

PROGRAMME OF RESEARCH PROJECTS UNDERTAKEN IN 2025-26

1. AI-BASED HIGHER EDUCATION IN THE 21ST CENTURY

A comparative study of efficacy and accuracy of major AI engines, research on best AI tools, Potential Role of AI in K12 and Higher Education, LLMs and Comparison-Related Educational Research, High Education Institutions that are using AI for Learning, Research, and Teaching, Organizations Developing AI Learning Management Systems to Support Global Education, Framework for Decision-making using AI, Hallucinations and Polarization of users views, higher order transdisciplinary integral thinking, Human Values and Digital Innovation are the ongoing research at MSS. MSS Staff participated at the AI Impact Summit held on 17 February in New Delhi at a high-impact session titled “Great Powers in the Age of AI and Cognitive Systems.” Also, MSS Staff visited NxtWave to learn more about how they empower students with advanced AI, ML, and Full-Stack Development skills. It was also presented earlier at the UNESCO Annual Conference on AI in Bangkok in June 2025.

The mission of the project is to harness the power of AI and advances student-centered pedagogy to promote development of new models of accessible, affordable, quality higher education for India. Presentation of this approach by MSS staff has already been well received and endorsed in conferences at the UN, UNESCO, and the Consumer Electronics Show 2025. Plans are underway for collaboration with India Foundation to conduct a national educational conference to present the benefits of the AI-based system to leading public and private universities in India based on an AI-based digital delivery system. This low-cost scalable system has the potential to position India as the global leader in AI-based education. This innovative approach integrates advanced AI technologies, transdisciplinary curricula, real-time multilingual support, and lifelong learning aligned with industrial demands.

2. EDUCATION AND VOCATIONAL TRAINING FOR SELF-EMPLOYMENT IN INDIA

Unemployment, underemployment and low worker productivity are serious challenges to the rapid development of India. The government of India's Pradhan Mantri Kaushal Vikas Yojana (PMKVY) managed by the National Skills Development Corporation provides financial incentives to candidates and training providers. This and other programs such as National Apprenticeship Promotion Scheme (NAPS) are intended to raise the skills of India's workforce in order to keep pace with rapid developments in technology. MSS is studying these schemes and sharing information about them.

- A. **AI-Driven Vocational Skills Education Platform:** MSS is conducting research in AI-based skills assessment, match skills capabilities of workers with the requirements of specific jobs, plan for continuous skill development of the workforce, deliver customized training and assessment systems while dramatically reducing the cost and increasing the delivery of vocational skills training in a wide range of fields to support growth of India's industrial and service sectors. This research explores how AI is transforming vocational skills training by enhancing learning efficiency, personalization, and accessibility. AI-powered Learning Management Systems (LMS) are widely used in corporate training, analysing employee skills, identifying knowledge gaps, and recommending personalized learning paths. Companies like Google, Microsoft, and Amazon use AI to create adaptive learning experiences, ensuring employees acquire relevant skills. Platforms such as Coursera, Udemy, and LinkedIn Learning play a crucial role in upskilling professionals in fields like IT, healthcare, advanced manufacturing, and digital marketing. Virtual reality (VR) simulations and AI tutors provide hands-on training for industries

requiring practical experience, such as automotive repair, construction, and medical training. Despite its advantages, AI has limitations in teaching complex interpersonal skills, ethical, decision-making, and highly specialized manual trades, where human intuition and experience remain essential. However, emerging technologies like real-time AI feedback, adaptive content, and VR/AR integration continue to shape the future of vocational training, making skill development more dynamic and accessible. This project is drawing on successful models developed by BuildWithin, a vocational training service in Washington DC., and a leading provider of skill assessment and development programs for major corporations and governments in USA.

- B. **Self-employment:** In India, a significant proportion of the population lacks both awareness and vocational skills, which results in difficulty finding employment opportunities. In order to address this issue, MSS has been designing and providing vocational training programs to equip individuals with the necessary skills and awareness to secure employment. With over two decades of experience in facilitating income generation through computer-based work, MSS is now embracing the transformative potential of Artificial Intelligence (AI) for vocational training. The program seeks to empower individuals in their pursuit of self-employment without requiring significant upfront investment. This approach not only bridges skill gaps but also fosters economic independence and resilience within the community. MSS is carrying on discussions with senior management of MEPSC, GOI's Management and Entrepreneurship Skills Council, to develop new approaches for entrepreneurial education.

