A THEMATIC ANALYSIS OF THE IMPACT OF STUDENT-CENTRIC METHODS IN HIGHER EDUCATION INSTITUTIONS ACROSS KERALA

A THEMATIC ANALYSIS OF THE IMPACT OF STUDENT-CENTRIC METHODS IN HIGHER EDUCATION INSTITUTIONS ACROSS KERALA

Abstract

The quality of higher education directly influences the future of a country. Therefore, the maintenance of quality is essential with compromises. In the technological advancement era, the demand is for studentcentric methods rather than teacher-centric teachers should approaches; serve facilitators. This study aims to identify the impact of student-centric methods adopted by higher education institutions. For purpose, top NAAC graded colleges in Kerala were purposively selected, and secondary data regarding their adopted student-centric methods were collected from their SSRs. Thematic analysis was applied for generating themes and for effective analysis. The study categorizes studentcentric methods under six themes: hands-on learning, diverse engagement, leadership development, practical application, innovation and entrepreneurship, technology-integrated education. The impact of student-centric methods on students is categorized under the themes of Practical Skill Development, Critical Thinking Emphasis, Community Engagement, Cultural Holistic Learning Approach, Technology Integration, and Professional Exposure. The study emphasizes that higher education institutions in Kerala have started to transition from teacher-centric methods to student-centric approaches.

Keywords: Student centric method, experiential learning, HEIs, problem solving, critical thinking

Authors

Dr. Sajeesh T J

Assistant Professor, Dept. of Commerce S.E.S College, Sreekandapuram sajeeshthadathil@gmail.com 9633672948

Dr. Seena P P

Assistant Professor,
Dept. of Commerce
S.E.S College, Sreekandapuram
seenasunikumar@gmail.com
9995259669

A THEMATIC ANALYSIS OF THE IMPACT OF STUDENT-CENTRIC METHODS IN HIGHER EDUCATION INSTITUTIONS ACROSS KERALA

I. INTRODUCTION

The academic and personal development of students has been shaped with the help of higher education. Nowadays, there is a growing emphasis on student-centric methods to enhance learning experiences within these institutions. Student-centric methods facilitate the active involvement of students in their own learning, fostering critical thinking, collaboration, and problem-solving skills. This study aims to explore the various student-centric methods implemented by higher education institutions and evaluate the impact of student-centric methods followed by the college in enhancing the overall learning experiences of students. The focus of this research is on experiential learning, participative learning, and problem-solving methodologies. By examining these methods, their types, and their impact, this study seeks to contribute to a better understanding of how higher education institutions can create more engaging and effective learning environments.

II. REVIEW OF LITERATURE

(Chinu Agrawal & Shyamlata Juyal, 2014) reviewed student centric methods followed by higher education institutions in India. The study observed that the teaching-learning process becomes more active only when the students' involvement increases.

(Aithal, 2016) Compared the innovations in student-centric methods adopted by the top ten business schools in India with those of the top private business schools in India based on pedagogical details.

(Rajaram K, 2021) Observed the transformation of higher education in the area of teaching and learning during the twenty-first century. The study highlights the importance of innovation in the teaching-learning process.

(Shankar Subramanian Iyer, A. Seetharaman, & K. Maddulety, 2020) recognizing the importance of embracing technological possibilities, it becomes evident that a transformative shift in education is crucial. This transformation not only enhances the teaching-learning process but also underscores the imperative of boosting learners' employability.

(Barmola, 2019) The study attempted to find meaning in facilitation and guidance from a psychological perspective. It considered these two tools use in pedagogy to ensure the active participation of teachers in student-centered education

Objectives of the Study

- 1. To explore various student-centric methods implemented by Higher Education Institutions (HEIs)
- 2. To investigate the impact of student centric methods adopted by HEIs on learning experiences and academic performance.

III. RESEARCH METHODOLOGY

This study employed qualitative analysis to examine the objectives through the collection of secondary data, utilizing the purposive sampling method to select the top ten NAAC graded colleges in Kerala. Data on student-centric methods were collected from their

A THEMATIC ANALYSIS OF THE IMPACT OF STUDENT-CENTRIC METHODS IN HIGHER EDUCATION INSTITUTIONS ACROSS KERALA

self-study reports. The study involved the compilation of transcripts from ten selected HEIs. Thematic analysis was employed as the primary method to extract meaningful insights from the data. This research focuses on a thematic analysis of the impact of student-centric methods in higher education institutions across Kerala.

