

To Compare the Perspectives of Teacher Educators and Pupil Teachers for Infrastructure in Teacher's Training Colleges

Shikha Verma
Amity University

Mitima Sachdeva
Amity University

Amita Bajpai
University of Lucknow

Teachers keep the foundation stone of formal learning. This learning should be built up with planning and affection. A great deal of thoughts of teachers is required in a friendly environment. For this, we need well trained teachers. In ITEP, Teacher education colleges are given comprehensive guidelines for infrastructure improvement. Good infrastructure will definitely improve the level of teacher education. A researcher conducted an online survey for a sample of teachers and students. The purpose of this study is to compare the perspectives of the respondents regarding teacher training infrastructure. This study also points out the importance of various features of the teacher training infrastructure from the point of view of the respondents and encourages the respondents to express their opinion on better use of the infrastructure.

Keywords: infrastructure, teacher, teacher education, teacher's training institute, integrated teacher education programme, teacher educator, student teacher

INTRODUCTION

The infrastructure of a college is an important aspect that always needs attention. The word infrastructure includes a lot. Several items, facilities, and arrangements are included in this single word, 'infrastructure'. The infrastructure of an educational college includes classrooms, a playground, a library, laboratories, computer systems, electricity, backup facilities, and so forth. If the college's infrastructure is appropriate, the individuals will carry out their jobs and duties in a sufficiently appropriate manner. This will certainly support their progress. These facilities are also regarded as one of the most important indicators of ensuring a conducive and favorable learning environment for all.

During the past three decades, major emphasis has been placed on policies, programs, and schemes, such as National Education Policies, Operation Blackboard (1987), Sarva Shiksha Abhiyan (2001–2002), etc., by making provision of appropriate amenities and facilities within the educational environment at both school and higher education levels. The National Education Policies have admitted that when the

environmental conditions do not contain proper infrastructure facilities and amenities in an educational college, it proves to be a demotivating factor to students and teachers. The recent policy, therefore, calls for a drive to bring about improvements in an educational college. The Right to Education Act (2009) has recommended that every educational institution should have proper facilities and amenities of infrastructure. This includes restrooms, clean drinking water, playgrounds, proper environmental conditions, nutritious and proper boundary walls, etc. (Bandhopadhyay, 2016)

ADVANTAGES OF INFRASTRUCTURE FOR EDUCATIONAL QUALITY

Daniel Rivera, Social Development Project Director at CAF, Development Bank of Latin America, states that the improvement of the physical conditions of an educational college is as closely related to learning as other educational inputs, including home environment, motivation, good teachers, libraries, technologies, or student services. The advantages of infrastructure are multi-dimensional.

Admission and Attendance

According to UNESCO, the enrolment and drop-out rate is greater in rural areas than urban areas. Several studies have found that the physical conditions of buildings of educational colleges increase admissions and positively affect course completion. The World Bank found that investments in facilities of an educational college had a very significant effect on the attendance of the learners and the teachers.

Motivation to Teachers

Studies in Bangladesh, Ecuador, India, Indonesia, Peru, and Uganda indicate that teachers in schools with good infrastructure have, on average, 10% less absenteeism than teachers in colleges with deficient infrastructure. In fact, the study found that infrastructure had a greater teachers absenteeism than teacher salaries or the administration. The teachers are motivated to attend daily and teach efficiently.

Better Learning

Studies carried out in many countries, such as the one conducted in the U.S.A. by 21st Century School Fund in 2010, found positive statistically significant results between institutional infrastructure and standardized tests to measure learning processes and giving span to their talents.

Home Away from Home

Creative, motivating and comfortable atmosphere will strengthen the desire of learners and teachers to attend school every day.

Digital Infrastructure Has Become a Must

Before the pandemic, digital learning was an option. Many colleges realized its importance and incorporated technology as a part of their ecosystem via smart classrooms and other IT infrastructural developments. Hence, educational institutions have to invest in building to make digital infrastructure education accessible for all.

New Normal School Environment Post Reopening

Sitting spaces and activity rooms have to be bigger to maintain social distancing norms. Canteen space should be able to accommodate the people systematically; rest rooms have to be converted to incorporate proper safety and necessary hygiene requirements and many more.

Proper Infrastructure: A Challenge

One of the main challenges that an owner of an educational college might face in incorporating all the necessary facilities is financial constraints. Proper infrastructure development is fairly expensive and the owner might not have sufficient budget. The availability of financial resources is regarded as the major factor in promoting infrastructural facilities (Bhunja, Duary, 2012).

