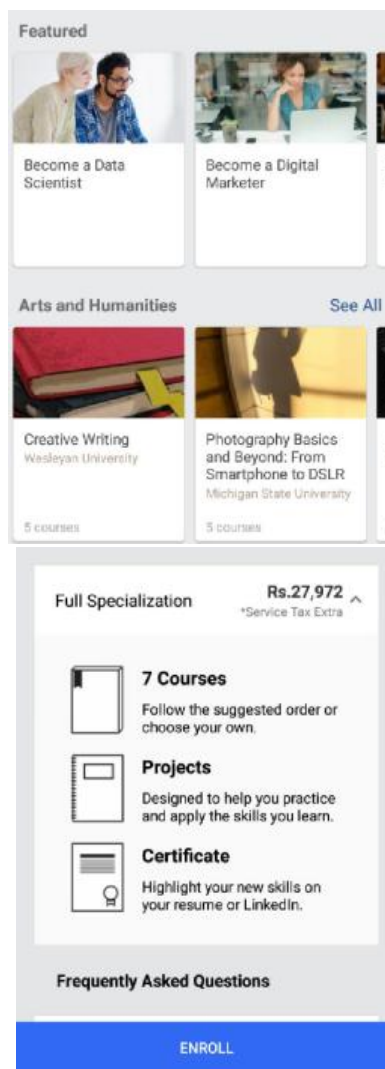
### VII. MOOC'S ROLE IN EDUCATION

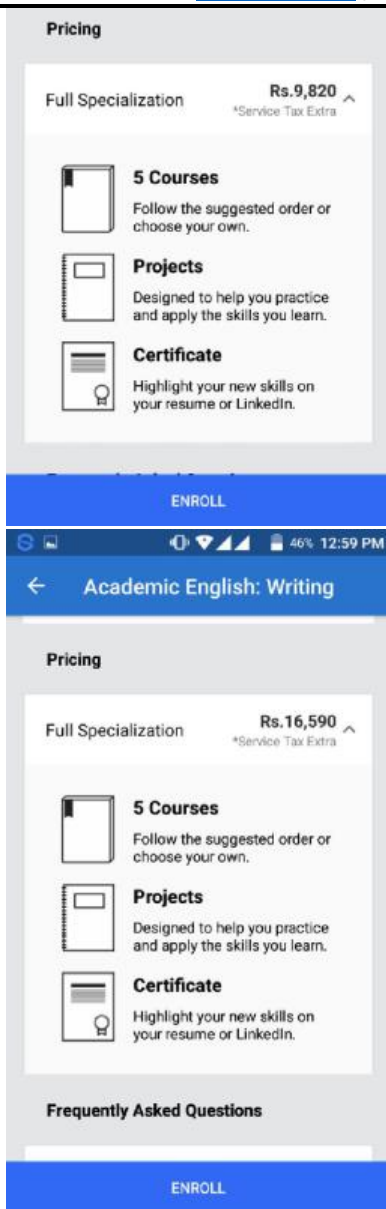
The online learning content in the name of MOOC has been spread out very rapidly and many service providers are in the market to provide the services to a person who wants to learn. In the last three years, over 25 million people from around the world have enrolled in Massive Open Online Courses (MOOCs) offered by Coursera, EdX, and other platforms. Initially heralded as a revolution in higher education access, expectations have been tempered as research revealed that only a small percentage of these millions were completing the courses, approximately 80% already had at least a bachelor's degree, nearly 60% were employed full-time, and 60% came from developed countries (defined as members of the OECD). MOOCs seemed to be serving the most advantaged, the headlines blared, and most people weren't even completing them. [9]

From the above stated data a question raises why people opt for MOOC when they are not completing the same, there are millions of registration for the courses and nowadays the mobile devices are very handy to login and learn anywhere and anytime. What does MOOC provides to the user, some tangible benefits like help in finding a new job, raise in pay scale, help in getting promotion or some intangible benefits like skill enhancement, improvement in performance etc. advantaged populations from developed countries were deriving the most benefits from completing MOOCs. As these courses are available to the users with certificate with a price to pay, and may be this is the reason only people with good socioeconomic conditions are completing the course others are restricting themselves to the course contents only. The maximum population from the registered users for MOOC are interested in "learning" not to get certified, as in many of the site's FAQ's it has been written that the certificate from the service provider will be added to the homepage of the user and it can be linked to the various other sites like LinkedIn for better viewing and response it is not at all accredited by the universities as the primary goal of MOOC's are to provide learning to a person who want to learn.

