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Exploring The Attitude Of Student-Teacher Towards Online Unrestricted-Type Open Book Examination

Budh Singh[1]

Abhishek Kumar Prajapati[2]

Dharmendra Kumar Sarraf[3]

[1]Associate Professor, Department of Education, Guru Ghasidas Viswavidyalaya, Bilaspur (Chhattisgarh)
[1] Assistant Professor, Department of Education, Doctor Harisingh Gour Vishwavidyalaya, Sagar (Madhya Pradesh)
[1] Assistant Professor, Department of Education, Doctor Harisingh Gour Vishwavidyalaya, Sagar (Madhya Pradesh)

Abstract

The shift towards online education, driven by technological advancements and the global pandemic, has introduced innovative teaching-learning practices including online teaching and it needs a different assessment method such as the Online Unrestricted-Type Open Book Examination (OUTOBE). The growing reliance on online education has led to the adoption of various assessment formats, including the OUTOBE, which allows students access to unlimited resources during the examination. This study explores the attitudes of student-teachers studied in the B.A. B.Ed. / B.Sc. B.Ed. (4 Year Integrated) Programme of Doctor Harisingh Gour Vishwavidyalaya (MP) India towards OUTOBE, focusing on their attitude of its fairness, effectiveness, and impact on learning outcomes. Purposive sampling technique was used for selection of the sample. Total 66 student-teachers in which 24 female and 42 male student-teachers who had both the experience of online unrestricted type open book and traditional (closed book) examination, were included in this study. Using a quantitative survey to capture diverse perspectives of student-teachers. To compare the means of scores, t-test is used for analysis of data. The findings revealed that while many student-teachers appreciate the flexibility and

[1]Associate Professor, Department of Education, Guru Ghasidas Viswavidyalaya, Bilaspur (Chhattisgarh), Email Id: singhbudh82@gmail.com
[2] Assistant Professor, Department of Education, Doctor Harisingh Gour Vishwavidyalaya, Sagar (Madhya Pradesh), Email Id: akprajapati@dhsgsu.edu.in
[3] Assistant Professor, Department of Education, Doctor Harisingh Gour Vishwavidyalaya, Sagar (Madhya Pradesh), Email Id: dksarraf@dhsgsu.edu.in

reduced anxiety associated with OUTOBE, there are some concerns about its effectiveness in evaluating true understanding and critical thinking skills. Despite these concerns, the majority of student-teachers expressed a preference for OUTOBE over traditional examinations, citing its potential to assess applied knowledge and practical skills. It offers valuable insights for educators and policymakers seeking to enhance the assessment strategies in higher education, ensuring them align with 21st-century teaching and learning paradigms.

Keywords: OUTOBE, Online Unrestricted-Type Open Book Examination, Attitude, Student-teacher and Innovative Assessment.

Background of the Study

Education is essential for the all-round development of individuals. The ultimate goal of education is to transfer knowledge from the teacher to the student and promote the application of critical thinking (Johanns, Dikens and Morre, 2017). Education is one of the primary needs for all people to support a nation's progress (Nordin, Mustafa, & Razzaq, 2020; Widana, Parwata, & Sukendra, 2018). Every educational system consists of an examination system by which the qualities and abilities of the students are assessed by giving them grades and positions (Ahmed, 1993) and the ultimate objectives of the examination is to measure the performance level of the students and without this, we can't know what the students attain from their educational system? (Rasul and Buksha, 2011). A good evaluation system can become an integral part of the teaching- learning process and benefit both the learners and teachers (Ahmed et.al, 2021). The evolution of assessment methods in higher education has been a subject of significant academic discourse, especially in the context of technological advancements and shifting pedagogical paradigms. Among these methods, the Open Book Examination (OBE) has emerged as a transformative approach, offering flexibility and fostering critical thinking. Unlike traditional examinations, where students rely on memory, OBE allow students unrestricted access to resources, encouraging application-based learning, analysis, and synthesis of knowledge. Generally, close book examination is probably the most common method of student assessment used in all levels of education system in India and it is basically used to test students' abilities of storing-recall- reproduction, and understanding as well as knowledge (Anaya et al., 2010) under very restrictive conditions. Feller (1994) pointed out in his article "Open book testing and Education for the future" that Closed Book Examinations (CBE) only serve to demonstrate what students can do with whatever they have been able to memorize. The continued use of CBE may encourage memorization instead of critical thinking and analysis.

