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STUDY ON THE APPROACH OF STUDENTS WITH THE EVOLUTION OF FLIPPED CLASSROOM LEARNING

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ABSTRACT

Traditional transmittal methods of education have been questioned for their inflexibility, inefficiency, passivity, and lack of student-centeredness. As a result, the higher education sector has been compelled to adopt more adaptable, effective, student-centered, and active teaching tactics. Recently, the flipped classroom concept has been proposed as a means of facilitating this shift. However, research on the usage of flipped classrooms in higher education is in its infancy, and little is known about how students perceive learning in flipped classrooms. This study investigated the students' opinions of flipped classroom instruction in the CBSE Board schools of Nagpur. Students' (n = 240) impressions of flipped classroom in general, video as a learning tool, and Moodle (Learning Management System) as a supporting tool within the context of a flipped classroom model were assessed using a questionnaire. The results demonstrated that the vast majority of students had a favorable view of the flipped classroom, the usage of video, and Moodle, and that a favorable view of the flipped classroom was substantially connected with feelings of enhanced motivation, engagement, learning, and effective learning. Low achievers reported considerably more favorable views about the use of video as a learning aid, perceived enhanced learning, and perceived more effective learning than high achievers. Main objective of this study is to analyze the approach of students with the evolution of flipped classroom learning.

Keywords: Flipped Classroom, active, tactics, enhanced etc

1. INTRODUCTION

Schools that have a big number of students and require teachers to educate them all at the same time typically struggle to meet the requirements of students who have a wide range of abilities, backgrounds, and learning styles. It is not unusual to come across a large percentage of children that may be categorized as 'slow learners.' It is necessary to provide them with more attention, differentiated training, and even individualized instruction in order to accelerate their learning pace and bring them up to speed with the fast learners. As a result of the large amount of material they must cover in a short period of time, many teachers find it more difficult to achieve this than they expect. They take the easy way out by cramming as much stuff as possible into the allowed time and hoping that as many pupils as possible retain the information they have taught them (Bergmann & Sams 2012)

Instead of memorising facts and statistics, educationists claim that genuine education is about building knowledge via inquiry, application, and links to personal and social experiences, rather than rote memorization of data. It is necessary for students to have meaningful relationships with their professors and peers in order to enhance their cognitive talents. Higher-order cognitive abilities are becoming increasingly important to students today, and alternative teaching strategies are being sought. There is a drive for educational transformation in all areas, from teaching to learning, from teacher-centered to student-centered, from passive listening to active learning, from chalk and talk to technology-enhanced instruction, and everywhere in between. Everyone want to witness the emergence of a new educational system that is learner-centered and full of joy, freedom, creativity, imagination, innovation, and humanization, among other qualities. The flipped classroom, a relatively recent educational innovation, appears to be moving in this direction.

English, the common language of communication between people from different countries, has grown into a global language in recent decades as a result of the need for it on the world stage. When it comes to education, English is the predominant language of teaching in the vast majority of Indian schools and institutions. It also serves as a connection language for those who work in occupations that demand them to collaborate with people from other countries. Aside from that,

the fast development of science, technology, and electronic media has enhanced the importance of English as a communication language. English is also regarded as the "language of opportunity" since it helps people to get access to knowledge, power, and better employment prospects in a more efficient and effective manner.

The East India Company began teaching English in 1759, at the beginning of the British Raj in India, and has a 250-year history of providing English instruction to the Indian people. When formal education was first introduced in India in the first half of the nineteenth century, the growth of English may be traced back to that time period. After Macaulay's Minute was published in 1835, however, the English language gained in significance. Lord Macaulay argued in favour of the use of English in Indian education because he felt it was the only language capable of imparting scientific and technological information to Indians, and he was correct. In order to bridge the gap between India and the Western world, Macaulay's suggestion advocated for the use of English as the principal medium of communication between the two. However, it was also widely known that the only goal of the organisation was to create a corps of clerks to aid in the administration of the country. Thus, English became the official language of the government, as well as of the general public, government administration, parliamentarians, and the judiciary, among other things. Even more significantly, because Macaulay believed that eastern languages had little material worth preserving, English was accepted as the language of teaching at the highest levels of educational attainment. The famous presentation on Indian education, delivered on February 2, 1835, established the English language as the key to contemporary knowledge and as such as superior to the Arabic and Sanskrit languages in terms of comprehension. The people of the nation have the potential to be exceptional English academics. Educating the entire population would be difficult; nevertheless, it was possible to establish a class of individuals who were Indian in blood and colour but English in taste, ideas, morals, and intelligence by providing them with an English education.

