

Holistic Integrated Student Development Model & Service Delivery Model – A Best Practice of Srinivas University, India

P. S. Aithal¹, Adithya K. M.², & Pradeep M. D.³

¹ Institute of Management and Commerce, Srinivas University, Mangalore, India.

Orcid-ID: 0000-0002-4691-8736; E-mail: psaithal@gmail.com

² Research Scholar, Institute of Management and Commerce, Srinivas University, Mangalore, India.

³ Institute of Social Sciences and Humanities, Srinivas University, Mangalore, India.

Orcid-ID: 0000-0003-2561-4749; Email ID: mdpradeepnair767@gmail.com

Area of the Paper: Education Management.

Type of the Paper: Case Study.

Type of Review: Peer Reviewed as per [C|O|P|E](#) guidance.

Indexed In: OpenAIRE.

DOI: <https://doi.org/10.5281/zenodo.6800702>

Google Scholar Citation: [IJCSBE](#)

How to Cite this Paper:

Aithal, P. S., Adithya, K. M., & Pradeep, M. D., (2022). Holistic Integrated Student Development Model & Service Delivery Model – A Best Practice of Srinivas University, India. *International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, 6(1), 590-616. DOI: <https://doi.org/10.5281/zenodo.6800702>

International Journal of Case Studies in Business, IT and Education (IJCSBE)

A Refereed International Journal of Srinivas University, India.

Crossref DOI : <https://doi.org/10.47992/IJCSBE.2581.6942.0181>

Paper Submission: 01/04/2022

Paper Publication: 30/06/2022

© With Authors.



This work is licensed under a [Creative Commons Attribution Non-Commercial 4.0 International License](#) subject to proper citation to the publication source of the work.

Disclaimer: The scholarly papers as reviewed and published by the Srinivas Publications (S.P.), India are the views and opinions of their respective authors and are not the views or opinions of the S.P. The S.P. disclaims of any harm or loss caused due to the published content to any party.

Holistic Integrated Student Development Model & Service Delivery Model – A Best Practice of Srinivas University, India

P. S. Aithal¹, Adithya K. M.², & Pradeep M. D.³

¹ Institute of Management and Commerce, Srinivas University, Mangalore, India.

Orcid-ID: 0000-0002-4691-8736; E-mail: psaithal@gmail.com

² Research Scholar, Institute of Management and Commerce, Srinivas University, Mangalore, India.

³ Institute of Social Sciences and Humanities, Srinivas University, Mangalore, India.

Orcid-ID: 0000-0003-2561-4749; Email ID: mdpradeepnair767@gmail.com

ABSTRACT

Purpose: *To showcase an innovative higher education training model at the university level for students' all-round holistic development by studying an existing university model as best practice in the university system.*

Methodology: *As an exploratory case study methodology is followed for the collection of information from university personnel, University website, faculty members, and students and analysed the information under the best practice model and ABCD framework.*

Results & Outcome: *An effective innovation and best practice for the all-round development of students to improve graduate attributes. The models support to create quality graduates with employability and entrepreneurship skills to make them independent, confident, and successful citizens of the country.*

Originality/Value: *The paper contains identification, analysis, and interpretation of two successful innovative models in the higher education space with quality training and quality service to make it student centered.*

Type of Paper: *Case Study on Best Practice.*

Keywords: Student integrated development model, Education service delivery model, Best practice in university, Higher education innovation, Srinivas University, Holistic education, ABCD analysis

1. INTRODUCTION :

Innovations in the higher education system with emphasis on service quality are current and future requirements to drive the higher education industry ahead of other industries [1-2]. It is known that higher education industry produces innovators with higher-order skills like analysis, evaluation, and creation. Graduates with such innovative skills will contribute extensively to all industries in society as change leaders. Higher education institutions especially private universities have the autonomy to do innovations in their entire service development and service delivery stages to enhance their service quality. Innovations and best practices in university operations add value and brand and hence students' satisfaction and delight [3]. In the current student-centred model of higher education, universities are responsible to develop an innovative teaching-learning model [4-5] with futuristic curriculum and delivery methods as best practices. Srinivas University, being a research and skill focussed university developed a holistic model with bottom-up or inductive approach of developing an integrated student development model to provide student-centred curriculum and satisfactory graduate attributes. This holistic model is implemented at Srinivas University, Mangalore, India and discussed here as a best practice case study in education industry [6].

Srinivas University is a private research and skill-oriented university located at Mangalore, Karnataka state, established by A. Shama Rao Foundation, Mangalore in the year 2013. Srinivas University is an extension of Srinivas Group of Colleges which were started in the year 1988 under the aegis of A. Shama Rao Foundation, Mangalore, which is a Charitable Trust established in 1988 itself under the guidance of a noted industrialist and senior Chartered Accountant and the current Chancellor of SU,

Dr. CA A. Raghavendra Rao. Srinivas Group of Colleges strived incessantly for imparting quality professional education in the fields of Hotel Management, Physiotherapy, Business Management, Computer Science & Applications, Social Work, Education, Nursing Sciences, Pharmacy, Engineering & Technology, Architecture, Medicine, Allied health sciences and Dental sciences through 18 Colleges/institutions during last 33 years with recognition from AICTE, NCTE, NCI, MCI, DCI, PCI, COA as well as NAAC – A Grade.

The infrastructure, faculty, and research-oriented teaching-learning processes are synchronized to develop the student's capability and confidence in the future pursuits of life. The unwavering commitment to quality education in Srinivas Group of Colleges facilitated easy evolution of **SRINIVAS UNIVERSITY** in Karnataka State which is first private university established in coastal Karnataka. The government of Karnataka published **SRINIVAS UNIVERSITY ACT-2013** of Karnataka Act 42 of 2013 under clause (3) of Article 348 of the constitution of India in the Karnataka Gazette for general information on Thursday, May 15, 2013.

The University operation commenced from 15th May 2015 and the Sponsoring body integrated the then 8 existing institutions namely Srinivas College of Hotel Management (1988), Srinivas College of Physiotherapy (1993), Srinivas Institute of Management Studies (1999) [4, 6], Srinivas Institute of Social Work (2001), Srinivas First Grade College (2001), Srinivas College of Education (2003), Srinivas School of Technology (2010), and Srinivas College of Allied Health Sciences (2013), to constitute Institute of Management & Commerce, Institute of Computer & Information Sciences, Institute of Social Sciences & Humanities, Institute of Engineering & Technology, Institute of Hotel Management & Tourism, Institute of Physiotherapy, Institute of Allied Health Sciences, Institute of Nursing Sciences, and Institute of Aviation Studies offering innovative industry-oriented specialized courses at UG, PG, and Research levels. The university is also a member of the **Association of Indian Universities (AIU)**, since 2015 so that the degrees offered by the University are acceptable for higher education admissions and for earning government, public sector, and private sector jobs all over the world. The university is also recognized by **Karnataka Higher Education Council (KHEC)**.

In the year 2019, SU has obtained the Recognition of **Department of Scientific and Industrial Research, (DSIR)**, of Dept. of Science & Technology, Govt. of India to encourage Industrial Research. This year, Srinivas University has got UGC Recognition under 2f section and became eligible to apply for NIRF & NAAC gradings.

With the vision to be a trendsetter among universities and build students who emerge as leaders with competence, conscience and compassion by empowering them with sound education and high standards of ethical and professional behaviour enabling them to build and promote a more humane, just and sustainable world for future generations. With the slogan - **Creating Innovators** and with the mission to provide an exceptional learning environment where students can develop and enhance their leadership and teamwork skills, creative and intellectual powers and passion for learning by providing an uncompromising standard of excellence in teaching; embodying the spirit of excellence to educate the citizen-leaders of society with distinction. **Hard work through winning Strategy**, the University is committed to provide ten **Core Values** to be inculcated among all stakeholders which include: *Team Work, Respect, Responsibility, Ethics, Etiquette, Social Service, Communication, Character & Competency, Techno-savvy & Scientific Thinking, Quest for Excellence, and promoting open systems (including Software & Publications).*

2. RELATED WORK :

2.1 Related work on Higher Education Student Development Model:

Literature search is conducted using Google scholar search engine by giving the search keyword "Higher Education Student Development Model" and the important results obtained related to our research objectives are listed in table 1.

Table 1: Related work on Higher Education Student development Model based on Literature review

S. No.	Field of Research	Focus	Outcome	Reference
1	An organizational model for	An organizational model of student development is presented together	Based on the study, it has been suggested that asserting bureaucracy as a	Crookston, B. B. (1972). [7]

	student development	with operational suggestions.	system of organization does not support the goals of student development. Student-centered approaches are stressed.	
2	Validating culturally diverse students	Customized education to promote diversity among students with different interests.	This study demonstrated that non-traditional students, no matter how fragile, can be transformed into effective graduates by means of continuous efforts.	Rendon, L. I. (1994). [8]
3	Examination of Pace's model of student development	Results strongly support Pace's proposition on student effort in that effort is the most important determinant of perceived gains.	Concluded that the extent to which students' exert their time and efforts in the educational opportunities and activities provided by institutions directly impacts their growth and development.	Ethington, C. A., & Horn, R. A. (2007). [9]
4	Enhancing student development in community colleges	By providing supportive programs, services, and staff to meet the need of various student populations with diverse objectives.	Student development theories can help higher education trainers to provide better programmes and services based on student diversities and particularities.	Ortiz, A. M. (1995). [10]
5	Student motivations, learning environments, and human capital acquisition	The importance of students being motivated to engage in reciprocal relationships with their learning environments in order to enhance their human capital skills. In spite of the time, effort, and resources devoted to higher education, little is known about several basic issues.	Highlights the importance of student motivations, importance of institutional setting and nurturance, the relation between person and structure, relative importance of ability and motivation, and for implications for student affairs.	Cote, J. E., & Levine, C. (1997). [11]
6	A developmental model of intercultural maturity	Intercultural maturity in the context of a holistic approach to human development using Kegan's (1994) model as a foundation and relating this outcome to other collegiate learning outcomes.	Developed a model for better understanding the nature of intercultural maturity, how students develop the capacity to achieve collegiate outcomes around diversity issues, and why efforts to promote the achievement of a variety of diversity	King, P. M., & Baxter Magolda, M. B. (2005). [12]