As far as the role of MOOC's in education as a difference maker depends on many factors if we look at the registered users for the courses the numbers are exciting but the actual beneficiary are very less if we talk about the certification part, the factors may be demographics, socioeconomic, more number of person who give importance to the certificate from the regulatory bodies for future safety, may be the persons got registered just to seek knowledge for enhancing the skill set for their future combat mission in excelling in their careers. There could be 'n' numbers of reasons but there is one thing it is becoming popular

in many parts of the world due to the content and experienced faculties from reputed institutions form the world. MOOC's are can be accessed on different themes like reliability of information, accessibility of information, content, learning – like it is the new style and many people will like this if they find the area of interest in the course content, communication, and outcome of the study. Sometimes skills gained form these courses are of personal gain, in addition to the professional gain.





Coursera Mobile app Showing Courses and their Price

### Classroom Connectors

#### Clever



**What it is:** Clever streamlines the process of logging into educational apps by letting students log into all of their tools with a single set of credentials (instead of dozens).

#### Edmodo



**What it is:** Edmodo is a controlled social media platform for teachers, students, and parents. It allows teachers to assign and grade homework on their mobile devices, students to connect with educators and classmates, and parents to stay up-to-date on what their kids are doing at school.

#### Kahoot!



**What it is:** Kahoot! is a user-friendly tool for designing in-class questionnaires and quizzes. A user designs a quiz, survey, or questionnaire to test the knowledge of his or her audience. Audience members can answer questions using a variety of devices. The quizzes and questionnaires, referred to as "Kahoots," are designed to promote a game-like atmosphere in the learning environment.

#### Schoology

## VIII. SHIFTING TRENDS OF LEARNING / EDUCATION

In the contemporary scenario the education sector is going through waves of changes, the old traditional mode of teaching or educating is still in the main line, but there are many supportive alternatives that are continuously emerging on the scene. Online education, distance learning, MOOCs are few to quote. Other than these there are many options available for learning like, people are targeting every aspect of education for primary to the higher education.



**What it is:** Schoology is a learning management system to facilitate the creation of class rosters, curricula, and calendars. It also keeps track of interactions among students and student assessment results, among other things.

Skype



**What it is:** Skype is an online video-calling tool that allows users across the world to communicate, for free, via the Internet.

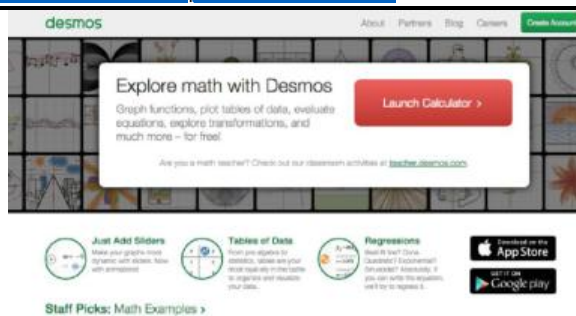
**Interactive Information Providers**

BetterExplained



**What it is:** BetterExplained is a forum for sharing founder Kalid Azad's "Aha!" moments on technical subjects. Through videos, diagrams, and colloquial explanations, the site explains the logic behind mathematical equations and concepts, such as imaginary numbers or Bayes' theorem.

Desmos



**What it is:** Desmos is an incredibly fast online calculator that can graph any imaginable function. It also allows users to add sliders, do regressions, and plot whole data tables, among other things.

Google Knowledge Graph



**What it is:** Google Knowledge Graph is an enhanced way of using the standard search bar. In essence, Google Knowledge Graph consists of those short, accurate answers you see when you ask a question in Google search. Rather than dig through websites to find the distance to the moon in miles (for instance), Google Knowledge Graph quickly answers your query and suggests resources for further investigation.

instaGrok



**What it is:** instaGrok is a search engine that generates a web of related videos, images, articles, and terms based on a student's query. Students can also use instaGrok to evaluate sources and to quiz themselves on specific topics.

Khan Academy





**What it is:** A series of videos that emphasizes self-paced, interactive learning with a large number of online lessons across a variety of subjects.

PatrickJMT



**What it is:** PatrickJMT gives students access to a wide variety of free online video tutorials in math.

Wolfram Alpha



**What it is:** One part calculator and one part encyclopedia. From showing you step-by-step solutions to complex equations to telling you everything you need to know about the 17th president of the United States (Andrew Johnson), this database provides systematized knowledge in an accessible way.

## Language Learning Tools

Duolingo



**What it is:** Duolingo is a language-learning app and website that features comprehensive guides for nine of the most commonly taught languages in the U.S., including Spanish, French, and German.

Pleco



**What it is:** Pleco gives you the freedom to engage with the Chinese language in a variety of ways. It serves as a digital dictionary that helps with vocabulary and also enables you to look up characters from texts, images, and even handwriting.

SpanishDict



**What it is:** SpanishDict is a Spanish translation tool with a built-in community of Spanish language learners.

## Online Courses





**Coursera**



**What it is:** Coursera works with world-renowned universities to give users access to free online courses. Students can learn at their own pace and receive certificates as they complete courses.

**Crash Course**



**What it is:** Crash Course is a YouTube channel created by John Green — author of “The Fault in our Stars” — and his brother, Hank. It offers deeply-researched, information-packed video courses in episodic format on big topics like world history and astronomy.

