# A Study of Impact of MOOCs on Education

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Abstract - Massive Open Online Courses (MOOCs) are internet-based courses having incredibly large numbers of participants. It is considered as the latest 'big thing' in Open and Distance Learning (ODL). Since a lot of research and experimentation has started on MOOCs, the results are giving a better understanding of how MOOCs can help participants who are willing to learn through new ways of learning. MOOCs are characterized as remedies to educational disparities related to social class and bridge the gap between the affluent and poor distant learner. The critics are questioning its low completion rate (people who start a MOOC but don't finish) its major drawback. However, given the number of participants registering for MOOCs at present, completion rate and absolute reach shall be considered as significant. Over 2.1 million course completions were recorded as of April 2015 and one million people have completed a Coursera course since 2012. In this paper we have studied many interviews, questionnaires research papers having the target learner e.g school students, graduates, employment seekers and already employed people who either wanted to upgrade their skills in their corresponding fields or desired to change their existing jobs. Based on that we find the impact of MOOCS on their education, Jobs and careers of these participants taking the test cases from various MOOCs all around and the MOOCs offered by Harvard and MIT in particular. Our work includes its impact and access on those students and job seekers who are having different Socio-Economic Status.

**Keywords** - MOOCs; Remedies to Educational disparities; Open and Distance Learning (ODL); Socio-Economic Status (SES); target learner; Completion rate.

## I. INTRODUCTION

Massive open online courses (MOOCs) are considered as a remedy to educational disparities among the educationally cut-off, economically poor and digitally inaccessible class of the world. MOOCs are largely designed for those who are geographically distant and inaccessible to the hub of education. India has got tremendous potential in creating advanced online classes and freely available content along with countries like United States etc. The Ministry of Human Resources Development has already started freely available econtent on MOOC platform known as SWAYAM. In the first instance as of June 2017 about 247 MOOCs under Swayam has been announced by the six National MOOCs Coordinators

(NMCs) i.e NPTEL, UGC, CEC, IGNOU, NCERT and NIOS. While India is competing with major players like Coursera and edX who offer more than 500 online classes each a year Indian students are largely gained in expertise mostly in those cities where they still face shortage of experts and professors. In India we have a record 3.2 million students currently studying in engineering courses and there aren't enough experts and experienced professors to teach everyone in person. All courses aren't possible to be offered in every institution mainly in far off and rural areas and sometimes there people with just a bachelor's degree is pressed to teach. The best hope of fixing this problem is definetly going to be introduction MOOCs in these institutions . In India a pioneering Indian IIT bombay computer science Professor Deepak Phatak is playing a pivotol role in pioneering the MOOCs for online education in India. Whereas Indian education system has to broaden its access to primary and higher education and bring down its cost by using technological advances. Massive Open Online Courses have emerged as a viable model for imparting online education. Indian enrolments account for about 8 percent of worldwide activity in Coursera and 12 percent in edX, the two leading providers of MOOCs (George Anders July 27, 2015). Only the United States has much higher share than India and then China is roughly comparable to India in registration of MOOCs. India top universities and IIT's are creating various MOOCs itself and have over 700 courses running at present. Findings in this paper has an answer to those who raise concerns that MOOCs and similar approaches to online learning exacerbate rather than reduce disparities in educational outcomes. We have in past few years around twenty five million people enrolled for MOOCs offered by Coursera, EdX, and other platforms. Heralded as a longlasting revolution in higher education for its quality and access and have succeed to keep its promise in terms of enrolments and access, quality of education some researches reveal that only a small percentage of these millions were completing the courses, out of these we could find 80% were graduates, 60% (approx) were fulltime employees and 60% belong to those countries in which quality and access to education is very high. These researches show that MOOCs seems to be serving the most advantaged class of people rather than those unadvantaged people who couldn't either start their education or continue their education formally also headlines were shown that in MOOCs completion rates are very low i.e most people weren't even completing it. But again we were

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expecting that MOOCs will catch the audience from only technical courses like Engineering, Sciences, Medicine etc but now in developed economies we see the biggest audience are among those who are from nontechnical courses like history, psychology, or some other courses who remain the side interest of the student. We find from the various surveys of researchers that people who often drop out after a few sessions were from developed countries as compared to India. In India courses offered by Indian MOOC providers or providers from U.S, Europe or any other country the big following are college students, recent graduates and employed learners. According to Rick Levin, CEO of Coursera the Indian students are more serious bunch of learners and hope that the right technical courses can help them win better jobs and grow in their fields. Thus the aim of putting students and teachers in digital contact with the country's most renowned experts and Professors in particular and across the world in general have succeed in sharing their expertise without really travelling and visiting their location.

