



Implementation Status Of Choice Based Credit System In Rural Degree Colleges Of Odisha

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ABSTRACT

The University Grants Commission (UGC) made mandatory to all the Indian universities and affiliated colleges to implement the Choice Based Credit System (CBCS) from the academic session 2015-16. However, the implementation of CBCS can only be done successfully if all the stakeholders are aware of it, notably teachers and students. If they are aware of all the dimensions of CBCS, they can give full shape to its implementation. Here, the investigators put an effort to Examine the awareness of students and teachers towards CBCS with regards to their colleges types of management and gender. Additionally, it attempted to study the practices of CBCS implementation in rural colleges of Odisha with the prescribed norms. The current study employs descriptive survey method. The population of the current study includes all the colleges situated in rural areas of Odisha. The accessible population consists of all the rural degree colleges affiliated to Utkal University, Bhubaneswar. Applying purposive sampling technique, Jajpur district was selected as sample for the study. Investigators selected four rural colleges by applying stratified random sampling method which included two Government and two Non-



Government aided colleges. A total of 40 teachers and 120 students were selected using stratified random sampling. No significant difference was found among students on awareness about CBCS on the basis of their gender and type of management. Similarly, no significant difference was found among teachers on awareness about CBCS on the basis of their gender and type of management. Further, most of the teachers and students of rural colleges viewed that they are facing different challenges such as – infrastructural facilities, updated study materials, lab equipment and facilities for skill enhancement courses. Students do not get better research guidance and support from teachers while working on their dissertation and practical work due to acute shortage of teachers.

Introduction

The Indian higher education system faces acute problem of access, fairness & justice and quality issues in comparison to other countries. Higher education in India was found in the last many decades to be unprogressive with the traditional procedure of evaluation system, rigid curriculum and outdated teaching-learning practices, which were far behind the international standard. The employability of students coming out of this wireless system was very poor ([Mahakur, Baral & Meher, 2019](#)). To reform the system and ensure quality and excellence in Higher Educational Institutions (HEIs), the Choice Based Credit System (CBCS) was introduced by the UGC from the year 2015-16 to bring academic and curricular reformation all over the country. The main purpose of introducing CBCS is to bring single curriculum all over the nation. The elementary dimensions of CBCS are: Semester System, Credit System, and Choice in subject selection, Grading System, Internal and External Examination System ([UGC, 2014](#)). Earlier, different policies and programs have urged these key dimensions to change the academic and curricular reformations in higher education. The Education Commission (1964-66) recommended for introducing semester system, flexibility on choosing different subjects, and implementation of internal assessment that comprehensively evaluates holistic aspects of students, not just those measured by the external examinations. The NPE (1986) suggested reforms regarding the examination system in India, which encompassed initiation of continuous institutional evaluation at the post-graduate stage in colleges and universities. It also recommended for use of letter grades which indicate students' performance while the cumulative grade point average (CGPA) should refer to success



in general. CABE Committee on Autonomy of Higher Education Institutions (2005) has further suggested that universities shall give more emphasis on continuous internal assessment to supplement the annual examination system and review/revise the syllabus at least once in three years. The committee also advocated for switching over to introduce credit system where degrees would be awarded on completion of credits and flexibility in academic structures at par with international standards. Similarly, the National Knowledge Commission (2009) has recommended for switching over to a course credit system and continuous internal assessment with a view to moving away from memory-based examinations to a more comprehensive evaluation of learning outcomes of students.

Different global practices such as European credits transfer system in all over European university and National Qualifications Framework (NCF) in Australia, the Pan-Canadian Protocol on the Transferability of University Credits, the Credit Accumulation and Transfer System (CATS) in the UK as well as the systems operating in the US, Japan, etc. are examples of different examination and administrative reforms which enhance the quality among higher education system. ([Atack, 2024](#)). The key features of these programmes are - credit transfer, flexibility in choosing interdisciplinary subjects, semester system, grading, skill enhancement programs, etc.