Social media platforms often harbour misleading information and advice. To address this issue, the MSS staff have established a group dedicated to cultivating responsible social media influencers. This initiative aims to ensure that influencers disseminate professionally researched and verified original content, thereby elevating the quality and reliability of information shared online.

3. **HUMAN SECURITY FOR ALL (HS4A)**

Human Security for All global campaign is an initiative based on the work of the UN Trust Fund for Human Security. As part of the campaign MSS is collaborating with SpellBee International Foundation for Human Excellence (SIFHE), and Indian based educational institute on a program to introduce education for Indian school-children on the main dimensions of human security, including health, food, nutrition, environment, and technology. The program provides personally relevant practical information to students in India as to how they can improve the quality of life for themselves, their families and the community through introduction of knowledge as an integral component of language training. The program was launched during the first quarter of 2024 and has extended the message of human security across schools in India, started under the HS4A campaign. It has already involved 700+ schools and reached 500,000+ students in India and will be continued for the next three years.

4. **SOCIAL DEVELOPMENT IN A RAPIDLY CHANGING WORLD**

MSS is applying insights from several decades of earlier research on the process of social development to understand the impact on India of rapid globalization, technological evolution, urbanization, information, rising levels education and international collaboration at all levels from the individual and organization to the national and global community. Articles on relevant principles of social development are being published regularly in *Cadmus Journal*.

5. **PEDAGOGY FOR SCHOOL EDUCATION**

Primrose School was established in 1999 in an urban area of Pondicherry to demonstrate the efficacy of the innovative methods of child education. The school develops and applies experimental approaches including the extensive use of computers for self-directed learning and techniques developed by American educationist Dr. Glenn Doman for early childhood learning. Professional Development for K12 Teachers at Primrose: MSS has designed structured programs aimed at enhancing pedagogical skills and subject expertise among K12 educators integrating online modules, workshops, and peer-to-peer learning to ensure flexibility and broad accessibility to make sure it aligns teacher development with global standards.

MSS is now directing an in-school research project in association with Primrose School ICSE, Pondicherry to demonstrate and test the effectiveness of a new person-centered, contextual, life-based, educational pedagogy designed to enhance learning outcomes and accelerate student maturation. The pedagogy has been researched by MSS for the past decade and endorsed by experts at several international conferences. The study will track and document the benefits of the new approach. Once confirmed, MSS will seek to disseminate the methods to other Indian schools.

6. **AI, THINKING AND CREATIVITY**

Much concern has been generated by fear that AI will replace the need for human beings and even take over our higher thinking capacities in work. Research at MSS challenges this view and plans to document the thesis that higher human mental capacities far exceed those of Generative AI systems have a remarkable capacity for memory, data processing and rapid analysis of huge quantities of information. AI also has an enormous capacity to synthesize many different sources and types of information drawn from different disciplines, overcoming the limitation of human beings to transcend the limits imposed by disciplinary silos in education and research, which is spurred by the exponential growth in data leading to increasing specialization and fragmentation of disciplines, a major obstacle to addressing the complex interdependencies between disciplines. MSS is also searching for ways to overcome inherent limits to human rationality, as the result of inherent cognitive and heuristic biases.

On the other hand, AGI is not capable of creative thinking. Its function is limited to “statistical thinking”, which means to searching the huge spectrum of human-generated information and select data from it that seems to be most closely associated with the answers it is looking for. This is the source of the hallucinations which limit the reliability of AI systems. AI is most reliable when dealing with measurable data, but it is not capable of addressing issues on which subjective factors are prominent.

The objective of this project is to document ways in which AI-based knowledge can not only enhance human effectiveness but also liberate human beings from the mental drudgery of lower order mental activities and cognitive biases, while providing it access to comprehensive, transdisciplinary perspectives which specialists in different fields find it very difficult to formulate. The purpose is to demonstrate that symbiotic systems in which AI and human intelligence are combined can support the development of higher order mental capacities in human beings while generating more reliable perspectives and decisions than either AI or human mental faculties can generate on their own.

7. **TRAINING IN AI-BASED RESEARCH**

The research involves development of training programs to enhance the effectiveness of AI educational delivery instruments for Indian instructors, students and administrators with emphasis from rote

memorization to understanding and independent thinking, from abstract theory to contextualized knowledge, from passive to active pedagogy, from fragmented disciplinary to transdisciplinary perspectives, from competitive to cooperative learning environment, from repetitive to creative educational activities.

