Best Practices at Vidyalankar Institute of Technology

VIT, over a period of 20 years, has developed some best practices by way of educational strategies and activities which enhanced quality of teaching and learning such as:

1. V-provisions (ICT enabled provisions)
2. Academic Preview and Academic Review

Title of the First Best Practice: vProvisions (ICT enabled provisions)

Objectives/intended outcomes:

1. To create digitally-enabled platforms to enable a smart environment for learners
2. To effectively manage academic and administrative resources.

Underlying principles of this practice:

In line with GOI's initiative of Digital India, VIT has set up the following vProvisions to promote active use of technology on the campus:

- vLive
- vPrint
- vRefer
- vMIS
- E-learning
- Open Course Ware (OCW)
- vTutorials
- vAttendance

Contextual Features of vProvisions:

1. Centralized for efficient management of academic, administrative, auxiliary and financial aspects.
2. User-friendly and can be accessed on and beyond the campus.
3. Save energy, time, and are eco-friendly.
4. Quick dissemination and remote access of information.

Challenges/Issues:

1. Creating customized software and its continuous upgradation
2. Data and system security

Brief description about vProvisions:

VIT takes pride in its in-house vProvisions which were ideated and executed in Incubation Centre by students and guided by faculty.

- **vMIS:** A customized ERP that takes care of all the academic, administrative, auxiliary and financial processes on campus. It addresses -
  - Student – Admission, Exam, Library, Accounts, Transcripts, etc.
  - Staff - Attendance, Payrolls, Leaves, Stores and Inventory Management, etc.

- **vLive:** A platform and discussion forum for dissemination of information such as notices related to exam, placement, academics, competitions etc.

- **vPrint:** A web-based centralized printing service that allows users to give print jobs from any location to "Any Time Print" (ATP) stations at the Institute.

- **vRefer:** A file transfer protocol (FTP) repository for students to access educational materials.

- **E-learning:** Digitized course material integrated with images, animated videos, web links, MCQs, quizzes and games to make learning engaging.

- **VIT Open Course Ware:** VIT's Lecture Capture System is an LMS to help learners access lectures recorded live in class.

- **vAttendance:** Biometric-based attendance capture and calculation system.

- **vTutorials:** Software which generates random mathematical assignments.

Uniqueness:

- VITians can access most of the vProvisions remotely
- vPrint, vLive, vAttendance are unique platforms with respect to VIT and are developed in-house by students.

Constraints/limitations:

- Keeping up the demand of internet throughout the campus during peak hours and providing seamless connectivity for smooth functioning of vProvisions.

Evidence of Success:

- **vLive:**

Users on vLive have increased over the years, if compared from 2013 till 2018

- **vRefer:** Repository of academic resources of 200 courses till 2018

- **E-Learning:**
  The number of e-books uploaded on the college repository include even ibooks and now around 146 e-books are available

- **Open Course Ware (OCW):**

Number of courses recorded in 2016, 2017, and 2018 have increased from 60, 120, to 154 respectively. The lectures recorded in these three years have increased from 631, 1789, to 2133 and visits to OCW have also increased from 2350, 22361, to 41289 respectively.

Problems Encountered:

- Like with any new technology, there were issues in users getting familiarized with it.

Resources required:

- VIT is equipped with all the resources and infrastructure required for the utilization of vProvisions which is now a well-established best practice at the Institute.
- Helpdesk system takes care of all IT related issues.

Title of the Second Best Practice: Academic Preview and Academic Review

Objectives/intended outcomes:

- **Academic Preview:**

1. To assess academic planning for effective curriculum delivery. (Plan)
2. To validate components of Academic Administration Plan (AAP). (Check)

- **Academic Review:**

1. To verify Course File compiled by faculty. (Do & Check)
2. To assess proper implementation of AAP; to suggest corrective measures. (Check & Act)

Underlying principle

Preparation is the key to success (Preview); feedback is the key to continuous improvement (Review).

Contextual Features:

1. Academic preparation is monitored (Preview) and its efficacy checked (Review).
2. Preview and Review are designed to set benchmarks for quality technical education at the Institute.

Challenges faced:

1. Identifying evaluation parameters, and assigning weightages.
2. Each teacher preparing Course File comprising 32+ evidences including Course Diary.

Description of the Practice:

VIT has initiated Preview and Review Processes in 2014 to streamline curriculum delivery. For every faculty member, Preview is conducted before a semester begins and Review at the end of the semester.

Preview:

As "well-begun is half done", VIT initiated Preview to identify appropriate resources for effective course delivery. It is carried out in three stages:

1. Faculty prepares draft AAP with inputs from Cluster Mentor/s (Internal and External).
2. Faculty submits information in the self-evaluated Preview form.
3. HOD validates their academic preparedness.

Subsequently, AAP is disseminated to students through vLive and vRefer.

Review:

Review is an evaluation of the implementation of AAP. It is carried out in three stages:

1. Faculty submits self-evaluated Review form. HOD and DAO validate the information at the Department level and forward it to the Institute Panel.
2. The Institute Panel (comprising senior faculty from other departments) verifies the Review Form and Course File.
3. Graded Report is submitted to the Principal and feedback is communicated to the faculty.

Uniqueness:

1. Development of a comprehensive AAP.
2. Systematic mechanism for checking compliance of pre-teaching (planning) and post-teaching (evaluation) through SMARTER (S=Specific, M=Measurable, A=Attainable, R= Relevant, T=Time bound, E=Evaluated and R=Reviewed) goals.

Constraints/limitations:

1. Moving from paper to paperless.
2. Logistics of organizing Preview/Review processes for all faculty.

Evidence of Success

Preview and Review are successful endeavours at VIT and lead to curriculum enrichment through:

1. Development of comprehensive AAP including BSA activities
2. Innovative teaching-learning methodologies
3. Development of e-learning resources
4. Proper documentation

The BSA activities have raised from 78, 99, to 117 in the years 2015, 2016 and 2017 respectively. Also, the number of E-learning resources have substantially increased in these years from 48, 101, to 150 respectively.

Preview Grades

The Preview grades have improved quite significantly from 2016, 2017, and 2018 from the range of 14-35 up to 66-65 approximately

Review Grades

The review grades have consistently maintained an average between 51-54 in the years 2016 and 2017.
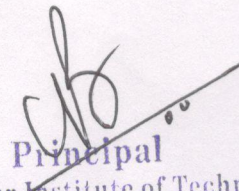
Problems Encountered

1. Designing a suitable TLP to suit the learning needs of millennials.
2. Orienting teachers to adopt innovative teaching methods.

These problems were resolved through discussion and analysis.

Resources Required

VIT is equipped with all the resources required for the implementation of the Preview and Review processes, which are now well-established practices at the Institute.

Principal
Vidyalankar Institute of Technology
Antop Hill, Wadala (E), Mumbai-37.