The CBCS in higher education encompasses several key dimensions that aim to enhance the learning experiences for students. One fundamental aspect of CBCS is the semester system, which organizes the academic session into two distinct periods, allowing for a more structured and focused approach to learning. This system provides students with the opportunity to engage deeply with specific subjects over a defined period, promoting in-depth understanding and knowledge retention. Another essential dimension of CBCS is the evaluation system, which emphasizes continuous and comprehensive assessment. This approach moves away from traditional, exam-centric evaluation methods and incorporates various assessment tools such as assignments, projects, and presentations. Diversification of the evaluation process will encourage students to develop a broader skill set and in-depth understanding of the contents. It is in this context that the credit system within CBCS assumes the status of a pivotal dimension, one that makes it possible to quantify academic workload. Credits are assigned to courses based on their complexity, and students accumulate credits as they progress through their academic journey. This system supports flexibility in options for course choice, suiting each student's interest and academic goals. This makes the process of learning more individualized and flexible. Secondly, CBCS also seeks reform in the curriculum of higher education to make students more employable, with a view towards global standards by having its curriculum attuned to industry requirements and international best



practices. CBCS goals thus include the augmenting of employability and the access to knowledge and expertise that help students face stiff competition in the global environment. The main goal of implementing CBCS is to improve academic quality across the board from curriculum to teaching and learning process to the testing and assessment frameworks (UGC, 2014)

Govt. of Odisha has implemented the CBCS at undergraduate level from the academic year 2016-17. In Odisha, Colleges present a heterogeneous ownership landscape: government, private, non-government-aided and autonomous colleges. Some institutions are run by the State Government, while others are run by private body and local bodies. Government colleges are fully getting financial support from Government of Odisha and its faculties are recruited by the Odisha Public Service Commission (OPSC). There are 49 government colleges and 16 teacher education institutes in Odisha. Non-government aided colleges are those colleges which are partially getting financial support from the Govt of Odisha. There are 566 numbers of Non-government aided colleges in Odisha. There are 50 numbers of autonomous colleges in Odisha (Higher Education Department, Govt of Odisha, 2024). Autonomy in this context may be taken to mean that the ability of the college to have more control over its academic and administrative affairs, including curriculum design, assessment methods, examination systems, faculty recruitment, and more.

While reviewing the literature, it is found that Science students have more favourable perception in comparison to Arts students towards CBCS (Roy, Khanam & Devi, 2013; Deuri, 2015; Bhat, 2018). The investigators came across number of studies related to semester system. The results were contradictory. Few studies show that semester system gives ample opportunity to cover a lot of courses in a prescribed time (Pathak & Rahman, 2013; Das, 2017). Contrary to this, students were facing problem in time management, it develop workload and mental pressure among them (Neog, 2020).

UGC has declared that, it is mandatory to all the degree colleges to implement CBCS in their respective state from 2015-16 academic sessions. Government of Odisha introduced CBCS in all the colleges of Odisha from 2016-17. Few researches have been conducted on attitude and perception towards CBCS in higher education (Roy, Khanam & Devi, 2013; Deuri, 2015; Bhat, 2017; Swami, 2013). Studies related to semester system, grading and credit system are also done by different researchers. Such studies have conducted in the state of Assam, Kashmir, Himanchal Pradesh and West Bengal (Roy, Khanam & Devi, 2013; Bhat, 2017; Das, 2017; and Pathak & Rahman, 2013). Baloj (2021) in his study highlighted that, there is strong disparities among rural and urban colleges with regard to infrastructure facilities, availability of reading materials and teaching aids, teachers, books, journals and other documents in



libraries. In Odisha, the physical and learning environment of rural colleges is not satisfactory (Behera, 2023). Hardly any study being conducted in rural degree colleges of Odisha. Keeping this in view, the researchers intended to select rural colleges for research site and further intended to investigate the awareness of students and teachers about CBCS based on UGC guideline. It also intended to examine the current practices and problems faced by rural colleges in successful implementation of CBCS.

Objectives of the study

1. To study the practices of choice based credit system in Rural Colleges of Odisha with reference to prescribed norms of UGC.
2. To examine the awareness level of students towards implementation of choice-based credit system in rural colleges of Odisha with regards to gender and type of management.
3. To examine the awareness level of teachers towards implementation of choice-based credits system in Rural Colleges of Odisha with regards to gender and type of management.

Hypotheses

Ho1: There exists no significant difference between Boys and Girls of rural colleges on awareness about CBCS.