**iTunes University**



**What it is:** iTunes U is a library of free educational resources. It offers lectures, videos, books, and other educational materials.

**University of Reddit**



**What it is:** The University of Reddit is an online learning community, self-described as an "experimental, open-source, peer-to-peer teaching and learning platform."

**Plotly**



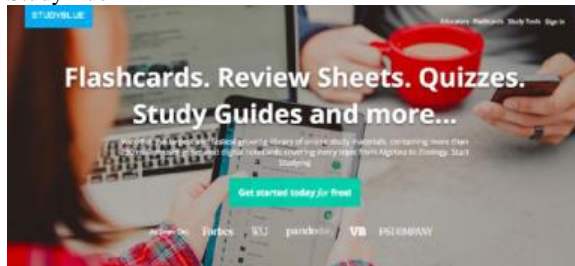
**What it is:** Plotly provides a user-friendly platform in which graphs can be created and shared in a Web-based format.

**Prezi**



**What it is:** Prezi allows you to make cool interactive presentations and collaborate on projects in real time. It can also feed updates of your work to your devices.

**StudyBlue**



**What it is:** StudyBlue is a popular online studying platform. It boasts a gigantic library of user-created flashcards and study guides.

**Quizlet**



**What it is:** Quizlet allows users to create study tools, such as quizzes, flashcards, and games — which can then be accessed on computers or mobile devices. It also allows teachers to create study resources and share them with an entire class.

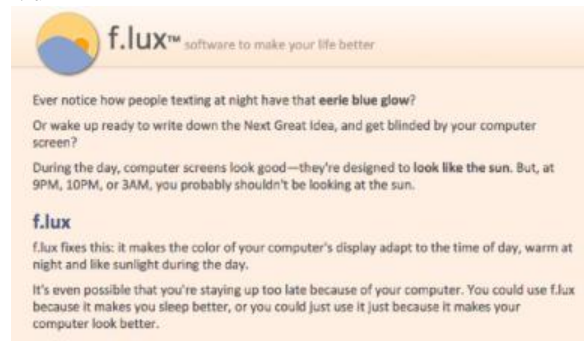
### Productivity Boosters

#### Cold Turkey



**What it is:** Cold Turkey will help you to stay focused and on task by allowing you to block applications, websites, or even the entire Internet for a fixed amount of time.

#### f.lux



**What it is:** f.lux makes the lighting of your computer screen adapt to the time of day. This change in lighting is supposed to help you sleep better by affecting the way blue light is used in your nighttime computer screen.

#### Focus Booster



**What it is:** This productivity app helps you stay focused by giving you the tools you need to implement the Pomodoro Technique — a method of focusing that involves short periods of concentration followed by quick breaks — in your work life and study habits. You can download a timer (to your desktop or mobile device) that keeps track of how long you've been focused on a particular task and helps you remember when to take breaks.

#### RescueTime



**What it is:** RescueTime helps you monitor how you are spending your time when you are on your computer, and it provides reports that analyze your productivity.

#### Unstuck



**What it is:** Unstuck is like a private life coach that lives in your computer or phone. When you're stuck with a problem, it will ask you questions about your situation, then categorize the kind of "stuck" you are. Once it has categorized your current state of mind, it prompts you with ideas for overcoming your current situation.

#### Reading Enhancers

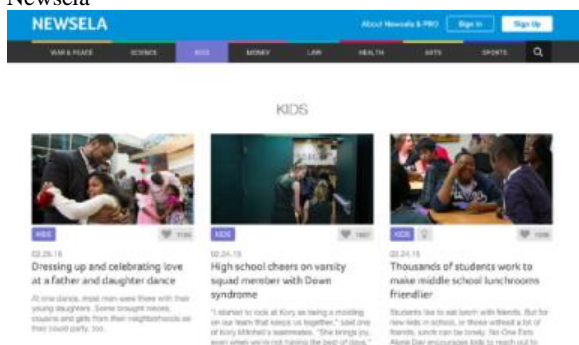


LightSail



**What it is:** LightSail is an educational reading app. It combines a large library of 80,000 books with in-text assessments and quizzes.

