



## SWAYAM- Indian MOOCs: An Insider's Perspective

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### ABSTRACT:

MOOCs or Massive Open Online Courses were called disruptive technology in 2012. MOOC has proved to be game changer for educational practices. Study Webs of Active – Learning for Young Aspiring Minds (SWAYAM) is an Indian MOOC initiative and is fast catching up in the MOOC world. SWAYAM is designed to achieve the three cardinal principles of Education Policy viz., access, equity and quality. The SWAYAM course delivery follows 4 quadrant approach. SWAYAM aims to make anytime anywhere learning and uses pedagogical approach of ODL and Online learning. The Course Coordinators (CCs) have to develop MOOCs as per SWAYAM guidelines. A Questionnaire was designed on Google forms which were used to collect the data. The data received was analyzed and it was observed that most of the CCs were satisfied with the learning platform of SWAYAM. CCs did not find all features useful and thus, did not use features they were not comfortable with, like the features of insight; assessment was not being used effectively by CCs. Many suggestions were given by CCs like making learner complete profile mandatory, a short training for the CCs, options of Virtual classes, etc.

**KEYWORDS:** SWAYAM, MOOCs, Course Coordinators, Quadrant, Technology-enhanced learning (TEL)

### 1. INTRODUCTION:

MOOCs or Massive Open Online Courses have become the buzzword and anyone who has not done or heard of it, is considered not updated in the field. MOOCs, as the name suggests facilitate thousands of students to enroll in courses taught by some of the most talented professors and researchers in the world. MOOCs turn higher education into a public good on a global scale and is the most prominent trend in higher education today Choudhary & Borbora (2017), Baskaran, (2018), Sharma (2018a, 2018b).

In fact, Pappano (2012) called 2012 to be the year of the MOOC. MOOCs have been called as disruptive technology in

2012 and are the game changers in the field of education. MOOCs provide the invaluable opportunity to connect with global learners without conventional constraints such as time, money, and geography (Baskaran, 2018). “Massive open online courses (MOOCs) have drastically changed the way we learn as well as how we teach. The main aim of MOOCs is to provide new opportunities to a massive number of learners to attend free online courses from anywhere all over the world. MOOCs have unique features that make it an effective technology-enhanced learning (TEL) model in higher education and beyond” (Yousef, et.al., 2014).

Coursera, edX, Udacity are some of the pioneers in the MOOCs. Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM) is an Indian MOOC initiative and is fast catching up in the MOOC world. Realizing the importance MOOCs, the Government of India launched SWAYAM (MOOCs) and SWAYAM Prabha (DTH channel) as the online initiatives to reach all (Kanjilal & Kaul, 2016). SWAYAM is designed to achieve the three cardinal principles of Education Policy viz., access, equity and quality (Malik, 2015).

Indian Government has roped in and is encouraging talented and committed teachers with expertise in their field of study, to come forward to offer courses on SWAYAM and become the CCs and run MOOCs (Matliwala, 2017). The courses hosted on SWAYAM are designed and delivered in 4 quadrants – (1) e-tutorial (video lecture), (2) e-text, (3) discussion forum and (4) assessment.

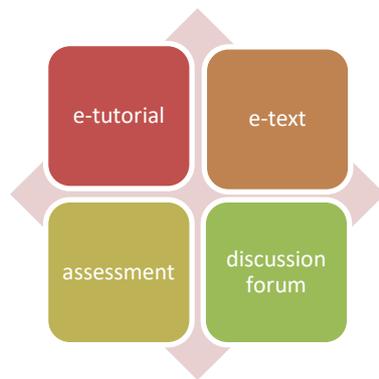


Figure 1: Four Quadrants of a SWAYAM Course

SWAYAM is the indigenously developed Learning Management System, a digital platform for learning at distance where prestigious educational institutes offer best quality content for students from school till post-graduation. The courses on SWAYAM are produced and delivered by AICTE for self-paced courses, NPTEL for engineering, UGC for post-graduation education, CEC for under-graduate education, NCERT &