			outcomes have met with mixed success.	
7	Interactive training for student development	Propose the Interactive Training Model (ITM), a full classroom role-play experience, as a method for helping student counselors develop essential interviewing and counseling skills and self-awareness.	Narrative student feedback regarding the use of ITM in an essential skills course is presented, and implications for counselor education are discussed.	Paladino, D. A., et al. (2011). [13]
8	A three-phased model for course design for Student development and service-learning	Focus on the effective design of service-learning courses and curricula.	Developed three phase model by articulating what works at certain stages and by giving faculty members a flexible menu of options to achieve increased success.	Howe, C. W., et al. (2014). [14]
9	Academic and co-curricular involvement	Student growth through academic and co-curricular involvement.	The linear connection between academic and co-curricular is fund. Suggested that students should be involved in both academic and co-curricular activities as much as possible.	Huang, Y. R., & Chang, S. M. (2004). [15]
10	A new model of student learning in higher education	Social emotional development as a new model in the Higher Education system.	A new construct, called social and emotional development (SED) is presented.	Seal, C. R., et al. (2011). [16]
11	Conceptual model Co-creation in higher education	The model includes key components of value co-creation, co-production, and value-in-use as well as links to the anticipated benefits of value co-creation.	The first conceptual model of value co-creation in higher education using a lens of co-creation cultivated through business and marketing literature.	Dollinger, M., et al. (2018). [17]
12	Guiding change in higher education	An emergent, iterative application of Kotter's change model.	The change effort focused on enhancing faculty capacity to support diverse student success. The change process was a prescribed, linear, sequential change process.	Kang, S. P., et al. (2022). [18]
13	A conceptual model to enhance student innovativeness:	Developed a conceptual model that links inquiry-based learning (IBL) and student innovativeness, and introduce three teacher-controlled design	Observed that an open, discovery-focused and team-based inquiry offers the greatest potential for enhancing students' skills in innovation.	Acar, O. A., & Tuncdogan, A. (2019). [19]

		elements namely whether an inquiry is open or closed, discovery-focused or information focused, and individual or team-based.		
14	Use of digital technology to enhance the student experience.	Digital technology has become a central aspect of higher education, inherently affecting all aspects of the student experience.	Stemming from the use of educational technology, behavioural engagement and affective & cognitive engagement.	Bond, M., et al. (2020). [20]
15	Integrating academic and career advising	Integrating academic and career advising toward student success.	The outcome shows that how integrating academic and career advising may benefit students in the current higher education environment.	Lynch, J., & Lungrin, T. (2018). [21]
16	Research and Innovation based Excellence Model to Reimage Universities	Proposed a model of promoting research at UG and PG levels boosts the Innovative ability of students and faculty members towards excellency.	The present trend in global Higher Education, their effect on Indian University education, technology and its impact on university education model, how research can differentiate campus based university education, Innovations in University research including author centric scholarly publication for copyright based IPR and Student Centric Curriculum for Patent Based IPR are discussed.	Aithal, P. S., & Aithal, S. (2020). [22]
17	Importance of Arts & Design in Liberal Education	Importance of Arts & Design in Liberal Education STEAM (Science, Technology, Engineering, Arts, Maths) Model of Higher Education.	The advantages, benefits, constraints, and disadvantages of the STEAM model are studies using ABCD analysis from different stakeholders' perspectives.	Aithal, P. S., & Aithal, S. (2020). [23]

Based on the above review of literature, it is found that a systematic effort to improve students learning experience along with latest syllabus and pedagogy to enhance employability and entrepreneurship is required. Such integrated innovations of higher education model to make students as all-rounders is required for future industries.

2.2 Related work on Higher Education Student Service Model:

Literature search is conducted using Google scholar search engine by giving the search keyword "Higher Education Student Service Model" and the important results obtained related to our research objectives are listed in table 2.

Table 2: Related work on Higher Education Student Service Model based on Literature review

S. No.	Field of Research	Focus	Reference
1	An empirical study of the factors underlying student service quality perceptions in higher education	To investigate the perceptions of teaching service quality and to examine The factors related to the student ratings of faculty service quality, such as student Grade Point Average (GPA) and course complexity.	Snipes, R. L., & Thomson, N. (1999). [24]
2	A student-centred conceptual model of service quality in higher education	Service quality assessment at pre-course position, in-course experience, and post-course service of part time PG students of a UK business school.	Clewes, D. (2003). [25]
3	Higher education service quality, student satisfaction and loyalty	Student satisfaction and loyalty is studied using HESQUAL scale to measure service quality.	Teeroovengadum, V., et al. (2019). [26]
4	Development of a Conceptual Model of Student Satisfaction with Their Experience in Higher Education	The model is based on the identification of the variable determinants of student perceived quality and the impact of those variables on student satisfaction and/or dissatisfaction with the overall student experience.	Douglas, J., et al. (2008). [27]
5	Conceptual model of student satisfaction in higher education	Factors influencing student satisfaction in higher education and its consequence to improve student loyalty.	Alves, H., & Raposo, M. (2007). [28]
6	A prospective model for aligning educational quality and student experience in international higher education	The model incorporates quality control, quality assurance, quality audit, quality assessment, quality enhancement, and quality management.	Tsiligiris, V., & Hill, C. (2021). [29]
7	Service quality in higher education and student satisfaction, institutional image, and behavioral intention	Developed an integrated model to examine the structural relationships among a higher education institution's service quality, student satisfaction, institutional image, and behavioral intention at a private university located in South Korea.	Hwang, Y. S., & Choi, Y. K. (2019). [30]
8	Student Evaluation and Reforms in Higher Education Institutions	The graduate attributes specified by the college/affiliating university and the institutional effort to ensure the attainment of these by the students are also analysed.	Aithal, P. S., & Kumar, P. M. (2016). [31]
9	Student performance and Learning Outcomes in Higher Education Institutions	The institutions effort to collect and analyse data on student learning outcomes and use it for planning and overcoming barriers of learning, institution and individual teachers use assessment/evaluation as an indicator for evaluating student performance, achievement of learning objectives and planning, and other relevant information regarding teaching-learning and evaluation are also discussed.	Aithal, P. S., & Kumar, P. M. (2016). [32]

10	Service quality and student satisfaction: A case study at private higher education institutions	The study provides support for the SERVQUAL model which related to the factors contributing to students' satisfaction.	Hasan, H. et al. (2008). [33]
----	---	--	-------------------------------

Based on the above review to know the current status of service delivery in higher education institutions including universities, it is found that a gap in the efforts of a systematic policy of higher education service delivery to every student. Through a well-defined and well communicated model of service delivery, both students and teachers can be winners in student-centered and faculty focussed teaching-learning processes of the higher education system.

2.3 Related work on Higher Education Best Practices:

A literature search is conducted using the Google scholar search engine by giving the search keyword “Higher Education Best Practices” and the important results obtained related to our research objectives are listed in table 3.

Table 3: Related work on Higher Education best practices based on Literature review

S. No.	Field of Research	Focus	Reference
1	Best practices in higher education	Finding and implementing.	Fram, E. H., & Camp, R. C. (1995). [34]
2	Best practices in academic assessment in higher education	A Case in formative and shared assessment.	Pastor, V. M. L. (2011). [35]
3	Measuring best practices	Assessment of best practices in competency-based education.	McClarty, K. L., & Gaertner, M. N. (2015). [36]
4	Best practices for enculturation	Collegiality, mentoring, and structure of best practices.	Boyle, P., & Boice, B. (1998). [37]
5	Best practices in online education	Best practices to promote learning.	Finch, D., & Jacobs, K. (2012). [38]
6	Review on best teaching practices	Good teaching practices with ICT in Spanish higher education.	Alonso-Garcia, S., et al. (2019). [39]
7	Quality teaching as best practice	Policies and practices of quality teaching in higher education.	Hénard, F., & Roseveare, D. (2012). [40]
8	Best practice synthesis	Blended course design as best practices.	McGee, P., & Reis, A. (2012). [41]
9	Benchmarking best practices	Cultivating faculty support for institutional effectiveness activities as best practice.	Welsh, J. F., & Metcalf, J. (2003). [42]
10	Relationship between best practices with other factors	Relationships between area of academic concentration, supervisory style, student needs with best practices.	Egan, R., et al. (2008). [43]
11	Best practices in learning styles	A review of theory, application, and best practices on learning styles.	Romanelli, F., Bird, E., & Ryan, M. (2009). [44]
12	Faculty best practices	For blended learning in e-learning and face-to-face instruction.	Mortera-Gutiérrez, F. (2006). [45]
13	Best practice types	Preparing an effective syllabus as best practice.	Slattery, J. M., & Carlson, J. F. (2005). [46]

14	A framework for best practice	Driving, sustaining, and scaling up blended learning practices in higher education institutions.	Lim, C. P., et al. (2019). [47]
15	Type of best practice	Syllabus designing practices and quality assurance at higher education level.	Bano, A., et al. (2019). [48]
16	Innovations and best practice in HEI	A case study on how innovations and best practices can transform higher education institutions.	Aithal, P. S., & Kumar, P. M. (2015). [49]
17	Best Practices in Library	A case study on best practices in library for Quality Enhancement in Higher Education Institutions.	Aithal, P. S. (2015). [50]
18	Type of best practice	A strategic model of creating innovators through setting up organizational vision, mission and core values.	Aithal, P. S. (2016). [51]
19	Best practice as one of the goods of higher education	The three goods of higher education; as education, in its educative, and in its institutional practices.	Gibbs, P. (2019). [52]
20	Best practice based on accountability	Autonomy in higher education-towards an accountability management model.	Aithal, P. S., & Kumar, P. M. (2019). [53]

Based on the above review knowing the current status of best practices, autonomy to the higher education system and supporting them to innovate in physical infrastructure, digital infrastructure, innovative teaching-learning infrastructure, IPR infrastructure, emotional infrastructure, and networking infrastructure are going to enhance the quality of HE service.

3. OBJECTIVES OF THE PAPER :

- (1) To observe a best practice for student development and service in an organization (Srinivas University, India) which has autonomy to innovate.
- (2) To know the current status of student development models, student service models, and best practices in higher education institutes through a systematic literature review.
- (3) To identify the objectives of an identified best practice
- (4) To know the context and details of the best practice.
- (5) To discuss the details of the Integrated Student Development Model of Srinivas University as a best practice.
- (6) To discuss the details of the Integrated Student Service Delivery Model of Srinivas University as a best practice.
- (7) To discuss the evidences of success from organizational point of view, student point of view, industry and society point of view.
- (8) To evaluate problems encountered and resources required for successful implementation of the best practice.
- (9) To analyse the best practice from stakeholders' point of view using ABCD analysis framework.
- (10) To suggest how the best practice can be promoted for other higher education institutions and universities to make higher education as student centred and industry integrated.

4. OBJECTIVES OF THE PRACTICE :

- (1) To enrich intellectual abilities among students with values and leadership abilities.
- (2) To establish state-of-the-art infrastructure for teaching and learning
- (3) To create centres of excellence for research and development.
- (4) To provide consultancy to the industries & public organizations.
- (5) To work with new models of education including virtual classroom.