## II. BACKGROUND

For nearly a century ago, technologists have promised that new broadcast media will bridge resource gaps between students in more- and less-privileged environments. With radio, the underprivileged school going will become the privileged was the promise in the 1930s; in the 1960s, boosters declared that television would make instruction of higher order available to those young people who they might not otherwise receive. In the first years of the 2010s, technologists have heralded the possibility that massive open online courses (MOOCs) can "democratize education". Despite the previous generations of broadcast and interactive technologies like film, radio, television, personal computers, Internet access, and Web 2.0 platforms have made an big impact on our day to day lives but in terms to fulfil the hundred percent promise of educational parity they are yet to claim their promise. The new claim from MOOC advocates empirical study. To study the claim of MOOCs I have used here the term called "digital divide" which was put forth by the famous scientist N Attewell he said that the gap in education technology opportunities between students from different backgrounds is by access and non access to digital technology. Data of the survey that was collected from students registered in various MOOCs and studied their course performance and course access is generally unavailable in studies of broadcast technologies. The rate of completion of different MOOCs offered in India and by Harvard and MIT on the edX platform is mentioned also here. Recent articles on MOOCs in both the scholarly literature and the popular press emphasize the fact that hundreds of thousands of people around the world now have access to courses offered by elite universities (Lewin, 2012). Research also shows that the people who are taking advantage of MOOCs are young, well educated, and even employed predominantly male, from

developed countries. They have higher levels of formal education, and are unlikely to encounter barriers related to the affordability of higher education [1]. The individuals expected to benefit most from MOOCs are inadequately represented among the early adopters of this new form of education (Christensen et al., 2013). But the study shows we have more number in MOOCs who are already well educated compared to who want to start their careers. The reason that target learners aren't able to start or complete the MOOCs can well be described by Attewell's argument of "digital divide," the gap in education: one of access and another of usage. Affluent students more easily use different levels of emerging technologies than less affluent. As they are more used to them since early ages for different purposes with different levels of support from mentors. It has been seen historically that digital divides of usage compounds digital divides of access. Also the surveys from the National Assessment of Educational Progress (NAEP) in 1996 and 2011 showed that students from more expensive schools were more likely to use computers for simulations or modelling in contrast to students from schools serving low-income students. Later students were more likely to use computers for documentation and presentation purposes. Different patterns have been found across the sciences and other subjects when comparing schools with similar computer-student ratios in different standard students from different backgrounds. Attewell found evidence of similar patterns of computer usage at home, where the academic benefits of home computers were greater for children from affluent families The target learners are somehow missing the opportunities due to some valid reasons since its inception. These patterns extend into the era of free Web tools as well as was examined by Reich and colleagues in their study of the use of freely available wikis-platforms for collaborative Web publishing. Students of different age groups e.g from class 5th to higher classes (5th-12th) in schools in the year 2008 onwards. They found that free wikis were more likely to be created in affluent schools, and in these schools, wikis were more likely to be used to support collaborative problem-solving and new technologies, innovations information for literacy. In schools serving lowincome students, wikis were mo re likely to be used for teacher-centred content delivery. This research suggests a potential paradoxical effect of free online-learning resources: They can disproportionately benefit the affluent—people who have the social, financial, and technological capital to take advantage of new innovations, including those that are free.