NIOS for school education, IGNOU for out of the school students and, IIMB for management studies, NITTR for teacher training. It covers a long list of disciplines and are covering four learning paths—certificate and diploma; undergraduate; postgraduate; school education. Both SWAYAM and SWAYAM Prabha version aim to make it anytime anywhere learning, as has been the motto of Open and Distance Learning (ODL). The pedagogical approach of ODL varies from conventional system. Therefore, the CCs need to be trained in the pedagogical strategies of ODL and online learning.

SWAYAM has also started offering Faculty Development Programme (FDP) under the Annual Refresher Programme in Teaching (ARPIT) scheme. If we look at the total course run by NITTR, the courses are very few and not related to teacher education.

In an attempt to train large number of untrained teachers, NIOS experimented with D.El.Ed and all the courses of D.El.Ed. (501-510) were offered through SWAYAM. It was a onetime window provided by the government to train the untrained teachers of elementary schools throughout the country. It is one of the successful projects undertaken to train the elementary school teachers. It has not only been able to train the untrained teachers but also paved way for teacher education courses through online platforms. This will increase the reach and the training may be given without dislocating the in-service teachers.

In SWAYAM, the CCs have the autonomy to design and run the course. The CCs are responsible for the quality and the success of the course. Therefore, it becomes imperative that their experiences in running MOOC courses on SWAYAM are explored. Also, the challenges faced by CCs while running course on SWAYAM need to be analyzed and addressed. This would help in strengthening the system of Indian MOOCs.

At present more than 2000 faculty members, of more than 800 universities/

institutions across India are associated with the SWAYAM to provide free online courses across different categories/specializations. The courses are being developed by faculty members across India according to the guidelines of four quadrant provided by MHRD. Courses on SWAYAM are online courses which are a form of distance mode. The faculty of the conventional university is more tuned to teaching in conventional, face to face mode. When these teachers show interest to develop these courses, they need to understand the dynamics of distance education, especially the online courses. The national coordinating institutions provide workshop to the CCs once their proposal is selected by Academic Advisory Committees (AAC) of the coordinating institutions. The CCs have to understand the four quadrants, and how to develop the MOOC course. The course has to be uploaded on the SWAYAM platform to be made available to prospective learners.

The present paper is an attempt to explore the experiences of the CCs who have run their MOOCs on SWAYAM, especially the challenges faced by them.

## 2. METHODOLOGY:

SWAYAM is a Learning Management System (LMS) which needs a certain level of ICT skills for the CCs to be able to offer the course and run it successfully on SWAYAM. There are many challenges when a CC embarks on the journey. Thus, a study was envisaged as to try to find the challenges faced by the CCs. A questionnaire was designed and developed using Google forms.

The form was sent to hundred and fifty CCs from various institutions across India wherein only twenty-nine responded. The data obtained was analyzed and is presented here.

## 3. DATA ANALYSIS:

The results show the CCs response to challenges and issues faced on SWAYAM sought through the questionnaire.

### A. Demographic Profile:

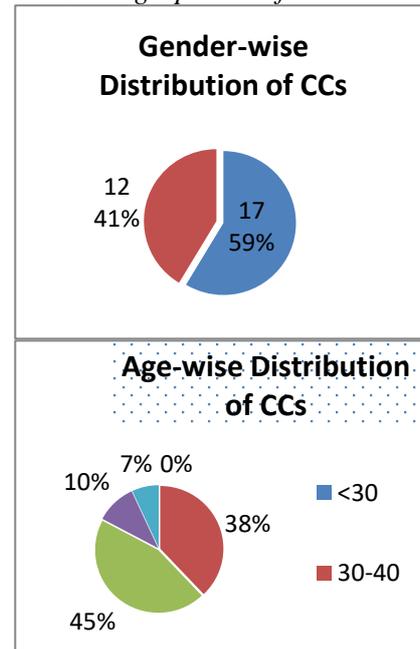


Figure 2 & 3 : Gender-wise Distribution of CCs & Age-wise Distribution of CCs

The gender-wise distribution of CCs (figure-2) was 59% Men and 41% Women who were motivated and committed to design and develop courses for SWAYAM in their area of specialization. The distribution of sample age wise in figure 3 shows near normal distribution.