In all educational colleges, even in a teachers' training college, infrastructure development is an important aspect that needs to be considered. In Integrated Teacher Education Programme (ITEP), it has been comprehensively instructed that the infrastructure development in a teacher's training college is regarded to have a considerable influence in enabling future teachers to achieve the desired educational and professional objectives.

Teacher Education is truly vital in creating a team of quality teachers. The National Council of Education (NCTE) supported the norms and standards of different teacher education programs. Four-year Integrated Education program integrates liberal science and Liberal Arts with B.Ed pedagogy. This professional Training program is qualitative and well-designed, but it also faces some challenges. ITEP provides good infrastructure facilities like libraries and laboratories to learners.

We all are aware of the fact that good teachers can be trained in a good training college, and well-trained teachers can efficiently teach the students in a better manner; hence, teacher training programs are also redesigned and redefined. Integrated Teacher Education Programme (ITEP) has given guidelines on the infrastructure of the teacher's training colleges. The perspective of the teacher educators, managers of the colleges, and pupil teachers are also changing, realizing the importance of the college's infrastructure.

OBJECTIVES

- To compare the perspective of groups of teacher educators and pupil teachers for infrastructure in a teacher's training college.
- To explore the importance of different infrastructure items as given in ITEP in a teacher's training college from the perspective of teacher educators and pupil teachers.
- To explore 5 most important infrastructure features in a teacher's training college.
- To find the opinions of the teacher educators and pupil teachers for better use of infrastructure in a teacher's training college.

HYPOTHESIS

There is one null hypothesis for only the first objective.

H1 - There is no significant difference in the perspectives of teacher educators and pupil teachers for infrastructure in a Teacher's Training College.

RESEARCH METHODOLOGY

Tool for the Present Study

The online survey was used for the present study. The researcher constructed a Google form. The tool was validated for its content by experts. Efforts were made to improve the language and remove ambiguity in these items /statements to make them understandable for all. After careful editing, the final tool was shared online to collect the data quickly and conveniently.

Sampling

The researcher collected the contact details of the teacher educators and pupil teachers from the teacher's training colleges and prepared a list to share the link and to collect the data. The link to the Google form was also shared with the Principals and Heads of colleges so that they could give their responses and share the link with the faculty and their pupil teachers.

Purposive Sampling was used for the sample. The selection was based on the following criteria.

Inclusion Criteria

- Belonging to teacher's training college of district Lucknow of Uttar Pradesh, India at the time of data collection.
- who were willing to take part in the study.

Exclusion Criteria

- who belongs to a course other than B. Ed. or B. El. Ed.
- who were not willing to take part in the study

RESULTS AND DISCUSSION

A Google form was used for collecting data and analysis was done accordingly.

FIGURE 1
DESIGNATION OF PARTICIPANTS

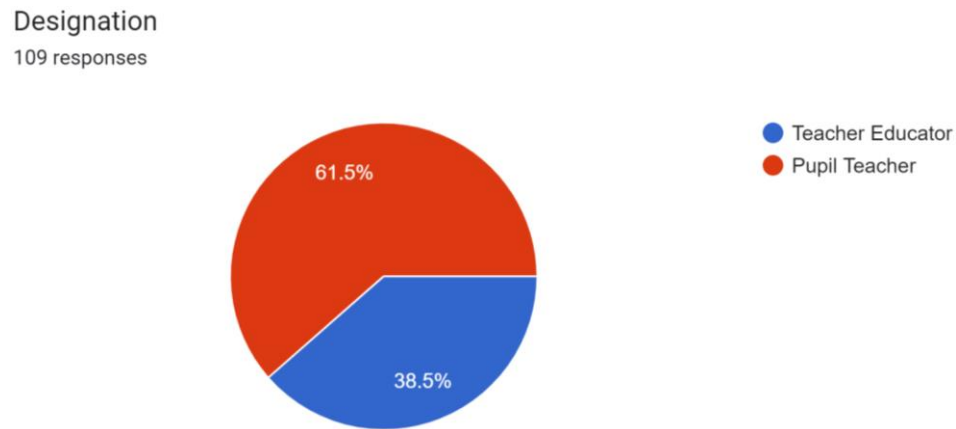


TABLE 1
TO SHOW THE NO. OF PARTICIPANTS TOOK PART IN THE STUDY

Respondent	No. of Responses	Percentage of Responses
Teacher Educator	42	38.5%
Pupil Teacher	67	61.5%
Total Responses	109	100%

FIGURE 2
IMPORTANCE OF INFRASTRUCTURE IN TEACHER’S TRAINING INSTITUTES

Question - Is the infrastructure in a Teacher’s Training Institute important?
 109 responses

