Best Practice 2

Title of the Practice-2: Usage of Technology in Teaching Learning Process

Objectives of the Practice:

To enable digitally deployed and student-centric platforms to create a smart environment for learners.

Context:

In today's digital era, the integration of Information and Communication Technology (ICT) has become imperative in professional education institutions. The ICT Enabled Teaching Learning Process (iTLP) initiative aims to harness the power of technology to improve the teaching-learning experience and help in creating a smart environment conducive to students' growth and development. In a rapidly changing technological world, FAMT recognizes the importance of leveraging digital tools and platforms to enhance the quality, accessibility, and effectiveness of education. By embracing ICT-enabled solutions, the institute aims to empower students with personalized learning experiences, interactive multimedia resources, and collaborative virtual environments. Moreover, iTLP endeavours to foster innovation, critical thinking, and digital literacy among students, preparing them to thrive in an increasingly interconnected and technology-driven world. Through this initiative, FAMT strives to redefine traditional teaching paradigms and establish itself as a leader in digital education and pedagogy.

Practice-

Over 25 years, FAMT has continuously refined its educational strategies and activities to enhance the quality of teaching and learning. One such exemplary practice is the implementation of the ICT Enabled Teaching Learning Process (iTLP), initiated in 2018-19. This forward-thinking approach to integrating technology in teaching-learning proved invaluable during the pandemic, facilitating a seamless transition to online teaching and learning methods.

Aligned with the Digital India initiative, FAMT has implemented various ICT deployments to promote the active use of technology across its campus. Every department is equipped with ICT-enabled classrooms, fostering interactive and engaging learning environments conducive to student success.

The adoption of Google Workspace has revolutionized communication and collaboration, providing students and faculty with tools for email, document storage, online meetings student email IDs. Further, the E-learning platforms and tools, created and used by the faculty, have eased the sharing, managing, organizing and accessing of educational content for the students such as:

- YouTube Channels
- Virtual Labs
- Home pages
- Google Classroom
- Moodle
- Edmodo
- Lecture repositories

FAMT's collaboration with renowned national and international organizations has further broaden access to advanced learning resources and opportunities. The institute has tie-ups with:

- Coursera,
- IBM Skillshare,
- edX,
- Infosys Springboard and
- ISRO Nodal Centre

FAMT community can access to enriching and multidisciplinary educational resources through tie ups and registrations with the platforms such as:

- SWAYAM and NPTEL repositories
- National Digital Library
- Springer Nature

The institute's library portal grants access to these e-conent while empowering students, and faculty in their research. Additionally, the implementation of a cloud-based Management Information System (MIS) by Akron Systems has modernized administrative processes, and attendance tracking for enhanced efficiency and transparency.

FAMT's dedication to alumni engagement is evident through the establishment of an Alumni Portal, fostering connections and networking opportunities among graduates.

In conclusion, FAMT's commitment to leveraging ICT deployments highlights its dedication to embracing technology as a catalyst for innovation and excellence in teaching and learning. These initiatives have enhanced the educational experience both for students as well as faculty.

Evidence of Success:

Faculty members effectively utilize ICT tools for teaching-learning, while developing E-content for courses shared through multiple online platforms, enhancing student engagement and certification.

Online courses completed by students and faculty members are as follows:

Sr	Name of online education platforms	No. of courses completed by Students and Faculties
1	Coursera	2624
2	IBM Skillbuild	4285
3	EDx	431
4	IIRS-ISRO	54
5	NPTEL, Swayam, etc.	100+
	Total	7394

More than 300 online resources are developed by faculty members.

Positive student feedback reflects satisfaction with facilities. Notably, improvements in student placement and results underscore the efficacy of these initiatives. Additionally, faculty development through online training and certification programs ensures continual enhancement of teaching methodologies, contributing to the overall success of FAMT's educational practices.

Problems Encountered and Resources Required:

FAMT faces financial constraints in upgrading ICT hardware and software, hindering the institute's ability to provide state-of-the-art technology infrastructure. This limitation impacts the effectiveness of teaching and learning processes, impeding the integration of advanced digital tools and platforms.

To address these challenges effectively, FAMT requires increased financial resources to invest in the upgrade of ICT hardware and software, ensuring access to cutting-edge technology for both students and faculty. Additionally, efforts are needed to improve network infrastructure in rural areas, including the expansion of internet connectivity and the deployment of alternative solutions such as mobile hotspots or satellite internet services to enhance accessibility to educational resources for all students.