Unlike the CBE where students emphasize low-level skills such as cramming and short-term memorization (Anaya et al., 2010), OBE encourage students' high-level skills such as the abilities to reason, conceptualize and solve problems effectively. An OBE is one in which examinees can consult their class notes, text-books, and other approved material while answering questions (Chaursia, 2021). It is a tool progressively offered today in order to diminish test anxiety (Doghonadze & Demir, 2013; Mamhusseini, Omar & Othman, 2020) and to help students show their information and abilities and, correspondingly, have a more optimistic attitude towards tests. Vyas & Vyas (2009) define an open-book exam as "one in which examinees are allowed to consult their class notes, textbooks, and other approved material while answering questions" However, Gupta (2020) mentioned

that in OBE only reference and textbooks are allowed for student's consultation. The OBE may be oral or written, a component of, or a complete exam. Kulkarni & Attal (2021) mentioned that in OBE students are allowed to refer to either class notes and summaries or a 'memory aid', textbooks, or other approved material while answering questions and it emphasize problem solving, creativity or deep knowledge rather than a simple recall. The traditional or CBE are written examinations consisting of small to big essay type questions where a student needs to answer by mere recalling within a specified time. However, OBE test higher order thinking skills on the basis of the input provided (Ganna, 2017). The OBE have achieved both the requirements of an assessment tool and a student-centered method to education, as a technique that reduces the level of testing anxiety experienced by students (Chan, 2004 as cited by Anwer, Mamhusseini, Omar and Othman, 2020). The OBE demands that the course focuses on a set of intellectual skills, rather than on the information content itself (Mukherji, 1986). In OBE, questions are designed in such a way that the answer will not be directly access through textbook or class notes. Generally, traditional examinations provide questions for students like "Define the notion 'ICT'. This type of questions may be a meaningless question, because students would copy the relevant information from their book/learning material directly. This type of question promotes rote learning instead of critical thinking and other 21 century skills. It is generally accepted that students find traditional closed-book examinations to be more threatening than open-book examinations (Myyry, 2015), and that the ability to use a textbook or other learning resource while answering a question during examination increases the learner's confidence while decreasing anxiety levels (Wiggs, 2010). The essence of OBE is not the availability of resources but the ability to apply the information contained within them to solve complex problems. Theophilides and Koutselini (2000) has identified two problems for OBE:

1) Students wasting time looking for information and having less time to formulate their answers/responses properly and

2) OBE creates false sense of confidence that cause students to be less prepared for the examinations.

Types of Open-Book Examinations:

Doghonadze and Demir (2018) mentioned two forms of Open-book examinations

1. Traditional sit-down; also called limited-time examinations, with changing degrees of access to learning resources and references.

2. Take-home examinations; sometimes called Open-book examinations you do at home in which question(s) are handed out to the learners and expected that answers are attempted by learners without help from others, and the answer books are returned within a specified period of time.

Traditional sit-down exam is also called In Class (close book) Examination (ICE) and take-home (open-book) examination; ITE (as cited by Spiegel and Nivett, 2021). Generally, Open-book examinations are usually two types:

1. **Restricted type Open Book Examination:** As the name indicates that there is restriction about some learning material in examination hall however the examination is OBE. In this type, students are allowed to bring one or more specific documents approved by the examination agency into the examination hall. The students may also be allowed to refer printed documents such as the logarithmic tables, dictionaries, reference books, but no handwritten material like class notes, made easy and other material which have not had prior approval. In this type OBE, the approved documents/material function more or less as appendices to the question paper itself. These examinations are not radically different from closed book examinations. They do not present any special problems, irrespective of the nature of the course.