Ho2: There exists no significant difference between the students of Government & Non-Government Aided Colleges on awareness about CBCS.

Ho3: There exists no significant difference between male and female teachers of rural colleges of Odisha on awareness about CBCS.

Ho4: There exists no significant difference between the teachers of Government and Non-Government Aided Colleges on awareness about CBCS.

METHODOLOGY

The survey approach was adopted for the present investigation since the investigators surveyed the awareness level of students and teachers in rural colleges of Odisha. All the rural colleges of Odisha constitute the population in the present study. Target population for the study comprises of all the Rural Degree Colleges affiliated to Utkal University, Bhubaneswar, Odisha. Nine districts such as- Angul, Cuttack, Dhenkanal, Jagatshingpur, Kendrapada, Khurdha, Nayagarh, Puri and Jajpur comes under the



jurisdiction of Utkal University, Bhubaneswar. There are 385 degree colleges come under Utkal University (Higher education Department, Government of Odisha, 2021). The investigators selected Jajpur district as accessible population. In Jajpur district 32 degree colleges are under the jurisdiction of Utkal University. They choose four degree colleges by using stratified random sampling technique. The investigator drew sample from two strata which are (i) Government Colleges and (ii) Non-government aided colleges. Under each management, two colleges were selected. Thirty students and 10 teachers from each college were selected by using random sampling techniques. Thus, the sample consisted of 120 students and 40 teachers.

Separate awareness tests were developed by the investigators for students and teachers. The awareness test for students consisted of 26 questions and that for teachers consisted of 28 questions. The awareness test comprised of different dimension of choice based credits system such as, concept of CBCS, semester system, grading, CGPA, SGPA, credit and credit transfer. Items were prepared according to the level of understanding expected from students and teachers.

The collected data of awareness test were analysed by using Descriptive statistics (i.e. Mean, Median, Mode, SD, Skewness, Kurtosis, & Range). To compare the awareness of students and teachers in relation to their demographic variables (Gender, Types of management), inferential statistics (i.e. t-test) was adopted.

To know the practices and problems of CBCS in rural degree colleges in Odisha, separate semi-structured interview schedules were developed for teachers and students on different dimensions of CBCS such as, concept of CBCS, semester system, credit, grade system, and evaluation. On the basis of above aspects, investigators developed twenty items in each schedule.

Results

Practices of CBCS in rural degree colleges of Odisha

Practices and problems and issues with regard to implementation of CBCS at undergraduate level in rural degree colleges of Odisha are highlighted below.

Orientation

Taking consideration of CBCS, 70% of teachers echoed that they had attended the orientation by different experts in their respective colleges. It helped them in understanding the nuances of CBCS whereas, 30% of teachers had not attended any kind of orientation conducted by their college authorities.



While interviewing students, it was found that they did not get any induction programme about their syllabus as per CBCS. Further, only 30% of student responded that they got little information about the CBCS pattern from their teachers of respective departments during their classes.

Semester system

Majority of teachers said that semester system is helpful to enhance the quality of educational process. They said that in semester system, students become more conscious about their study. By choosing the subjects as per their interest, they can score better marks in examination. They are engaged in learning throughout the year which help them for higher study with in-depth knowledge of their stream of study and inter-disciplinary subjects as well.

Majority of students agreed that the semester system was introduced to bring quality in their learning process. It makes them engage in attending lectures; completing project works, assignments, and term papers; participating in seminars and group discussions continuously.

In contrary, few of the teachers and students opined that semester system could not bring quality in teaching-learning process. They justified that in a short span of time, it was not easy to cover lot of courses. There is less scope for both students and teachers to have in-depth discussion in a particular subject. Also, good reference books are not available in the libraries of the colleges.

Some of the teachers said CBCS is fit into colleges in cities or universities where funding is not a problem. It is not appropriate in rural colleges. The majority of teachers were of the opinion that the semester system had increased their workload. CBCS syllabus is over-loaded with content. Lot of post-graduation level contents are introduced at undergraduate level. We need lot of preparation to take classes. However, we don't get time due to the overload of classes. Ultimately, students become the victims.