Newsela



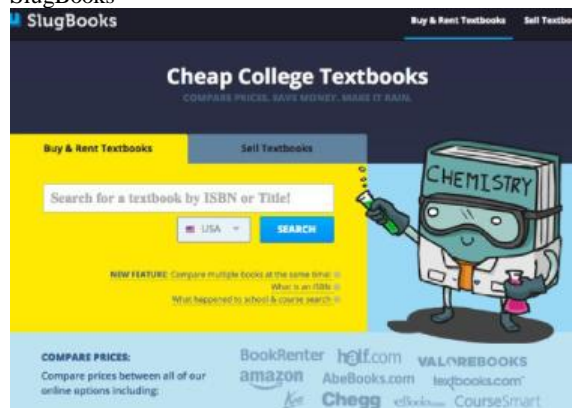
**What it is:** Newsela — a combination of the word “news” and the acronym “ELA” — helps students develop critical reading skills that are aligned with the Common Core. The online reading program uses relevant news topics and articles to test students in five different reading levels. Quizzes help students work through the material they are reading. Teachers can view students’ activity to help them keep track of progress and areas of weakness.

panOpen



**What it is:** panOpen provides a platform for easily accessing and evaluating high-quality open educational resources (OERs). An OER is a piece of content that has been freely and openly licensed for educational purposes — it can be a textbook, an assessment, a collection of course materials, or even an entire course.

SlugBooks

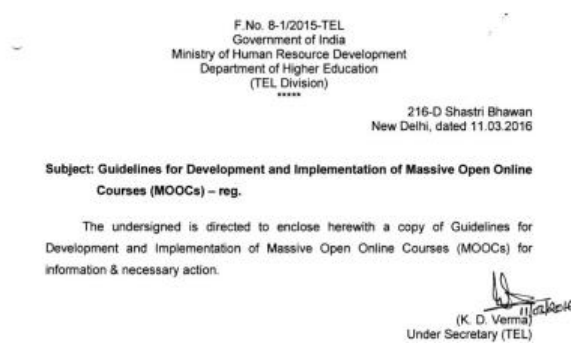


**What it is:** SlugBooks helps students find inexpensive textbook options. It compares prices from various online retailers to determine where students can find the best price to buy or rent. It also provides a platform for people looking to sell textbooks. [10]

From the above examples it is clear that people are working in the direction of better learning, there are plenty of resources for a person who wants to learn and upgrade skills, only the MOOC are not the last option.

IX. MOOC AND MHRD

MHRD – Government of India, Ministry of Human Resource Development, and Department of Higher Education has released Guidelines on dated 11.03.2016, for Development and Implementation of Massive Open Online Courses (MOOCs). Massive Open Online Courses, An initiative under National Mission on Education through Information Communication Technology (NME-ICT) Programme.



These programs are with a view to providing access to the best quality learning resources across the country, the project 'Study Webs of Active Learning for Young Aspiring Minds' (SWAYAM) has been started. SWAYAM provides an integrated platform and portal for online courses, using information and communication technology (ICT) and covering High School till all higher education subjects and skill sector





courses to ensure that every student benefits from learning material through ICT.

SWAYAM is a:

1. one-stop web and mobile based interactive e-content for all courses from High School to University level.
2. High quality learning experience using multimedia on anytime, anywhere basis.
3. State of the art system that allows easy access, monitoring and certification.
4. Peer group interaction and discussion forum to clarify doubts
5. Hybrid model of delivery that adds to the quality of classroom teaching.



<https://swayam.gov.in>

Whereas, Under NMEICT, NPTEL (a group of 7 IITs and IISc) developed e-content in 23 Disciplines numbering 933 Courses. CEC has so far completed the development of e-content in 29 Undergraduate subjects and shall further be completing e-content in 58 Subjects in four quadrants. UGC is in the process of completing e-content in 77 Post Graduate subjects. Similarly, many other institutions are engaged in development of e-content. On successful completion of each course, the institution offering the MOOCs course would issue the certificate, along with the number of credits and grades, through which the student can get credits transferred into his marks certificate issued by his parent institution. Guidelines for credit sharing will be issued by concerned Regulators such as UGC, AICTE, etc. for consideration by various Institutes.

Indian government is also in the bandwagon of MOOC, they are planning massively for the massive courses, IITs and IISc are involved along with UGC and AICTE for regulation. This may be different from private MOOC providers and may be of one level up from them as it is government initiative and may be cost effective too. The reason came up why after registering in large numbers but the course completion is very less, charges for the certification could be one of the reason. The MOOCs form MHRD may be more effective to the users of Indian Scenario and users other the other countries with similar socioeconomic conditions.

## X. TOP UNIVERSITIES OF WORLD ARE OFFERING MOOC

Massive open online courses (MOOCs), which universities within the U.S. and across the world offer as a means to earn credit without physically sitting in a classroom, became more popular and more expensive in 2016.

According to a recent report from the tech company EdSurge, MOOCs have become more prevalent. The report, titled “**Monetization over Massiveness: Breaking Down MOOCs by the Numbers in 2016**,” was published Dec. 29. Dhawal Shah, founder of Class Central and contributing writer at EdSurge, wrote the report, which states that 58 million students signed up for at least one online course in 2016, a notable jump from the 35 million students who registered for MOOCs in 2015.

The increase in MOOC participation persisted despite an increase in MOOC registration fees. EdSurge’s report states that no major venture funding rounds were awarded to MOOC providers in 2016, as they were in previous years. This year’s lack of funding meant that providers had to make more money through their courses. As a result, certain features, such as certificates, graded assignments, and content, were no longer offered for free.

