The Maharaja Sayajirao University of Baroda



Institutional Best Practices

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Best Practice 1

1. Title of the Practice

MSUB Integrated System (MSUIS) for Strengthening e-Governance Initiatives of MSUB

2. Objectives of the Practice:

The MSUB has already implemented several e-initiatives in NAAC Cycle-3. Now, university's Computer Centre has indigenously developed MSUIS (Integrated Portal) as single data repository for data generation, quick access and generation and submission of numerous reports as required by Government, Ranking /Rating Agencies, Students, teachers, funding agencies, corporate, alumni, and other stakeholders to improve operational efficiency resultant into strategic decision-making. Its multiple objectives include viz., to promote transparency, openness and customized Generation/submission/Retrieval /Archival of Data/ Reports by removing barriers of place and time to efficiently manage and govern academic and administrative operations and ultimately enhance e-Governance practices of the university.

3. The Context:

The primary context is to encompass and integrate each of the aspects of student's life cycle, academics, administration, audit, governance and management practices considering diversity, wide range of disciplines, size and scale of operations and presence of large number of students and staff in the university is a challenging task. Integrating, accommodating these diversities of curriculum, teaching-learning, research, extension activities in the design and development of e-Systems has been a major challenge. MSUIS is aimed to integrate under single umbrella already implemented different e-Governance modules viz., Students' life Cycle, WFMS, MEP, WFMS, ARMS, Online Admissions/Teaching/ Engagement / Examinations/Results' declaration/ Recruitment/Accounts /Audit /Inventory/ NAAC-DW and NIRF Data Collection Portals developed by Computer Centre and Department of Computer Science and Engineering. Provision of staff with winning their acceptance and adaptation of technology and innovative tools requires continual training, reskilling to ensure use of customized features of MSUIS is a complex task.

4. The Practice:

MSUIS is aimed to transform under 'Digital University Framework' for various functionalities with a special focus on academic operations of university. The MSUB has allocated budget of Rupees 304.60 Lakhs in its syndicate meeting held on 30th June, 2020 for indigenously developing its MSUB Information System [MSUIS] for enabling it is aimed at offering similar access to data for everyone as

a part of its single digital network platform to connect all sources to ensure seamless uniform flow of data and information in all the nodes in the entire network. The entire campus is wi-fi enabled for students and staff. The major ICT initiatives of MSUB concerning Management includes viz., Students, Admissions, Examinations, Academics, Staff (Recruitment /Payroll), Library, Alumni, Accounts, Audit, and Inventory, etc. The students are provided unique 'Permanent Registration Number' for the life time under system of 'Student Life Cycle' through SMS on registered mobile number as well as e-mail, with their user ID and password for personalized e-Suvidha account which enables him/her to have online access and data retrieval concerning Student Admission Management viz., status, payment of fees, scholarship application, post admission information, assignment, examinations, declaration of result, alumni registration to conferment of Degree/Diploma. The records and credentials of teachers as well as requisite data and information of the departments, faculties and sections are collected through the Annual Report Management System which is immensely helps in provision of data for accreditation and ranking. The administrative process is carried out with the help of Workflow Management System. The MSUB has framed and implemented ICT Policy, e-Governance policy, and e-waste Policy for strengthening and integrating existing initiatives under MSUIS under a single umbrella of Enterprise Resource Planning Framework to facilitate and achieve multiple goals. The advent of the pandemic and its prevalence has raised several challenges and opportunities in continual implementation and integration of einitiatives in MSUIS. Catering to the teaching-learning process, conducting online examinations of such a large number of students presented a nightmarish situation initially. The university has tied up with Microsoft Teams to meet this challenge. Today, that effort presents itself as a huge repository of learning material for the students. A Moodle platform has been also provided. The university remained proactive throughout the pandemic including the critical phases by hosting many online discourses on relevant subjects and issues. Thus, MSUIS aims to deliver rejuvenating experience to students and staff of the university.