## III. MATERIALS AND METHODOLOGY

As many research findings on Massive Open Online Courses are suggesting that MOOCs are deepening education system rather than widening its access across the geographical boundaries. Despite a downfall in media coverage of MOOCs in the west it is still being positioned as pivot in standing

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struggling higher education systems in the Global South. The number of initiatives and efforts to incorporate MOOCs within the formal structures of higher education are standing high in widening its access. Indian learners are one of the largest subpopulations of learners in Western MOOC platforms, and the Indian Government is taking steps towards formalising MOOCs, allowing institutions to offer learners 20% of their credit-based courses through the SWAYAM platform. Despite a large amount of research emerging on MOOCs in the world, more than 90% of all empirical MOOC research originates in the West. It is suggesting that a lack of research on MOOC is going in rest of the world. A comparative study of Indian learners in MOOCs is going to identify the demographics, motivations, learning experiences and challenges faced by learners on these courses. The study of Indian learners on a Western platform (FutureLearn ) with Indian learners on an Indian platform (NPTEL - National Programme for Technology Enhanced Learning) will identify the demographics, motivations, learning experiences and challenges faced by learners. [2] .The survey conducted will be in 2500 MOOCs and will shed light on the varied learner groups that take MOOCs in India, and also shall suggest a nuanced role that MOOCs could play in the world in general.[2]

#### IV. DISCUSSIONS AND RESULTS

Although MOOCs were always seen as a possible path toward upward mobility in education, few studies have questioned if they do and how the most populations shall gain to leverage these resources. The MOOC phenomenon has challenged established notions and prompted education institutions to reexamine their own current missions in relation to them (Daniel, 2012) and it has even been argued that every institution needs a MOOC strategy (Kim, 2012. I also put forward a review of its potential of transforming education and raising the level of education globally. The learners those who did register for courses were with greater socioeconomic resources (SER) and more likely to earn a certificate. Also the differences in MOOC access and completion rate were larger in children of age 10 -25 years and the age groups, where people find on-ramps into science, technology, engineering, mathematics and medicine (STEMM) careers. The majority of registrants in MOOC courses already had a good background of education and were from colleges or graduate degree holders, and some studies have found a positive, substantively modest correlation between a student's level of education and more importantly the course completion. We built these studies with a much richer demographic portrait of students across a wider range of streams and backgrounds. We use Socioeconomic status (SES) i.e one's social and financial resources, and it is typically viewed through a combination of measures . In this study, three indicators of SES are used: (i) parental educational attainment, (ii) neighborhood median

income, and (iii) neighborhood average educational attainment. When signing up for edX, students were asked to provide their residential address, and for MOOC registrants, the address was used to identify each student's census block group, a "neighborhood" of ~1500 people for which census data about median income and educational attainment was already available . Although more direct measures of family income or wealth are preferred, still these neighborhood-level measures is also proven useful. People particularly in the age group of 10 to 16 years for several reasons were studied. First, these are the years that have traditionally been critical for students finding an on-ramp into higher education be it science, technology, engineering, and mathematics (STEM) education. Also, MOOC advocates have identified class 10th ,12th students as a promising target population for MOOCs and universities and MOOC platforms are increasingly targeting this population with their offerings. Pragmatically, these students likely live at home with their parents, and our three measures probably identified an individual's SES with greatest fidelity in this age range. In the 2012–2016 academic years, large number of MOOCs were offered. Harvard and MIT offered 68 free courses and modules on the edX learningmanagement system, which attracted 1,028,269 unique participants (individuals who entered the courseware of one or more courses) . the study examined 164,198 unique participants from the various backgrounds who reported an age between 13 and 69 and provided a residential. Because many participants registered for multiple courses, these students accounted for more than 200,000 participant-course observations. We compared the demographic characteristics of one area in U.S with the overall population of U.S. to better understand the digital divide of access. This comparison can be understood as a case-control study, with edX enrolees as cases and a synthetic set of one-to-one matched controls by geographic area, with the assumption that controls were unlikely to be enrolled in edX, given the large population size. We then examined how measures of SES predicted course completion to understand the digital divide of usage. For individuals of all ages from 16 to 69, MOOC participants lived in neighborhoods that are more affluent and have higher average levels of educational attainment We found that, on average, MOOC participants resided in neighborhoods where median household income was as high as 10lacs, which was 2Lacs above the neighborhood average of 5 Lacs in US. When we restricted our comparison to individuals aged 16 to 21, the difference was 3 Lacs. We found large differences in neighborhood educational attainment across all age groups as well. On this survey to conduct a variety of sensitivity analyses were done, which suggested that this finding was robust and persisted at the individual level. Specifically, it was found that the positive relationship between neighbourhood SES and MOOC participation persisted across courses and within states, countries, and census tracts survey respondents

