

A Proposal for the Improvement of Educational Infrastructure

Prepared for
The Chancellors Office
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Informative Abstract

The FAST-NU Islamabad Campus is one of the greatest institutions in the country for Computer Science. Still, it is starting to suffer due to inadequate resources available to the students, leading to the downfall of its educational integrity.

An increased student body that the university's physical infrastructure cannot handle is one of the many reasons for this. This has led to overcrowded classrooms and communal areas, not allowing students to study or relax freely. Moreover, Professors are ill-trained to deal with this many students in a single classroom, which leads to havoc in lectures. Finally, with the growing batches, there aren't enough Laptops or Desktops to handle all students. All of this could be dealt with firstly, the academic staff being given regular seminars on how to handle this capacity so they can easily navigate, and secondly, a fourth building being constructed in place of the Old Cafeteria to accommodate the growing strength. Lastly, introducing a new building will bring more Desktops and Labs where students can do their work.

The cost required to complete the construction of the New Building is Rs. 12cr., allowing the university to accommodate even more students once it is completed.

Roughly 500 more students could be admitted each semester with the addition of this new building.

Introduction

Overview

Our university's current infrastructure and faculty resources are struggling to keep pace with the growing student body. This proposal outlines the need for a new academic building and regular faculty development seminars to address the challenges of overcrowded classrooms, communal areas, and a diverse student population. Investing in these solutions ensures that our university provides a supportive and effective learning environment for all students.

Background

FAST-NU Islamabad has been one of the best institutions to study in the country, providing quality education and a great atmosphere for everyone. FAST is known for its rigorous academic program and for training students for the real world by making them work on projects that will mold their experiences. Nearly 24 years after its inauguration, FAST-NU is still reputable nationwide for its academics and extracurriculars, a vital inclusion for University life. Students can access 2 different cafeterias, 3 blocks, a cricket pitch, a Futsal court, and many other sports activities. Allowing students to balance their studies with an equal inclusion for sports and society.

Statement of Problem

With the increasing student body each and every year, the physical infrastructure of FAST-NU Islamabad cannot keep up. This is leading to overcrowded classrooms and communal areas; the university requires new seating areas to accommodate everyone. Not being able to seat students makes an uncomfortable experience for both the professors and the students, where, on many occasions, students have had to sit on the floor during a lecture. This helps the morale of neither us students nor does it help the learning experience in any way, shape, or form.

Professors have not been taught how to deal with students of this magnitude. There is no control of many professors over the students in a classroom, which leads to, for lack of better words, a fish market in the classes. This does not help the students who are actually paying attention, causing havoc in classes and labs.

Many of the labs within the university have outdated and not working machinery. This does not allow students to work on their Projects and Assignments, as many machines are ill-equipped to handle the assignments. As the years progress further, the population of students is only likely to increase even more, and the Machines and existing infrastructure will only get worse each day.

Need

As the population of the university is growing at an alarming rate each and every year, the approach to handling this has not changed. FAST-NU's studies and educational integrity are at risk if this continues further. No work on this issue will cause debilitating issues for students.

Scope

1. Infrastructure Expansion:

- a. Detailed analysis of current infrastructure capacity and projected student growth.
- b. Assessment of space requirements for classrooms, laboratories, study spaces, and communal areas.
- c. Exploration of design options for a new academic building, prioritizing energy efficiency and sustainability.
- d. Development of a comprehensive construction plan, including timelines and budget estimates.

2. Faculty Development:

- a. Needs assessment to identify specific faculty training and development areas.
- b. Design a structured professional development program, including seminars, workshops, and mentorship opportunities.
- c. Collaboration with experts in multicultural education and inclusivity to enhance faculty's ability to teach diverse student populations.
- d. Evaluation of program outcomes and ongoing adaptation based on faculty feedback and student performance data.

3. Financial Feasibility:

- a. Projection of costs for technology upgrades, salaries, and services during the upcoming year.
- b. Identify potential funding sources, including government grants, private donations, and reallocating existing resources.
- c. Development of a detailed budget plan outlining expenses and revenue projections.
- d. Analysis of return on investment, demonstrating the cost-effectiveness of proposed solutions.