- (6) To explore multi-disciplinary and trans-disciplinary education and research in science, engineering, technology, philosophy, and culture.
- (7) To develop the scientific, technological, cultural and traditional heritage of the people in the society through continuous education.
- (8) To propagate “Education as Passion and not as a Profession” based on the guiding principle of “Continuous improvement as the way for success”
- (9) To bring distinctiveness in the Service Delivery of the University
- (10) To implement Core Resources model for growth and prosperity
- (11) To deliver teaching and learning aids in time to the students.
- (12) To intensify the adoption and usage of best practices in all colleges.
- (13) To focus for Holistic development of Students by offering one to one service.

5. THE CONTEXT :

Innovation is the lifeblood of every University to survive, sustain, differentiate, monopolise the service. Innovations in physical, digital, teaching-learning, intellectual property, emotional and network infrastructures are the need of the day [54-55]. Competency and Skill oriented education model is based on the adoption of consistent innovative pedagogies in teaching, learning and research thereby contributing to the holistic integrated development of its stakeholders. Srinivas University has been very keen to implement its aggressive strategies to become a skilled and research focussed system and contributing to the transformation of society by contributing innovators. In this regard, University made innovations in designing and starting new super speciality programmes both in UG, and PG level as per present and future industry relevance, innovations in examination with continuous evaluation making it pool proof. The University has established networking with many industries, universities, and Education service providers to substantially improve the quality and weightage of the courses and degrees respectively. The service delivery demands changes in accordance with the emerging modalities in environment, technology, customer preference, time, law, etc. In order to be competitive in the present time University has provided ample attention to develop its core resources (Figure 1) and has a firm belief that its students deserve the best.

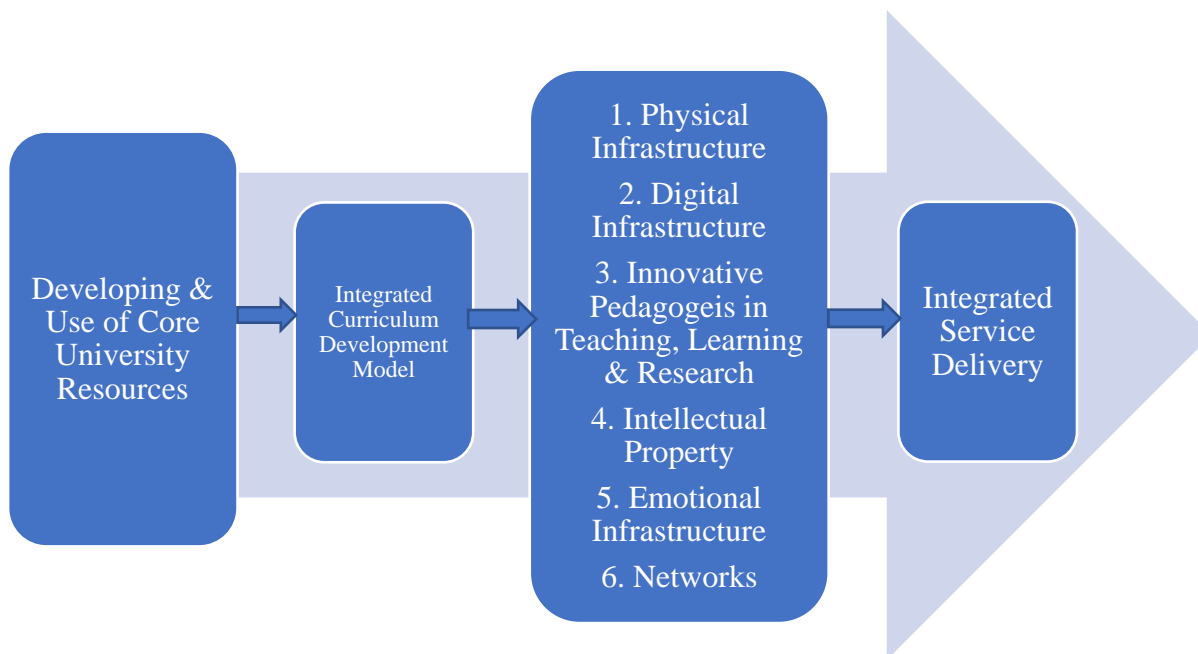


Fig. 1: Srinivas University Holistic Integrated Student Development and Service Delivery Model.

6. THE CONSTRUCTS OF THE PRACTICE :

The university uses a holistic approach of service development and service delivery using its six infrastructures (physical infrastructure, digital infrastructure, innovative teaching-learning infrastructure, intellectual property infrastructure, emotional infrastructure, and industry & alumni

network infrastructure) with the objective to provide world-class quality in order to satisfy and delight the students as internal customers. The university uses the following innovative components in its quality service:

(1) **Institutional core values:** University has embedded core values of teamwork, respect, responsibility, ethics, etiquette, social service, character, competency and confidence, techno-savvy and scientific thinking, quest for excellence and continuous improvement in its service utility with all the stake holders. University follows first come first admit model to drive its desire to excel with honest effort in reaching to the maximum beneficiary.

(2) **Innovative pedagogy in Teaching and Learning:** With the rich legacy of 33 years of service in quality education has utilized its autonomy to the best and designed several super speciality courses having industry relevant research focused curriculum. Electives were allowed based on student interest and future prospects. Efforts are taken by the Board of Studies to incorporate customised assignments, lab-based learning, field exposures, project works, case studies into the curriculum. Annual leadership programme, co-curricular and extra-curricular activities aims to enrich the self-confidence of the students. Dissemination of action skills were fostered through field exposures, mini projects and internships. Individual mentoring support from faculties, counselling from psychologists and career advice services are provided by the departmental placement officers on timely basis. Continuous evaluation system with equal importance to internal and semester end examination has been made as the means to earn good grades. University examination section conducts hassle free transparent examination along with the option of providing make-up examination to the failed students within one month of declaring result thereby saving a year of such students.

(3) **First come first admit model:** In order to provide opportunity of education to all has set a policy to admit any student with eligibility on first come first admit basis. As per the direction of Honourable Chancellor Dr. CA A. Raghavendra Rao, the faculty team aspires to mould the slow and average performers into fast learners instead of admitting talented students with threshold limits of 85 per cent and securing university ranks. First come first admit model has opened up doors for all to get enrolled to super speciality course in spite of marks, gender, race, caste, class, etc.

(4) **Chancellors free-ship Model:** In order to support the meritorious students belonging to economically weaker sections are provided with free ship facility. Students enrolling to any courses with more than 95% marks in their 12th standard will get waiver of all the years fee for one Student per course and up to five students who score above 90% marks in the 12th Qualifying exam will get 50% course fee waiver for all the years for the entire course duration. 23 students have received full tuition fee reimbursement from the institutional fund.

(5) **Separate Hostel facility for boys and Girls:** University provides spacious well equipped hostel facility to both boys and girls separately with security deployed for safety and security of the inmates. Nutritious and clean vegetarian and non-vegetarian food is served to the inmates. Separate buses are functioning to pick and drop students from college to hostel on daily basis. Pure drinking water is served in the hostels. The discipline, study hours, play time will also be monitored by the hostel warden appointed for exclusive purposes.

(6) **Library Services:** College has a spacious hi-tech library with sufficient reference books, journals, guides, manuals, research projects, newspapers etc. in order to facilitate the easy access to library resources, library has been digital accession, issue and return processes through the mobile phone itself. Sought membership right with free access to the library resources of Mangalore University, Central University and National Institute of Technology, Karnataka. Subscription is sought for the usage of National Digital Library, E-Journals, E-Magazines and Newspapers which helps students to access enormous materials in online itself.

(7) **Earn while Learn Model:** The placement cell of the University will help the undergraduate and post graduate students to get in to part time jobs where the student can spend his unutilised time after the regular classes in a more productive ways and can earn salary by which he can minimize dependency over their parents. Students are employed in pizza hut, Swiggy, Zomato, commercial shops, hotels, pubs, retail shops, super markets, customer cares, BPOs, etc.

(8) **Productive Course Work Model:** The scholars enrolling to doctoral programmes has to complete course work compulsorily to be eligible to present the synopsis to doctoral committee. The course work is designed for 16 credits comprising of 4 papers having 4 credit each. Paper 1 is on Research Methods, Paper 2 on Core Subject, Paper 3 on Case Studies, and Paper 4 on Literature review. All papers have

50 marks internal and 50 marks external, respectively. On completion, scholars will be well aware with the research methodology and publication which will help to prepare a good synopsis on there are of research.

(9) Ideal Publication and Copyright with Author Model: STAR focused Research and Innovation pedagogy is followed by focusing on the Students, Teachers, Academics Governance and Research. Srinivas Publications encourage the publication of journal articles in its four international indexed journals with open access and for free of cost. The publication provides better liberty to share the published paper in the research consortiums including SSRN, Research Gate, Academia, etc since the publishers will not seek copyright over the publications.

(10) Competency based continuous Student Evaluation Model: Student progress in all core papers is evaluated for 100 marks of which 50 marks allocated for internal examination and 50 marks for semester end examination. For measuring the competency of the student's continuous evaluation is conducted in each subject by allocating separate marks for internal examination, assignment, class participation and attendance. The Academic software is also in built with evaluation criteria to be marked at the end of every class while executing the class with software based on the pedagogies used by the respective faculty daily basis.

(11) Ubiquitous Online Training Model for Research Scholars: Orientation on research methodology is provided to Ph.D. scholars enrolled from varied places is carried through online mode by using Teachmint, Zoom, Webex, Google meet platforms. This facilitates reaching huge number of audiences at time and giving interdisciplinary exposures to the researchers. Online mock presentations, Doctoral Committee meetings are also carried during the Covid Period in order to maintain social distancing at the interest of the health and welfare of all.

(12) Use of Research Experts for Ph.D. Guidance as Research Professor Model: Remarkable step is taken to employ experienced retired Professors with Ph.D. as research professors having served in government, aided, deemed, autonomous institutes to utilise their expertise and free time for the benefit of research scholars who are ambitious to do doctoral studies. It facilitates scholars to work along with eminent academic experts across the disciplines and derive best publication to their credit.

(13) Optimized usage of Infrastructure with Blended Training Model: University conducts offline, online, self-learning through MOOC courses, field-based learning, project-based study, case analysis, experiential learning through active participation, guest lectures and talks from the industry experts, industry and agency visits, social service etc. The available infrastructure is utilised to the best by conducting offline classes on alternative days along with online classes. Computer lab is provided to all at convenient days so as to derive the best utilities from the IT experts.

