

Integrating Cultural Wisdom and Digital Technologies for Children's Moral and Emotional Development

Garima¹, Girish Nath Jha²

School of Sanskrit and Indic Studies, Jawaharlal, Nehru University
Rankawatgarima03@gmail.com, girishjha@jnu.ac.in

Abstract

The influence of technology on children's education is increasing rapidly in the digital age, but with it comes the challenge of how to develop children's cultural and moral values in a balanced manner in the age of AI. In traditional societies, moral and cultural teachings have often been imparted through religious and philosophical texts, memorisation, interpretation, and oral traditions. This research presents an AI-based value-oriented learning framework that aims to make cultural and ethical teachings more structured, simple, and technologically accessible to children. The study includes a brief analysis of memory-based teaching systems prevalent in various religious traditions and incorporates insights from existing approaches to propose an integrative model based on selected verses from the Bhagavad Gītā. The proposed system includes data generation and processing, simplified interpretation, semantic understanding, pronunciation analysis, and interactive learning features based on selected cultural content. While the framework is conceptual in nature and has not yet undergone pilot implementation, it is designed as a foundation for future empirical validation. The study suggests that, through AI and modern technologies, traditional cultural knowledge can be delivered to children in a more effective and engaging manner, thereby opening new possibilities for strengthening their moral and cultural development.

Keywords: Bhagvad Gītā, AI integration, ASR, TTS, Value-Based pedagogy, AI-integrated learning

1. Introduction

In the present global society, children are growing in an environment where technology, social media, digital media and rapid information flow have become a natural part of their daily experience. While it has led to benefits such as social cooperation, global reach, development of self-expression and access to communities, its long-term use by children and adolescents poses serious risks to mental health (Zsila and Reyes, 2023). Today, while the education systems seem to focus primarily on cognitive competencies and academic achievement, the development of values, self-control, compassion, and discernment of right and wrong among children has been relatively neglected.

Today, the question of student ethics and accountability has become one of the biggest challenges in the field of education (Ramadhani et al., 2024). In such a situation, value education can play an important role in building a generation that is not only intellectually intelligent but also possesses moral awareness, social responsibility, and high morality (Ruhayat et al., 2026). (Lamb and Brooks, 2026) believe that character education should not be limited to indirect moral formulation but should be adopted in well-planned strategies that develop both a cognitive understanding of virtues and their practical application.

Some efforts are being made in all countries regarding this subject. Historically, all religions have also used their own cultural narratives, life-philosophies, narratives, symbols and dialogue traditions for moral and personality development through different texts,

civilisations, and cultures. These pedagogical methods were not just a means of communicating knowledge, but were also a means to nurturing a relationship with society, life and self and for establishing a balance.

According to (Banerjee, 1999), the uniqueness of religion and theology lies in the fact that they determine the duties for every individual in society and provide a moral and ethical framework for proper conduct. (Dubey, 2012) has highlighted their importance and presented religion as a righteous way of ethical and moral life. However, due to modern lifestyles, nuclear family structures, and the progressive use of digital gadgets, this cultural and behavioural dialogue is gradually becoming disconnected from the children's world. Moreover, the complexity of cultural texts, which can neither be understood quickly nor easily linked to the present situations, children have challenges in developing an interest in these subjects.

In this context, the research begins with the fundamental question of whether modern technology, rather than being a barrier to the moral, cultural and emotional development of children, can be used as a bridge. That is, can culture and moral values be effectively communicated to children through technology as well. (Park et al., 2024) in their Scoping Review have shown that research based on digital media is still insufficient to address spiritual and mental health among Generation Z. Although the effectiveness and popularity of digital methods for addressing mental health problems are growing, more studies are needed on digital platforms that address spirituality and mental health together. The successful design of value-based learning models for children in technology-rich

environments demands a balance between technological innovation and established developmental and ethical principles. The goal is not just the enrichment of knowledge, but also the creation of a strong moral and character base in the coming generation. (Alfusanah et al., 2024).

This study is based on the assumption that the combination of culture + Moral Values + Technology can offer a strong educational model for the holistic development of children. If moral and cultural teachings are redesigned to suit children's psychological level, interests, and contemporary learning habits, they can become meaningful and experiential for children rather than being cumbersome or didactic.

Contemporary child psychology indicates that children learn more effectively through stories, visual experiences, dialogues, music, and creative expressions than through abstract theories. For this reason, value-based teachings, when presented in the form of narrative, visual presentation, interactive activities, and creative mediums, can have a profound impact on children's behaviour, thinking, and emotional responses.