5. Evidence of Success:

MSUIS has been indigenously developed and established by the Computer Centre and Department of Computer Science and Engineering to ensure control on data and privacy. It aims to integrate and augment different e-Systems/modules viz., Student, Faculty, Academics, Examinations, Library, Staff etc. with continual enhancement in its functionality and features. Students' life cycle takes care of the data from the entry of students to conferment of degree/diploma. Online admissions and eSuvidha mobile app. has helped to increase GER by 18% during 2016 to 2021. Online Admissions / Examinations / Ph.D. Framework / Engagement / Result Declaration Portals have helped students to continue studies, research, internships, and placement during Covid pandemics. MEP has effectively dealt

with activities of examinations management. Online Recruitment Portal is useful in hassle free receipt of online applications till issuance of appointment order with interviews conducted in blended mode for staff of the university. WFMS enables online access and approval of office note with permanent and transparent record keeping and its retrieval. The Annual Report Management System integrates almost all parameters and metrics of University Annual Report, Annual Quality Assurance Report and NAAC framework making it easy for the IQAC team to collect, assimilate and for startup, internships, mentoring, and placement to students of the university.

6. Problems encountered, and resources required

The use of technology for governance and academic administration to realize vision and mission of MSUB through MSUIS has successfully dealt with problems of logistics and mobilization of financial resources. The staff, and students of the university have worked hard to accept, adapt and adopt various e-modules of MSUIS concerning viz., students, academic, examinations, staff, academic administration and governance. The establishment and maintenance of MSUIS requires formidable ICT infrastructure especially for storage of data, pathway for flow of information and above all maintenance of privacy and data security. The training of students and staff and sensitizing other stakeholders too is a big challenge. The scattered 12 campuses with staff of 2500+ and 47000+ students too raises challenge of resolving their queries require continual. maintenance, modification and upgradation of e-modules to persuade them for continual use of features and functionalities of MSUIS is the key problem handled effectively by the university.

Best Practice 2

1. Title of the Practice:

MSUB's Initiatives and Development Plan for Implementation of National Education Policy (NEP):2020

2. Objectives of the Practice:

The NEP:2020 aims to fulfill aspirations of youth by providing them quality education to make India Vishwa Guru. MSUB being MERU impart Multidisciplinary, Professional, Value-Based, Lifelong Education following 'Satyam Shivam Sundaram'. MSUB strives for achieving excellence in academics and research through capable faculty and students. MSUB focusses upon Equity and Inclusion, Languages, Arts, Culture, and ICT for holistic growth and development of students. Its vision and mission centres around innovation, entrepreneurship and skill development of students by integrating Indian ancient science and ethos reflective of its synergy with MSUB's initiatives and Action Plan vis-à-vis objectives of implementation of NEP 2020.

3. The Context:

NEP:2020 is a blueprint for self-reliant India. The IQAC and Core Committee has prepared 'Institutional Development Action Plan' (Short/Medium/Long Term) for implementation of NEP. The key initiatives implemented include Outcome-Based Education and Mapping of attainments for Academic Programmes, Adoption of a CBCS/Electives/Specialization, and offering of Interdisciplinary, Integrated, Academic Programmes and Certificate/Add-on/Value Added Courses with credit transfer as well as adoption of 'Academic Bank of Credit', Multiple Entry/Exit and Internationalization of Higher Education etc. MSUB has ingrained objectives and gradual implementation of NEP in its teaching-learning, research, extension, infrastructure, governance, and leadership aspects with support of students, staff and stakeholders. MSUB has established DSW to provide financial assistance to the economically weaker students. The challenges being faced by MSUB in implementation of NEP include mobilization of resources, prioritization, creating conducive learning environment, establishing students' support system. participation of teachers, other stakeholders and above all support of the State **Government**.