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appeared similar to non-respondents with respect to our measures of SES, alternative demographic data sets and neighborhood identification approaches produced similar estimates; and participants also tended to live in more densely populated neighbourhoods, which suggested that MOOCs do not disproportionately serve the geographically isolated only [3]. If we take MOOC participation as a function surrounding or neighbourhood SES, it allowed us to consider that the participation of MOOC more likely dependent on neighbourhood of the participant. The logistic regression models between the participants shows the standard deviation change in the predictor. Interpreting these results in rupees, we predicted that additional income of Rs 2 Lacs in neighborhood increased the participation by 27%. If we increase average educational attainment by one, it increases participation by 69%. Among young adults, the educated neighbourhood make the MOOC participation even stronger. Moving to the digital divide in its usage, we found analogous patterns when we examined the relations between digitally divided participants for certificate attainment. Educated Neighborhood- and individual-level SES measures were associated with higher rates of course completion, with larger magnitudes from younger participants. Examining the full age range of participants from 13 to 69, I could find results modest in magnitude. Among the individuals who desire to participate in a HarvardX course, one's own educational attainment was a statistically significant but not substantively strong predictor of course completion on average. These relatively modest overall differences, however, masked important differences in attainment by SES for young people. For an young adult participant whose highest education of parents was a bachelor's degree, the number of certification were 1.75 (approx) times those of an otherwise similar young adults in the same course who's highest education of parents were less than a bachelor's degree. Students from all backgrounds earned certificates in Harvard and MIT MOOCs, but especially among the young, high-SES students were more likely to earn a certificate. As a matter of success we have seen around 25 million people from around the world have registered in Massive Open Online Courses (MOOCs) offered by Coursera, EdX, and other platforms. The massive enrolment in the MOOCs in education system is considered a revolution in spreading of education across all its boundaries. But contrary research revealed that only a small percentage of these millions were completing the courses. 39% are from developed countries and 26% are from developing countries. Despite this still MOOCs are considered as the most advantaged educational breakthrough. Our findings answers critics of MOOCs about the concerns of MOOCs completion rate. In late 2014 a survey of 780,000 people were conducted in 212 countries, the findings are put below from the participants who had completed a Coursera MOOC prior to September 1, 2014.

## a. The Survey Data

Out of fifty two thousand people who were respondents in this survey, 58% were male, 58% were regular full time employed people, 22% were students but they were either employees in full-time or in part-time mode and were continuing studies in a traditional course 83% were graduates 34% were from the U.S only and 39% from other developed countries, and 26% from rest of the developing countries. In this survey, median of the age of respondents was calculated as 41, with a range of 31 to 55 years. This trend was showing similarity to previous studies of Coursera users but in those courses participants were more educated, males were fewer and were in older age than this survey of EdX users. Many people took this survey as more interesting and responded very well. for instance, those from developed countries and those who had completed more than one MOOC filled the survey questionare in greater numbers. The problem of potential bias was addressed by using iterative proportional fitting to obtain reweighted estimates of reported career and education benefits.[4] All the differences which are based in this survey results are statistically significant at p<.01. The survey used here was put forth bv Chen ZhenghaoBrandon AlcornGavle ChristensenNicholas ErikssonDaphne KollerEzekiel J. Emanuel teachers from Harvard Bussiness school.

#### b. MOOCs as Career Builders

It was put in a questionnaire to Coursera course completers why they enrolled in MOOC and what outcomes in terms of education or career they expect after its completion i.e about career benefits and educational benefits. Career benefits was the more common reason for taking a MOOC. Fifty-two percent of the people surveyed report a primary goal of improving their current job or finding a new job this adds them to the group known as "career builders."

#### c. Career Benefits of MOOCs

As reported by those who stated career benefits as their primary reason for completing a MOOC.



SOURCE COURSERA SURVEY DATA

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Of these career builders, 87% report a career benefit of some kind. When asked about tangible career benefits i.e getting a raise in current position, finding a new job,[4] or starting a new business and intangible ones such as enhancing skills for a current job or improving their ability to get a new job [4]. In-Tangible career benefits were more difficult to achieve, that is being better equipped to do your current work. Thirty-three percent of career builders report that a tangible benefit is expected after completing a MOOC, and majority of them were excited that they expect a new job or starting their own business. It was also seen that vast majority of people who complete MOOCs specifically for career benefits get them. One-third of course completers reported a more direct, tangible benefit such as getting a new job.