(14) Annual Faculty Accountability through API Score Model: All the faculties are motivated to perform best by allocating API scores to academic, research, publication, extracurricular activities, event organisation, engaging in admissions, examination related works, consultancies, personal development, achievements, gaining copyrights and patents etc. Each good work will earn allocates score thereby the performance will be measured as per the API format of the University and supported with substantial monetary incentives. The promotion and career enrichment of the faculty is decided upon the annual API Score.

(15) Mentoring and Counselling Service: One to One student mentoring facility is carried in all colleges by the respective faculties of the department once in every semester to motivate and channelise student progress. Any student with serious abnormalities in the behaviour and conduct will be referred to the University Counsellor who shall counsel and treat the abnormality with the help of psychotherapy.

(16) Automation of Academic and Evaluation: University has carried out automation of learning management system in collaboration with Heroizen Technologies, Bengaluru by automation of admission, attendance, teaching, evaluation, marks card and announcement of the University result, etc.

(17) Student Research Project: All the final year under graduate students are supposed to prepare a research project in the area of their specialisation by collecting data from the field. Concerned faculty will see that the research outcome will be published as journal article at the end of the work.

(18) Experiential Learning: Students are exposed concurrent field work, internship of specific duration, block placement, summer placement, course work, apprenticeship with the industry of relevance to get hand on training in the specialised areas to learn on the job roles in more clarity. Students will be taken to industry visit and study trips to experience the work in reality.

(19) *Extra-Curricular Engagements*: Students are engaged in the forum, clubs and committees to organise programmes. Festival including Onam, Diwali, Sri Krishna Janmastami, Christmas, Ramzan, Eid, etc. Students are trained in Sports such as volley ball, football, cricket etc and even in the Indore Games including table tennis, chess, caroms, etc. Students will organise fresher's party, cultural day celebrations, and send-off functions. Exhibitions and fests are conducted by using students to train them with organising and leadership skills.

(20) *Exclusive Faculty Training*: University has established Center for faculty training under the chairmanship of Dr. Jayashree bolar which shall conduct periodic faculty development programmes to the teaching and non-teaching fraternities of the University both online and offline modes. The centre shall train the participants in the areas of teaching, research, value additions, university policies, duties, responsibilities, pedagogies, automated academic management systems, online teaching software and service delivery and quality aspects and issue completion certification. It is mandatory for all the faculties to undergo and complete at least 2 training certifications in an academic year which also yield scoring in the Annual Performance Indicator respectively. It is also required by the University that all faculties shall pursue at least 2 MOOC Courses from UGC Swayam courses, Coursera, edX, NPTEL, Alison, etc.

7. SRINIVAS INTEGRATED STUDENT DEVELOPMENT MODEL :

While offering any UG, or PG program in universities, the curriculum and pedagogy plays an important role. Programs with futuristic curriculum and attractive pedagogy can realize the objective of higher education by providing suitable knowledge, employable skills, and experience so that both confidence and competency of the students should be upgraded to the industry expectations [56-57]. Recently we have developed a conceptual model on student centric curriculum to increase their employability based on innovativeness. This integrated student development framework is based on STEAM-Employability Model (STEAM stands for Science, Technology, Engineering, Arts & design, and Mathematics) with a focus on experimental learning and IPR generation. The model is also represented in the form of a block diagram as shown in figure 2 [58-59].

7.1 Integrated Student development framework:

The integrated Student development framework is focused to generate new knowledge, new skills, new experience through hard and dedicated learning model. The curriculum design of various programmes is based on: (1) More subjects and more credits to cover learning on continuously increasing information with time, (2) STEAM (Science, Technology, Engineering, Art & design, and Maths) focus in curriculum planning, (3) Employability/Entrepreneurship skills enhancement program (ESEP) features, (4) Creating intellectual property awareness through compulsory patent analysis in specialized fields, (5) Experienced learning (EL) by means of industry oriented internship, and (6) Compulsory contribution to IPR either through copyright or through patent filing to qualify for the award of degree. Universities which formulate strategy to implement such integrated student development framework by having collaboration with industries are capable to reach excellence. In student-centred model of academic learning, the curriculum should be futuristic and it should be based on the questions - what, how, and where. Srinivas University has used its autonomy to design an innovative, well-planned curriculum called integrated student development model to make its students as “**all-rounders**” and at the same time “**super-specialized**” in a futuristic area with following components:

(1) *More subjects and more credits to cover learning on continuously increasing information with time:*

Due to increased research contributions in society, information is growing in all subjects leading to information explosion. Knowing the gist of such advanced new information is very essential to the students to become innovators in research and skill focussed higher education system. Learning more subjects and more credits in each semester allows them to utilize their most precious time effectively and allows them to become all-rounders and super specialists. With this background, Srinivas university designed its curriculum in every semester of all programmes with more subjects and more credits so that students at UG and PG courses are required to take 24 to 28 credits compared to the general structure of other universities as 20 to 24 credits per semester (i.e., at least 4 more credits).

(2) STEAM (Science, Technology, Engineering, Art, culture & design, and Maths) focus in curriculum planning:

In order to make Indianized Higher education system, Srinivas University recognized the importance of art, culture, and design and added them to the curriculum along with science, technology, engineering and maths in undergraduate four years programmes. Art, culture, and design education components add enhanced confidence and make learning enjoyable. This also makes the higher education model as holistic and multi-disciplinary [60]. Hence STEAM model of higher education is an improved version and more innovative compared to STEM model while planning higher education curriculum.

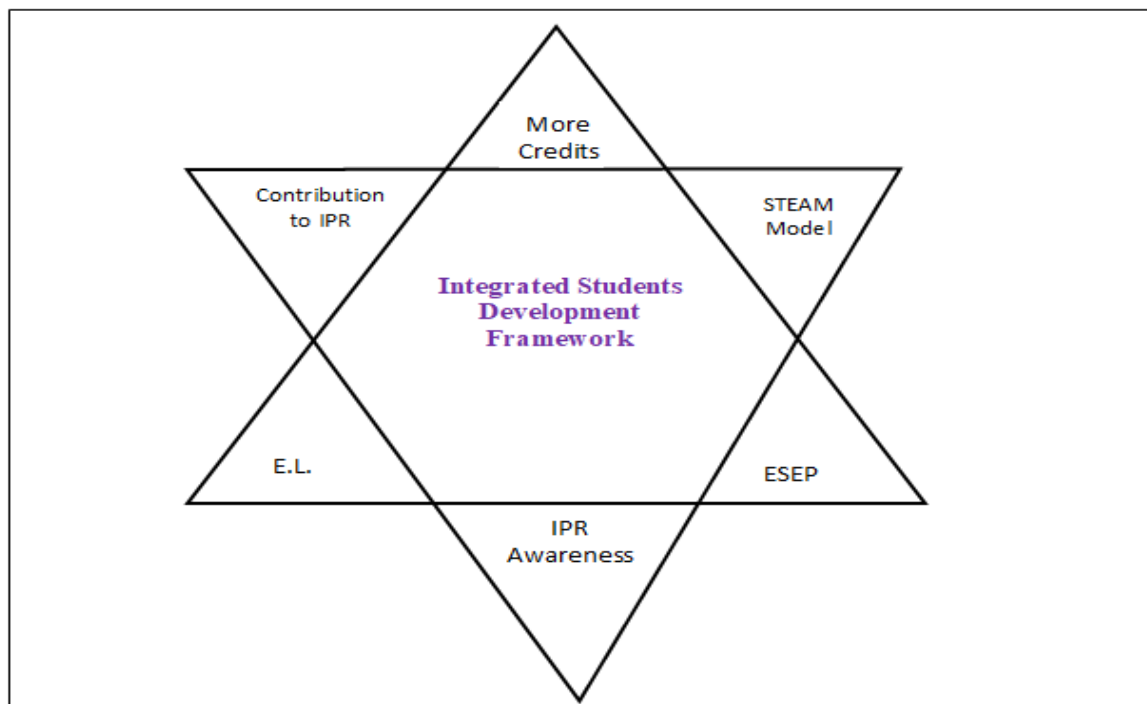


Fig. 2: Integrated Student development Framework for effective education [58, 59]

(3) Employability/Entrepreneurship skills enhancement program (ESEP) features:

Amidst Corona pandemic, to counter the recent hue and cry of Indian Education systems utter failure of creating employable & independent thinking students, Srinivas University is now equipped with Employability/Entrepreneurship skills enhancement program (ESEP) features with new structure of curriculum consisting overall 50% Knowledge focus, 25% skills focus, and 25% research focus to unfold the hidden potentials of the students and to create them as Innovators. Students of both UG and PG programmes will study two ESEP subjects in each semester specially designed to acquire 21st-century employability & entrepreneurability skills. These skills are provided by internal and external experts invited through special collaborative efforts [61-62].

(4) Creating intellectual property awareness through compulsory patent analysis in specialized fields:

To create awareness about patents and copyrights and to acquire them during the study through team-based scholarly articles or patents of products or processes is an integral part of this student-centred model. The university created facilities like open access scholarly publication by holding copyright with authors, patent analysis, and publication in indexed journals by keeping copyrights with authors are taught to the students to differentiate themselves from other university students. Analysing other patents in a chosen field systematically by evaluating their structure, features, and listing advantages, benefits, constraints, disadvantages, effectiveness, and future economic benefits (ABCDEF) in the responsibility of patent analysis [63-65] in one or two semesters motivates and empowers students to create their own patents during internship or apprenticeship time under compulsory patent filing requirement for Degree completion.

(5) *Experiential Learning (EL) by means of industry-oriented internship:*

Experiential learning deals with getting hands-on experience by doing or closely watching skilled work by means of attending practical/laboratory-based experiments, industry-based internships, company-based apprenticeships, short team projects, fieldwork, etc. Srinivas University has included all these experiential learning methods in its various UG and PG programmes. This gives an opportunity for students to gain hands-on training along with the confidence to face challenges in industries and society.

(6) *Compulsory contribution to IPR either through copyright or through patent filing to qualify for the award of degree:*

Setting targets, creating opportunities, continuous monitoring, follow-up, confidence through role models, and accountability of performance are essential to increase productivity in the working/learning place [66-67]. Setting targets of compulsory copyright for scholarly publication or patent filing at the end of semester projects or internships make students alert and to work hard with such goals. This also differentiates in terms of their quality on innovativeness. When the award of the degree is connected with compulsory publications based on creating new knowledge or patent filing by creating new product or process leads to guaranteed success [68-69].

7.2 Administrative and Faculty Responsibilities in Implementation of Integrated Student development Model :

Faculty members of various divisions of the university like: Student counselling Centre, Internal Quality Assurance Cell (IQAC), Board of Studies (BOS), Board of Examinations (BOE), Research & Innovation Council, Placement & Training centre, Centre for foreign education, Srinivas publication, Alumni Association, etc. have involved in the successful implementation of Srinivas Integrated Student Development model.