“That means for many providers, monetization became a priority,” Shah said. “All the major providers already have or plan to launch courses that are paid only. And it seems to be working. The “Big Three” MOOC providers—Coursera, Udacity, edX—combined have potentially made around **\$100 million in 2016**.”

In addition to increased participation and registration fees, EdSurge’s report also points to several other trends within MOOCs in 2016. For example, the variety of courses also increased in 2016. This past year, 2,600 new courses were announced among cloud providers; 1,800 new courses were released in 2015. As of now, 6,850 courses are offered across 700 universities.

According to the report, these massive online courses are getting less massive. The MOOC model has shifted from vast numbers of students enrolled in a virtual session that occurs once or twice a year to a system where students can sign up for classes whenever they want and take them at their own pace. Shah compared the new model to a “Netflix-like experience.”

Another change across MOOCs this past year is the gravitation toward business-oriented classes. Coursera announced its Coursera for Business program this year. Udacity created a product targeted toward corporate training. FutureLearn has a product for professionals in the health care and education sectors.





“Taking the course simultaneously with thousands of learners is no longer a selling point of MOOCs from a course providers perspective,” Shah said. “There’s been a decisive shift to focus on ‘professional’ learners who are taking these courses for career-related outcomes, over the dabblers and lifelong learners who take courses just for curiosity’s sake.” [11]

## XI. MOOC PROVIDERS WORLDWIDE

MOOC users reach 58 million globally [12]; this is a big number the massiveness of the course can be easily depicted from the number mentioned. MOOCs move from free to fee as skills demand grows [13]; because of the demand there has been a lot of changes done in the structure of the courses by the course providers. The massiveness of the people who joined the courses is shifting to the paid quality contents and courses. There are courses available which can be termed as free, but people are ready to pay for the courses from they can gain something or it is helpful in getting raise in the paycheck. edX, Udacity, Udemy and many more are constantly changing, evolving their course structure to attract more and more students from all round the world. If we look at the list of the MOOC providers given next to this section, the massiveness of the MOOC providers can be felt. Everyone is targeting the same. But with a slight difference.

*List of MOOC providers worldwide:*

- **edX** – Owned by MIT & Harvard University. It’s one of the largest provider of MOOC education internationally. Topics include biology, business, chemistry, computer science, economics, finance, electronics, engineering, food and nutrition, history, humanities, law, literature, math’s, medicine, music, philosophy, physics, science, statistics and more.
- **NovoEd** – Founded by Stanford University professor Amin Saberi and PhD student Farnaz Ronaghi. Unlike any other MOOC provider, here students can collaborate in small teams with students around the world and submit assignments.
- **Udacity** – Offers proprietary “Nanodegree” programs for learning technology skills that matter by doing projects employer’s value, without leaving your current job.
- **Udemy** – Mostly known for their collection of paid courses but they have many great courses available for free, such as: Build Your First Website in 1 Week with HTML5 and CSS3 & Become an iOS Developer from Scratch
- **Coursera** – The most popular provider of massive open online courses globally. Coursera has more than 10 million users in 890 courses from 117 institutions.
- **Harvard Open Courses** – Under Open Learning Initiative (OLI), Harvard has launched a plethora of free courses to everyone around the world. Topics covered such as art, humanities, museum studies, business studies, management, computer science, engineering, mathematics languages, journalism, literature, speech, writing, pre-medical studies, science, environmental studies, social sciences and study skills.
- **MIT OpenCourseware** – Large scale on-line publication of MIT course materials. It includes many free courses available to anyone, anywhere.
- **Khan Academy** – Learning from their micro lectures and practice exercise is quite engaging. Their motto is “A free, world-class education for anyone, anywhere”.
- **+Acumen** – Offers free learning material for social change leaders and entrepreneurs.
- **Acade.me** – A new platform which provides access to major courses to everyone, around the globe.
- **Academic Earth** – It offers curated collection of best free courses from world’s top universities such as Harvard, MIT, Princeton, UC Berkeley and Yale.
- **Acamica** – An Argentina based free learning platform for students who are unsatisfied with their formal education system. They simulate learning using videos, interactive games, simple guides and gamification techniques.
- **Alison** – its aim is to enable every person to gain basic knowledge, education and workplace skills. Offering more than 600 certified courses in more than 10 languages. Their slogan is “A new world of free certified learning”.
- **Allversity** – Helping users to learn, teach, and connect using free digital courses and tools in the field of mathematics, science, and history.
- **ApnaCourse** – They give trainings and certifications online which helps employees internationally. Targeted towards working professionals who wants to gain skills and climb up the corporate ladder.
- **Aquent Gymnasium** – Provides courses focused on most in-demand creative and technology skills such as responsive design, jQuery, UX and coding for designers.
- **Box Hill Institute** – BHI is a leading education provider in Australia which is offering few of their courses for free; to let people experience the quality of their education.
- **C++ Institute** – Advanced e-learning programme with milestones, motivational tools and skills verification in C++.
- **Canvas Network** – It offers open, online courses taught by educators anywhere in the world. It collaborates with educators, institutions and technologists to cut educational barriers.
- **Carnegie Mellon University** – Open Learning Initiative – CMU is offering more than 20 courses which gives you targeted feedback. This system helps you to know if you are mastering the topic or if you need more practice.
- **Commonwealth of Learning** – The only inter-governmental organization solely concerned with development of open learning, distant education and knowledge. It provides resources and education to Commonwealth’s 54 member states.
- **Complexity Explorer** – Dedicated to online courses and other educational materials related to complex science systems. Developed in collaboration by Santa Fe Institute and Portland State University.
- **Digital Business Academy** – Empowers learners with the business skills to start, run or join a digital business. “When and how to start a digital business.” and “Developing digital products and marketing and branding.” are among the 8 free courses offered