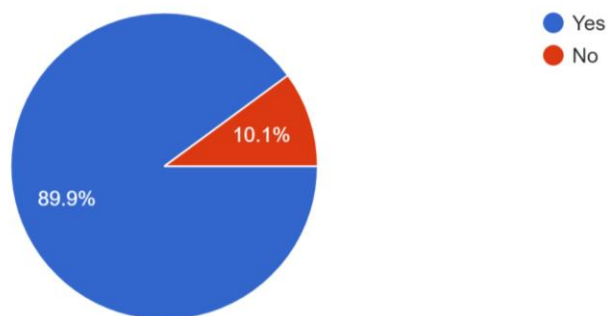


TABLE 2
TO SHOW NO. OF FAVORABLE AND UNFAVORABLE IN THE STUDY

Type of Responses	No. of Responses	Percentage of Responses
Favorable Responses	98	89.9%
Unfavorable Responses	11	10.1%
Total Responses	109	100%

98 respondents agreed that infrastructure is important in a teacher’s training college, while 11 respondents did not find infrastructure important. The next section of the Google form was allowed for only these 98 respondents who agreed with the importance of infrastructure in a teacher’s training college. These 98 respondents were asked to write their complete designation. These are supposed to attend the next section, which had perspective-based questions. Their answers were analyzed and compared.

TABLE 3
FOR THE SIGNIFICANCE LEVEL

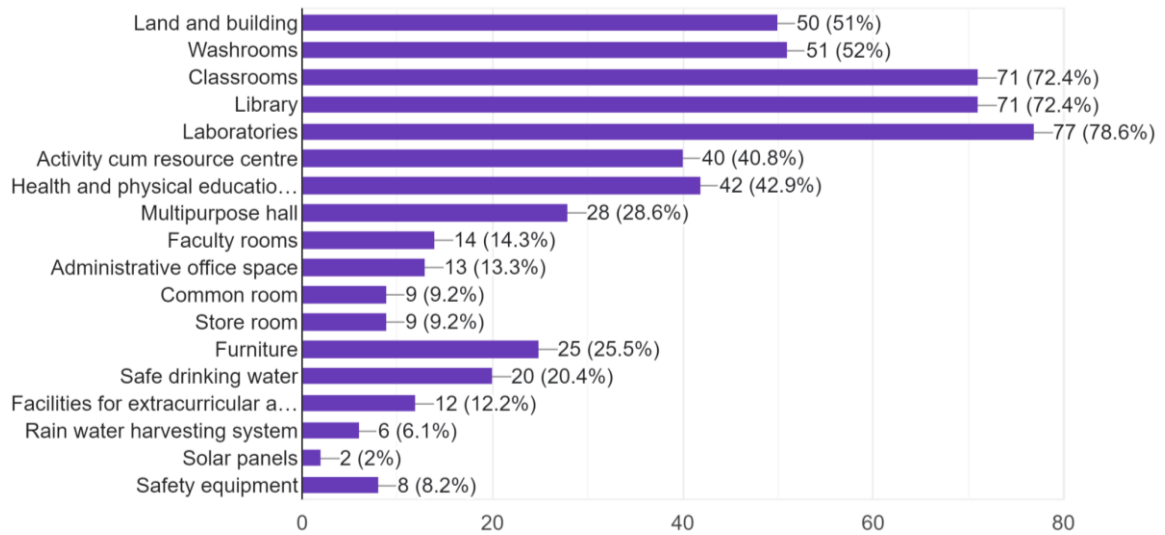
Respondents	No. of Respondents	Mean	S.D.	z value	Significant level
Teacher educators	35	61.24	10.04	1.48	Not significant
Pupil teachers	63	58.16	7.91		

df = 96, t table value at *0.05 level = 1.98; **0.01 level = 2.63

There is no significant difference in the perspective of teacher educators and pupil teachers. Hence, the null hypothesis is accepted.