## 4. COURSE RELATED:

*Nature of courses:* The courses were designed in two ways, whether new or repurposed. New course were the ones which were proposed for the first time by the CC whereas repurposed were those which were already running and were now being offered through SWAYAM with four quadrant approach.

As can be seen in the figure 4, 52% of courses were repurposed whereas only 38% of the courses were new. The reason for this could be because it was easy to start already running course than start afresh. In case of IGNOU and NIOS, there was already material available as e-text and that helped in covering the second quadrant easily. Also, as the

available courses were approved for the statutory bodies of the universities and institutions, it was easier to get the approval for initiating courses on SWAYAM platform.

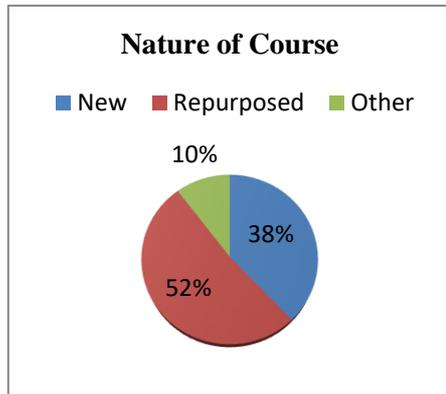


Figure 4: Nature of Courses

5. Working with SWAYAM Platform:

SWAYAM is an indigenous developed IT platform that facilitates hosting of all the courses, taught in classrooms from 9<sup>th</sup> class till post-graduation to be accessed by anyone, anywhere at any time. All the courses are interactive, prepared by the best teachers in the country and are available, free of cost to the residents in India (SWAYAM,2018) The CCs were running their course through the platform. Thus, it was very important that the platform was CC friendly besides being learner friendly.

- a. The CCs expressed their experience of the SWAYAM platform for **Navigation (going from one point to another point, going back, etc.)**. Equal percentage of CCs (37.93%) found it to be easy and ok i.e. neither difficult nor easy.
- b. The CCs found **Uploading of content material (Videos, text etc.)** on SWAYAM to be easy (48.27%) whereas another 41.37% found it to be ok. This is quite encouraging as it indicates that the infrastructure like network strength were good in institutions and also the CCS were proficient enough.

- c. The CCs found **Organizing content into schedules (Scheduling of modules etc.)** on SWAYAM to be ok (48.27%) whereas another 41.37% found it to be easy.
- d. **Designing Group Discussion Forums, also Monitoring, Open Discussion.** 48.27% of the CCs found it to be ok whereas 17.24% found it to be difficult. Around 30% found it to be easy. This feature works on concept of interactivity and most of CCs found it to be comfortable to work with.
- e. **Developing assessment - quizzes** is very important in e-learning and designing of websites. It is practiced by teachers in IGNOU. 37.93% found it to be ok whereas 41.37% found it to be easy and 13.79% found it to be very easy.
- f. **Uploading and collecting assignments.** 44.82% of CCs found it to be ok whereas 31.03% found it to be easy and 13.79% found it to be difficult.
- g. **Evaluating assignments on the platform.** 41.37% of CCs found it to be ok whereas 27.5% found it to be easy and 20.68% found it to be difficult.
- h. **Making announcements** is an important feature of interactivity and 41.73% found it to be easy, 17.24% as very easy and 24.13% as ok and 17.24% as difficult. Any teaching learning activity needs communication and this feature shows most of CCs were comfortable in communicating with learners through the platform.
- i. **Receive and reply to learners' messages** was the only feature where 3.44% CCs expressed as most difficult followed by 6.89% as difficult. 41.37% found it to be easy and 31.03% as ok. 17.24% found it very easy to receive and reply to learners' messages.