A senior teacher said:

We are suggesting some good reference books to the library to purchase. We also suggested students to go through those books in the library for further reading. However, these books were not purchased for the library.



Few teachers said,

We were working in a composite college where we had been teaching students of higher secondary as well as undergraduate classes. This was a burden for us. Implementation of semester system at undergraduate level further increased our burden. We did not get scope to explore the creative potential of students by engaging them in number of activities and continuously monitoring their activities. Hence, there is an urgent need to appoint adequate number of teachers if the government wants to implement semester system in real sense.

Grading system

Majority of teachers said that grade is better than the mark system. They said that the grade system helped the student in reducing the cut-throat competition among students. It also creates a “We-feeling” among students.

Majority of students replied that, mark is better than grade because the nine-point grading scale somehow confuses them. Similarly, it is difficult to find out which one of the students is more worthy than others in the same group. In mark system, students become serious in their learning.

Contrary to this, some students said that grading system has decreased the mental pressure. With mark system, our parents pressurize us to secure more marks in examination and always compare our mark with our peers. The pressure from parents’ side decreased due to grade system to some extent as in grade system there is less scope to compare with peers.

One of the teachers said:

In most of the job sectors, experts sought for marks instead of grade. He cited his own example while he was appearing for SSB interview. Particularly, in engineering, students were assigned grade instead of marks. However, when they face an interview for a job, the interview board asks to show the exact marks instead of grade. Students had to again go to universities to bring their exact mark sheet.



Skill enhancement courses

There is a provision in CBCS to provide different types of Skill enhancement courses along with the disciplinary courses. Some of the teachers explained how it helped the students to get a job after graduation. However, few teachers responded that it had hardly developed the skill among the students because majority of them focus on their own Discipline oriented papers. To carry out these courses, a special teacher should be appointed in every college. One of the teachers said, “Due to lack of teachers in our college, a teacher from political science department had been assigned to teach the office management course to students and this was the reality of every college. If a commerce background or MBA background teacher teaches the students instead of the teachers from arts background, then it may become more effective for students to develop skill related to office management”. Some said that infrastructure is not sufficiently available in colleges. There is only one computer in each department and the students don’t get any opportunity to learn computer.

Majority of the students replied that, the skill enhancement course is not properly implemented in colleges. They don’t have sufficient infrastructure facilities to learn different skill enhancement courses.

Evaluation strategies

When teachers were asked about how do they cope-up with varieties of strategies (i.e. project, seminar, group discussion, term paper, etc.) to evaluate the students’ learning, majority of teachers said that, they discuss with their colleagues when they face any problem and then give instructions to their students to work. Further, they said that they take the help of internet to supervise the students’ work. Majority of the teachers said that they do not have any clear-cut idea about the credit system. Their colleges do not practise credit system in real spirit. If it will be implemented in true sense, students will get flexibility to complete their course.

When students were asked the same question, majority of them said that, this new evaluation strategy has given them hands-on experience through engagement in group discussions and seminars, etc. This reduces their anxiety level in examination. This also develops skills like, public speaking, communication, problem solving, etc.

Problems faced by students and teachers



During the interview with teachers and students, the respondents raised some of the problems which are mentioned below:

- ❖ Curriculum for undergraduate course has been updated as per CBCS. However there is lack of availability of textbooks and reference books as per CBCS pattern in colleges. Poor rural background students cannot afford to buy the books from the market.
- ❖ Most of the content are available online or in softcopy. However, it is not available in hardcopy. To access the online or softcopy ICT facility is needed. It was found that, there is no ICT lab in non-government aided colleges. Hence, both students & teachers face problems in their academic work. However, Government colleges provide two computers for teachers and students to every department which is also not sufficient.
- ❖ Science departments do not have updated equipment in their laboratories as per CBCS syllabus. Hence, students and teachers face problem while they do their practical work.
- ❖ In CBCS, there are different courses like- Ability enhancement courses, Discipline based courses, Generic electives, Core courses, Foundation and Skill enhancement courses, etc. These courses are to be covered in a semester system. In most of the colleges, there is lack of sufficient number of classrooms to carry out the classes for these courses.
- ❖ One of the major problems of students and teachers in CBCS is lack of time for completion of different courses in a semester. Teachers have to complete different courses in short time period along with their academic work. In most of the colleges, teachers are assigned to teach the students of both higher secondary and undergraduate level. In most of the degree colleges there is acute shortage of teachers.

