

ACY 2017-2018

Practice #1

Title of the Practice: Institutional focus on Environment and Sustainability

Objectives:

- To balance our economic, environmental and social needs, allowing prosperity for now and future generations
- To increase student and campus engagement in sustainability initiatives
- To reduce carbon footprint inside campus
- To promote use of alternative/ renewable energy resources
- To increase operational efficiency

The Context:

The Institution is committed to improving the health and quality of life during working hours and beyond. The institute recognizes that sustainability supports that mission by striving to improve the environmental health and quality of life for the campus and community. In order to have healthy communities, we need clean air, natural resources, and a nontoxic environment. We require more resources such as energy, water, and space. Sustainability aims to use our resources efficiently to benefit our campus and community. Sustainability and healthcare are intricately related since the quality of our environment affects public health. In this context, many initiatives were started focusing towards environment and sustainability.

The Practice:

As a way forward towards sustainable development, GMRIT started new initiatives to bring a change in the attitude of internal stakeholders as well as the residents of GMRIT campus. The first initiative was to bring awareness among the students and staff for maintaining a zero waste campus. Further, proper care was taken from segregation of waste to the disposal. We, at GMRIT established a sewage treatment plant for the reuse of wastewater for gardening purposes and sewage sludge as fertilizer. A biogas plant was put to use the food and kitchen waste from hostels to produce gas which in turn is used for cooking in the hostel. Sanitary napkin incinerators in ladies hostel were setup for proper disposal. A solar power plant with net metering facility was established to promote usage of alternative/renewable energy. The most appreciated best practice is the "Pollution Free Thursdays" where no vehicle is allowed to move in the campus. The housewives and maids in quarters are given necessary education in maintaining a plastic free residential area. Another form of dynamic interaction to accelerate campus sustainability involves the external stakeholders. This has resulted in a co-creative approach in various forms of stakeholder engagement. At the end, the existing Green office and residential practices with waste minimization dimensions such as Save Environment and adopt sustainability techniques, Use Less Paper and Practice Recycling, Plastic free campus represent the multiple pronged approaches in promoting and strengthening the campus sustainability initiatives on waste minimization and management.

Evidence of Success

- 2nd Rank in AICTE Clean Campus Award 2019
- Fully functional solar power plant in campus

- Presence of energy efficient and sensor driven electromechanical equipment
- Effective Solid and Liquid Waste Management
- Lush green eco-friendly campus

Problems Encountered and Resources Required:

- Educating the stakeholders from time to time to bring out a mind-set change to adopt to clean campus initiatives
- Involves significant amount of budget and personal allocated for maintenance activities

Practice #2

Title of the Practice: Institutional focus towards digitization of learning resources

Objectives:

- To develop the skills and confidence of educators in the appropriate and effective use of digital technology to support learning and teaching.
- To ensure that digital technology is a central consideration in all areas of curriculum delivery and assessment.
- To provide technology equity to students by providing meaningful access to learning resources
- To empower students academically by providing them with the 21st Century learning tools
- To prepare students for the workplace of the 21st Century, and thereby enhancing local economic development by creating a technologically-literate graduating work force
- To enhance the overall learning experience by generating enthusiasm and a more positive learning environment for students

The Context:

Recollecting the famous thought provoking sentence by Jenny Arledge - "Technology can become the 'wings' that will allow the educational world to fly farther and faster than ever before; if we will allow it," the present world recognized that technology has no bounds in the 21st century. This is the phase of radical development where technology is taking over every niche and corner. In this context, the institute understands that the education system is evolving for the sake of betterment, as this generation's students are not born to be confined by the limits of simple learning; their curiosity is vast and cannot be catered with educational systems that were designed earlier. This effect is even more significant with the adoption of outcome based education. If we teach our graduate students the way we taught them yesterday, we would deprive them of their tomorrow. Our old professional engineering educational system lacks the capability to stand a chance in the 21st century. In this regard, a series of initiatives are in place in the institute catering to the specific needs demanded by students and faculty to allow curriculum design delivery & assessment to practice outcome based education in the true spirit.

The Practice:

Digital learning is replacing traditional educational methods more and more each day. Irrespective of how much technology is integrated into the classroom, digital learning has come to play a crucial role in education. It empowers students by getting them to be more interested in learning and expanding their horizons. Below are the digital learning initiatives adopted by the institute.

- Access to digital library
- Subscription to e-journals and e-books
- LAN based courses and learning content
- ICT enabled classrooms
- Contemporary curriculum delivery strategies
- Online examinations
- Encourage and incentivize online certification courses

Evidence of Success:

- a. Transformation from traditional lecture class to a discussion oriented class
- b. Increased participation and promotion of healthy competition among students

- c. Self-motivated and more accountable learners
- d. Increased employability skills and campus placements
- e. Increased participation in seminars, paper presentations and project design contests
- f. Increased access to teachers and learning resources during off working hours
- g. Increase in self-paced learning

Problems Encountered and Resources Required:

- a. Students struggle to maintain self-discipline as there is no direct control or is minimal in an professional education system. It is expected that the students maintains self-discipline in utilizing the resources in a judicial manner for improving his/her learning experiences.
- b. Many students find it difficult to manage time and take up digital initiatives in the way they are intended to
- c. Technological difficulties are a major hindrance to digital learning due to location of the institute in a remote place. Students mainly depend on institute internet and during off work hours internet connectivity by telecom operators is meagre and will not support access to entire digital content
- d. Further, to take advantage of the potential of digitization in improving the students learning experience, modern tools like mobile phones, laptops etc. are required by each and every student for usage in the classroom. However, permitting such tools into the classroom is a trade-off between existing government rules, financial status and above all mind-set of the students to use them judicially without prejudice to core values and ethics of education.