Bridging Traditional and Modern Education: Value-Based Learning and Skill Development School At Pune with a Gurukul Approach Aligning with NEP 2020

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Abstract— Traditional value-based education and modern skill development are not aligned in the Indian educational system, which leaves pupils unprepared for difficulties in the real world. Inspired by the Gurukul concept, this project intends to compare the possibilities of a value-based education and skill development school in Pune with contemporary educational institutions. The study examines how contemporary educational systems and the Gurukul model include skill development and value-based education using a case study technique. It highlights how crucial vocational education is and how engaging, hands-on learning environments are essential. Schools may support holistic development and equip students for problems in the real world by implementing these ideas into the current curriculum, which is in line with the NEP 2020 ideals.

Keywords—NEP 2020; Value Based Education; Holistic Learning Environment; Skill Development

I. INTRODUCTION

India's education system has shifted from the Gurukul model, which emphasized values and skills, to a rote-based system, creating a gap in holistic learning. While NEP 2020 advocates multidisciplinary education, its implementation remains inadequate, and schools lack a framework merging traditional wisdom with modern pedagogy. With the objective to address these issues, the study aims to analyze the potential of value-based education and skill development school that complies with NEP 2020, taking inspiration from the Gurukul approach. Through case studies and comparative analysis of Gurukuls, schools, it will identify gaps in existing models. The study focuses on Indian schools for students aged 6-18, emphasizing value-based and skill-oriented education, limiting its universal applicability. The need arises from increasing student stress, the disconnect between values and practical learning, and the lack of holistic educational environments. The outcome will provide insights into designing balanced educational spaces that integrate academic knowledge, ethics, and life skills, fostering a future-ready learning experience at Pune.

II. LITERATURE STUDY

In [1] [2] [3] ,The similar work traces the history of the Indian education system, emphasizing its roots in ancient

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Vedic traditions. It highlights the holistic approach to education practiced in Gurukuls, where students were not only taught academic subjects but also moral values and life skills. The study underlines how the education system was centered around personal development and ethical guide.

In [4] [5] [6] , The study delves into the evolution of the Indian education system from the Vedic period to modern times. It focuses on the shifts from oral traditions to written texts and the gradual institutionalization of education, which led to the rise of universities like Nalanda and Takshashila. The study also explores the influence of colonial rule and the subsequent reforms in the education system.

In [7] [8], Analysis provides a critical analysis of the NEP 2020, focusing on its potential to transform the education sector in India. It also evaluates how the policy addresses the need for a comprehensive and multidisciplinary curriculum and its long-term impact on the country's educational landscape.

In [9] [10] [11], It explores how NEP 2020 envisions a digitally empowered education system. It discusses the role of EdTech in personalized learning, the impact of AI-driven assessment tools, and the need for digital literacy among students and teachers. The study highlights government initiatives like DIKSHA and SWAYAM, evaluates their effectiveness in bridging the digital divide. The paper focuses on the importance of infrastructure, teacher training, and policy implementation to ensure equitable access to technology driven education.

In [12] [13], It emphasizes the role of education in shaping moral and ethical character, highlighting the traditional Indian focus on value-based learning. It argues that education should go beyond academics to instill virtues essential for personal growth and societal progress. By integrating moral values into the curriculum, the study advocates for a holistic approach that fosters responsible and ethical individuals.

In [14], It explores modern value-based education approaches in line with NEP 2020, emphasizing their role in fostering emotional intelligence, resilience, and social harmony. It highlights how integrating values into education supports holistic student development and ethical growth.

In [15] [16] [17], The paper emphasizes the need for a shift from traditional academics to practical, skill-based learning in India's education system. It speaks about vocational training

models that align education with industry demands, enhancing employability. Highlighting the gap between theory and practice, the study advocates for hands-on learning to equip students with relevant workforce skills.

III. CASE STUDIES

The case study analysis includes academies, Gurukuls, and residential schools to understand the spatial and educational dynamics of different learning environments. SSC and CBSE schools represent mainstream education, helping analyze their curriculum structure, spatial organization, and interactive learning environments. Gurukuls provide insight into value-based and skill-oriented education, emphasizing traditional pedagogy and holistic development. Residential schools offer perspectives on immersive learning and the impact of environment on student well-being. Studying these diverse models helps evaluate how different spaces influence student engagement, interaction, and learning experiences, ultimately guiding the integration of value-based and skill-driven education in a modern Gurukul-inspired model.