FIGURE 3
IMPORTANT FEATURES OF INFRASTRUCTURE IN A TEACHER'S TRAINING INSTITUTES

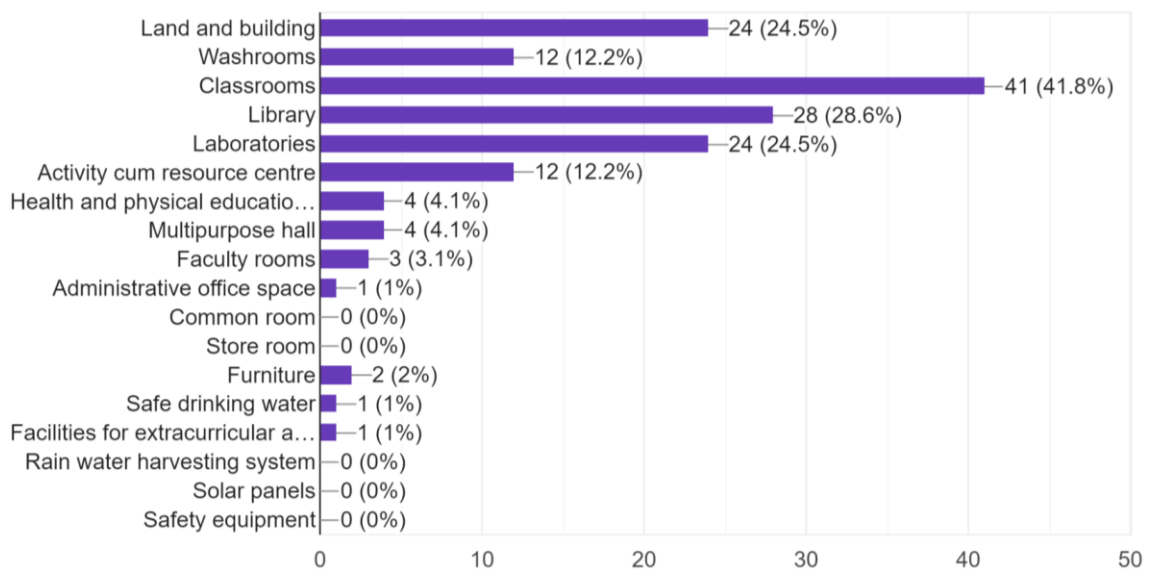
Question -Select any 5 most important features of infrastructure in a Teacher's Training Institute.
 98 responses



According to the study, 5 most important features of infrastructure in a teacher's training college are laboratories, library, classrooms, washrooms and land- building of the college.

FIGURE 4
UNIQUE FEATURE OF INFRASTRUCTURE IN A TEACHER'S TRAINING INSTITUTES

Question - Select the most unique feature of infrastructure in a Teacher's Training Institute
 98 responses



The respondents marked classrooms, libraries and laboratories as the most unique infrastructure feature in a teacher's training college.

Classrooms are the most essential requirement of any educational college. Classrooms must also be well equipped with the latest technology like Audio-video systems, projectors, and internet connectivity. Classrooms must be developed as flexible learning place of working individually and in groups.

The library is a main resource for any educational college. It has a significant role to play for both learners and teachers. Libraries must also be flexible to incorporate technologies like e-library, digital books and other contents, access to the central library and libraries across the campus in various locations. With the onset of Coronavirus, e-library and digital books are the need of the time. Proper spaces should allow for reading and discussions as this enhances collaborative efforts among library-users.

Good laboratories having all the necessary equipment encourage the learners to perform lab activities more effectively. It supports the learner in translating the theories into experiences practically.

Respondents suggested a playground, and canteen; elevators should also be added to the infrastructure.

The playground is another important component of educational infrastructure. It contributes to physical and mental health and creates a positive atmosphere in the colleges. It must be spacious enough to support various sports activities at the same time.

Infrastructure should not just focus on facilities for learners but also for teachers.

Colleges must consider recreational centers such as spaces for indoor activities, studios for musical performances, gyms, etc. as integral parts of educational infrastructure. Recreational centers and canteens with the right kind of furniture helps create a favorable atmosphere for pupil teachers to spend time inside the campus for a longer duration, especially during their practice teaching where they have to go for practice teaching on their allotted time along with preparation of lesson plans. These are very much required in composite colleges and integrated courses like ITEP.

98 responded for better use of infrastructure in a Teacher's Training College. The responses were like the use of a good timetable, good administration, good management, and skillful management. Few responded and realized the need for funds and budget.

CONCLUSION

There was a favorable opinion of different groups of sample respondents towards the infrastructure of a teacher's training college. The researcher found no significant difference in the perspective of teacher educators and pupil teachers regarding the infrastructure of their college. The sample responded 5 most important infrastructure features in a teacher's training college: laboratories, library, classrooms, washrooms and land- building of the college. Most of the respondents selected classrooms, libraries and laboratories as the most unique feature of the infrastructure in a teacher's training college. Keeping the importance of the infrastructure of a college in mind, it is essential to design educational infrastructure in such a way so that it maximizes the effectiveness of teacher education being delivered.