The trained and dedicated faculty members along with industry experienced people are involved in developing integrated student development model. The implementation of Srinivas integrated student development model is done carefully as honours degree model with more subjects for study, more credits, multi-disciplinary and inter disciplinary focus, experimental and experiential learning methods with industry immersion and IPR creation from student teams.

8. SRINIVAS INTEGRATED STUDENT SERVICE DELIVERY MODEL :

Holistic education not only focus on providing Integrated Student development framework for effective education, but also should effectively implement it through systematic and well-planned student centric service model [70-72]. Integrated service model in higher education should contain required services offered to the students by the university to achieve the goal. Further, such integrated student service model should contain components for satisfactory completion of students' requirements from admission to graduation. Such integrated student service model provides effective services to the students in order to fulfil their objectives of better performing by availing announced and promised services from the university by time to time. Since all the students are aware of the components of such integrated service model, there will not be any injustice to certain section of the students. Further, these services are well defined, well communicated and offered through intimated electronic media in order to reach every student of a class or programme.

Srinivas integrated student centric service model focus on providing 360-degree service to undergraduate and postgraduate students and is developed from student point of view and is to be offered by the teachers of the University. The model contains suitable components to provide student satisfaction and delight at all stages of their studies in a programme, from admission stage, learning stage, and placement stage as shown in figure 3.

(i) Admission stage: This stage involves providing information and awareness about different programmes offered by the university along with their curriculum, course pattern, pedagogy, career opportunities, etc. to the prospective students and their parents. This also involves counselling for programme/course selection, advising financial solutions through education loan, staying at campus or near campus during study, information on student responsibilities during the course period, parent responsibility during course period, earn while learn opportunities, etc. Admission stage involves various processes starting from student approach to the university for programme/course enquiry to the orientation program of the programme/course.

(ii) **Learning stage:** Learning stage is centre of the higher education system where students have to enhance their knowledge, skills, experience, and character (ethics & values) through systematic teaching-learning methodology. In student centric education & training model, students should get supporting services for their satisfaction and delight.

(1) **Futuristic Curriculum:** As per the request of IQAC and based on the instructions of Board of management, Board of studies (BOS) of individual programmes identifies and develops futuristic curriculum and updates it every year. As per the curriculum, detailed syllabuses for every subject of each semester are developed.

(2) **Session-wise Teaching Plan:** The respective subject faculty member who is teaching individual subject is required to develop detailed session-wise teaching plan for entire syllabus and share it with every student who opt that course/subject.

(3) **Chapter-wise Study Material:** The subject faculty member also has to prepare chapter-wise study material as per the syllabus and distribute it to all registered students.

(4) **Blooms Taxonomy based Question Bank with Model Answers:** The subject faculty member

(5) **Student Assignment on QB:** Students are required to prepare best answers to the question bank questions individually with the help of study material, Textbook and reference books shared with them. This will help them to perform better and score good marks in semester end university examinations.

(6) **Sharing PPT slides of Class Interactions in PDF:** To provide equal support to all the students, whether they present or absent to the classes (due to any genuine reason), the faculty members who handled the classes will also share the power point slides in pdf format to every registered student.

(7) **Minimum five Textbooks sharing per subject in PDF for Reference:** In the era of digital books, faculty members of individual subjects are required to identify best and suitable five books related to that teaching subject and share them with every student through their class WhatsApp group and an online teaching platform.

(8) **Continuous Evaluation:** Srinivas university student service model gives equal importance to continuous evaluation along with semester end examination with the ratio for university semester end exam and continuous evaluation is 50:50. Fifty percent marks are allotted for continuous evaluation unlike most of other universities where the ratio for university semester end exam and continuous evaluation is 70:30.

(9) **Immediate Semester end Results:** Through examination system automation, Srinivas University has developed its capability to evaluate semester end examination papers in such a way that it declares the examination results along with printed mark cards within 10 days after the examinations.

(10) **Earn while Learn support (optional):** The University, through its placement and counselling centre, helps and guides students to engage earn while learn program. The information regarding part-time jobs in the city or online are communicated to registered students through specifically created WhatsApp groups.

(iii) **Placement stage:** Placement stage is usually internship or output stage for students in higher education system (HES). The following services are offered as essential services in integrated student service delivery model:

- (1) Counselling & Support for internship or Apprenticeship,
- (2) Counselling & Support for Higher education/ Employment / Self-Business.
- (3) Member of alumni association & lifelong support.

In this student centred and faculty focussed model, every faculty member is trained to provide designated services and is responsible for effective implementation of the model. The success of Srinivas integrated student service model depends on the committed efforts of faculty members who acts as counsellors, teachers, and placement advisors.

8.1 Administrative and Faculty Responsibilities in Implementation of Integrated Student Service Delivery Model :

The faculty members of the University under the direction of Deans, Programme/Course coordinators, and class coordinators are mainly involved in creating, offering and sharing these components of integrated student service delivery. Through WhatsApp group of individual classes, and Teachmint online training platform, the components of Srinivas integrated service model are delivered to the students. Faculty responsibility include:

- (1) Unit-wise detailed Syllabus (with Subject code, Objectives, Pedagogy, Expected outcome & List of Reference books).
- (2) Session-wise Teaching Plan (Minimum 40 sessions for 100 marks paper & 20 sessions for 50 marks paper).
- (3) Chapter-wise/Unit-wise Study material as per approved Syllabus (Min 25 pages/Chapter).
- (4) PPT presentation in PDF format Chapter-wise/Unit-wise.
- (5) Chapter-wise Question Bank in Bloom’s Taxonomy format.
- (6) Model Answers to Question bank questions.
- (7) Minimum Five Scanned PDF Textbooks directly related to the syllabus to be shared with WhatsApp group/ Teachmint Group of the Class.
- (8) For Lab-based Practical papers, Lab Manual is compulsorily shared with the students.
- (9) Open announced policy for Internal/Continuous evaluation marks distribution in individual subjects.
- (10) Each Faculty member should create a virtual Class Room for their Subject using Teachmint online platform for sharing Study material & Assignments. They should also the member of the WhatsApp Group of the Class along with the students.
- (11) Faculty members should know student feedback components & continuously improve their feedback by improving their Teaching performance.
- (12) Faculty members should have a copy of Annual Performance Indicator (API) score format and plan to improve their Ranking grade every year.

Srinivas Integrated Student Service Delivery Model		
Admission Stage	Learning Stage	Placement Stage
(1) Counselling for Course selection, Education Loan, Stay, etc.	(1) Futuristic Curriculum (2) Session-wise Teaching Plan (3) Chapter-wise Study Material (4) Blooms Taxonomy based Question Bank with Model Answers (5) Student Assignment on QB (6) Sharing PPT slides of Class Interactions in PDF (7) Minimum five Textbooks sharing per subject in PDF for Reference (8) Continuous Evaluation (9) Immediate Semester end Results (10) Earn while Learn support (optional)	Counselling & Support for (i) Internship or Apprenticeship (ii) Higher education/ Employment / Self-Business. (iii) Member of alumni association & lifelong support.
<i>Every student get justice through equal amount of information and support as service delivery</i>		

Fig. 3: 360 degree Srinivas integrated service delivery model

The universities must take some of the measures to promote research and innovation using their autonomy. This includes compulsory research components in the curriculum, performance-based faculty compensation, annual faculty ranking based on individual annual faculty research index, promotions are based on research performance, etc. Theory of accountability (Theory A) [66 – 69] is best suitable for inspiring and motivating the faculty members and other researchers to get their maximum contribution both individually and team wise for research productivity. The essential elements of Accountability Theory (Theory A) include (1) Systematic planning, (2) Target setting for individuals and groups, (3) Motivation through continuous follow-up, (4) Developing working strategies, (5) Fixing responsibility, (6) Showing role model, (7) Monitoring & Guiding to reach the goal, and (8) Accountability either positive or negative depending on the outcome. Theory A can be effectively implemented in universities by following a framework consisting of collective identification of the need, collective goal setting, collective responsibility, collective monitoring, and collective accountability. The choice of work strategy, motivation, and developing internal role models are tools for accomplishing the research objective [66-69]. Vice-chancellor and Deans of the university should be role models for young researchers through their continuous research contribution. Promoting collaborative research with other higher education institutions and industries through an organizational

research policy to increase the research and innovation of the university and will help the university to march towards excellence through reimagining its position by fully utilizing its autonomy [70-72].

9. EVIDENCE OF SUCCESS :

9.1 From University Point of View :

- (1) Admitted 3788 students between 2017-2021.
- (2) Out of total 23 Chancellors Free Ship scheme girls have been the majority beneficiaries.
- (3) 1800 Students are admitted to college hostel.
- (4) 560 students are availing earn while learn facility by taking up part time jobs.
- (5) Substantially high as 500 scholars have enrolled for Ph.D. in Srinivas University.
- (6) Published 1,188 Articles and 40 books under Srinivas Publications.
- (7) As a part of effective service delivery during COVID 19 lockdown period Srinivas University is the first University to announce Online Classes to its students in the region and even online Ph.D. mock presentations, I DCM, II DCM's through online platforms during the Covid period.
- (8) 60 Research Professors are recruited for guiding students of Ph.D.
- (9) API linked incentive scheme is brought to operation for the staffs of Srinivas University since 2019.
- (10) Examination and Evaluation is also conducted through Academic Software ERP System during the 2020.
- (11) 700 Extra-curricular activities were organised by the University to provide holistic exposure to students.
- (12) Constituent institutions have secured 100 percent result along with University ranks over the last five years.
- (13) Srinivas University is conferred with First Rank in Research among World Business Schools by Elsevier's Global SSRN Research Ranking
- (14) Established 10 institutions in the disciplines of Hotel Management & tourism, Engineering & technology, Social Sciences, Business Management and Commerce, Education, Physiotherapy, Allied health Sciences, Nursing Sciences, Computer and Information Sciences and Aviation studies.
- (15) About 112 Courses are offered with UG, PG, and Research Degrees.
- (16) Ranked #1 in Research Publications as per the Elsevier during 2019 & 2020.
- (17) 3,788 Students are studying in the Srinivas University.
- (18) Maintains 20: 1 Student - Faculty Ratio.
- (19) About 55% of our stakeholders are first generation college students.
- (20) Pride to have 12 faculty members within 100 Ranks in the Elsevier's SSRN among the top 12,000 researchers.
- (21) About 30 % of students are working/earning during evening/weekend.
- (22) Strong alumni base.
- (23) About 84% students belong to Minority Communities especially from economically backward and socially challenged sections (423+2764) respectively.
- (24) About 45.43 % i.e., out of total 3788 students 1721 are girls.
- (25) About 49.78 % i.e., out of total 3788 students 1886 are from other States.
- (26) Spread across 2 Campuses in Mangaluru, D.K District.
- (27) 65 Super Specialty Programmes at UG level.
- (28) 1230 Publications during last 5 years.
- (29) 209 Highly qualified & accomplished regular faculty team.
- (30) About 200+ student research papers during last 05 years
- (31) About 300+ recruiting partners for Placement/Internship.
- (32) 600 research scholars pursuing research leading to Ph.D. & 85 Post-doctoral scholars pursuing D.Sc./D.Litt.
- (33) 20 National Conferences held annually since 2019 with publication of proceedings with ISBN.