A. Sidhhagiri Gurukulam at Kaneri Math, Kolhapur



Fig. 1 Sidhhagiri Gurukulam [18]

Siddhagiri gurukulam, located in the serene village of kaneri near kolhapur. Maharashtra, was established in 2006. Fig. 1,This unique educational institution integrates traditional vedic teachings with modern multidisciplinary learning. The gurukulam is designed by G.L. Pangham and Associates. The gurukulam nurtures over 300 students under the guidance of 25 experienced faculties, offering a holistic approach to education. Rooted in the philosophy of imparting wisdom through practical knowledge, cultural values, and spiritual growth, siddhagiri gurukulam strives to create balanced individuals equipped for modern challenges while staying connected to their roots.



Fig. 2 Activities in Gurukulam [18]

Siddhagiri gurukulam stands against the limitations of the macaulay education system, which emphasized rote learning and neglected India's rich cultural heritage and practical skills. Fig. 2 ,Their teaching philosophy emphasizes critical thinking, life skills and cultural values while promoting hands-on skill development through vocational training, arts, and technology integration. By nurturing self-reliance and character building, siddhagiri gurukulam prepares students to thrive in

contemporary society while staying deeply rooted in Indian traditions.

A Day at Gurukulam

At gurukulam, students embark on a vibrant journey of holistic learning, blending academics with traditional arts, crafts, and self-reliance. Guided by siddhagiri foundation, they master skills like music, Vedic mathematics, weaponry, yoga, and organic farming, while fostering discipline, Creativity, and entrepreneurship. All the activities are held in the central courtyard of gurukulam. Gurukulam revives the timeless legacy of value-based education and Indian craftsmanship.



Fig. 3 A day at Gurukulam [18]

Fig. 3,Siddhagiri Gurukulam is a holistic learning environment that integrates traditional knowledge with hands-on skill development across various disciplines. In addition to dedicated spaces for carpentry and craftsmanship, as well as vast agricultural lands for hands-on farming experience, the Gurukulam also emphasizes the importance of physical, artistic, and martial training.



Fig. 4 Vocational Skill Development [18]

Students receive structured education in Indian classical music and dance, nurturing their cultural and artistic sensibilities. Fig. 4,Moreover, self-defense training is an integral part of their learning, with traditional Indian martial arts and Mardani sports such as Lathikathi, Dandpatta, and sword fighting being actively taught. These practices not only enhance physical strength and discipline but also revive India's rich warrior traditions. By blending academics, vocational training, and physical education, Siddhagiri Gurukulam successfully embodies a self-sustaining, skill-oriented learning model that aligns with the ethos of NEP 2020 and the Gurukul system's holistic approach to education. Gurukulam has ample space for various activities, but lack of dedicated areas for art forms hinders their structured growth. Designing and planning dedicated spaces will enhance the learning experience and artistic development.

B. The Heritage School, Talegaon

The Heritage Education Society oversees the Heritage School, which was founded in 2003 and is situated in Talegaon Dabhade, Pune, Maharashtra. Fig. 5,The School is designed by Madhav Joshi and Associates. This coeducational school serves students in Classes I to XII offering both daytime and residential options. The Central Board of Secondary Education (CBSE) curriculum is followed at the school, and English is the primary language of instruction. The academic and residential areas make up the two main clusters of the school's 10-acre

campus. The residential cluster comprises a student centre, a principal's residence, warden studio units, and dorms. Classrooms, labs, teacher rooms, and other necessary facilities are located in the academic cluster.



Fig. 5 The Heritage School [19]

Fig. 6,The master plan of the Heritage School at Talegaon harmonizes with the natural topography, utilizing contours for an efficient layout. It is divided into Academic, Residential, and Ancillary zones, ensuring a structured distribution of spaces. The academic zone includes classrooms, labs, and administration, while the residential cluster, placed at a higher level, provides privacy for students and faculty. Ancillary facilities like catering centers, a multipurpose hall, and a proposed swimming pool encourage communal interaction. The design respects natural slopes, integrates green spaces, and fosters a serene learning environment, aligning with the Gurukul philosophy.