However, despite the fact that Macaulay's recommendation was followed, a section of the Indian political elite was opposed to the introduction of English language education in the nation. The

English language has emerged as the world language, a language that is understood by people from all walks of life, despite all of the hurdles.

While teaching at the university level has evolved over time and between cultures, the basic principles of how it is done have remained mostly same. The conventional lecture with the professor, or the "sage on the stage," as King (1993) describes it, serves as a key pillar, transferring information to the students who are listening in on the lecture. Over the past 30 years, however, university education in general, and conventional lectures in particular, have come under intense scrutiny.

Against this backdrop, and in large part as a result of advances in educational technology, increasing pressures on higher education have been observed, which has prompted a push toward flexible blended student-centered learning strategies that mitigate the limitations of the transmittal model of educational delivery. In tandem with the trend toward student-centered learning, we have observed an increase in the number of academics and educators pushing for flipped classroom curriculum in postsecondary institutions of learning. The promotion of the flipped classroom approach is a fair position to take. Following the underlying theory and empirical studies, it appears to address several challenges associated with traditional ways of lecturing and pave the way for active learning strategies as well as for utilising classroom time for higher levels of Bloom's taxonomy, such as application, analysis, and synthesis, to be practised in the classroom.

Based on the concept of typical teaching being inverted, the flipped classroom approach substitutes what is generally done in class with what is regularly done by students outside of class. This means that instead of listening to a lecture in class and then going home to work on a set of assignments, students study course literature and digest lecture information through video at home before engaging in problem-solving, analysis and discussion guided by the teacher in class. According to proponents of the flipped classroom paradigm, flipping teaching and learning in higher education has a number of advantages, including the following: Students can learn at their own pace, which encourages them to actively engage with lecture material. It also frees up actual class time for more effective, creative and active learning activities. Teachers have more

opportunities to interact with students, as well as more opportunities to assess their learning. Students take control and responsibility for their own learning.

2. METHOD

This study is based on a quantitative analysis of a closed questionnaire addressing undergraduate students perceptions and experience of learning through flipped classroom in a course preparing students for their exams with respect to scientific methodology and communication. The participants were undergraduate students (n=240) at the Nagpur University. All of the students were enrolled in 8 different bachelor level programs at the department of Computer and Systems Sciences. The students, 76 females and 164 males, ranged in age from 20 to 34 years. Students will be better prepared for their bachelor's thesis if they take the course covered in this study, which includes scientific methodology and communication. In order to facilitate students understanding of the fundamentals of research strategies, data collection methods, and analysis methods, the learning objectives are divided into two categories: first, familiarising students with the application of qualitative and quantitative methods of analysis, and second, facilitating students understanding of the fundamentals of research strategies, data collection methods, and analysis methods. To put it another way, the course sought to provide students with both conceptual knowledge (a thorough understanding of scientific processes) and practical knowledge (a thorough understanding of laboratory procedures).

3. SURVEY MEASURES AND PROCESS

- Section 1 (Flipped Classroom Scale) consisted of 21 items measuring students' experiences and attitudes of learning through flipped classroom
- Section 2 (Video Scale) consisted of 16 items measuring students' experiences of using video lectures as a medium for learning.
- Section 3 (LMS scale) consisted of 9 items measuring students' perceptions of the utility of Moodle in supporting their learning processes within the frame of flipped classroom pedagogy.