- (34) Established Srinivas Publication House with four indexed and refereed Online International Journals with ISSN having high impact factor.
- (35) More than 300 study books are prepared for UG & PG Courses by the faculties and available in the library for access.
- (36) The full tuition fee reimbursement of 23 students is done under Institutional Scholarship and 103 students from the State and Central government respectively.
- (37) More than 1,500 study material books are written and shared with the students for 50 Programmes at UG and PG levels.
- (38) More than 1,500 Bloom's Taxonomy based Questions banks are developed for 50 programmes and shared with the students. This effort contributed to enhance both learning skills (lower order skills) and research skills (higher order skills) of the students.

9.2 From Student Point of View:

- (1) Opportunity to super-specialize in a given area based on futuristic industry demand subject.
- (2) Holistic curriculum to choose and learn multi-discipline subjects
- (3) All-round learning opportunity through implemented STEAM model
- (4) Integrated student curriculum model provides all-round development of a student to make his/her employable or an entrepreneur.
- (5) Integrated student service model provides high-quality, assured service to make them happy, satisfied, and delighted.
- (6) The blended mode of delivery in some UG programmes which are non-practical oriented are welcomed by students as it avoids wastage of their precious time in non-productive activities like traveling, waiting for services, etc.
- (7) The inclusion of MOOC subjects from national and international online training agencies like SWAYAM as an option to earn the required credits in each semester is also well accepted.

10. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED :

Some of the problems encountered while planning and implementing the practice are:

- (1) Identifying Super Speciality Courses and framing industry relevant curriculum in consultation with industry is found to be challenging.
- (2) Educating young scholars and students on research etiquette and publication ethics has inhibited lots of human and technical resources.
- (3) After math of Covid-19 setback, effects of lockdown and pressure built upon the higher education institutions to incept online education as a breakthrough in the service delivery even during the period of pandemic was taken as an opportunity and the University has announced online classes for all our students as a first effort in the region. University has invested its time and efforts in training the faculties upon online educational tools such as zoom, webex, teachmint, google classroom.
- (4) Developing a holistic Annual Performance Index (API) for the University and motivating employees to earn their promotion and salary accordingly was a challenging task.
- (5) Srinivas University being only 5 years old and self-financed in its financial operations, investing hugely on the infrastructure development at its inception stage is a constraint.
- (6) Introducing every novelty is challenging.
- (7) Retaining highly professional academicians and researchers is a challenge.
- (8) The source of Funding/Financial Aid is the need to invest more on excellent faculty, infrastructure, expansion, technology, etc.

11. ABCD LISTING OF THE BEST PRACTICE :

Analysis and interpretation of issues is a part of scholarly research. There are different analysis frameworks used to analyse the issues which include SWOC analysis as internal analysis [73-75], ABCD analysis as stakeholder's analysis [76-81], PESTLE analysis as external analysis [82-84], six-thinking hats analysis [85-87], etc. In this section, we have used ABCD listing [88-100] framework to

analyse the best practices proposed in previous sections. In ABCD listing, a list of advantages, benefits, constraints, and disadvantages are identified from the researcher's point of view.

11.1 Advantages of Srinivas Integrated Student development model:

- (1) More subjects and more credits in each semester provide the opportunity to update the current knowledge in a chosen area.
- (2) Through a STEAM focus in curriculum planning students get the opportunity to learn science, technology, engineering, arts, culture & design, and mathematics in every semester.
- (3) Employability/Entrepreneurship skills enhancement program offered in each semester focuses on offering various learning skills (like remembering, understanding, and application skills) and research skills (like analyzing, evaluating, and creating skills) which will differentiate the students to enhance their employability or entrepreneuriality.
- (4) Creating intellectual property awareness through compulsory patent analysis in specialized fields has the advantage of setting the target for individual students and individual teams by creating awareness of analyzing the patents.
- (5) Experiential Learning (EL) by means of an industry-oriented internship has the advantage of enhancing skills among students in their specialized fields.
- (6) Compulsory contribution to IPR either through copyright or through patent filing to qualify for the award of the degree has an advantage focussing on creating new products, new processes, new knowledge, or a new interpretation of existing knowledge.

11.2 Advantages of Srinivas integrated student service delivery model:

- (1) Students get full-fledged support from faculty members from the admission stage to the placement stage. The integrated student service model ensures high quality, satisfactory service to the students the university at UG, PG, and research levels.

11.3 Benefits of Srinivas Integrated Student development model:

- (1) More subjects and more credits in each semester provide the benefit of acquiring more knowledge compared to their counterparts in other universities.
- (2) Through STEAM focus on curriculum planning students can apply scientific thinking in decision making and also becomes effective innovators in problem identification and their involvement in solutions.
- (3) Employability/Entrepreneurship skills enhancement program offered in each semester has the benefit of placing the students in challenging organizations in better prospective jobs/ making them as successful entrepreneurs by identifying and encashing opportunities.
- (4) Creating intellectual property awareness through compulsory patent analysis in specialized fields has the benefit of understanding patents, their structure, and hence an idea and interest in converting their research project/ internship outcome into Patents/Copyrighted articles respectively.
- (5) Experiential Learning (EL) by means of the industry-oriented internship has the benefit of increased exposure to industrial processes and in turn, increases the confidence among students to face the challenges in society.
- (6) Compulsory contribution to IPR either through copyright or through patent filing to qualify for the award of a degree has the benefit of increased IPR in the name of students, faculty members, and the institution.

11.4 Benefits of Srinivas Integrated Student Service delivery model:

- (1) The integrated student service delivery model is intended to provide student satisfaction and delight in a student-centric model. Based on the components and their successful delivery which is further monitored by different stages, both students and parents are found to be satisfied and happy.

11.5 Constraints of Srinivas Integrated Student development model:

- (1) More subjects and more credits in each semester have the constraint of teaching them by appointing industry experienced and research experienced faculty members.
- (2) The STEAM focus on curriculum planning has a constraint of adding engineering and mathematics subjects for commerce and arts programmes.

- (3) Employability/Entrepreneurship skills enhancement program offered in each semester has the constraints of identifying suitable skill requirements for individual students.
- (4) Creating intellectual property awareness through compulsory patent analysis in specialized fields has the constraints of publication of plagiarism-free patent analysis in scholarly journals or conference proceedings.
- (5) Experiential Learning (EL) by means of the industry-oriented internship has the constraints of creating experimental learning modules by creating laboratories or by collaborating with suitable industry partners.
- (6) Compulsory contribution to IPR either through copyright or through patent filing to qualify for the award of a degree has constraints on completing the publication or patent within the course completion time.

11.6 Constraints of Srinivas Integrated Student service delivery model:

- (1) Getting work done by faculty members and monitoring their performance in providing student services as per the model is a constraint in a large organization like a university with many departments and programmes at UG and PG levels.

11.7 Disadvantages of Srinivas Integrated Student development model:

- (1) More subjects and more credits in each semester have the disadvantage of enhanced cost of providing quality service.
- (2) The STEAM focus on curriculum planning has the disadvantage of low acceptance by some commerce and arts programme students. It is also difficult to attract them to these elected subjects.
- (3) Employability/Entrepreneurship skills enhancement program offered in each semester has the disadvantage of enhanced cost for the university and re-defining the career goal of the students at different levels of their maturity.
- (4) Creating intellectual property awareness through compulsory patent analysis in specialized fields has the disadvantage of motivating every student and orienting them to learn research skills.
- (5) Experiential Learning (EL) by means of the industry-oriented internship has the disadvantage of monitoring and evaluating learning progress.
- (6) Compulsory contribution to IPR either through copyright or through patent filing to qualify for the award of a degree has a disadvantage for poor learners due to the fact that they may find it difficult to complete graduation.

11.8 Disadvantages of Srinivas Integrated Student service delivery model:

- (1) Though it is a special service intended to help individual students by providing systematic information to simplify the teaching-learning process, sometimes, such services are criticized as spoon-fed support to the students.

12. CONCLUSION :

Innovative education service models are essential for student satisfaction and delight. Organizations have used survival, sustainable, monopoly, competitive, and growth & prosper strategies to implement incremental, sustainable, destructive, or radical innovations. To improve and ensure the quality of the service in higher education is student-centric, Srinivas University has developed and implemented two best practices which are consecutive, progressive, and interdependent. The “Srinivas Student Integrated Development Model” and “Srinivas Integrated Student Education Service Delivery Model” developed and offered by Srinivas University through its innovation and best practices umbrella are aimed to transform higher education into student-centric and acts a major role in transforming higher education to lead other industries. Further, it is suggested that these best practices can be promoted for other higher education institutions and universities to make higher education as student-centered and industry-integrated.