- **Duke University** – Leading pioneer in education is providing many courses for free. Subjects such as healthcare, chemistry, human physiology, astronomy, neuroscience, data analysis and more, are covered.
- **EduKart Open** – A platform developed by India based distance learning and online education company; to deliver information about free MOOCs globally.
- **ELD** – An initiative by The Economics of Land Degradation (ELD) to provide free education based on subjects such as land degradation, water prevention, environment and health.
- **First Business MOOC** – Offering best practices of business in various languages.
- **Forum Academy** – World Economic Forum has launched their own MOOCs on subject such as global IT outlook, future of automotive industry, understanding social innovation and more.
- **FutureLearn** – Owned by The Open University, England which provides step-by-step free online courses from topics such as science, technology, art, humanity, spiritual science and business.
- **FX Academy** – Founded by DailyForex.com who have monitored and reporting Forex market since 2006. FX Academy is a comprehensive learning platform to learn about Forex trading at any-time, from anywhere.
- **Grovo** – It's an innovative learning platform that offers a micro learning system which manages 4,800 video lessons covering more than 160 subjects. Its focus is to enhance skills of users and businesses on internet tools, cloud systems and other professions.
- **George Washington University (GW Online)** – GWU started offering free open courses to public on select topics as part of their mission to provide worldwide thought leadership and access to education.
- **IAI Academy** – The Institute of Art and Ideas offers MOOCs in philosophy, science and politics.
- **Instreamia** – Provides system to learn languages through online articles and videos.
- **Investoo** – A free online tool to practice forex trading. It was featured on Equities.com, MoneyWeek.com and TraderPlanet.com.
- **iTunes University** – Apple's own platform to make the education intuitive. Their library includes many free courses in various topics.
- **iversity** – Iniversity is a winner of the "MOOC Production Fellowship" held in early 2013. Their courses include critical thinking, public speaking, idea generation and business analysis.
- **Janux** – The University of Oklahoma and NextThought in collaboration developed various courses for free. Made available through Janux.
- **Learning by Giving Foundation** – MOOC focused on philanthropy for people who want to make a difference in the community. "Giving With Purpose" – To help non-profit organization of your choice. Backed by Warren Buffett and family.
- **Leuphana Digital School** – Leuphana University offers various digital courses free of charge and participants get opportunity to obtain a university certificate after successful completion.
- **Marist College's FOLD** (Fashion Online Learning Domain) – Educate yourself with the communication and art of fashion from a global perspective.
- **MongoDB University** – It offers in-depth classes with hands-on experience with MongoDB case studies based on years of field experience.
- **MOOC-Ed** – Courses on research based models of professional development and learning through project-based learning, collaboration and peer-supported learning, rather than tests and grades.
- **MRUniversity** – Marginal Revolution University offers an education website with courses on economics. It includes articles, videos and presentations.
- **One Month** – Self-paced courses which can be finished in 30 days with just 15 minutes a day. Ruby on rails, HTML & CSS, growth hacking, iOS and web security are some of the topics covered.
- **Open Education** – Through Open Education readers are exposed to both subjective and objective look at various issues facing professional systems today.
- **The Open University** – It's the largest academic institution based in UK and a world leader in flexible distance education. It provides many free courses in various subjects.
- **Open Yale Courses** – Yale University provides free access to a selection of their introductory courses through this platform.
- **Open2Study** – Backed by Open Universities Australia (OUA). It offers more than 45 free courses for anyone around the world.
- **OpenCourseWorld** – Their courses are structured in the same way as seminars and lectures in major universities. There is a start and an end date to every course.
- **openHPI** – Hasso Plattner Institute, Germany's highest ranked computer science institute provides in-depth knowledge based courses multi-faceted topics in information technology.
- **OpenLearning** – A MOOC platform which allows anyone to create, run and enroll in any course from anywhere.
- **openSAP** – Information Technology (IT) based MOOCs provided by SAP and HPI, Germany. It has been awarded by "Innovation in Learning Bronze Award 2014" at The Learning Awards 2014 and "Best in Extended Enterprise Learning Program".
- **OpenSecurityTraining** – Training resources for computer security and other security topics that can be learned in a day.
- **OpenUpEd** – Their vision is to reach every learner who is interested to take part in online higher education, irrespective of their needs and particular situation. Large number of courses are available in various languages.
- **P2PU** – Peer 2 Peer University (P2PU) allows students to organize and take part in courses and study groups about any specific topic.
- **Polimi OPEN KNOWLEDGE** – Bridging the gap from high school to university, from Bachelor of Science to Master of Science and from university to job.
- **Saylor.org** – Saylor Foundation offers free and open classes of college level courses with certificate upon completion of each course.