4. RESULTS

1. Students general perceptions of Flipped Classroom

TABLE 1 EXPERIENCE OF STUDENTS ON THE FLIPPED CLASSROOM AFTER THE COURSE

Experiences of flipped classroom	n	Percent	M	SD
After completing the course, I have a favorable view on flipped classroom.				
Yes	180	75		
No	60	25		
I have a prior experience of flipped classroom				
Yes	23	9.6		
No	217	90.4		
I appreciate learning with video	240		4.15	1.1
I am more flexible and mobile as learner	240		3.95	1.1
I have to take more responsibility for learning	240		3.91	0.96
I can study in my own pace	240		3.75	0.91
My learning processes are more supported	240		3.54	1.13
The non-traditional classroom activities were meaningful	240		3.4	1.13
It is easier and more effective to learn	240		3.17	1.03
I do more studying/learning on my own spare time	240		3.03	1.25

I feel more alone	240		3.01	1.29
I am more motivated as learner	240		2.95	1.13
I am more active as a learner	240		2.81	1.16
I learn more	240		2.74	1.07
I feel an increased workload that is stressful	240		2.61	1.2
I experience stronger peer-collaboration	240		2.45	1.01
It feels like a distance course	240		2.43	1.3

The flipped classroom format was well-received by a large number of pupils. 180 students out of 240 respondents viewed the flipped classroom positively following the course (75 percent). The students most valued the use of video (M = 4.15, SD = 1.10), the flexibility and mobility provided by the flipped classroom model (M = 3.95, SD = 1.10), the fact that learning can be completed at the student's own pace (M = 3.75, SD = 0.91), the fact that learning processes are better supported (M = 3.54, SD = 1.13), and the fact that non-traditional campus activities are meaningful (M = 3.40, SD = 1.13)

Regarding other aspects of the learning process, students tended to agree that the flipped classroom method makes learning simpler and more effective (M = 3.17, SD = 1.03) and that they are more motivated as learners (M = 2.95, SD = 1.1). In addition, many students believed that they were required to assume greater responsibility for their learning (M = 3.91, SD = 0.96). Notable also is the fact that several pupils felt alone throughout their study (M = 3.01, SD = 1.29).

2. Use of Video as a learning Tool

Table 2 Students' Experience of using video as a method of learning

Experiences of using video for learning	n	M	SD
Useful to pause video	231	4.52	0.85
Useful to rewind video	228	4.48	0.87
Useful to fast-forward video	210	4.04	1.36
Useful to watch lectures in a mobile way	240	3.98	1.28
The combination of video and non-traditional lectures was useful	240	3.73	1.16
Video made learning more effective	240	3.54	1.19
Video quality was satisfactory	240	3.48	1.23
Video made me learn more	240	3.38	1.22
Video motivated me to learn	240	3.26	1.15
Video can replace traditional lectures completely	240	2.59	1.33
I rather have traditional lectures than video	240	2.48	1.34
Learning through video resulted in more peer discussions	240	1.43	0.5

The use of flipped classrooms and, in particular, video as a medium for assimilation of content that would otherwise be provided in traditional lectures was found to be substantially correlated with perceived increases in motivation, learning, and learning effectiveness. When evaluating the student's use of video as a learning tool in further depth, a variety of reasons for liking video become apparent. The students highly agreed that the ability to pause, rewind, and fast-forward video was beneficial to their learning (M = 4.52; SD = 0.85; M = 4.04; SD = 1.36). In addition,

they believed that the mix of video and non-traditional lectures was beneficial (M = 3.73, SD = 1.16), as well as that the ability to see lectures remotely (MD = 3.98, SD = 1.28).

3. Utilization of MOODLE within the frame of Flipped Classroom

TABLE 3 EXPERIENCES OF STUDENTS USING THE MOODLE FRAME

Experiences of using MOODLE	n	M	SD
It was useful to see other students questions and teacher answers in MOODLE	240	4.31	0.88
MOODLE supported my learning	240	4.18	0.78
It was useful to communicate with teachers through MOODLE	240	4.02	1.03
MOODLE motivated me to learn	240	2.9	1.15

The course utilized a learning management system (MOODLE) to support students' learning processes within the framework of a flipped classroom format. As shown in Table 5, the students valued this assistance (M = 4.18, SD = 0.78). In particular, they considered it helpful to be able to view other students' MOODLE questions and the instructors' responses (M = 4.31, SD = 0.88) and for general contact with teachers (M = 4.02, SD = 1.03). Intriguingly, the LMS itself contributed to the motivation of certain students to study (M = 2.9, SD = 1.15).