The MSS team is collaborating with other NGOs to cultivate a community that supports students and teachers in acquiring fundamental skills for utilizing Artificial Intelligence for instructors and students in Indian educational settings. This initiative aims to foster responsible use of AI as a learning tool, while adhering to best practice policies, without necessitating substantial investment in costly hardware, software or technical resources.

8. **BUSINESS MANAGEMENT, EDUCATION ORGANIZATIONAL DEVELOPMENT, ENTREPRENEURSHIP LEADERSHIP AND EMPLOYMENT**

MSS is aiming to prepare content to provide advanced curriculum for business and technology education based on the philosophy that business is a social institution intended to serve the needs of society and that profit is a natural result of effective management in service of the public. The objective of the project is to ensure that next generation leaders fully understand both the potential benefits and social responsibilities associated with the adoption of AI and related technologies and that they learn to identify specific areas in which these technologies can be utilized to address pressing social needs in India and abroad, such as modern agriculture, fin-tech, medical care, self-employment opportunities, medical and other fields of scientific research, and education.

MSS staff have been researching the process of entrepreneurship, employment and business success to identify the social, psychological, technological and organization factors responsible for their success. This project focuses on development of a new curriculum for training of students for job placement, entrepreneurship, employment generating strategies and business consulting. Discussions are underway with MEPSC Management & Entrepreneur Professional Skills Council, a national skill sector council, to promote courses that will accelerate the growth of entrepreneurship in India and thereby stimulate the creation of new jobs for youth.

MSS is presently conducting research for the development of the core curriculum and is reaching out to leading international experts to ensure that the quality of the curriculum and the teaching staff is on par with the best in the world. The project includes development of AI learning tools to make possible self-paced, customized, interactive learning by students which can be made available to students at very low cost compared with the high cost of business education that presently restricts access. The plan is also to develop a platform and set of world class online courses designed to expand entrepreneurial opportunities in business and technology management practices in India.

9. **UNDERSTANDING SOCIAL EVOLUTION THROUGH LITERATURE**

MSS is engaged in an extensive exploration of the relationship between literature, psychology, history, and social development. Its research examines the correlation between characters and events depicted in literature and the evolution of human values and social behaviour. This work forms part of a broader institutional objective to develop new criteria for literary criticism grounded in an understanding of social evolution, thereby contributing to a deeper insight into the principles governing life.

The research encompasses the works of major authors such as Jane Austen, Anthony Trollope, Charles Dickens, and Victor Hugo. A comprehensive study of Jane Austen's *Pride and Prejudice* has been undertaken, resulting in the editing of twelve volumes of insights and commentary, produced under the initiative of the Mother's Service Society. Additionally, a publication titled *The Character of Life* has been developed based on this body of work.

MSS is also actively engaged in research across a wide range of topics within the social sciences. It collaborates with educational institutions to implement active, collaborative, person-centered, and values-based approaches to education.

10. FINANCIAL AWARENESS:

MSS recognizes the critical impact of inflation on the value of earned money. Without prudent savings, inflation erodes the purchasing power of currency over time. To address this concern, MSS staff actively engage with the general public, imparting essential financial literacy skills with the support of financial and legal professionals. These efforts empower individuals to maximize their hard-earned income effectively. Specifically, MSS staff collaborate closely with Non-Resident Indians (NRIs), guiding them on prudent financial practices. This includes strategies for saving, investment in India, and wealth preservation. Additionally, NRIs receive valuable advice on contributing meaningfully to Indian society—whether through philanthropy, community initiatives, or other impactful avenues.

11. GLOBAL TURBULENCE: SOURCES & SOLUTIONS

The project approaches global turbulence which encompasses the polycrisis affecting all humanity today, and can be traced to . a widening gap between rapidly expanding human capabilities and the slower evolution of social values, governance systems, and collective awareness. Advances in science, technology, and economic integration have outpaced society's capacity to manage their consequences responsibly. This imbalance has generated uncertainty, polarization, and insecurity across political, economic, social, and cultural domains.

A central objective of the initiative is to move beyond reactive, fragmented responses toward integrated, long-term solutions. It emphasizes that global challenges cannot be resolved through isolated policies or narrow disciplinary approaches. Instead, they require transdisciplinary understanding, ethical reflection, and coordinated action that address root causes rather than surface symptoms.

The project focuses on identifying the conditions and processes necessary for conscious global transformation. MSS staff have engaged in research based on the contemporary developments in the world and have published articles and participated in conferences.