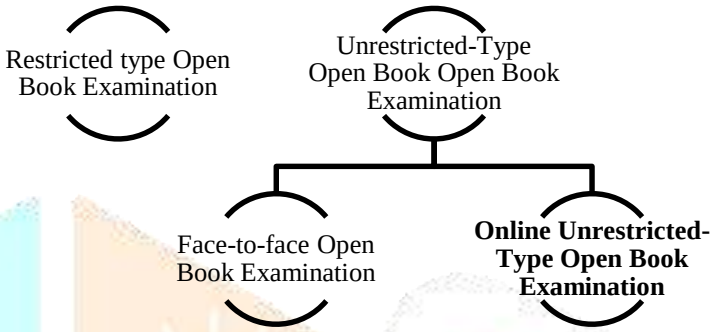

Fig. 1 Types of Open Book Examinations

2. **Unrestricted type Open Book Examination:** In unrestricted types open book examinations, students are free to bring whatever they like. The students may carry any books, lecture handouts of the course coordinator, or their self-made class notes. The unrestricted type of open book examination may also be of two form i.e. face-to-face mode open book examination and online unrestricted type open book examination (OUTOBE). The OUTOBE forms of unrestricted type open book examination was prevalent during COVID-19 pandemic when the whole teaching-learning and evaluation process has been shifted in online mode. In this type, the students are received their question paper/assignment on their e-mail, WhatsApp group/Google classroom etc. and students has written their answers on notebook by using various online sources and submit on Google classroom like other online platforms.

The use of such type of examinations presuppose certain strategies to conduct the examinations and types of questions. If the objective of an examination is to test the facts or information that students have rote or memorized, open book examination is inappropriate, since students can easily transfer the information in the textbook or lecture notes to the examination paper. Suppose the examination consists of information-based questions like, "Who invented the theory of relativity?", "Explain the term 'Standard Deviation'", or "Write an essay on the main structural characteristics of Old English", the students can then easily find the answers in the textbooks or class notes, and copy them in their answer books.

The researches have shown that most students find open text book assessment less stressful than closed book examination. It is established fact that the open book examination has emphasized problem solving, critical thinking, creativity and deep knowledge rather than a simple recall. Feller (1994) suggested that the open book examination is superior to closed book examination as it is more realistic similar to problem solving situations and students are likely to face outside world Elertsen and Valdermo (2000) argued that an OBE encourages

greater engagement and improves understanding of course material. The students prefer open book to closed book examination and find it less stressful (Philips, 2006).

Rationale

The assessment is a critical component of the teaching-learning process, serving as a tool to evaluate student learning, foster critical thinking, and ensure the achievement of educational objectives. The adoption of OUTOBE has garnered attention as a modern assessment approach, particularly in the context of the COVID-19 pandemic, which necessitated a rapid shift to online learning environments. OUTOBE is offering students the freedom to access resources during examinations, promoting application-based and analytical thinking rather than rote memorization. The rationale for this study lies in the growing emphasis on innovative and flexible assessment practices in higher education. For student-teachers, the future educator's themselves-assessment experiences significantly shape their perceptions of effective pedagogy and influence their future teaching methods. Understanding their attitudes towards OUTOBEs is crucial, as it provides insights into the effectiveness, challenges, and potential impact of this assessment format on their learning and professional development. Despite the increasing implementation of OUTOBE, limited research has focused on how student-teachers perceive this format. Their attitudes are essential to examine because they not only reflect their readiness for such assessments but also highlight potential gaps in institutional support, question design, and resource availability. Furthermore, OUTOBEs challenge traditional notions of assessment fairness and integrity, raising important pedagogical and ethical considerations.

This study aims to explore the attitude of student-teachers towards OUTOBE. By investigating these attitudes, this research seeks to inform educators and policymakers about the benefits and limitations of OUTOBEs. The findings will contribute to the development of more effective assessment frameworks that align with the evolving needs of students and the goals of contemporary education. In sum, the rationale for this study is grounded in the need to bridge the gap in understanding student teachers' experiences with OUTOBE and to contribute to the ongoing discourse on innovative assessment practices in higher education. This exploration is particularly timely as institutions worldwide strive to enhance the quality and inclusivity of their educational practices in an increasingly digital age.

Anwer, Mamhusseini, Omar and Othman (2020) conducted a study on attitude of nursing students on OBE and concluded that OBE minimize the students' anxiety during examination. Alghamdi (2024) reported that majority of medical students strongly perceive OBEs as less stressful and easier in comparison to the traditional examinations. This inculcates ownership of learning and eventually promotes students' thinking rather than memorizing. Furthermore, the OBE provides opportunities for self-awareness and self-evaluation, and prepares students for their life by enabling practice opportunities where all cognitive domains of Bloom's Taxonomy can be integrated into problem-solving similar to those encountered in real situations. In OBE, students are required to process the available data, interpret and draw inferences, and write their responses based on their understanding of the notions.