Some previous researches had also shown that MOOC enrollees predominantly belong to well-educated families and advantaged populations from developed countries were deriving the most benefits from completing MOOCs [4]. However this research also confirms the demographics of users taking these courses and the conclusion drawn by it shows career builders find both benefits (tangible and intangible) [4] and people with higher socioeconomic status and higher levels of education get more access and hence benefits.when you look at tangible career benefits specifically developed countries, career builders with low in socioeconomic status and lower levels of education report tangible career benefits at about the same rate as those with high status and lots of education [4]. In developing countries. those with lower levels of socioeconomic status and education are significantly more likely to report tangible career benefits.[4]

Tangible career benefits reported by those who stated such benefits as their primary reason for completing a MOOC.



The differences in the general career benefits and tangible career benefits can be different to different people and that depends on their needs in different populations. People who already have a highly-skilled job are likely to benefit most from up-skilling and to improve in the positions of their current job (general career benefits), whereas the people having less skills are more likely to benefit from re-skilling to transition to a new job (tangible career benefits).

Other side of the coin which tells about benefit of joining MOOCs is from Education Seekers. Twenty-eight percent of all people who completed a MOOC enrol primarily to achieve an academic goal called as "education seekers." Of education seekers, 88% report an educational benefit of some kind. Eighty-seven percent report an intangible educational benefit (such as gaining knowledge in their field), and 18% report a tangible educational benefit — either gaining credit toward an academic degree or completing prerequisites for an academic program [4].People from developing countries are more likely to be education seekers along with the people with lower socioeconomic status.

#### The Educational Benefits of MOOCs

As reported by those who stated educational benefits as their primary reason for completing a MOOC.



The above chart shows the comparison of tangible and intagible benefits of education from MOOCs. This research reveales insights that approximately half i.e 47% of education seekers who are also students in a traditional academic setup report in MOOC courses. Among those who are registered in traditional courses 94% show report of some educational benefits from taking a MOOC. 24% specifically report a tangible educational benefit. The most common educational benefits is gaining knowledge essential in their field of study i.e 76 % and others on deciding on a field of study 40). Among the students who are education seekers and who are not in any traditional academic setup more likely report educational benefits. Education seekers from developing countries report more tangible benefits who are with low socioeconomic status with low educational status Also a person without a postgraduate degree were more likely to report benefits than those with having Post Graduation degree [4]. In addition to this non-school and non-college going students are using MOOCs to prepare for return to a regular educational setup. For example, people who are in the age

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group of 25 to 40 are willing to continue and restart after a break due to some home problem or care giving to children after marriage report in the MOOCs to refresh key concepts prior to returning to education system or degree.

## d. MOOCs for Education Seekers

The people who completed a MOOC were enrolled primarily for academic certificate and they can be put in the category of education seekers. The survey shows that 36 % people from developing countries are interested to join MOOC as education seekers in comparison of just 24% from developed countries. 47 % people among education seekers are students of academic course and 94% register because of educational benefit or certificate and about 24% are those who want to gain any tangible education out of it for updating themselves. While comparing students of developing and developed countries as education seekers 87% are from developing and 80 % are from developed countries; 91% with low SES (socioeconomic status) are more serious in joining and who want educational benefits, compared to 86% with high socioeconomic status including people who were older, home making women, employed workers register for MOOCs to refresh key concepts. Thirty-eight percent in the age group of 25-40 among education seekers report using MOOCs to refresh concepts only compared to those 35% who are under 25 years of age; 53% of non student report for MOOCs to refresh key concepts.