IV.DATA ANALYSIS AND DISCUSSION

Thematic analysis requires a systematic approach. Initially, a thorough reading and familiarization with each transcript are conducted to comprehend the context and content. Following this, the identification and extraction of phrases or excerpts related to student-centric practices are undertaken. Specific sentences or groups of sentences that directly address the research questions are selected. The subsequent step involves grouping similar codes derived from the extracted excerpts into broader categories or themes. The themes and codes developed based on two objectives

1. Student-Centric Methods Implemented by HEIs are Categorised under Six Themes.

Theme 1: Hands-on Learning

St. Aloysius College focuses on experiential learning, utilizing hands-on activities to promote practical skill development, encompassing projects that involve environmental sustainability, cultural festivities, and real-world issue resolution. Prajyoti Niketan College adopts a blend of experiential and participative learning methods, encouraging students to actively engage in discussions, debates, and presentations, nurturing practical involvement and critical thinking skills. Morning Star Home Science College emphasizes experiential learning programs, offering hands-on experiences through field visits and industrial tours, bridging the gap between theory and real-world application. Bishop Chulaparambil Memorial College combines experiential learning with on-the-job training, cultivating practical skills through projects and industrial visits. Muhammed Abdurahiman Memorial Orphanage College employs various experiential strategies, including research activities and industrial exposure, facilitating the practical application of academic knowledge. Kumbalathu Sankupillai Memorial Devaswom Board College engages students in hands-on activities like biodiversity exploration, gardening, and community initiatives, linking classroom learning with practical experiences. Safi Institute of Advanced Study (SIAS) offers hands-on learning opportunities in areas such as feature film-making, short film production, and app development, enabling students to apply creative and technical skills. St. Stephens College, Uzhavoor, focuses on hands-on learning through projects, internships, and study tours, providing practical experience in various fields of study. Mar Athanasios College for Advanced Studies (MACFAST) encourages hands-on learning through minor and major projects, internships, and practical training, allowing students to apply academic knowledge in real-world scenarios. Sacred Heart College promotes hands-on learning through NSS activities, Heart-to-Heart initiatives, and service activities, fostering community engagement and real-life projects. In conclusion, these institutions employ diverse hands-on learning approaches, including experiential learning, practical skill development, and communitybased activities, each tailored to provide students with a comprehensive education and the development of essential skills and knowledge

A THEMATIC ANALYSIS OF THE IMPACT OF STUDENT-CENTRIC METHODS IN HIGHER EDUCATION INSTITUTIONS ACROSS KERALA

Theme 2: Diverse Engagement

St. Aloysius College emphasizes diverse engagement through club and forum participation, intercollegiate competitions, and cultural exposure. Prajyoti Niketan College encourages participation in club and forums, NCC, NSS, Women Cell, and Incubation Centre, fostering a wide range of activities. Morning Star Home Science College focuses on group discussions, seminars, and interactive sessions to enhance student engagement. Bishop Chulaparambil Memorial College promotes diverse engagement through technical expos, annual thesis conferences, and media activities. Muhammed Abdurahiman Memorial Orphanage College emphasizes group-based learning, engaged learning, and 24x7 activitybased classrooms. Kumbalathu Sankupillai Memorial Devaswom Board College encourages peer teaching, alumni interactions, and industry internships. Safi Institute of Advanced Study (SIAS) offers technical expos, financial literacy programs, and newspaper analysis sessions. St. Stephens College, Uzhavoor, focuses on community service, entrepreneurship development, and practical training. Mar Athanasios College for Advanced Studies (MACFAST) promotes diverse engagement through intercollegiate competitions and collaboration with professional bodies. Sacred Heart College conducts debates, quizzes, essays, painting, and poster competitions, fostering a wide range of activities to enhance student participation.