Objectives of the study

In order to address research problems following objectives were formulated:

1. To study the attitude of the student-teachers towards the online unrestricted type open book examination.
2. To compare the attitude of the student-teachers towards the online unrestricted type open book examination in relation to their gender (male & female), stream (science & arts) and locality (rural & urban).

Hypotheses

1. There is no significant difference between the attitude of male and female student-teachers towards the online unrestricted type open book examination.
2. There is no significant difference between the attitude of science and arts group student- teachers towards the online unrestricted type open book examination.
3. There is no significant difference between the attitude of rural and urban student-teachers towards the online unrestricted type open book examination.

Research Methodology

This study primary aims to explore and describe the attitudes of student-teachers studying in higher education institutions towards the online unrestricted type open book examination (OUTOBE). The study employed a descriptive survey design which is ideal for gathering the quantitative data form the student-teachers towards the OUTOBEs. This design helps to identify patterns, trends and variations of student-teachers towards the OUTOBE. The population for this study consisted of all the student-teachers registered in the B.A. B.Ed. and B.Sc. B.Ed. (4 Year Integrated and Innovative Programmes). A purposive sampling technique was used to select participants who had experienced of both type of experience OUTOBEs in their end semester examination. The sample for the study was delimited to 66 student-teachers from the Department of Education, Doctor Harisingh Gour Vishwavidyalaya, Sagar (MP). Efforts were made to include participants from both urban and rural institutions to capture a broad spectrum of attitudes. An attitude scale was developed to measure the attitudes of student teachers toward the OUTOBE. The first section of the attitude scale included demographic information such as age, gender, programme name, semester and prior experience with OUTOBEs and the second section of the attitude scale include statements regarding (ranging from Strongly Agree to Strongly Disagree) of OUBEs in terms of usefulness, fairness, effectiveness, ease of use, and influence on learning strategies. Inferential statistics viz. standard deviation, t-test and other statistics has been used. The collected data were analyzed using Jamovi, a statistical software.

Hypothesis 1. There is no significant difference between the attitude of male and female student- teachers towards the online unrestricted type open book examination.

Table-1: Group Statistics and Independent Samples t-test for attitudes towards the open book examinations of pupil teachers'_ Gender

Group Statistics **Result of t-test for Equality of Means**

Variable	Gender	N	Mean	Std. Deviation	t-Ratio	Sig. (2-tailed)
Attitude OUTOBE	Female	24	101.75	9.326	1.551	.126
	Male	42	97.50	11.413		

Table 1 presents the mean scores and standard deviations of male and female student-teacher's attitudes towards the open book examinations. The mean attitude score for male student-teachers is 101.75, with a standard deviation of 9.326. In contrast, female student-teachers have a mean attitude score of 97.50, with a standard deviation of 11.413. In case of comparing the mean score of attitudes towards the online unrestricted type open book examinations between female and male student-teachers, the calculated t value is 1.551 and the calculated p-value is .126 ($p > 0.05$). Since p value is more than 0.05, hence p value is not significant at .05 levels. So H01 is not rejected and it can be said that there is no significant difference between the attitude of male and female student-teachers towards open book examination.

Hypothesis 2. There is no significant difference between the attitude of science and arts group student-teachers towards the online unrestricted type open book examination.

Table-2: Group Statistics and Independent Samples t-test for attitudes towards the open book examinations of pupil teachers'_ Stream

Group Statistics **Result of t-test for Equality of Means**

Variable	Stream	N	Mean	Std. Deviation	t-Ratio	Sig. (2-tailed)
Attitude OUTOBE	Arts	33	95.94	12.809	2.416	.019
	Science	33	102.15	07.353		

Table 2 presents the mean scores and standard deviations of arts and science student-teachers attitudes towards the online unrestricted type open book examinations. The mean attitude score for arts student-teachers is 95.94, with a standard deviation of 12.809. In contrast, science student-teachers have a mean attitude score of 102.15, with a standard deviation of 07.353. In case of comparing the mean score of attitudes towards online unrestricted type open book examinations between arts and science student-teachers, the calculated t value is 2.416 and the calculated p-value is .019 ($p < 0.05$). Since p value is less than 0.05, hence p value is significant at .05 levels. So H02 is rejected and it can be said that there is a significant difference between the attitude of arts and science student-teachers towards the online unrestricted type open book examination.