Awareness of Students towards CBCS

To study the students' awareness towards CBCS, the collected data has been analysed by using descriptive statistics. The calculated summary of statistics is presented in table-1.

Table-1: Awareness of students towards CBCS

N	Mean	median	SD	mode	kurtosis	skw	Range	Min score	Max score	P ₂₅	P ₇₅
100	11.13	11	2.86	10	.979	.463	18	3	21	9	13



The table-1 shows that the value of mean, median, and mode are 11.13, 11 and 10 respectively. The disparity of scores from the mean position is marginal with the standard deviation being 2.86. The skewness value of 0.463 indicates positive skew in the distribution and more number of individuals' scores are below the average score in the group. The kurtosis value of 0.979 shows that it is platykurtic. Hence, it can be concluded that more number of students are below average in their awareness level about CBCS.

Awareness of Students about CBCS in relation to Gender

The significant difference between the means of awareness level of Boys and Girls students about CBCS is given in below.

Table- 2: Awareness of students towards CBCS in relation to Gender

Gender	N	Mean	S.D	Df	“t” value
Boys	44	11.57	2.56	98	1.36
Girls	56	10.79	3.06		

According to table 2, the mean awareness scores of Boys and Girls are 11.57 and 10.79. Obtained ‘t’ value is 1.36 which is lower than the table value at 0.05 level. Therefore, the null hypothesis, “There exists no significant difference between Boys and Girls of rural colleges on awareness about CBCS.” is retained. Hence both boys and girls are having same level of awareness about CBCS. Similar finding was also given by Mahakur, Baral, & Meher (2019).

Awareness of students about CBCS in relation to type of College Management

To know the mean difference between the awareness level of students in Government and Non-Government Aided colleges about CBCS, the summary of the t-test is given below in table-3.

Table-3 Awareness of students towards CBCS in relation to Type of College Management

Types of College Management	N	Mean	SD	Df	“t” value
Government Colleges	50	10.62	2.37	98	1.79
Non-government aided Colleges	50	11.64	3.23		



Table-3 depicts that the mean awareness level of students of Government and Non-Government Aided colleges are 10.62 and 11.64 respectively. The obtained 't' value is 1.79 which is less than the table value i.e. 1.98 at 0.05 level. Therefore, the null hypothesis "There exists no significant difference between the students of Government & Non-Government Aided Colleges on awareness about CBCS" is retained. Hence, students of both Government and Non-government aided colleges are having same level of awareness about CBCS.

Awareness of Teachers towards CBCS

Table-4: Awareness of Teachers towards CBCS

N	Mean	SD	Median	mode	Kurtosis	Skewness	Range	Min score	Max score
40	17.95	3.36849	18.5	19	-1.07	-.087	12.00	12	24

The table-4 shows that the value of mean, median, and mode are 17.95, 18.5 and 19 respectively. The disparity of scores from the mean position is marginal with the standard deviation being 3.36. The skewness value of -0.087 indicates negative skew but not far from the normal distribution value. The kurtosis value of -1.07 shows that it is platykurtic. Hence, it can be concluded that more number of students are below average in their awareness level about CBCS.

Table 4: Descriptive Statistics of Awareness Test of the teachers the mean, median, mode, standard deviation, skewness, kurtosis, minimum score, and maximum score of the instructors' awareness test are presented in Table 4. The data has a mean of 17.95, a median of 18.50, a mode of 19, and a standard deviation of 3.35, indicating that the spread is away from the mean value. The value of skewness is -.087 and kurtosis is -1.07. Thus the distribution is negatively skewed but not far from the normal distribution.

Awareness of teachers about CBCS in relation to gender and type of management

Awareness of Teachers about CBCS in relation to Gender

To know the significant mean difference between the Awareness levels of teachers about CBCS on the basis of gender, the summary of the t-test is given below in table -5

Table-5: Awareness of Teachers about CBCS on the basis of Gender

Gender	N	Mean	S.D	df	“t” value
Male	22	18.27	3.34	38	.667
Female	18	17.56	3.43		

Table-5 shows that mean awareness level of male and female teachers are 18.27 and 17.56 respectively. The obtained ‘t’ value is .667 which is less than the table value i.e. 2.04 at .05 level. Therefore, the null hypothesis “There exists no significant difference between male and female teachers of rural colleges of Odisha on awareness about CBCS” is retained.