Fig. 6 Master Plan of The Heritage School [19]

The design of the Heritage School at Talegaon aligns with NEP 2020 by promoting holistic and multidisciplinary learning through well-defined academic, residential, and ancillary zones. Fig. 7,Open spaces and organic circulation encourage experiential education, while facilities like the multipurpose hall and outdoor areas support skill-based and co-curricular learning. The provision for future expansion ensures adaptability to evolving educational needs, making the layout flexible and future-ready.



Fig. 7 Spaces from the school [19]

In conclusion, the site plan effectively integrates natural landscapes with built spaces, creating an engaging and stress-free learning environment. While it already reflects key principles of NEP 2020, incorporating more flexible learning spaces, technology-driven classrooms, and vocational training areas could further enhance its relevance. This case offers valuable insights for designing educational institutions that balance tradition with innovation, fostering a progressive and inclusive approach to learning.

C. Avasara Academy, Lavale

Avasara Academy, located in Lavale, Pune, is a residential school dedicated to empowering young women through high-quality education and leadership development. Fig. 8,Designed to foster academic excellence, creativity, and critical thinking, the campus integrates modern learning spaces with natural surroundings, creating an environment conducive to holistic growth. The institution emphasizes a multidisciplinary approach, blending traditional knowledge with contemporary pedagogy to equip students with essential life skills. With a strong focus on sustainability, the campus design incorporates eco-friendly architecture, open spaces, and collaborative learning areas, reflecting a progressive educational vision that aligns with modern pedagogical principles.



Fig. 8 Avasara Academy [20]

Fig. 9,The master planning of Avasara Academy in Lavale is designed to integrate seamlessly with the natural landscape, creating a harmonious learning environment. The campus is divided into distinct zones, including academic, residential, and recreational spaces, ensuring efficient functionality and connectivity. The academic blocks, such as the Indian Studies, Science and Engineering, and Entrepreneurship Center, are strategically positioned to promote interdisciplinary learning. The cafeteria, classrooms, and library are centrally located, enhancing accessibility and fostering community engagement. The presence of open green spaces, terraced landscaping, and sports facilities further reinforces the academy's commitment to holistic development, encouraging both intellectual and physical growth.



Fig. 9 Master Plan of Avasara Academy [20]

Avasara Academy aligns with the National Education Policy (NEP) 2020 through its multidisciplinary curriculum and skill-based approach to education. Fig. 10,The campus design promotes collaborative learning, with shared spaces encouraging interaction beyond classrooms. Facilities such as the Leadership Center and Entrepreneurship Center integrate vocational and life skills into mainstream education, reflecting

NEP's emphasis on experiential and applied learning. The academy's focus on sustainability, gender inclusion, and innovation serves as a valuable model for future educational institutions seeking to implement NEP 2020's vision of flexible, inclusive, and competency-based education.



Fig. 10 Spaces from Avasara Academy [20]

In conclusion, Avasara Academy exemplifies a progressive approach to school design, balancing modern educational methodologies with a sustainable and student-centric environment. The campus layout fosters both academic and extracurricular development, embodying NEP 2020 principles. Its integration of interdisciplinary spaces, hands-on learning,

and holistic growth makes it a reference point for future educational institutions aiming to create dynamic and inclusive learning environments.

IV. COMPARATIVE ANALYSIS

Comparative analysis plays a crucial role in identifying key similarities, differences, and patterns among educational models, providing valuable insights for developing an effective and well-informed design approach. This study examines two case studies located in Pune, comparing them with a Gurukulbased model to evaluate aspects such as spatial organization, pedagogical approaches, and alignment with the National Education Policy (NEP) 2020. The analysis highlights both the strengths and gaps within these educational frameworks, offering a comprehensive understanding of best practices. These findings contribute to the development of a balanced and future-ready learning environment that integrates traditional wisdom with modern educational methodologies. By synthesizing these insights, the study helps in formulating strategies that can bridge the gap between conventional and contemporary educational practices, ensuring holistic student development. Additionally, it emphasizes the role of spatial design in shaping learning experiences and fostering an environment that supports value-based education. The research ultimately serves as a reference for creating educational spaces that are adaptable, inclusive, and aligned with evolving pedagogical needs.