4. LOW AND HIGH ACHIEVER'S COMPARISON

TABLE 4 COMPARISON OF LOW AND HIGH ACHIEVERS

Experiences of flipped classroom	Achiever	M	SD	F	t	*p*
Positive attitude towards FC	Low	3.1	0.7	2.13	1.3	0.2
	High	2.7	1			
Increased motivation	Low	3.2	0.9	4.56	2	0.5
	High	2.8	1.2			
Increased learning	Low	3.1	0.9	10.1	2.4	0
	High	2.7	1.2			
More effective learning	Low	3.3	1	12.1	2.5	0
	High	2.8	1.3			
Attitude towards video	Low	3.1	0.7	11.2	3.2	0
	High	2.7	1			
More active learner	Low	2.9	1.1	2.08	1.5	0.1
	High	2.6	1.3			
More responsibility for learning	Low	3.6	1	0.08	0.5	0.7
	High	3.5	1.1			

When low and high performers among students were compared in terms of attitudes regarding flipped classrooms, video, and the influence on learning and motivation, several intriguing results were discovered. The findings of performed independent sample t-tests revealed no significant differences in low achievers' (M = 3.37, SD = 0.74) and high achievers' (M = 3.20, SD = 0.87), t(238) = 2.13, p > 0.05, favorable attitudes toward the flipped classroom. Significant variations in attitudes about the usage of video were seen between low achievers (M = 3.10, SD = 0.72) and high achievers (M = 2.67, SD = 1.02), t(238) = 3.17, p 0.05.

Interestingly, low achievers (M = 3.13, SD = 0.93) and high achievers (M = 2.71, SD = 1.23), t(238) = 2.40, p 0.05, had substantially different perceptions of improved learning. Low

achievers (M = 3.25, SD = 0.95) and high achievers (M = 2.80, SD = 1.32), t(238) = 2.46, p 0.05, indicated significant differences in perceived more effective learning. However, no significant differences between low and high achievers were found in the other characteristics studied.

5. CONCLUSION

Traditions in higher education need to be reformed, and the sage on the stage has to be replaced with a guide on the side for student-centered active learning practices. In this scenario, flipped classroom is recommended as an answer. Several studies show that using a flipped classroom can increase student engagement and encourage a more active learning style in higher education. This study's findings support previous research and show additional benefits of the flipped classroom concept.

The pupils in the study liked the flipped classroom. Students loved the ability to study at their own speed, the flexibility and mobility provided by video lectures, and the fact that learning is simpler and more successful in a flipped classroom. Even so, the findings should be tempered by the study's limitations. The lack of a control group restricts the results' external validity. Another drawback is that most of the students polled have never used a flipped classroom, thus the results may reflect the effect of a new method to learning and teaching rather than the flipped classroom strategy. Notably, all outcomes relating to enhanced learning and learning effectiveness are based on students' self-reported impressions, not independent assessments. Beyond student views, further research on the effects of flipped classroom should address these constraints.

REFERENCES

- Betihavas, V., Bridgman, H., Kornhaber, R., & Cross, M. (2015). The evidence for ‘flipping out’: A systematic review of the flipped classroom in nursing education. Nurse Education Today, 6, 15–21.
- Gilboy, M. B., Heinerichs, S., & Pazzaglia, G. (2015). Enhancing student engagement using the flipped classroom. Journal of nutrition education and behavior, 47(1), 109–114.

- Butt, A. (2014). Student views on the use of a flipped classroom approach: evidence from Australia. Business Education & Accreditation, 6(1), 33–43.
- Findlay-Thompson, S., & Mombourquette, P. (2014). Evaluation of a flipped classroom in an undergraduate business course. Business Education & Accreditation, 6(1), 63–71.
- Bishop, J. L., & Verleger, M. A. (2013). The flipped classroom: a survey of the research. In ASEE National Conference Proceedings, Atlanta, GA.
- Davies, R. S., Dean, D. L., & Ball, N. (2013). Flipping the classroom and instructional technology integration in a college-level information systems spreadsheet course. Educational Technology Research and Development, 61(4), 563–580.
- Beekes, W. (2006). The "millionaire" method for encouraging participation. Active Learning in Higher Education, 7(1), 25–36.