A survey of MOOCs that answers the reason of low turnover was done by Monika Hamori, Professor of Human Resource Management at IE Business School University in Madrid. she conducted a survey for more than one-third of 1,481 employed learners mostly managers and knowledge workers taking online courses. she found that these participants had received no training from their organizations since one year. She noticed in her survey that things look even worse if you consider what's happening in the workforce more broadly. We have seen that in the United States the employees who received employer-funded training was 21% but in 2009 it decreased to only 15% (the most recent data available). But for this business managers or owners isn't to be blamed as they themselves were not aware about such trainings. The decline in employer-funded trainings was steeper in boom periods than during recessions that means a lot of people who want to become better at their jobs were fending for themselves. Organizations are able to change the provision of formal trainings to their employees by encouraging and supporting them for enrollment in MOOCs that are firstly readily available and relatively very inexpensive on platforms such as Coursera and EdX. Now it has been noticed some companies realize this and have started to team up with MOOC providers to enhance employee training among that AT&T, GE, L'Oréal, and Marks & Spencer are prominent

examples. Companies like McKinsey, Microsoft, and Tenaris are producing their own content on management, computer science, engineering, finance etc for own employees and for general public as well. However, fewer organizations are making efforts to use MOOCs for its employee development. Monika's survey says about 67% of the employed learners were going to apply their new MOOC learned skill-set in their current jobs or companies and 27% had already using it exclusively in their jobs .Among these 27 % only 5% received financial help from their employers, 8% percent got time off from work to study, and only 4% had the coursework included in their performance evaluations. About 20% of people who are employed in MOOCs had received a training and financial assistance or time off. And if you think that large, resourcerich companies would offer more help than others then it was proven wrong. The people at firms with fewer than 50 employees were twice as likely to receive financial benefits and time-offs than those companies with more than 10,000 employees. In view of its huge potential, we also find out why organizations are so slow to embrace MOOCs? For this she has drawn a data analysis from about 28,000 learners in around 127 + countries based on her study and interviews to participants, the results offer insights into how employees working in companies can better capitalize on MOOC learning. The basic reasons why organizations fail to capitalize from MOOCs was the lack of awareness among first line of managers. Secondly employees after completing MOOCs are often afraid that their bosses will think that they are uninterested in their current roles if they show any interest in exploring a different path. Hence many companies aren't even fully informed about their employee's capabilities and goals [4]. Managers don't know about the skills of their employees or what their ambitions for personal growth are. Secondly many companies still don't seem to recognize MOOCs as a viable substitute for formal trainings. Showing reluctance to leverage MOOCs training to employees, companies are missing out on an effective way to increase employee commitment, especially for young high potentials. Employers who largely invest in talent development and bring trainers from outside and then create their own programs are the ones who are most likely supporting for MOOCs. In this study it was found that young and skilled managers do consider training very serious for the growth of organization and personal career development. A questionnaire of 14 practices when provided to employees for ranking, they ranked it third, behind high-stakes assignments and support from senior leadership and ahead of mentoring, coaching. Yet they also said that the training represented one of the biggest gaps between employers valuation towards their employees this in turn always create a negative impact on behaviors of employees, such as helping colleagues, and can increase counter-productive behaviors. Self financing learners are more than twice compare to those who receive organizational

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support to see the acquired knowledge as a stepping-stone to a employer.



## E Learning as Retention Tool

#### V. SHOULD BE ESTABLISHED AND RECOGNIZED AT TOP LEVEL. THEY CAN BE THE BEST CHAMPIONS OF MOOCS.

If the culture of learning is established at the top level i.e Administrators, Bosses, Principals/ Head Masters and managers at all levels should accept that entry of knowledge should come through the root of the organization. That is, it is hierarchy who should initiate and implement MOOC-based training. This approach makes sense. Every Top level administrators have the domain expertise to guide course selection for the development of learners and of job-relevant skills..

# a. Select all for MOOC training to develop broader competencies—not just few skills.

As it has been seen in this research that employers select more employees for MOOC training who have marketing roles in the organisation. The percentage found was 40% from marketing, 15% from sales and rest from operations,R&D, and finance etc.

## b. Managers can serve as facilitators and instructors.

In the traditional trainings we have seen that instructor help people to navigate through the material explain each concept in greater depth in his way and also share his/her knowledge when questions arise. MOOCs, in contrast are a self-directed learning process. Each learner decides how much time he can spend on a module or topic, or whether to study all the topics in a course or just a few. Managers can help him or her in these problems by providing informal guidance before and during the courses, making learning easier and improving completion rates.