Table 1: Working with SWAYAM Platform

S. No.	SWAYAM platform	Opinion									
		Very Easy		Easy		Ok		Difficult		Very Difficult	
		Score	%age	Score	%age	Score	%age	Score	%age	Score	%age
1	Navigation (going from one point to another point, going back etc.)	4	13.79	11	37.93	11	37.93	3	10.34	0	0
2	Uploading of content material (Videos, text etc.)	2	6.89	14	48.27	12	41.37	1	3.44	0	0
3	Organizing content into schedules (Scheduling of modules etc.)	3	10.34	12	41.37	14	48.27	0	0	0	0
4	Designing Group Discussion Forums, also Monitoring,	2	6.89	8	27.58	14	48.27	5	17.24	0	0
5	Developing assessment - quizzes	4	13.79	12	41.37	11	37.93	2	6.89	0	0
6	Uploading and collecting assignments	3	10.34	9	31.03	13	44.82	4	13.79	0	0
7	Evaluating assignments on the platform	3	10.34	8	27.58	12	41.37	6	20.68	0	0
8	Make announcements	5	17.24	12	41.37	7	24.13	5	17.24	0	0
9	Receive and reply to learners' messages	5	17.24	12	41.37	9	31.03	2	6.89	1	3.44

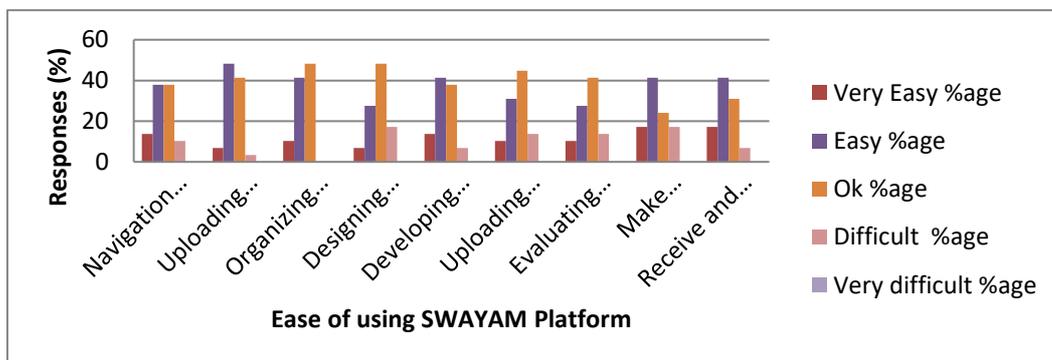


Figure 5: Working with SWAYAM Platform

6. COMPONENTS OF SWAYAM PLATFORM:

*Course Library:* It is one of the important components which helps in building the Course content on the SWAYAM Portal.

CCs found this feature useful for content uploading, embedding, scheduling their course on SWAYAM. Also, in rerun of course on

SWAYAM in next cycle, Course Library helped in scheduling.

*Messages:* It is important means of interacting with the learners.

It is heartening to see that all the learners were using messages feature to communicate with CCs i.e. the system was being used interactively.