REFERENCES :

- [1] Aithal, P. S., & Aithal, S. (2015). An innovative education model to realize Ideal Education System. *International Journal of scientific research and management (IJSRM)*, 3(3), 2464-2469. [Google Scholar](#)

- [2] Arizal, N., & Listihana, W. D. (2018, July). Innovations on Service Quality: Rising Students' Satisfaction and Loyalty. In *IOP Conference Series: Earth and Environmental Science* (Vol. 175, No. 1, p. 012099). IOP Publishing. [Google Scholar](#)
- [3] Aithal, P. S., & Kumar, P. M. (2016). Analysis of choice-based credit system in higher education. *International Journal of Engineering Research and Modern Education (IJERME)*, 1(1), 278-284. [Google Scholar](#)
- [4] Aithal, P. S., & Kumar, P. M. (2015). How innovations and best practices can transform higher education institutions: A case study of SIMS. *International Journal of Management (IJM)*, 6(2), 83-98. [Google Scholar](#)
- [5] Aithal, P. S., & Kumar, P. M. (2016). Teaching-Learning Process in Higher Education Institutions. *International Journal of Multidisciplinary Research and Modern Education (IJMRME)*, 2(1), 662-676. [Google Scholar](#)
- [6] Salian, B. R. & Aithal, P. S. (2015). Quality Enhancement in Office Management of Higher Education Institutions through Innovations & Best Practices. *Global Business and Management Research: An International Journal*, 8(5), 16-27. [Google Scholar](#)
- [7] Crookston, B. B. (1972). An organizational model for student development. *NASPA Journal*, 10(1), 3-13. [Google Scholar](#)
- [8] Rendon, L. I. (1994). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative higher education*, 19(1), 33-51. [Google Scholar](#)
- [9] Ethington, C. A., & Horn, R. A. (2007). An examination of Pace's model of student development and college impress. *Community College Journal of Research and Practice*, 31(3), 183-198. [Google Scholar](#)
- [10] Ortiz, A. M. (1995). Enhancing student development in community colleges. *Community College Review*, 22(4), 63-70. [Google Scholar](#)
- [11] Cote, J. E., & Levine, C. (1997). Student motivations, learning environments, and human capital acquisition: Toward an integrated paradigm of student development. *Journal of College Student Development*, 38, 229-243. [Google Scholar](#)
- [12] King, P. M., & Baxter Magolda, M. B. (2005). A developmental model of intercultural maturity. *Journal of college student development*, 46(6), 571-592. [Google Scholar](#)
- [13] Paladino, D. A., Minton, C. A. B., & Kern, C. W. (2011). Interactive training model: Enhancing beginning counseling student development. *Counselor Education and Supervision*, 50(3), 189-206. [Google Scholar](#)
- [14] Howe, C. W., Coleman, K., Hamshaw, K., & Westdijk, K. (2014). Student development and service-learning: A three-phased model for course design. *International Journal of Research on Service-Learning and Community Engagement*, 2(1), 44-62. [Google Scholar](#)
- [15] Huang, Y. R., & Chang, S. M. (2004). Academic and cocurricular involvement: Their relationship and the best combinations for student growth. *Journal of College Student Development*, 45(4), 391-406. [Google Scholar](#)
- [16] Seal, C. R., Naumann, S. E., Scott, A. N., & Royce-Davis, J. (2011). Social emotional development: A new model of student learning in higher education. *Research in Higher Education Journal*, 10(1), 1-13. [Google Scholar](#)
- [17] Dollinger, M., Lodge, J., & Coates, H. (2018). Co-creation in higher education: Towards a conceptual model. *Journal of Marketing for Higher Education*, 28(2), 210-231. [Google Scholar](#)
- [18] Kang, S. P., Chen, Y., Svihla, V., Gallup, A., Ferris, K., & Datye, A. K. (2022). Guiding change in higher education: An emergent, iterative application of Kotter's change model. *Studies in Higher Education*, 47(2), 270-289. [Google Scholar](#)

- [19] Acar, O. A., & Tuncdogan, A. (2019). Using the inquiry-based learning approach to enhance student innovativeness: a conceptual model. *Teaching in Higher Education*, 24(7), 895-909. [Google Scholar](#)
- [20] Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020). Mapping research in student engagement and educational technology in higher education: A systematic evidence map. *International journal of educational technology in higher education*, 17(1), 1-30. [Google Scholar](#)
- [21] Lynch, J., & Lungrin, T. (2018). Integrating academic and career advising toward student success. *New Directions for Higher Education*, 2018(184), 69-79. [Google Scholar](#)
- [22] Aithal, P. S., & Aithal, S. (2020). Promoting Faculty and Student Centered Research and Innovation based Excellence Model to Reimage Universities. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(1), 24-41. [Google Scholar](#)
- [23] Aithal, P. S., & Aithal, S. (2020). Importance of Arts & Design in Liberal Education STEAM Model of Higher Education. *Applied Arts Science in IT Age*, Edited by Dr. PK Paul, New Delhi Publishers, New Delhi, India, 1-24. [Google Scholar](#)
- [24] Snipes, R. L., & Thomson, N. (1999). An empirical study of the factors underlying student service quality perceptions in higher education. *Academy of Educational, Leadership Journal*, 3(1), 39-57. [Google Scholar](#)
- [25] Clewes, D. (2003). A student-centred conceptual model of service quality in higher education. *Quality in higher education*, 9(1), 69-85. [Google Scholar](#)
- [26] Teeroovengadam, V., Nunkoo, R., Gronroos, C., Kamalanabhan, T. J., & Seebaluck, A. K. (2019). Higher education service quality, student satisfaction and loyalty: Validating the HESQUAL scale and testing an improved structural model. *Quality Assurance in Education*, 27(4), 427-445. [Google Scholar](#)
- [27] Douglas, J., McClelland, R., & Davies, J. (2008). The Development of a Conceptual Model of Student Satisfaction with Their Experience in Higher Education. *Quality Assurance in Education: An International Perspective*, 16(1), 19-35. [Google Scholar](#)
- [28] Alves, H., & Raposo, M. (2007). Conceptual model of student satisfaction in higher education. *Total Quality Management*, 18(5), 571-588. [Google Scholar](#)
- [29] Tsiligiris, V., & Hill, C. (2021). A prospective model for aligning educational quality and student experience in international higher education. *Studies in Higher Education*, 46(2), 228-244. [Google Scholar](#)
- [30] Hwang, Y. S., & Choi, Y. K. (2019). Higher education service quality and student satisfaction, institutional image, and behavioral intention. *Social Behavior and Personality: an international journal*, 47(2), 1-12. [Google Scholar](#)
- [31] Aithal, P. S., & Kumar, P. M. (2016). Student Evaluation and Reforms in Higher Education Institutions. *International Journal of Multidisciplinary Research and Modern Education (IJMRME)*, 2, 652-661. [Google Scholar](#)
- [32] Aithal, P. S., & Kumar, P. M. (2016). Student performance and Learning Outcomes in Higher Education Institutions. *International Journal of Scientific Research and Modern Education (IJSRME)*, 1(1), 674-684. [Google Scholar](#)
- [33] Hasan, H. F. A., Ilias, A., Rahman, R. A., & Razak, M. Z. A. (2008). Service quality and student satisfaction: A case study at private higher education institutions. *International business research*, 1(3), 163-175. [Google Scholar](#)
- [34] Fram, E. H., & Camp, R. C. (1995). Finding and implementing best practices in higher education. *Quality Progress*, 28(2), 69-71. [Google Scholar](#)

- [35] Pastor, V. M. L. (2011). Best practices in academic assessment in higher education: A Case in formative and shared assessment. *Journal of Technology and Science Education*, 1(2), 25-39. [Google Scholar](#)
- [36] McClarty, K. L., & Gaertner, M. N. (2015). Measuring mastery: Best practices for assessment in competency-based education. *American Enterprise Institute for Public Policy Research*. <https://bit.ly/2MN1m04>. [Google Scholar](#)
- [37] Boyle, P., & Boice, B. (1998). Best practices for enculturation: Collegiality, mentoring, and structure. *New directions for higher education*, 101, 87-94. [Google Scholar](#)
- [38] Finch, D., & Jacobs, K. (2012, September). Online education: Best practices to promote learning. In *Proceedings of the human factors and ergonomics society annual meeting*, 56(1), 546-550. Sage CA: Los Angeles, CA: SAGE Publications. [Google Scholar](#)
- [39] Alonso-Garcia, S., Aznar-Díaz, I., Caceres-Reche, M. P., Trujillo-Torres, J. M., & Romero-Rodriguez, J. M. (2019). Systematic review of good teaching practices with ICT in spanish higher education. Trends and challenges for sustainability. *Sustainability*, 11(24), 7150, 1-15. [Google Scholar](#)
- [40] Hénard, F., & Roseveare, D. (2012). Fostering quality teaching in higher education: Policies and practices. *An IMHE Guide for Higher Education Institutions*, 1(1), 7-11. [Google Scholar](#)
- [41] McGee, P., & Reis, A. (2012). Blended course design: A synthesis of best practices. *Journal of Asynchronous Learning Networks*, 16(4), 7-22. [Google Scholar](#)
- [42] Welsh, J. F., & Metcalf, J. (2003). Cultivating faculty support for institutional effectiveness activities: Benchmarking best practices. *Assessment & Evaluation in Higher Education*, 28(1), 33-45. [Google Scholar](#)
- [43] Egan, R., Stockley, D., Brouwer, B., Tripp, D., & Stechyson, N. (2009). Relationships between area of academic concentration, supervisory style, student needs and best practices. *Studies in Higher Education*, 34(3), 337-345. [Google Scholar](#)
- [44] Romanelli, F., Bird, E., & Ryan, M. (2009). Learning styles: a review of theory, application, and best practices. *American journal of pharmaceutical education*, 73(1), 09-21. [Google Scholar](#)
- [45] Mortera-Gutiérrez, F. (2006). Faculty best practices using blended learning in e-learning and face-to-face instruction. *International Journal on E-learning*, 5(3), 313-337. [Google Scholar](#)
- [46] Slattery, J. M., & Carlson, J. F. (2005). Preparing an effective syllabus: Current best practices. *College Teaching*, 53(4), 159-164. [Google Scholar](#)
- [47] Lim, C. P., Wang, T., & Graham, C. (2019). Driving, sustaining and scaling up blended learning practices in higher education institutions: A proposed framework. *Innovation and Education*, 1(1), 1-12. [Google Scholar](#)
- [48] Bano, A., Ali, M., & John, S. (2019). Issues of syllabus designing practices and quality assurance at higher education level. *Global Social Sciences Review (GSSR)*, 4(4), 135-145. [Google Scholar](#)
- [49] Aithal, P. S., & Kumar, P. M. (2015). How innovations and best practices can transform higher education institutions: A case study of SIMS. *International Journal of Management (IJM)*, 6(2), 83-98. [Google Scholar](#)
- [50] Aithal, P. S. (2015). Quality Enhancement in Higher Education Institutions through Best Practices in Library: A Case of SIMS. *International Journal of Management, IT and Engineering*, 5(7), 489-505. [Google Scholar](#)
- [51] Aithal, P. S. (2016). Creating innovators through setting up organizational vision, mission and core values: a strategic model in higher education. *International Journal of Management, IT and Engineering*, 6(1), 310-324. [Google Scholar](#)
- [52] Gibbs, P. (2019). The three goods of higher education; as education, in its educative, and in its institutional practices. *Oxford Review of Education*, 45(3), 405-416. [Google Scholar](#)