*c.* Employers should track MOOCs in performance reviews A fact of MOOC registrants after a comprehensive study has been done in more than 200 MOOCs which shows that about 15% of the people who register for a MOOC actually earn a certificate of completion. But this percentage goes way up when companies do consider MOOC coursework in performance evaluations. Also till now only 4% of MOOC learners had mentioned MOOCs in their annual performance reports.

MOOCs have played an important role in individual's development. Its upto the person how and when he needs these trainings in his career. MOOCs benefit employees in big number as seventy-two percent of the employees who were participants in Coursera were surveyed and reported that they got career benefits and 61% reported that they got educational benefits.52% in the survey reported that improving their current job or finding a new job .The majority of people had overwhelming educational benefits or did complete prerequisites for their pursuing academic program. Most of the career and educational benefits were reported by people from developing countries. This reflected that economically and academically disadvantages populations are taking a considerable amount of advantage by joining MOOCs. In developing countries, a good number of career benefits was reported by people with lower education level and lower socioeconomic status. Among participants who were not student in any institution and belong to lower socioeconomic status people from developing countries are all more likely to report educational benefits.

#### VI. CONCLUSIONS

The current paper presents the various approaches of measuring the benefits of MOOCS in transformation of education across the boundaries with specific focus on higher education. MOOC phenomenon being appeared very recently, therefore it needed interest from various stake holders for the academic environment. However, to measure the quality and its impact on education infinite amount of survey and research is needed to officially declare how and where it needs to be adopted to mark its impact. Previous finding showed indications of the hopes that MOOCs would provide a lifechanging opportunity for those people who are not more advantaged to get good education, and have limited access to available content. but this paper reveals a surprising facts that people who are already well educated, fulltime employed register more and get benefit in their present jobs and also in getting new jobs. Also it was considered that MOOCs are available only to people who can afford to high data rates

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from internet service providers. although it is still exists but low and affordable internet data charges and free wifi in cities, schools, colleges and universities have changed it all. It has already reflected as there are now over 1 million people who have completed courses from Coursera alone, more than 100,000 people have certified completion from HarvardX and MITx courses.

The research in this field needs to focus on people who need career and educational benefits out of MOOC courses. In MOOC platforms, gathering of thousands participants provide a very reliable source of information about the quality ,access and exposure in terms of user's needs and requirements and about the way the designed learning processes should work. After gathering information from many such platforms here I conclude with the findings that MOOCs are a viable source of education where learners have enough opportunity to gain expertise in the field of study and which bridges the gap of access in education This research illustrates how MOOCs offer various opportunities not only to young unadvantaged students but to affluent, employed and skilled human power to change the educational landscape and achieve tangible benefits. Of course MOOCs aren't a cure-all for all the problems of global education. But it's a step in the right direction for one and all to a learning experience that many find beneficial for furthering their education and careers.

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## VII. REFERENCES

- T. Dillahunt, Z. Wang, and S. D. Teasley, "November 2014 Democratizing Higher Education: Exploring MOOC Use Among Those Who Cannot Afford a Formal Education," vol. 15, no. 5, pp. 1–12, 2014.
- [2]. J. Sanzgiri, "MOOCs in the Global South Indian Learners in Massive Open Online Courses," p. 2018, 2018.
- [3]. D. John, J. R. Democratizing, and C. Link, "Democratizing

Education? Examining Access and Usage Patterns in Massive Open Online Courses The Harvard community has made this article openly available . Please share how this access benefits you . Your story matters . Citation," 2017.

- [4]. C. Zhenghao, B. Alcorn, G. Christensen, N. Eriksson, D. Koller, and E. J. Emanuel, "Who's benefiting from MOOCs, and why," Harv. Bus. Rev., pp. 1–11, 2015.
- [5]. J. Sanzgiri, "MOOCs in the Global South Indian Learners in Massive Open Online Courses," p. 2018, 2018.
- [6]. D. John, J. R. Democratizing, and C. Link, "Democratizing Education? Examining Access and Usage Patterns in Massive Open Online Courses The Harvard community has made this article openly available. Please share how this access benefits you. Your story matters. Citation," 2017.
- [7]. C. Zhenghao, B. Alcorn, G. Christensen, N. Eriksson, D. Koller, and E. J. Emanuel, "Who's benefiting from MOOCs, and why," Harv. Bus. Rev., pp. 1–11, 2015.



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