4. Personnel Engagement:

- a. Survey of faculty and staff attitudes towards current infrastructure and faculty development initiatives.
- b. Focus groups to gather in-depth feedback and suggestions on proposed solutions.
- c. Communication plan to keep stakeholders informed throughout the implementation process.
- d. Ongoing collaboration with personnel to ensure their involvement and support.

Proposed Plan

The plan is to create a more in-sync educational infrastructure, which includes Physical infrastructure and professors being taught how to handle such a high magnitude of students.

Methods:

We must take the following steps to create a more in-sync experience.

Faculty Development Seminars. This is the most cost-effective and instant fix we have to such a pressing issue. Each faculty member, irrespective of their tenure at FAST-NU, will be subject to regular Development Seminars where they will be taught how to interact and deal with classrooms filled with students from multiple backgrounds. This will help make a more interactive experience and keep a quiet and tame class.

Student Review Forums. Instead of a course review, regular reviews on classroom experience should be taken by each student. This will help understand students' issues during their lectures and can be addressed within the Faculty Development Seminars.

Investing in Machinery for Labs. New machinery will help students easily complete their tasks, whether it be a Lab Task, Assignment, or Project. This will also help the havoc created in Labs when the PCs stop functioning.

New Building. The final and most long-term solution is constructing a new building to accommodate the increasing population. New and improved classrooms will ensure no class is overcrowded and there will be no issues in the classes.

Feasibility

The feasibility of this proposal is evident in its cost-effectiveness and alignment with the university's strategic goals. The proposed solutions address the critical issues of infrastructure inadequacy, faculty development, and student access to technology, ensuring that our university remains a premier institution of higher learning.

The construction of a new academic building is a significant investment, but the long-term benefits far outweigh the initial costs. The new building will provide much-needed additional classrooms, laboratories, and study spaces, alleviating the overcrowding that is currently hindering effective teaching and learning. Moreover, the design of the building will prioritize energy efficiency and sustainability, aligning with the university's commitment to environmental stewardship.

The proposed faculty development seminars and workshops will provide faculty with the training and resources needed to teach a diverse student population effectively. These sessions will focus on strategies for fostering inclusive classrooms, accommodating different learning styles, and promoting cultural sensitivity. By investing in faculty development, we can ensure that our students receive the high-quality education they deserve.

Enhancing student access to PCs by purchasing new equipment is a cost-effective way to improve student learning and prepare them for success in the 21st century. By providing students with the tools they need to access online resources, collaborate with their peers, and engage in digital learning experiences, we can empower them to reach their full potential.

Implementing these proposed solutions will require careful planning and budgeting, but the university has a demonstrated track record of sound financial management. With a commitment to securing the necessary resources and focusing on long-term sustainability, we can successfully implement this comprehensive plan to address the challenges of infrastructure inadequacy, faculty development, and student access to technology, ensuring that our university remains a leader in providing a world-class education for all students.

Conclusion

In conclusion, the proposed solutions to the challenges of infrastructure inadequacy, faculty development, and student access to technology will yield significant benefits for our university community. Reduced overcrowding in classrooms and communal areas will enhance the learning environment, promote academic success, and contribute to a more positive student experience. Access to adequate facilities will support students' academic and personal needs, fostering their overall well-being and success. New recreational spaces will promote a sense of community and belonging among students, enriching their campus life and contributing to a more vibrant and inclusive university culture.

By addressing the critical issues of infrastructure inadequacy and faculty development, we can pave the way for a more sustainable and effective learning environment at our university. Investing in these solutions demonstrates our commitment to providing our students with the resources and support they need to succeed in their academic endeavors and thrive in a diverse and inclusive learning environment. This proposal represents a significant step forward in ensuring that our university remains a beacon of academic excellence and a source of pride for our community.

We urge the university administration to approve our proposal and invest in the future of our students, faculty, and institution. By investing in these critical areas, we can create a truly exceptional university that prepares our students for success in the 21st century. Thank you for your time and consideration.