EDUCATIONAL IMPLICATIONS

- This study will certainly bring awareness to the importance of infrastructure and other provisions given in ITEP.
- The NCTE has made sufficient provisions for four years integrated B.Ed. The Programme will be in tune with the developments in the field of teacher education.
- The four years integrated B.Ed. has a balanced approach. It means giving due weightage to the curriculum and all the necessary activities required for development of trained teachers.
- This study will certainly bring awareness to owners of the teacher's training colleges for making adequate provisions of infrastructure in the college campus and will motivate them to keep improving the infrastructure from time to time.

- This will certainly motivate to improve the standard of the teacher's training colleges and teacher education. The improved infrastructure conditions will increase the admission and attendance of the teacher educators and pupil teachers.

SUGGESTIONS FOR FURTHER STUDY

- This study can be extended to study the influence of other variables like type of institution, qualification, subject-specification of respondents, gender, socio-economic and status of family background etc.
- The Department of Education and MHRD should survey parents to know their perspective and preference towards their children taking up the teaching profession.
- The present study can be extended to study the teacher educators' perspective of teacher training colleges where integrated B.Ed courses are already started.
- The study on the other provisions made in ITEP call be done.

REFERENCES

- Adhikary, A. (2017) A study on the perception of the teacher trainees towards two-year B.Ed. programme implemented in the teacher education institutions in Assam. *International Journal of Scientific and Research Publication*, 7(9).
- Aman, A., Maelah, R., & Auzair, S. (2012). Implementation of integrated case studies course for accounting students. *Procedia - Social and Behavioral Sciences*, 59, 9–17.
- Bandhopadhyay, M. (n.d.). *Present Status of Infrastructure Facilities in Schools in India: From National and State Level Perspective*. National University of Educational Planning and Administration. Retrieved November 30, 2022, from [http://www.dise.in/Downloads/Paper_on_Physical_Facilities_\(Draft_prepared_for_CABE\)_-_Report.pdf](http://www.dise.in/Downloads/Paper_on_Physical_Facilities_(Draft_prepared_for_CABE)_-_Report.pdf)
- Bhunia, G.S., Kumar, P., & Duary, S. (2012). Assessment of School Infrastructure at Primary and Upper Primary Level: A Geospatial Analysis. *Journal of Geographic Information System*, 4, 412–424. Retrieved June 25, 2022, from https://file.scirp.org/pdf/JGIS20120500007_28973302.pdf
- Choudhry, A.H., Gujjar, A.A., & Iqbal, J. (2011). A Study of the Attitudes of the Teacher Educators towards Pre Service Teacher Education Programme in Pakistan. *International Journal of Business and Social Science*, 2(16).
- Draft_NEP_2019_EN_Revised pp 287-92
- Gazette Notification of NCTE, ISBN-13: 9788170632740. Pg 28
- Gorain, R. (2017). Views of Teacher educators towards Two-year B.Ed. Programme of West Bengal. *International Journal of Interdisciplinary and Multidisciplinary Studies (IJIMS)*, 4(2), 95–98.
- Kapur, R. (2019), *Infrastructure Development in Schools*. Retrieved from https://www.researchgate.net/publication/334029594_Infrastructure_Development_in_Schools
- National Council for Teacher Education. (2009). *National Curriculum Framework for Teacher Education: Towards Preparing Professional and Humane Teacher*. New Delhi, India.
- National Education Policy 2020 Ministry of Human Resource Development Government of India, p42-43. Retrieved from https://www.mhrd.gov.in/sites/upload_files/mhrd/files/NEP_Final_English.pdf
- NCTE. (2014). *National Council of Teacher Education (Recognition Norms and Procedure)*. Retrieved from <http://dcde.puchd.ac.in/downloads/Regulation-2014.pdf>
- Public notification by NCTE (in English)
- Regulations by NCTE for Integrated Teacher Education Programme (ITEP)

- Sahoo, P.K., & Sharma, P. (2018). Student Teachers Perception towards the Restructuring of Teacher Education Programmes. *Educational Quest: An International Journal of Education and Applied Social Science*, 9(2), 187–201.
- Sudha, S. (2017). Attitude of Student Teachers and Teacher Educators towards Two Years B.Ed Course. *Paripex - Indian Journal of Research*, 6(1), 212–214.
- 21st Century School Fund. (2010). *Research on the Impact of School Facilities on Students and Teachers A Summary of Studies Published Since 2000*. Retrieved from <http://www.21csf.org/csf-home/Documents/ResearchImpactSchoolFacilitiesFeb2010.pdf>
- UNESCO report. (n.d.). Retrieved from <http://www.unesco.org/new/es/santiago/education/education-assessment-llece/third-regional-comparative-and-explanatory-study-terce/>