12. ADVANCED AGRICULTURAL PROGRAM

MSS was founded as a rural development project in 1970 and its early years resulted in elevating the surrounding agrarian region from extreme poverty into one of the most prosperous regions of South India. One signal achievement was its introduction of banana cultivation in the area for the first time ever. Today the region surrounding the MSS agricultural project is one of the largest and most important regions for banana cultivation in South India. During the past three years, MSS has introduced measures to radically elevate scientific farming practices on its model farm Mother Estates at Ramapuram, Cuddalore District. The adoption of satellite imaging, drone photography, advanced methods of intensive cashew cultivation,

organic farming, micronutrients, tissue culture and drip irrigation are now serving as a model for imitation and adoption by other progressive farmers in the area. MSS is now experimenting with intensive cultivation practices for cashew.

13. **DAILY DISCUSSIONS: SRI AUROBINDO'S PHILOSOPHY AND YOGA**

Since April 2020, MSS staff have conducted online lectures daily presenting Sri Aurobindo's writings, philosophy, and yoga, and their relevance to life today. Hundreds of papers and videos providing practical guidance are available on the MSS, MSS Research and Karmayogi.net websites.

14. **CONFERENCES**

- A. **Seeding Ethical AI Stewardship for Shared Global Futures, Bangkok, Thailand:** MSS is represented on the Governing Council of UNESCO-MOST BRIDGES Coalition, and participated in a side event organized by BRIDGES during the UNESCO Global Forum on Ethics of AI. It brought together a diverse group of scholars, civil society actors, policymakers, indigenous leaders, social and human science specialists, and youth advocates from around the world.
- B. **Global Turbulence: Sources and Solutions, Online: May 1, 2025:** This meeting explored the macro-level global social context in which the future of higher education should be considered and the role of education in addressing the global challenges and turbulence now confronting humanity with respect to peace, stability, human security and sustainable development. Dr. Garry Jacobs presented on "Enabling Conditions and Symptoms of Turbulence".
- C. **World Conference on Science and Art for Sustainability, Belgrade, Serbia:** The conference was a flagship event within the UN International Decade of Sciences for Sustainable Development (IDSSD), from 2024 to 2033. It brought together 42 experts from the sciences and arts to explore how a synthesis of the objective and subjective perspectives of science and art can strengthen efforts to promote sustainable, secure, and peaceful development for all. MSS representatives participated and presented at the conference.
- D. **AI Impact Summit, New Delhi, India: February 17, 2026:** Dr. Garry Jacobs participated in the high-impact session on "Great Powers in the Age of AI and Cognitive Systems" where the panel explored the role of AI and cognitive systems in shaping a secure and sustainable future, the transition from the Industrial Age to the Information Age and its governance implications.

15. **PUBLICATIONS**

- A. [Sources and Solutions for Global Turbulence](#), *Cadmus Journal*, Volume 5 Issue 4 in July 2025. **Annexure - 1**
- B. [A Call for a New Manifesto: Defending Humanity in an Age of Rising Extremism](#), *Cadmus Journal*, Volume 5 Issue 4 in July 2025. **Annexure - 2**
- C. [Valuable Lessons from the 20th Century Yet to Be Mastered](#), *Cadmus Journal* Volume 5 Issue 4 in July 2025. **Annexure - 3**
- D. [Unleashing the Synergy between Human Values and Digital Innovation: A Holistic Framework for Sustainable Future Management Education](#), *Cadmus Journal* Volume 5 Issue 4 in July 2025. **Annexure - 4**

- E. [Social Development Theory](#), *Cadmus Journal* Volume 5 Issue 5 in December 2025. **Annexure - 5**
- F. [Basic Laws of Development – Part II](#), *Cadmus Journal* Volume 5 Issue 5 in December 2025. **Annexure - 6**
- G. [A Global Roadmap towards inclusive Human Security](#), *Cadmus Journal* Volume 5 Issue 5 in December 2025. **Annexure - 7**
- H. [Science, Society, and Sustainability: Toward a New Paradigm of Integrated Knowledge for Human Security](#), *Cadmus Journal* Volume 5 Issue 5 in December 2025. **Annexure - 8**
- I. [Reliable Knowledge through the Integration of Art & Science](#), *Cadmus Journal* Volume 5 Issue 5 in December 2025. **Annexure - 9**
- J. [The Climate Challenge as a Catalyst for Global Social Evolution](#), *Cadmus Journal* Volume 5 Issue 5 in December 2025. **Annexure - 10**
- K. [AI and Education: Strategic Imperatives for Corporations and Academic Institutions](#), *California Management Review* in May 2025. **Annexure - 11**

16. **MSS STAFF:**

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