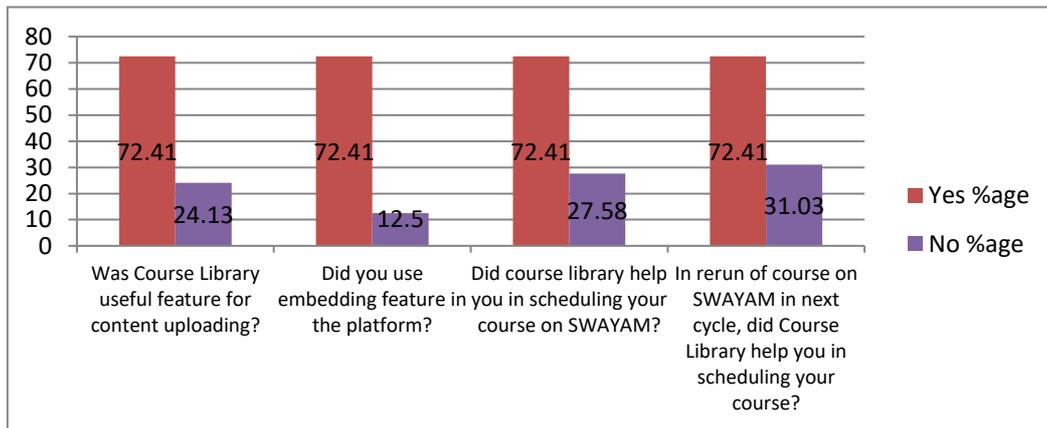


Figure 6: Course Library

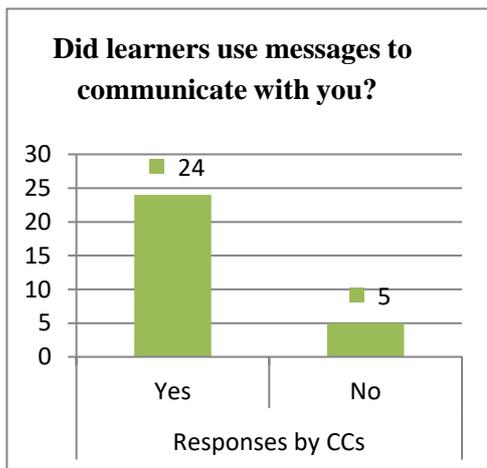


Figure 7: Use of Messages

The above figure7 show that 82.75% (24) learners communicated with the CCs using messages whereas 17.4% (5) did not use this feature. If we further explore the nature of messages (figure8), it was predominantly certificate related queries, content related and platform related queries were 22% each. Assessments was another topic used by 21% of learners and 10% learners sent messages on other

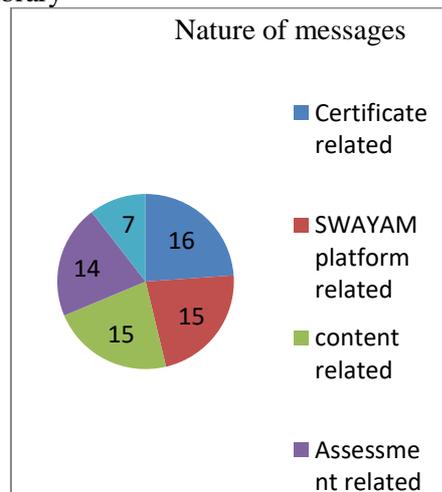


Figure 8: Nature of Messages

topics. It clearly indicates the anxiety pattern of learners as it is new system so they were worried about Certification. Then content and platform were also new to them. Assessment was another anxiety creating area.

*Assessment:* It is one of the four quadrants of the design of the SWAYAM course. As can be seen in figure 9 below maximum CCs(26) used Quiz for assessment and

only 3 CCs did not use this feature. Only 8 CCs used Discussion Forum as a

parameter of assessment as is usually recommended in all online courses.