Hypothesis 3. There is no significant difference between the attitude of rural and urban student-teachers towards the online unrestricted type open book examination.

Table-3: Group Statistics and Independent Samples t-test for attitudes towards the open book examinations of student-teachers _ Locality

Group Statistics **t-test for Equality of Means**

Variable	Locality	N	Mean	Std. Deviation	t-Ratio	Sig. (2-tailed)
Attitude OUTOBE	Rural	43	97.51	11.342	1.592	.116
	Urban	23	101.91	09.351		

Table 3 presents the mean scores and standard deviations of rural and urban student-teachers attitudes towards the online unrestricted type open book examinations. The mean attitude score for rural student-teachers is 97.51, with a standard deviation of 11.342. In contrast, urban student-teachers have a mean attitude score of 101.91, with a standard deviation of 09.351. In case of comparing the mean score of attitudes towards open book examinations between rural and urban student-teachers, the calculated t value is 1.592 and the calculated p-value is .116 ($p > 0.05$). Since p value is more than 0.05, hence p value is not significant at .05 levels. So H_03 is not rejected and it can be said that there is no significant difference between the attitude of rural and urban student-teachers towards online unrestricted type open book examination.

Result and Discussion

The present study is limited to student-teachers registered in the B.A. B.Ed. and B.Sc. B.Ed. (4 Year Integrated and Innovative Programmes) of Doctor Harisingh Gour Vishwavidyalaya, Sagar (MP) India. The findings are unable to generalize about all the students who are studying in different undergraduate integrated teacher education programmes. Another limitation is that this study included only 66 participants between 18-22 age groups. The study revealed that there is no significant difference between the attitude of the student-teachers towards the online unrestricted type open book examination in relation to their gender (male & female), stream (science & arts) and locality (rural & urban). The finding of the study partially supported by Halder (2022) who found in his study that gender (boys & girls) does not impact the attitude towards online open book examination but he found significant difference between the attitude of rural & urban students towards the online open book examination. The study also revealed that maximum student-teachers have positive attitude towards online unrestricted type open book examination. The institutions should update their examination systems and move towards the open book examination as it enhance problem solving (Feller, 1994), motivates engagement and understanding of course material (Elertsen and Valdermo, 2000) and is less stressful (Philips, 2006).

Conclusion

The present study explored the attitudes of the student-teachers towards the OUTOBE, a relatively new and innovative assessment approach in the field of teacher education. The findings revealed that while many student-teachers appreciate the flexibility, reduced anxiety, and critical thinking opportunities offered by this examination pattern, concerns remain regarding academic integrity, lack of standardization, and digital accessibility. The overall attitude was found to be moderately positive, indicating openness to such alternatives provided adequate guidance and support mechanisms are in place. This study underscores the need for teacher education institutions to orient student-teachers towards new forms of assessment, enhance digital readiness,

and ensure transparent evaluation practices. As educational paradigms continue to shift, understanding learner attitudes becomes crucial for the successful implementation of the OUTOBE aligned with 21st-century learning outcomes. Future studies related to this may expand the scope by including comparative analyses with traditional examination formats or involving a larger and more diverse sample across multiple disciplines.

References

- Ahmad, Z. (1993). Existing system of examination and the need of reform. Journal of Elementary Education, 1(3) 56-62
- Ahmed, F. R. A., Ahmed, T. E., Saeed, R. A., Alhumyani, H.,Khalek, S. A.,& Zinadah, H. A. (2021). Analysis and challenges of Robust E-exams performance under COVID- 19. Results in Physics, 23, 1-7. Retrieved from https://www.sciencedirect.com/science/article/pii/S2211379721001571
- Alghamdi, A. G. (2024). Assessing Medical Student Perceptions of Open-Book Exams for Self-Directed Learning. Cureus, 16(4). Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC11130531/
- Anaya, L. & Nicholas, E. & Lawani, U. (2010). Open-book vs. closed-book testing: An experimental comparison. ASEE Annual Conference and Exposition, Conference Proceedings. Retrieved from https://peer.asee.org/open-book-vs-closed-book-testing-an-experimental-comparison.pdf
- Anwer, D. S., Mamhusseini, A., Omar, Y. B. & Othman, M. S. (2020). Attitudes of Faculty and Students toward Open-book Examination as a Teaching Strategy in Nursing Education at Hawler Medical University. Erbil Journal of Nursing & Midwifery. 3(2) 136-142. Retrieved from https://ejnm.hmu.edu.krd/index.php/ejnm/article/view/144
- Chan, M. Y. & Mui K.W. (2004). The use of open-book examinations to motivate students: a case study from Hong Kong. World Transactions on Engineering and Technology Education. 3(1). 111-114. Retrieved from http://www.wiete.com.au/journals/WTE&TE/Pages/Vol.3,%20No.1%20(2004)/23_Chan41.pdf
- Chaurasiya, K.D. (2021). A study of open book and closed book examination with respect to certain