Theme 3: Leadership Development

The colleges employ a wide array of strategies and activities for leadership development. St. Aloysius College focuses on honing event management skills and organizational competence through events like Arts Day and College Union celebrations, providing students with hands-on experience in event planning and execution. Prajyoti Niketan College places a strong emphasis on leadership development via the Additional Skill Acquisition Programme, enhancing students' soft skills to prepare them for future employment. Morning Star Home Science College nurtures leadership qualities through workshops, exhibitions, and collaborative learning opportunities within an academic context. Bishop Chulaparambil Memorial College promotes leadership growth by offering an Entrepreneurship Development Cell and media activities, enabling students to develop entrepreneurial and communication skills. Muhammed Abdurahiman Memorial Orphanage College encourages leadership development through volunteering initiatives and modern instructional strategies, fostering social responsibility and adaptability. Kumbalathu Sankupillai Memorial Devaswom Board College focuses on leadership development through peer teaching and industry internships, providing practical experience and mentorship. Safi Institute of Advanced Study (SIAS) fosters leadership development through annual thesis conferences and the Young Innovators Programme, encouraging innovation and research skills. St. Stephens College, Uzhavoor encourages leadership development through community service, entrepreneurship programs, and practical training, instilling a sense of community engagement and hands-on experience. Mar Athanasios College for Advanced Studies (MACFAST) supports leadership growth through its Entrepreneurship Development Club and Technology Incubation Centre, offering opportunities to develop entrepreneurial and technological skills. Finally, Sacred Heart College places a strong emphasis on leadership development by involving students in representation and flood relief volunteer work, providing valuable real-world crisis management experience

IIP Sories

A THEMATIC ANALYSIS OF THE IMPACT OF STUDENT-CENTRIC METHODS IN HIGHER EDUCATION INSTITUTIONS ACROSS KERALA

Theme 4: Practical Application

All these institutions employ various strategies to facilitate practical application. St. Aloysius College emphasizes internships and industrial tours for real-world problem-solving. Prajyoti Niketan College focuses on honing real-world problem-solving skills through internships and industrial exposure. Morning Star Home Science College encourages practical application via internships, virtual laboratories, and problem-based learning. Bishop Chulaparambil Memorial College adopts project-based learning and skill development, while Muhammed Abdurahiman Memorial Orphanage College integrates skill-based learning and volunteer opportunities. Kumbalathu Sankupillai Memorial Devaswom Board College provides hands-on experience through projects and field surveys. St. Stephens College, Uzhavoor, offers real-world experience through community service, entrepreneurship programs, and practical training. Sacred Heart College provides opportunities for students to apply their learning in real-life contexts through study tours, industrial visits, and project-based learning

Theme 5: Innovation and Entrepreneurship

Innovation and entrepreneurship are actively promoted in these institutions. St. Aloysius College emphasizes innovation and entrepreneurship through project-based learning and practical initiatives. Prajyoti Niketan College encourages students to explore entrepreneurial opportunities through project-based learning and initiatives like the Entrepreneurship Development Cell. Morning Star Home Science College focuses on innovation through research activities, while Bishop Chulaparambil Memorial College promotes entrepreneurship through the Entrepreneurship Development Cell and skill-based learning. Muhammed Abdurahiman Memorial Orphanage College encourages innovation through research activities and modern instructional strategies. Kumbalathu Sankupillai Memorial Devaswom Board College fosters entrepreneurial thinking through industry internships and projects. SIAS promotes entrepreneurship via the Technology Incubation Centre and the Young Innovators Programme. St. Stephens College, Uzhavoor, encourages entrepreneurship and innovation through practical training and entrepreneurship development programs. MACFAST provides a platform for entrepreneurial thinking through its Entrepreneurship Development Club and various training programs. Sacred Heart College actively promotes innovation and entrepreneurship by encouraging students to explore entrepreneurial opportunities. These institutions foster a spirit of innovation and entrepreneurial thinking among their students through a range of creative and practical approaches

Theme 6: Technology-Integrated Education

Incorporating technology into education is a shared commitment among the institutions. St. Aloysius College and Prajyoti Niketan College both emphasize the use of ICT tools and online webinars. Morning Star Home Science College, during the Covid-19 pandemic, introduced virtual labs, highlighting their dedication to technology-integrated learning. Bishop Chulaparambil Memorial College prioritizes smart classrooms and online platforms for technology-based education. Muhammed Abdurahiman Memorial Orphanage College incorporates online webinars, national campaigns, and virtual labs into their educational approach. Kumbalathu Sankupillai Memorial Devaswom Board College takes a

A THEMATIC ANALYSIS OF THE IMPACT OF STUDENT-CENTRIC METHODS IN HIGHER EDUCATION INSTITUTIONS ACROSS KERALA

different route by focusing on peer teaching and the provision of state-of-the-art labs. SIAS employs technology through coding, MCQ-based problems, and DIY programs. St. Stephens College, Uzhavoor, emphasizes smart classrooms, online platforms, and ICT-enabled learning. MACFAST uses ICT tools and online webinars while also implementing outbound experimental learning. Sacred Heart College offers Wi-Fi-enabled classrooms and E-learning resources to foster a technology-enhanced learning environment. Each institution showcases a commitment to staying technologically relevant in the evolving educational landscape.