TABLE I. COMPARATIVE ANALYSIS (SOURCE: AUTHOR)

Sr Comparative Analysis					
.N o.	Parameters	Siddhagiri Gurukulam, Kolhapur	The Heritage School, Talegaon	Avasara Academy, Lavale	Analysis
01	Philosophy & Pedagogy	Rooted in Vedic traditions, integrates with modern subjects.	Experiential learning with a focus on Indian knowledge traditions.	Leadership-based, focusing on girl's empowerment and holistic education.	A blend of traditional wisdom, experiential learning, and leadership-based education will create a holistic approach.
02	Value-Based Learning	Strong emphasis on Indian culture, ethics, and moral values.	Uses storytelling, experiential activities, and discussions.	Focus on leadership, social responsibility, and ethical decision- making.	Combining Indian cultural values with leadership-based moral education will ensure holistic character development.
03	Skill Development Approach	Agriculture, Ayurveda, traditional crafts, and self-sufficiency.	Project-based learning, arts, and sports.	Communication, entrepreneurship, and problem-solving.	Blending traditional vocational skills with modern entrepreneurship will create future-ready students.
04	Integration with NEP 2020	Follows holistic, multidisciplinary Learning.	Emphasizes critical thinking, creativity, and experiential learning.	Encourages flexibility, skill-based learning, and leadership development.	A balanced model should integrate multidisciplinary, skill-based, and value-oriented learning to align with NEP 2020.
05	Learning Environment	Ashram-style, nature-centric with a strong Gurukul ethos.	Green campus with interactive learning spaces.	Modern, well-structured residential campus.	Blending nature-based learning with flexible and interactive spaces will create an ideal learning environment.
06	Spatial Organization	Clustered around a temple, open courtyards, and nature-integrated learning spaces	Open-plan classrooms, flexible learning spaces, and collaborative zones	Structured academic blocks, residential units, and leadership hubs	A layered spatial design with interactive, flexible, and nature- integrated spaces will create a rhythmic and engaging campus.
07	Teacher- Student Relationship	Guru-Shishya Parampara, strong personal mentorship	Inquiry-based learning, teachers as facilitators	Mentorship-driven with emphasis on independent learning	Combining Gurukul-style personal mentorship with modern inquiry- based learning ensures deep engagement.
08	Cultural & Spiritual Aspects	Sanskrit chanting, Bhagavad Gita studies, Vedic rituals	Indian heritage focus through festivals and storytelling	Mindfulness, self- awareness, and ethical discussions	A structured blend of spiritual learning, mindfulness, and cultural heritage will create a strong identity.
09	Residential Model	Fully residential Gurukul model	Day school with optional boarding	Fully residential for selected students	A day-school model with faculty residences aligns with non- residential Gurukul concept.

V. FINDINGS

The comparative study of Siddhagiri Gurukulam, The Heritage School, and Avasara Academy offers insights for crafting a holistic, future-ready education model. Siddhagiri emphasizes spiritual growth and self-sufficiency, The Heritage School promotes experiential learning rooted in Indian traditions, and Avasara focuses on leadership and modern skills. Together, they suggest a value-based system that blends with contemporary grounding competencies. Traditional vocational skills like organic farming and crafts can complement modern abilities such as communication and entrepreneurship. Spatially, Siddhagiri's nature-integrated layout and the flexible, collaborative designs of The Heritage School and Avasara Academy point to the need for interactive, adaptable spaces. The ideal model combines the personalized mentorship of the Guru-Shishya Parampara with inquiry-based learning, supporting a day-school format with faculty housing for deeper engagement.

VI. CONCLUSION

The school should blend Indian traditions with modern education by integrating mindfulness, ethical discussions, and storytelling into daily routines. A curriculum rooted in Sanskrit alongside STEM, arts, and leadership, will foster holistic development. Collaborative learning spaces and sustainable design—using natural ventilation, eco-friendly materials, and open courtyards—will promote peer interaction, environmental awareness, and a sense of belonging. This approach creates a structured framework for value-based, skill-based education that nurtures cultural identity, ethical grounding, and practical competencies, setting a benchmark for progressive yet tradition-rooted learning.