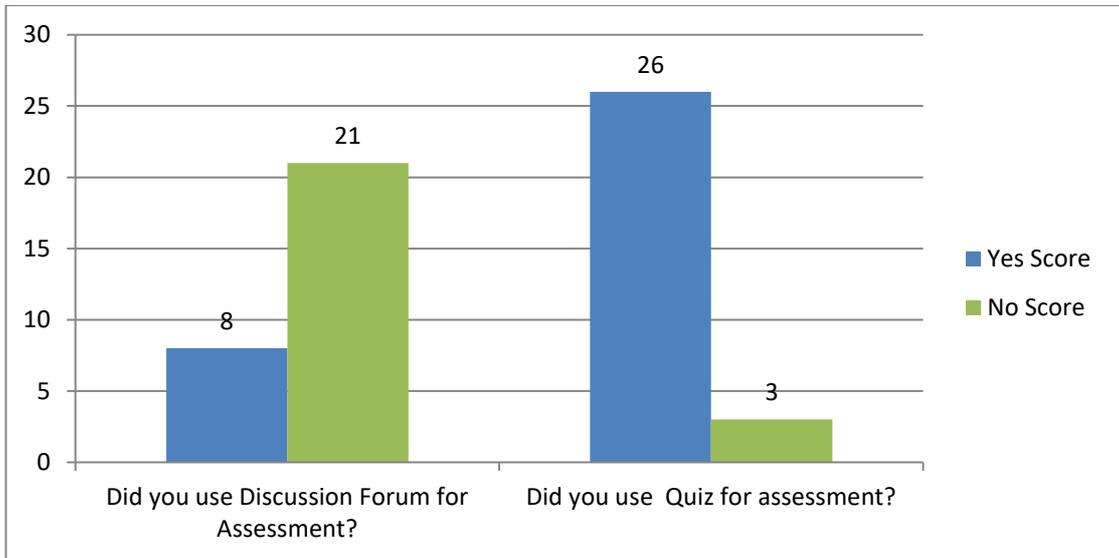


Figure 9: Assessment in SWAYAM

Table 2: Certification in SWAYAM					
S. No.	Issues related to SWAYAM platform	Responses by the CCs			
		Yes		No	
		Score	%age	Score	%age
1	Did you issue participation certificate to learners?	5	17.24	24	87.5
2	Did you issue completion certificate to learners?	4	13.79	25	86.2

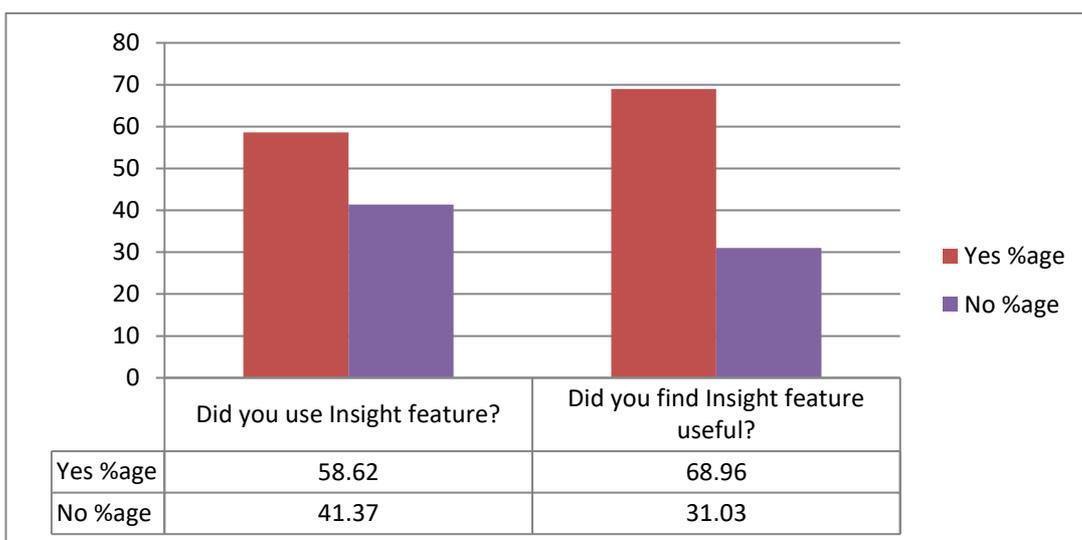


Figure 10: Insight Usage

*Certification:* the table 2 below clearly shows that not many certificates of participation nor completion were given by many CCs. Only 5 gave participation certificate whereas 4 gave completion certificate.