Awareness of Teachers about CBCS in relation to Type of College Management

To know the significant difference between the means of Awareness levels of teachers of Government and Non-Government Aided colleges about CBCS, the summary of the t-test is given below in table -6.

Table-6 Awareness of Teachers about CBCS in relation to Management of college

Management of college	N	Mean	S.D	df	“t” value
Government Colleges	20	18.75	3.14	18	1.532
Non-Government Aided colleges	20	17.15	3.45		

From the above table-6, it is found that the mean awareness level of teachers of Government Colleges and Non-Government Aided college are 18.75 and 17.15 respectively. The obtained ‘t’ value is 1.532 which is less than the table value i.e. 2.04 at .05 level. Therefore, the null hypothesis “There exists no significant difference between the teachers of Government and Non-Government Aided Colleges on awareness about CBCS” is retained.

Discussion

Since, 2016-17 Government of Odisha implemented CBCS in all the degree colleges of Odisha. A policy or program can be successful when its stakeholders are aware of it. It was revealed from the study that



the students were not aware about CBCS and their awareness level do not show any significant difference in relation to their gender and types of management. It may be due to the media as it provides different debates and discussions in common platform of CBCS by different experts of our country. But the girls and boys are aware of two Dimensions (semester and course) of CBCS and not the other dimensions like Credit transfer, credit system and grading system. It occurs as they all are very used to semester system and their colleges provide the opportunity to choose different courses like- Core, Generic, Skill enhancement, etc. While interacting with students, investigators came to know that there is no formal induction meeting held with students regarding CBCS. Students viewed that they do not have access to different physical and academic facilities such as, a well-equipped ICT lab, adequate books in the library, adequate number of teaching staff, etc. They also viewed that in the updated syllabus equal weightage is given to their practical work and research work and seminars. But they failed to get the proper guidance in doing the practical work. On the basis of students view and observation, it can be concluded that the practical work was conducted for the sake of fulfilment of the work but it hardly contributes to students' understanding about how to conduct a research, prepare and present a paper.

The findings further show that teachers are aware about various guidelines of CBCS. But no significant difference was found with regard to their gender and college management. Colleges are organizing different orientations with their faculty members on CBCS at their institutional level. Many experts of different fields are intermittently invited to the rural colleges to deliver talks on various issues related to CBCS. This could be the reason for no significant difference in awareness about CBCS of both teachers and students in relation to type of management and gender. From the field observation, however, it can be said that there is still incongruence in their awareness and practice. The real challenges of colleges are lack of infrastructures, inadequate textbook and reference books, poor lab facilities, scarcity of teachers, lack of guidance from faculties for research and seminar work, insufficient exposure to ICT practical and fieldwork. Teachers of the rural colleges should update their knowledge and skills by attending different online and offline faculty development programmes.

Conclusion

This research shall help the students know more about different areas of CBCS. They should be informed about various courses under CBCS. The findings of the study give a holistic view about the status of implementation of CBCS in rural colleges of Odisha. Teachers need to develop their competencies to supervise research and practical work of students. They should be aware about different problems faced by the student in CBCS pattern. Keeping into the view of the problems of students, they will develop



different strategies for maximizing the teaching-learning process. Policy makers must think of improving academic and physical infrastructure of rural colleges. Otherwise, the graduates will be produced without having employability skills.

Due to paucity of time, the present study is restricted to Jajpur district of Odisha. The same study can be conducted in other districts of the state and out of the state. Similarly, the size of the sample may be increased for better generalisations. Case studies may be conducted on best practice of CBCS in different higher education institutions.

CBCS was introduced to standardize the academic and curricular aspects across all Indian universities and colleges. After few years of implementation, based on feedback from students and teachers and institutional requirements, it should be reviewed. Government and different universities should take initiatives to prepare a proper statement of the proposal (SOP) among different universities for credit transfer within the course.

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