4. The Practice:

The MSUB has implemented various quality enhancement/sustenance initiatives based on NAAC:RAF and Peer Team Report (Cycle-3), and some of them has been now reflected and incorporated in NEP 2020. The key objective of Institutional Development Plan of MSUB for implementation of NEP is to integrate the process of education with real life situations and to sustain deep rooted social and national

values of ancient India. It aims to inculcate human values, tolerance, compassion, and equanimity among students and staff. One of the most basic skills that the students need is communication and a language proficiency in English. The imparting of communication skills has been considered as an option under the CBCS scheme. The core subjects in the curriculum along with the electives provide a strong base and wide choice to the students, that encompasses technical and life skills to address the holistic and multidisciplinary aspects of student's life aimed at their holistic growth and development. The MSUB has adopted a multistrategy model to advance the overall teaching and learning experience with Wi-Fi and other ICT facilities, extensive library resources, etc. meant for students to provide them an optimal learning environment. The MSUB offers studies in 08 Indian and 05 foreign languages. The research project is an integral part of experiential, collaborative and participative learning. The university enjoys substantial autonomy in curricular aspects, which percolates down to the faculties and departments. It organizes wide range of extension activities viz., NCC, NSS, ACC, Sports, Seminars, Workshops and Sessions on conventional and relevant topics to sensitize and develop awareness among students and other stakeholders. MSUB has entered research collaborations with national and international institutes/ universities. The MSUB focusses upon equity and inclusion having a strong ethical work culture and inclusivity. It offers scholarships and free ships to students. Mentoring and counselling of students by teachers has been a spontaneous and informal way of life in the campus. The university has deployed efforts to attract the best faculty and students by offering them incentives and support for academic, research, extension, and future career mobility. The research facilities and performance are strong enough for MSUB to become MERU. Most of the Post Graduate Students undertake project work and research-based internships. The implementation of interdisciplinary approach in MSUB is a logistical challenge, and needs time for sensitization, adaptability, acceptance, and integration with the stakeholders. Other constraints are availability of resources, infrastructure, and finance.

5. Evidence of Success:

Since December 2016, the GER of MSUB has increased by 18% with 43000+ students including 800+ international students from 51 countries and number of research scholars as 1100. MSUB has established 04 Institutes viz., Interdisciplinary Studies and Research, Leadership and Governance, Policy Research and International Studies and Climate Change and Research. It has set up 09 Centers, 04 Cells/Offices for enhancing industry-academia collaborations, research, resource mobilization, Skills development, internships, and placement. MSUB offers more than 6700 Core, Interdisciplinary and Multidisciplinary Courses. It has introduced integrated academic programs and 396 value-added courses. It has conducted 4500+ cocurricular/extracurricular activities as reflected in NEP

2020. The achievements, awards and accolades won by the students and teachers stand as evidence of fulfillment for implementation of NEP:2020. The MSUB's strong alumni base is a testimony of its success. The MSUB has disbursed more than Rs 5 Crores to 13000+ needy students from a source generated by itself. MSUB mobilized 370 sponsored research projects worth Rs 121 Crores. It has conducted More than 400 national and international research collaborations with 2000+ activities viz., Research Publications, Projects, Patents, Exchange Activities. MSUB has also conducted 24 Webinars on various aspects of implementation of NEP2020.

6. Problems encountered and resources required:

MSUB comprises of 14 Faculties offering education in Humanities, Science, Technology, Visual and Performing Arts offering Undergraduate and Postgraduate Academic Programs to 43000+ students pursuing more than 300 academic programs. The key challenge is to achieve synergy and integration in vocational, value-based, professional education in curriculum design, teaching-learning, research and evaluations which calls for coordinated but innovative approach. The key challenges encountered are viz., effective adoption of outcome-based education, implementation of Project and Research work especially at Undergraduate level, mobilization of Financial, Human, Technical, and ICT resources with continual involvement and engagement of teachers, students and other stakeholders. Implementation of NEP through action plan calls for collaborative approach, structural modifications, and financial support from State Government, alumni and funding agencies. The integration of interdisciplinary subjects under CBCS poses logistical challenges of allocation of time, classrooms, and laboratories. The MSUB has strategically planned and initiated gradual implementation of NEP with limited success.