2. Impact of Student Centric Methods Adopted by HEI on Learning Experiences and Academic Performance.

Theme 1: Prioritizing Practical Skill Development in Higher Education

Higher education institutions (HEIs) are actively prioritizing practical skill development in various ways. For instance, St. Aloysius College emphasizes experiential learning, allowing students to acquire practical skills by engaging in hands-on activities related to environmental sustainability, cultural celebrations, and real-world problem-solving. Prajyoti Niketan College opts for internships to enhance practical skills, preparing students for the challenges of their future careers. Morning Star Home Science College fosters practical skill development through events such as "Svijet Harane - The Food Fest," enabling students to apply theoretical knowledge in real-world contexts, especially in the field of food science. Bishop Chulaparambil Memorial College utilizes a project-based approach, requiring students to apply their knowledge to real-world situations, honing practical skills. Muhammed Abdurahiman Memorial Orphanage College encourages practical skill development via research activities, enabling students to apply academic knowledge practically. Kumbalathu Sankupillai Memorial Devaswom Board College engages students in biodiversity exploration and related activities, linking classroom learning with practical experiences. Finally, Safi Institute of Advanced Study (SIAS) offers opportunities in areas such as film-making, allowing students to apply their creative and technical skills, ultimately enhancing their practical knowledge

Theme 2- Nurturing Critical Thinking

A common theme shared among these institutions is their strong commitment to nurturing critical thinking skills in students. St. Aloysius College does this through participative learning, encouraging students to actively engage in discussions and debates. Prajyoti Niketan College places a specific focus on fostering critical thinking through discussions. Morning Star Home Science College offers virtual industrial visits to promote analytical thinking. Bishop Chulaparambil Memorial College encourages critical thinking through its Entrepreneurship Development initiatives. Muhammed Abdurahiman Memorial Orphanage College emphasizes skill-based learning, a path to developing analytical prowess. Kumbalathu Sankupillai Memorial College employs gardening as a practical method to engage students in critical thinking. Lastly, Safi Institute of Advanced Study (SIAS) fosters critical thinking through coding activities, encouraging students to think analytically and problem-solve effectively. These institutions are united in their aim to cultivate students' capacity for critical thought.

A THEMATIC ANALYSIS OF THE IMPACT OF STUDENT-CENTRIC METHODS IN HIGHER EDUCATION INSTITUTIONS ACROSS KERALA

Theme 3 - Nurturing Community Engagement

Community engagement stands as a common objective in these institutions, with each taking its unique approach. St. Aloysius College forms a 'Green Army' to promote environmental responsibility. Prajyoti Niketan College encourages community engagement through debate activities. Morning Star Home Science College facilitates interaction with the community through 'Grahadarshan,' possibly a home visitation program. Bishop Chulaparambil Memorial College contributes to the community via 'FINSIAS.' Muhammed Abdurahiman Memorial Orphanage College emphasizes volunteering initiatives, fostering a sense of social responsibility. Kumbalathu Sankupillai Memorial College connects students with their community by enhancing practical skills. Safi Institute of Advanced Study (SIAS) strives for community engagement by enhancing employability skills, preparing students for active participation in the workforce.

Theme 4- Enriching Cultural Exposure

Cultural exposure is a fundamental element of the student experience in the featured colleges. St. Aloysius College fosters cultural appreciation through the 'Bhoomithrasena Club,' providing students with opportunities to explore various cultural aspects. At Prajyoti Niketan College, the National Cadet Corps (NCC) serves as a platform for students to engage in cultural activities and gain a broader cultural perspective. Morning Star Home Science College enriches cultural exposure through workshops, allowing students to experience different traditions and practices. Bishop Chulaparambil Memorial College encourages cultural exploration through media-related activities, fostering an understanding of various cultures through communication. Muhammed Abdurahiman Memorial Orphanage College adopts modern instructional strategies to expose students to diverse cultural elements. Kumbalathu Sankupillai Memorial College emphasizes outcome-based education, which contributes to students' comprehensive cultural development by aligning academic programs with cultural understanding and appreciation.