- [53] Aithal, P. S., & Kumar, P. M. (2019). Autonomy in higher education-towards an accountability management model. *International Journal of Management & Development*, 6(10), 166-175. [Google Scholar](#)
- [54] Aithal, P. S., & Aithal, S. (2019, October). Essential infrastructures for world-class universities. In *Proceedings of National Conference on Research in Higher Education, Learning and Administration* (Vol. 1, No. 1, pp. 01-23). [Google Scholar](#)
- [55] Aithal, P. S., & Aithal, S. (2019). Building World-Class Universities: Some Insights & Predictions. *Building World-Class Universities: Some Insights & Predictions. International Journal of Management, Technology, and Social Sciences (IJMTS)*, 4(2), 13-35. [Google Scholar](#)
- [56] VanTassel-Baska, J., & Wood, S. (2010). The integrated curriculum model (ICM). *Learning and individual differences*, 20(4), 345-357. [Google Scholar](#)
- [57] King, P. M., & Baxter Magolda, M. B. (2005). A developmental model of intercultural maturity. *Journal of college student development*, 46(6), 571-592. [Google Scholar](#)
- [58] Aithal, P. S., & Aithal, Shubhrajyotsna. (June 2019). Innovation in B.Tech. Curriculum as B.Tech. (Hons) by integrating STEAM, ESEP & IPR features. *International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, 3(1), 56-71. DOI: <http://doi.org/10.5281/zenodo.3248630>. [Google Scholar](#)
- [59] Aithal, P. S., & Aithal, S. (2020). Promoting Faculty and Student Centered Research and Innovation based Excellence Model to Reimage Universities. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(1), 24-41. [Google Scholar](#)
- [60] Srikanthan, G., & Dalrymple, J. F. (2002). Developing a holistic model for quality in higher education. *Quality in Higher Education*, 8(3), 215-224. [Google Scholar](#)
- [61] Álvarez-González, P., López-Miguens, M. J., & Caballero, G. (2017). Perceived employability in university students: developing an integrated model. *Career Development International*, 22(3), 280-299. <https://doi.org/10.1108/CDI-08-2016-0135>. [Google Scholar](#)
- [62] Küttim, M., Kallaste, M., Venesaar, U., & Kiis, A. (2014). Entrepreneurship education at university level and students' entrepreneurial intentions. *Procedia-Social and Behavioral Sciences*, 110, 658-668. [Google Scholar](#)
- [63] Aithal, P. S., & Aithal, S. (2018). Patent Analysis as a New Scholarly Research Method. *International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, 2(2), 33-47. [Google Scholar](#)
- [64] Aithal, P. S., & Aithal, S. (2019). New Directions in Scholarly Research–Some Fearless Innovations & Predictions for 21st Century Research. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 4(1), 1-19. [Google Scholar](#)
- [65] Aithal, P. S., & Aithal, S. (2020). Promoting Faculty and Student Centered Research and Innovation based Excellence Model to Reimage Universities. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(1), 24-41. [Google Scholar](#)
- [66] Aithal, P. S., & Kumar, P. M. (2019). Autonomy in higher education-towards an accountability management model. *International Journal of Management & Development*, 6(10), 166-175. [Google Scholar](#)
- [67] Aithal, P. S., & Kumar, P. M. (2016). Organizational behaviour in 21st century–'Theory A' for managing people for performance. *IOSR Journal of Business and Management (IOSR-JBM)*, 18(7), 126-134. [Google Scholar](#)
- [68] Aithal, P. S., & Kumar, P. M. (2016). Comparative analysis of theory X, theory Y, theory Z, and Theory A for managing people and performance. *International Journal of Scientific Research and Modern Education (IJSRME)*, 1(1), 803-812. [Google Scholar](#)

- [69] Aithal, P. S. (2021). Business Excellence through the Theory of Accountability. *International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, 5(1), 88-115. [Google Scholar](#)
- [70] Kelley, J. W. (2004). Student academic services: An integrated approach. *Journal of College Student Development*, 45(3), 357-360. [Google Scholar](#)
- [71] Sultan, P., & Wong, H. Y. (2012). Service quality in a higher education context: an integrated model. *Asia pacific journal of marketing and logistics*, 24(5), 755-784. [Google Scholar](#)
- [72] Sultan, P., & Wong, H. Y. (2014). An integrated-process model of service quality, institutional brand and behavioural intentions: the case of a university. *Managing service quality*, 24(5), 487-521. [Google Scholar](#)
- [73] Aithal, P. S., & Kumar, P. M. (2015). Applying SWOC analysis to an institution of higher education. *International Journal of Management, IT and Engineering*, 5(7), 231-247. [Google Scholar](#)
- [74] Aithal, P. S., & Kumar, P. M. (2016). Analysis of choice based credit system in higher education. *International Journal of Engineering Research and Modern Education (IJERME)* 1(1), 278-284. [Google Scholar](#)
- [75] Suchitra, & Ramesh Pai. (2021). NYKAA: A Comprehensive Analysis of a Leading Indian E-Commerce Cosmetic Company. *International Journal of Case Studies in Business, IT and Education (IJCSBE)*, 5(2), 354–365. <https://doi.org/10.47992/IJCSBE.2581.6942.0140>. [Google Scholar](#)
- [76] Aithal, P. S., Shailashree, V., & Kumar, P. M. (2015). A new ABCD technique to analyze business models & concepts. *International Journal of Management, IT and Engineering*, 5(4), 409-423. [Google Scholar](#)
- [77] Aithal, P. S. (2016). Study on ABCD analysis technique for business models, business strategies, operating concepts & business systems. *International Journal in Management and Social Science*, 4(1), 95-115. [Google Scholar](#)
- [78] Mendon, S., & Aithal, P. S. (2022). Quantitative ABCD Analysis of Organic Food Product and its Impact on Purchase Intention. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 7(1), 254-278. [Google Scholar](#)
- [79] Frederick, D. P., Sujaya, H., & Salins, M. (2022). Quantitative ABCD Analysis of Online Shopping. *International Journal of Applied Engineering and Management Letters (IJAEML)*, 6(1), 313-329. [Google Scholar](#)
- [80] Nayak, Priyanka, & Kayarkatte, Narayan, (2022). Education for Corporate Sustainability Disclosures by Higher Educational Institutions – A Quantitative ABCD Analysis. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 7(1), 465-483. DOI: <https://doi.org/10.5281/zenodo.6657562>. [Google Scholar](#)
- [81] Shenoy, V., & Aithal, P. S. (2017). Quantitative ABCD Analysis of IEDRA Model of Placement Determination. *International Journal of Case Studies in Business, IT and Education (IJCSBE)*, 1(2), 103-113. [Google Scholar](#)
- [82] Aithal, P. S. (2017). Company Analysis–The Beginning Step for Scholarly Research. *International Journal of Case Studies in Business, IT and Education (IJCSBE)*, 1(1), 1-18. [Google Scholar](#)
- [83] Crasta, L. C., & Shailashri, V. T. (2021). Impact of Mobile Phone Services on the Traditional Telecommunication Services in India. *International Journal of Case Studies in Business, IT and Education (IJCSBE)*, 5(2), 211-225. [Google Scholar](#)
- [84] D’Silva, R. J., & Bhat, G. (2021). A Case Study of Cashew Industry in Karnataka. *International Journal of Case Studies in Business, IT and Education (IJCSBE)*, 5(2), 329-341. [Google Scholar](#)

- [85] Aithal, P. S., & Suresh Kumar, P. M. (2017). Ideal analysis for decision making in critical situations through six thinking hats method. *International Journal of Applied Engineering and Management Letters (IJAEML)*, 1(2), 1-9. [Google Scholar](#)
- [86] Al Jarrah, H. Y. (2019). Six thinking hats: An analysis of the skill level of Jordanian vocational education teachers and the extent of skill application. *Space and Culture, India*, 7(1), 170-185. [Google Scholar](#)
- [87] Aithal, P. S., & Kumar, P. M. (2016). Using six thinking hats as a tool for lateral thinking in organizational problem solving. *International Journal of Engineering Research and Modern Education (IJERME)*, 1(2), 225-234. [Google Scholar](#)
- [88] Aithal, P. S. (2017). A critical study on Various Frameworks used to analyse International Business and its Environment. *International Journal of Applied Engineering and Management Letters (IJAEML)*, 1(2), 78-97. [Google Scholar](#)
- [89] Aithal, A., & Shabaraya, A. R. (2018). Users Perspectives on Online Pharmacy Model. *International Journal of Health Sciences and Pharmacy (IJHSP)*, 2(1), 29-36. [Google Scholar](#)
- [90] Aithal, P. S. (2017). ABCD Analysis as Research Methodology in Company Case Studies. *International Journal of Management, Technology, and Social Sciences (IJMITS)*, 2(2), 40-54. [Google Scholar](#)
- [91] Aithal, P. S. (2017). ABCD Analysis of Recently Announced New Research Indices. *International Journal of Management, Technology, and Social Sciences (IJMITS)*, 1(1), 65-76. [Google Scholar](#)
- [92] Aithal, P. S., Shailashree, V. T., & Kumar, P. M. (2016). Analysis of ABC Model of Annual Research Productivity using ABCD Framework. *International Journal of Current Research and Modern Education (IJCRME)*, 1(1), 846-858. [Google Scholar](#)
- [93] Aithal, P. S., & Kumar, P. M. (2016). CCE Approach through ABCD Analysis of ‘Theory A’ on Organizational Performance. *International Journal of Current Research and Modern Education (IJCRME)*, 1(2), 169-185. [Google Scholar](#)
- [94] Aithal, P. S., Kumar, P. M., & Shailashree, V. (2016). Factors & elemental analysis of six thinking hats technique using ABCD framework. *International Journal of Advanced Trends in Engineering and Technology (IJATET)*, 1(1), 85-95. [Google Scholar](#)
- [95] Rajasekar, D., & Aithal, P. S. (2022). Direct to Consumer using Livestream as an Innovative Marketing Medium during COVID-19. *International Journal of Applied Engineering and Management Letters (IJAEML)*, 6(1), 77-86. [Google Scholar](#)
- [96] Kumari, P., & Aithal, P. S. (2020). Growth & Fate Analysis of Mangalore International Airport– A Case Study. *International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, 4(2), 71-85. [Google Scholar](#)
- [97] Aithal, P. S. (2017). Comparative study of various research indices used to measure quality of research publications. *International Journal of Applied and Advanced Scientific Research (IJAASR)-2 (1)*, 81-89. [Google Scholar](#)
- [98] Aithal, S., & Aithal, P. S. (2016). ABCD analysis of Dye-doped Polymers for Photonic Applications. *IRA-International Journal of Applied Sciences*, 4(3), 358-378. [Google Scholar](#)
- [99] Aithal, A., & Aithal, P. S. (2017). ABCD analysis of task shifting—an optimum alternative solution to professional healthcare personnel shortage. *International Journal of Health Sciences and Pharmacy (IJHSP)*, 1(2), 36-51. [Google Scholar](#)
- [100] Acharya, S. & Aithal, P. S. (2016). Impact of Green Energy on Global Warming-A Changing Scenario. *International Journal of Scientific Research and Modern Education (IJSRME)*, 1(1), 838-842. [Google Scholar](#)