- **SDSN.edu** – Educational materials from world’s leading experts on sustainable development.
- **Sobat.org** – School of Business and Trade (SoBaT) offers free computer accounting education.
- **SoundviewPro.com** – It provides video courses on critical business skills such as “Leveraging the strategic power of visuals.”, “People skills that create success.”, “Crisis management in business.” and more.
- **UniMOOC** – Tec – Teaches basics of web development introduction, XML introduction and history of the internet.
- **UNINETTUNO OpenupEd** – “University without boundaries”. Their courses are available in Italian, English, Arabic and French on areas such as engineering, communication, law, psychology, economics and literature.
- **UoPeople** – University of the People “World’s first non-profit, tuition-free, accredited, online academic institution.” It provides undergraduate degrees in business administration and computer science.
- **UP2U** – Currently they are offering courses based on WCAG and Adlab.
- **Virtual Linguistics Campus** – Platform to learn both theoretical and applied linguistics through certified linguistic courses and materials.
- **WEU** (World Education University) – They offer free college level education to everyone. All they ask is that you honour “The WEU Pay-it-Forward Pledge™” to share it others.
- **WizIQ** – A platform to provide systems for comprehensive training and teaching.
- **World Mentoring Academy (WMA)** – Making many courses from leading education universities of the world available at your fingertips.
- **The Writing University** – Just what the name suggests, they provide open courses on writing – fiction, poetry and songs.
- **Younico** – It’s an Russia based MOOC provider which offers both free and paid courses on topics ranging from IT to psychology.
- **MHRD** – Govt. of India’s – Study Webs of Active-learning for Young Aspiring Minds [SWAYAM]. Currently, SWAYAM is expected to offer three different courses - one from UC Berkeley and two from IIT Bombay and SWAYAM is going to use openEdx as its MOOC platform. Indian Institute of Management Bangalore has also joined edX and will host online course soon. [14]

## XII. QUESTIONNAIRE

This is a new paradigm shift in the learning environment, MOOC and other similar service providers that are mentioned earlier, can do the miracle of shifting the students from classrooms to the virtual environment. Will MOOC and other courses be the supportive element for the traditional teaching environment?

There are many questions like these, that could be answered only with the time, and the best person who can answer them are the users who have undergone for some of these courses,

what they feel about the course, its effectiveness, credibility and many other things.

To understand this the author had developed a series of questions to understand the effectiveness of the MOOC and the same has been floated online to collect the responses from the respondents.

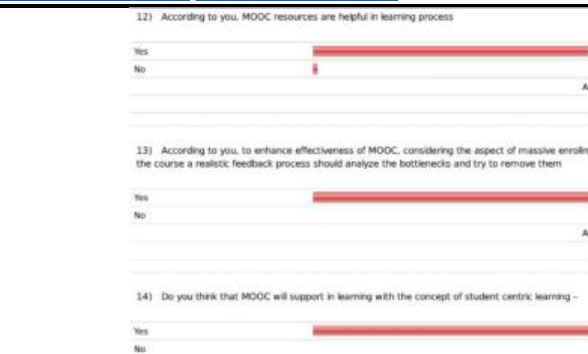
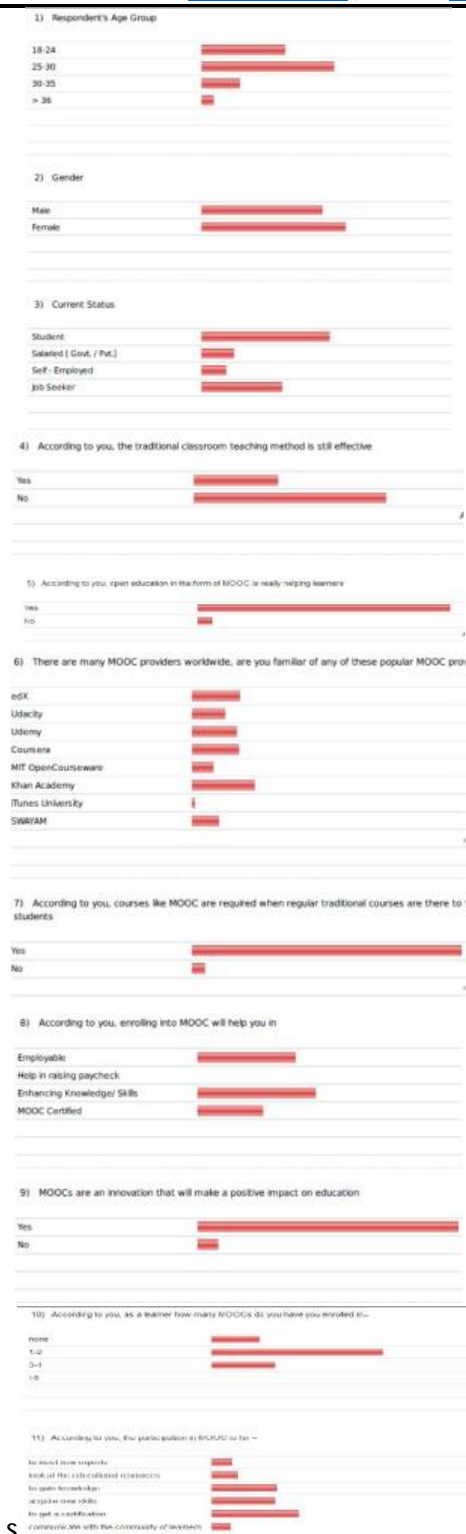
Kindly for follow the questionnaire regarding shifting trends ... MOOC with the online link:

[https://eSurv.org?u=Shifting\\_Trends\\_and\\_MOOC](https://eSurv.org?u=Shifting_Trends_and_MOOC)

## XIII. DATA ANALYSIS AND INTERPRETATION

The data was collected form the respondents form different age groups and different viewpoints. To understand their views the following is the graphical representation of their responses. According to the responses the author is going to understand and analyze their responses and will try to justify their thoughts.

The following are the data received from the respondents:



The responses collected through survey link from the users and may be non- users of MOOC, the respondents were youngster from the age group of 18 to 30 years with male and female in almost equal quantity. As per the current status of the respondents most of them are students and job seekers, few of them are salaried employed either in government or private organization. Majority of them say, traditional teaching methodology is not effective in contemporary scenario. Majority of them are in support of MOOC as supportive element in helping learning new concept. From the long list of available MOOC providers a few of them are selected, from the given list of popular providers to the respondents Khan Academy, Coursera, Udemy, Udacity and edX are familiar to them. Maximum of respondents are in support of MOOC courses' existence along with traditional learning, this shows something is more required from the traditional courses to the students and those who are through and seeking job. Most of the respondents are enrolling in MOOC courses for making themselves employable, enhancing their skills and for certification form MOOC. Most of them are ready to accept that the MOOC will provide a positive support to the education and learning process. As per the MOOC enrollment most of them are enrolled for 1-2 courses and few of them are engaged in 3-4 courses. Enrollment and participation in MOOC gives a clear indication for "certification" followed by "gain knowledge" and "skills". The MOOC resources are liked by everyone as they are good, people from top universities and institutions of the world are making effort to enhance the skill worldwide. The effectiveness of MOOC and in the light of massive enrollment and non- completion of course, the requirement of feedback system is supported by every person, to find out what is the reason for non- completion of course after enrollment is there anything the course providers can do to improve the situation. Student centric learning, is very much going to get benefit from MOOC, as the students want to excel in their life and growth for their careers, MOOCs can be very helpful to them for enhancing their skills and knowledge.

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XIV. CONCLUSIONS AND SUGGESTION

The topic like as name suggested Massive, massive enrollment, massive course providers worldwide, and massive opportunity to learn and enhance skill set everything is massive. The analysis of shifting trends in education, learning with new feathers in the cap like open education, student's centric learning approach along with the traditional class room teaching approach. People are finding new ways to learn and earn, as the time changes the trends are shifting and changing for the betterment.

The MOOC providers are growing day –by day, the original concept of massive enrolment is slightly shifting for learning to earning, people are constantly changing the content to get attraction from learner, and still the model is same learn from us but for “certification” pay to us. Indian government's initiative in MOOC is “**SWAYAM**” with the support of IITs, UGC, and AICTE etc. the MOOC is a new way of learning all the person are welcome who want to learn, all the person from students to the employed ones are using this platform to enhance their silk.

Most of the respondents are enrolling in MOOC courses for making themselves employable, enhancing their skills and for certification form MOOC. Most of them are ready to accept that the MOOC will provide a positive support to the education and learning process. One factor in the massiveness of enrolment and massive service providers the non – completion of the course is the point to ponder, why the people are enrolling in the course but they are not getting certified themselves, the major suggestion of the study is getting the root cause of the reason “ massive enrollment and non – completion” of course.

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