Theme 5 - Holistic Learning Approach

Higher education institutions (HEIs) demonstrate a diverse array of approaches to foster holistic and practical skill development among students. St. Aloysius College prioritizes experiential learning through hands-on activities that encompass projects promoting environmental sustainability, cultural celebrations, and real-world issue resolution. Prajyoti Niketan College focuses on enhancing practical skills via internships, preparing students for future career challenges. Morning Star Home Science College promotes practical skill development through events like "Svijet Harane - The Food Fest," enabling the realworld application of theoretical knowledge, especially in the food science field. Bishop Chulaparambil Memorial College adopts a project-based approach to practical skill development, where students tackle real-world problems. Muhammed Abdurahiman Memorial Orphanage College nurtures practical skills through research activities that allow the application of academic knowledge to practical scenarios. Kumbalathu Sankupillai Memorial Devaswom Board College engages students in practical skill development, focusing on activities like biodiversity exploration, creating a direct link between environmental theory and hands-on experience. Safi Institute of Advanced Study (SIAS) provides opportunities for practical skill development in areas like film-making, enhancing

A THEMATIC ANALYSIS OF THE IMPACT OF STUDENT-CENTRIC METHODS IN HIGHER EDUCATION INSTITUTIONS ACROSS KERALA

creative and technical skills. These colleges collectively emphasize critical thinking through participative learning, discussions, and activities like the Additional Skill Acquisition Programme. Additionally, community engagement is promoted through initiatives like Green Army, NCC, and NSS, instilling a sense of civic duty. Furthermore, cultural exposure plays a vital role in the student experience, with events like Arts Day and participation in diverse clubs allowing students to explore and appreciate different cultures. This holistic approach encompasses diverse clubs, workshops, exhibitions, and technical expos, extending beyond the academic curriculum to ensure students develop a well-rounded skill set

Theme 6 - Technology Integration

These colleges have embraced technology as an integral part of their educational strategies. St. Aloysius College fosters a student-centric environment and utilizes online events for experiential learning, while Prajyoti Niketan College emphasizes participative learning through ICT tools and webinars to enhance critical thinking and soft skills. Morning Star Home Science College employs virtual labs and online webinars to equip students with practical food science skills, and Bishop Chulaparambil Memorial College integrates technology through online platforms and media activities, enhancing participative learning and skill development. Muhammed Abdurahiman Memorial Orphanage College focuses on skill-based learning and modern instructional strategies using online webinars, research activities, and virtual labs. Kumbalathu Sankupillai Memorial Devaswom Board College leverages state-of-the-art labs and peer teaching for enhanced learning. Safi Institute of Advanced Study (SIAS) provides students with various technology-based activities, encouraging innovation and technical skills. St. Stephens College, Uzhavoor, prioritizes smart classrooms and online platforms, emphasizing practical training and entrepreneurship development. Mar Athanasios College for Advanced Studies (MACFAST) integrates technology through institutional visits and training programs, fostering a bridge between academia and industry. Sacred Heart College combines Wi-Fi enabled classrooms and Elearning resources with a wide range of academic and community activities to create a comprehensive technological learning environment, while Safi Institute of Advanced Study (SIAS) offers a diverse range of activities to foster a holistic learning environment, from coding to management fests.

Theme 7: Professional Exposure

In terms of professional exposure, several colleges take distinct approaches to prepare students for real-world challenges. St. Aloysius College focuses on leadership development programs, while Prajyoti Niketan College provides hands-on entrepreneurial experiences through its Incubation Centre. Morning Star Home Science College connects students with industry experts and emerging trends via online webinars. Bishop Chulaparambil Memorial College offers practical experience in media and communication through radio programs. Muhammed Abdurahiman Memorial Orphanage College fosters social responsibility through social volunteering initiatives. Kumbalathu Sankupillai Memorial College aligns academic learning with real-world applications through outcome-based education. At Safi Institute of Advanced Study (SIAS), students have opportunities for professional exposure, including coding and participation in management fests, effectively bridging the gap between academia and industry.