variables. Doctoral thesis submitted to Kadi Sarva Vishwavidyalaya. Retrieved from http://hdl.handle.net/10603/391178

- Das, J (2017). A Study on the Open Book Examination in terms of Achievement in Language Subjects and Examination Anxiety of Standard VIII Students. International Journal of Research and Review. 4(5), 46-54. Retrieved from https://www.ijrrjournal.com/IJRR_Vol.4_Issue.5_ Ma y2017/IJRR009.pdf
- Doghonadze, N. & H. Demir (2013). Critical Analysis of Open-Book Exams for University Students. Proceedings of ICERI 2013 Conference (pp. 4851- 4857), Seville, Spain. Retrieved from https://library.iated.org/view/DOGHONADZE2013CRI
- Feller, M. (1994). Open-book testing and education for the future. Studies in Educational Evaluation. 20(5), 235 – 238.
- Ganna, S. (2017) Open Book Examination as an Alternative Mode of Assessment at the Secondary Level: An Experimental Study. (Doctoral thesis) Available on Sodhganga
- Gupta, S.P. (2011). Adhunik Mapan evam Moolyankan. Allahabad: Sharda Pustak
- Halder, S. (2022). A study on the attitude of post-graduate level students towards online open book examination system at COVID - 19 situation. International Journal of Applied Researches, 8(12). 43-46. Retrieved from https://www.allresearchjournal.com/archives/2022/vol8issue12/PartA/8-12-13-972.pdf
- Johanns, B., Dinkens A. & Moore, J. (2017). A Systematic Review Comparing Open-Book and Closed-Book Examinations: Evaluating effects on development of critical thinking skills. Nurse Education in Practice, 27, 89-94. Retrieved from https://www.sciencedirect.com/science/article/pii/S1471595317305486
- Kulkarni, M. & Gurpreet, A. (2021). Role of Open Book Examinations in Managing Quality of Higher Education in Pandemic Situations. University News. 59(37), 20-23
- Mohanan, K. P. (1997). Open Book Examination-A. Report and a response to some Concerns

Examination. Centre for development of Teaching and Learning. July, 1997, 1 (2) Retrieved from http://www.cdtl.nus.edu.sg

- Mukherji, D. N. (1986). Examinations in India. Bombay: Hind Kitab Publishers.
- Nordin, M. N. B., Mustafa, M. Z. B., & Razzaq, A. R. B. A. (2020). Relationship between headmasters' leadership, task load on special education integration programme teachers' job satisfaction. Universal Journal Educational Research, 8 (8), 3398–3405. Retrieved from 10.13189/ujer.2020.080813.
- Rasul, S. & Bukhsh, Q. (2011) A study of factors affecting students' performance in examination at university level. Procedia - Social and Behavioral Sciences, 15, 2042-2047. Retrieved from https://www.sciencedirect.com/science/article/pii/S1877042811005969
- Spiegel, T., & Nivette, A. (2021). The relative impact of in-class closed-book versus take-home open-book examination type on academic performance, student knowledge retention and wellbeing. Assessment & Evaluation in Higher Education, 48(1), 27–40.
- Theophilides, C. & Koutselini, M. (2000). Study Behavior in the Closed Book and the Open Book Examination: A Comparative Analysis. Educational Research and Evaluation, 6(4), 379-393.
- Vyas, G. & Vyas, J. (2009). A comparative study of open book exam to closed book exam. Shodh, Samiksha aur Mulyankan International Research Journal, II (7), 164-165
- Widana, I. W., Parwata, I., & Sukendra, I. K. (2018). Higher order thinking skills assessment towards critical thinking on mathematics lesson. International Journal of Social Sciences and Humanities, 2(1), 24–32. Retrieved from 10.29332/ijssh.v2n1.74.Search in Google Scholar