Nagarjuna College of Engineering and Technology, Bengaluru.



An Autonomous Institution under VTU, Accredited by NAAC with A+ Grade

Best practices of the Institution as per the prescribed format of NAAC

Best Practice: 1

1. Title of the Practice: "Teachers use ICT enabled tools for effective teaching-learning process"

Educational systems worldwide have been affected by the Covid-19 pandemic, leading to the near total closures of schools, and colleges. Most governments around the world have temporarily closed educational institutions in order to restrain the spread of Covid-19. This requires all elements of education to adapt and to continue the teaching learning process. The Indonesia Government assigns the distance learning system using online learning. This is effective solution to activate classroom even though school have been closed to reduce the spread of covid-19.

Many platforms of digital sources have been implemented by school, one of them is using Google Classroom. This research aims to get review of using Google Classroom during this pandemic. This study was library research that describes the phenomenon of using Google Classroom. The result of the research finding proves that it is effective to use this platform. It is one way to be considered by the schools and teachers to provide students by e learning that can be attracted for the students, while the process of teacher learning move to virtual classes.

Teaching using ICT tools - Such as

- Subject PPT are prepared by subject faculty and senior professors in the department.
- > PPT prepared by outside experts.
- > Audio and video lectures prepared by our college faculty members.
- ➢ Flip teaching.
- > Audio and video lectures available through VTU, NPTEL.
- Advanced digital notepads.

Best Practice: 2

1. Title of the Practice: "Virtual Lab Facility"

- 2. Goal:
 - > To provide remote access to Labs in various disciplines of Science and Engineering.
 - These Virtual Labs would cater to students at the undergraduate level, postgraduate as well as level as to research scholars.
 - > To enthuse students to conduct experiments by arousing their curiosity.
 - > This would help them in learning basic and advanced concepts through remote experimentation.
 - > To share costly equipment and resources, which are otherwise available to limited number of users due to constraints on time and geographical distance.



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3. Context

- The Virtual labs developed by faculties from the top technical institutions of the country, address the issues of lack of good laboratory facilities, as well as trained teachers, by making remote and simulation based experimentation possible through the internet.
- Virtual labs facility for about 250+ laboratory courses and about 1750+experiments across multiple disciplines are available.
- A virtual lab is one of the largest educational initiatives in the world and a step forward than the traditional learning method.
- Training through Virtual lab enable students to conduct innovative experiments round the clock.

4. The Practice:

- Institution has been recognized as the Nodal center for Virtual Lab facilities sponsored by MHRD, GOI and supported by all IITs and IISc. This facility is being used by staff and students.
- 5. Evidence of Success:
 - Two tables from the web site of Amrutha University are given below which highlight the keen interest of our students on virtual lab experiments and is the evidence of success.
- 6. Problems Encountered and Resources Required:
 - Teachers are to be trained in conducting experiments using virtual lab facility. Computer and internet facility is required.

Best Practice: 3

Title of the Practice: "Institution Innovation Activities"

Ministry of Human Resource Development (MHRD), Govt. of India has established 'MHRD's Innovation Cell (MIC)' to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs). The primary mandate of MIC is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes while they are informative years. MIC has envisioned encouraging creation of 'Institution's Innovation Council (IICs)' across selected HEIs. A network of these IICs will be established to promote innovation in the Institution through multitudinous modes leading to an innovation promotion eco-system in the campuses.

Major focus of IIC

- > To create a vibrant local innovation ecosystem
- Start-up supporting mechanism in HEIs
- Prepare institute for Atal Ranking of Institutions on Innovation Achievements Framework



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- Establish Function Ecosystem for Scouting Ideas and Pre-incubation of Ideas
- > Develop better Cognitive Ability for Technology Students
- Functions of IICs
- > To conduct various innovation and entrepreneurship-related activities prescribed by Central MIC in time bound fashion.
- Identify and reward innovations and share success stories
- Organize periodic workshops/ seminars/ interactions with entrepreneurs, investors, professionals and create a mentor pool for student innovators
- > Network with peers and national entrepreneurship development organizations
- Create an Institution's Innovation portal to highlight innovative projects carried out by institution's faculty and students
- Organize Hackathons, idea competition, mini-challenges etc. with the involvement of industries.