A THEMATIC ANALYSIS OF THE IMPACT OF STUDENT-CENTRIC METHODS IN HIGHER EDUCATION INSTITUTIONS ACROSS KERALA

V. CONCLUSION

The thematic analysis undertaken in this study has provided an insights of studentcentric methods employed by Higher Education Institutions (HEIs) across Kerala. HEIs have strategically integrated experiential learning programs, internships, and hands-on activities, creating avenues for students to apply theoretical knowledge in real-world settings. This not only enhances their skill set but also contributes to a more comprehensive understanding of the subjects. The analysis also emphasised the importance of diverse engagement opportunities. Through clubs, forums, and intercollegiate competitions, students are provided platforms to showcase their talents and develop crucial soft skills. Leadership development initiatives, event management, and exposure to different cultures further contribute to the multifaceted growth of students. Furthermore, the integration of technology in education emerges as a pivotal theme. From ICT tools and online webinars to virtual labs, institutions are leveraging technology to create dynamic and interactive learning environments. The conclusion drawn from this thematic analysis is that student-centric methods, when thoughtfully implemented, have a profound impact on the overall educational experience and academic outcomes. The identified themes collectively contribute to the ongoing discourse on transformative education, emphasizing the need for a holistic and adaptive approach to higher education in the contemporary landscape. The findings of this study provide valuable insights for student-centric practices in Kerala's higher education institutions.

REFERENCES

- [1] Aithal, P. S. (2016). Innovations in student centric learning –a study of top business schools in india. *International Journal of Engineering Research and Modern Education*, 298-306.
- [2] Barmola, K. (2019). Facilitation and Guidance: A Technique of Student Centric Education. *Qualitative Enhancement of Teaching Pedagogy in Institutes of Higher Education*, (pp. 1-6). Jaipur.
- [3] Bishop Chulaparambil Memorial College. (2023). *Bishop Chulaparambil Memorial College*. Retrieved from https://bcmcollege.ac.in/
- [4] Byrne, D. (2022). A worked example of Braun and Clarke's approach to refexive thematic analysis. *Quality & Quantity*, 1391–1412.
- [5] Chinu Agrawal, & Shyamlata Juyal. (2014). Student Centric Learning in Higher Education A Review. *International journal of innovative research & development*, 265-268.
- [6] Delahunt, M. M. (2017). Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars. *All Ireland journal of teaching and learning in higher education*, 3351-3359.
- [7] Kumbalathu Sankupillai Memorial Devaswom Board College. (2023). *Kumbalathu Sankupillai Memorial Devaswom Board College*. Retrieved from https://ksmdbc.ac.in/
- [8] Morning Star Home Science College. (2023, October). *Morning Star Home Science College*. Retrieved from Morning Star Home Science College: https://www.morningstar.edu.in/
- [9] Muhammed Abdurahiman Memorial Orphanage College. (2023). *Muhammed Abdurahiman Memorial Orphanage College*. Retrieved from https://www.mamocollege.org/
- [10] National Assessment and Accreditation Council. (2023, October). *National Assessment and Accreditation Council*. Retrieved from http://naac.gov.in/index.php/en/
- [11] Prajyoti Niketan College. (2023, October). *Prajyoti Niketan College*. Retrieved from Prajyoti Niketan College: https://prajyotiniketan.edu.in/
- [12] Rajaram K. (2021). Transformation in Higher Education: Twenty-First-Century Teaching and Learning Competencies. *Transformation in Higher Education: Twenty-First-Century Teaching and Learning Competencies*, 1-19.
- [13] Sacred Heart College. (2023, October). Sacred Heart College. Retrieved from https://www.shcollege.ac.in/
- [14] Safi Institute of Advanced Study (SIAS). (2023). Safi Institute of Advanced Study (SIAS). Retrieved from https://sias.edu.in/

E-ISBN: 978-93-6252-523-9

IIP Series

A THEMATIC ANALYSIS OF THE IMPACT OF STUDENT-CENTRIC METHODS IN HIGHER EDUCATION INSTITUTIONS ACROSS KERALA

- [15] Shankar Subramanian Iyer, A. Seetharaman, & K. Maddulety . (2020). Education Transformation Using Block Chain Technology A Student Centric Model. *Re-imagining Diffusion and Adoption of Information Technology and Systems: A Continuing Conversation. TDIT 2020. IFIP Advances in Information and Communication Technology, vol 617.* (pp. 201-217). Springer.
- [16] St. Aloysiuse College. (2023, October). *St. Aloysiuse College*. Retrieved from St. Aloysiuse College: https://staloysiuselt.edu.in/ssr
- [17] St. Stephens College, Uzhavoor. (2023, October). St. Stephens College, Uzhavoor. Retrieved from https://www.ststephens.net.in/