*Insight:* It is feature which has the learning analytics component. It gives a detailed track of learners' interaction with the platform and CCs used it to analyse the learning pattern of learners. Learning analytics is very important in online courses. Around 69% of CCs found the feature to be useful whereas only 58% used it. This feature should be used more and more to learn about the student's engagement on platform and how it can be increased.

*Monitoring of discussions:* these are also important. As shown in figure 11, equal percentage of CCs monitored it every day and alternate day (31%), followed by 21% who monitored it once a week. 17% CCs monitored it twice a week.

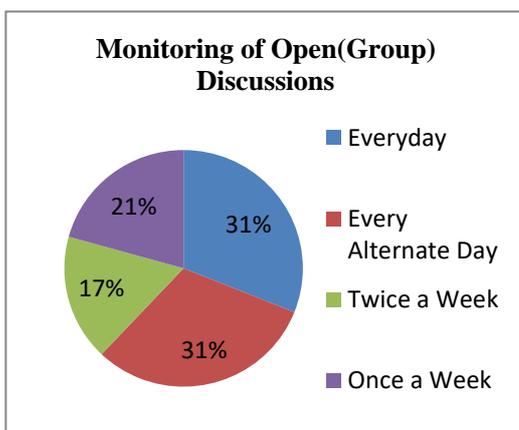


Figure 11: Monitoring & Discussion

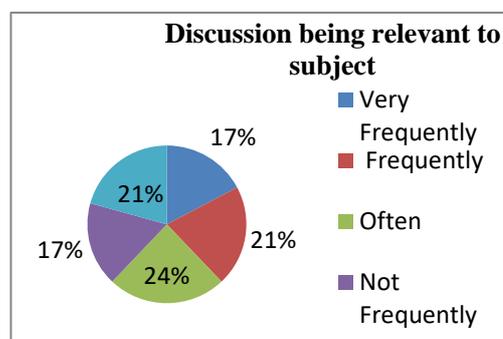


Figure 12: Nature of Discussion

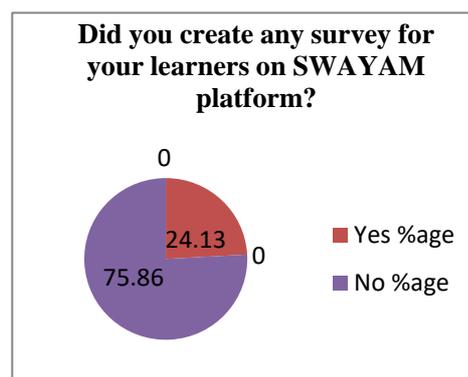


Figure 13; Use of Survey

As can be seen in figure 12, highest percentage of CCs(24%) expressed that often the discussions in discussion forum was relevant to the subject.

*Survey:* As can be seen in figure 13, most of the CCs (76%) conducted survey for the learners to get feedback whereas rest (24%) did not use this functionality.

CCs gave many suggestions for improving experience and efficiency of CCs on SWAYAM platform:

- Enrollment of students should stop after 2 weeks of the course. Attempting Quizzes can be allowed beyond the week.
- LMS should be more user friendly.
- More tools and facilities should be incorporated in SWAYAM.
- May be one or two live chat sessions may be initiated to chat with the students in a synchronous way.
- It needs improvement for better communication.

## 7. CONCLUSION:

Thus, we can say that the SWAYAM platform is CC friendly as most of its features were easy to handle. It can be used for running all kind of courses especially the teacher education courses. The teacher education courses were run by NIOS for D.El.Ed. courses. It was found to be quite effective. An important factor in the run of these courses is the CCs. It was found that the CCs were comfortable with the platform and were satisfied with it. The use of the platform

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for the teacher education can be used as in case of D.El.Ed. Also, the use of SWAYAM Prabha to reach the learner through DTH is also appreciable and is increasing.

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