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REFERENCES

[1] A. S. Altekar, Education in Ancient India, 2nd ed. Varanasi, India: Nand Kishore & Bros., 1951, pp. 1–95

- [2] N. P. K. Murthy, "Ancient Indian Education: A Brief Overview," International Journal of Education and Social Science Studies, vol. 6, no. 3, pp. 34-42, Mar. 2019. [Online].
- [3] R. R. Sharma, "Reviving the Ancient Indian Gurukul System in Contemporary Education," Journal of Indian Education, vol. 43, no. 4, pp. 12-19, Dec. 2017.
- [4] R. N. Sharma and R. K. Sharma, History of Education in India, New Delhi: Atlantic Publishers & Dist, 1996.
- [5] G. L. Ray, "Education in Ancient India: A Historical Perspective," Journal of Educational History, vol. 45, no. 2, pp. 235-248, 2011.
- [6] A. Singh and S. K. Choudhury, "The Impact of Colonialism on the Indian Education System," International Journal of Education and Development, vol. 29, no. 1, pp. 44-57, 2014.
- [7] M. Pandya and A. Raj, "Analyzing the impact of the New Educational Policy 2020: A shift towards competency-based and experiential learning," Educational Research Review, vol. 40, Apr. 2025, Art. no. 100583.
- [8] R. Sharma, "The Role of NEP 2020 in Transforming India's Educational Framework: An In-depth Analysis," International Journal of Educational Technology, vol. 12, no. 3, pp. 156-168, Mar. 2025.
- [9] P. Kishore and A. Kumar, "Integration and Use of Technology in Education: Insights from NEP 2020," Int. J. Creative Res. Thoughts, vol. 12, no. 8, Aug. 2024.
- [10] S. Sharma and R. Singh, "Transforming Education through Digital Learning Platforms in India: A Study on the Role of Technology in NEP 2020," Proc. 2024 IEEE International Conference on Education and Technology, pp. 123-130, Feb. 2024.
- [11] R. Mehta and A. Patel, "Artificial Intelligence and Big Data Analytics in Education: A Future Vision Aligned with NEP 2020," IEEE Trans. Educ., vol. 67, no. 3, pp. 315-325, Jun. 2024.
- [12] V. L. Karad, "Educational Thought of Dr. Radhakrishnan," in Proceedings of the National Conference on Value Education through Education, Pune: MIT School of Education and Research, 2018, pp. 1–6.
- [13] M. R. Paranjape, "Towards a Culturally Rooted Indian Model of Education," IEEE International Conference on MOOCs, Innovation and Technology in Education (MITE), Jaipur, India, 2016, pp. 154–158. doi: 10.1109/MITE.2016.038.
- [14] M. Alam, "Integrating value education for holistic development: Insights from NEP 2020," in Proceedings of the National Seminar on National Education Policy 2020: Transforming Vision into Practice, Aligarh Muslim University Centre, Murshidabad, West Bengal, 2024.
- [15] S. Kumar, "Vocational education and skill-enhancement in the NEP-2020," in *Proceedings of the National Seminar on NEP 2020 and Its Implementation*, Govt. Degree College, Narendra Nagar (T.G), 2021.
- [16] R. Kumari and M. C. Dubey, "Vocational Education in India: A Comparative Analysis of Policies Before and After NEP 2020," Journal of Survey in Fisheries Sciences, vol. 10, no. 3, 2023.
- [17] K. J. Singh and V. Gunasekaran, "Vocational Education in India: A Policy Analysis and Case Study of NEP 2020 Implementation," Baileo: Jurnal Sosial Humaniora, vol. 2, no. 1, pp. 76–85, Sept. 2024.
- [18] Siddhagiri Math, "Siddhagiri Gurukulam," [Online].
- [19] M. Joshi and Associates, "The Heritage School / Madhav Joshi and Associates," ArchDaily, Nov. 9, 2012. [Online].
- [20] M. F. González, "Avasara Academy / Case Design," ArchDaily, Feb. 21, 2019. [Online].