Modern technology can play the role of a facilitator in this process. VR technology, in particular, has shown potential in improving children's learning abilities through highly interactive and engaging simulated environments (Andryani et al., 2024). Modern technology can play the role of a facilitator in this process. VR technology, in particular, has shown potential in improving children's learning abilities through highly interactive and engaging simulated environments (Andryani et al., 2024).

The present research seeks to impart practical, cultural, and social knowledge to children by applying education, child psychology, culture and technology. The research also predicts that technology can play a positive and creative role in the moral, mental and emotional development of children if used sensitively and purposefully. In the present society, while there have been efforts to make AI safe, it is equally very important to awaken the power of the inner conscience as remarked by the great Indian poet Tulsidas in *Rāmacaritamānasa* – the good man grasps goodness, while the base man clings to baseness. Nectar is praised for its immortality, while poison is known for bringing death.

No matter how safe technology is made, there is a possibility of its misuse, which is more likely to cause distraction and problems for children. The findings of the research suggest that digital technology is neither completely harmful nor inherently value-creating; rather, its effect depends on how it is being used and under what guidance (Nursiti et al., 2023).

(Kristjánsson, 2025) provides an overview of the recent developments and research trends of morality education, underscoring the growing interest in digital technologies, global contexts, and diverse aspects of ethical education. It mentions that there are special issues and interdisciplinary efforts emerging in the current research on combining moral education with AI and digital technology, providing the necessary direction for the moral development of children in the digital age.

2. Related Work

Various researchers have pointed out that while integrating traditional knowledge and ethical teachings with modern technology, careful consideration of aspects of intellectual property rights, ethical challenges, and cultural preservation is necessary. At the same time, virtues and value-based education have been recognised as important for the mental and moral development of adolescents, and an understanding of developmental psychology and human-centred educational technology has also been suggested to be essential for developing effective learning models (Wang & Xu, 2024; Shane McLoughlin & Kristján Kristjánsson, 2025; Gupta, 2025; Nurhabibah, 2025).

A study found that with the help of Technology-Enhanced Learning (TEL), Islamic religious education in early childhood can be made more interesting and value-added. In the research, digital content (such as animated stories and interactive applications) increased children's learning interest, social interaction, and positive character traits (Sulastris & Ismail, 2025; Mesurado et al., 2025) developed a web-based intervention called "Little Hero", which aimed to promote moral values in children. Their research found that this program increased children's co-morbid behaviours, empathy, and positive emotional responses (Mesurado & Resett, 2025).

(Betawi, 2023) found that telling moral stories to preschool children significantly improved their integrity values, such as honesty, empathy, respect, and courage, making it clear that culturally grounded narrative content can have a positive impact on children's moral and emotional development (Betawi, 2023). Christian education has also been redefined as a transformative teaching method that enables religious communities to meaningfully assimilate the gospel in a digital, cultural, and ecclesiastical environment (Clair, 2025).

The findings suggest that the integration of educational technology positively contributes to the development of religious and moral values in early childhood, offering numerous benefits for promoting these essential qualities (Warmansyah et al., 2023).

Modern psychological studies have also shown that school-based mindfulness and

self-compassion programs develop self-regulation and compassion in children, which are foundational qualities for ethical conduct (Razza et al., 2025). Contemporary scholarship emphasises that cultural heritage and traditional knowledge are not merely relics of the past but dynamic resources that contribute to social cohesion, identity formation, and ethical awareness. Integrating cultural heritage into education strengthens learners' connection with community values and fosters responsible citizenship (Heritage Science, 2021; Trček, 2022). Although recent research on Artificial General Intelligence (AGI) highlights its transformative potential in education, it primarily focuses on personalisation and cognitive outcomes, with limited attention to culturally grounded moral and emotional development (Latif et al., 2023).

Globally, institutions such as the Jubilee Centre for Character and Virtues, Character Lab, and Centre for Curriculum Redesign emphasise virtue development, resilience, and ethical reflection, while UNESCO, OECD, Stanford Centre for Ethics and the Partnership on AI are contributing to the development of responsible, human-centred, and inclusive technology. In the Indian context, the Indira Gandhi National Centre for the Arts (IGNCA) has digitised cultural texts, monuments, and spaces. EdTech platforms such as DIKSHA and Jio Shiksha have increased the reach of digital education. The Laboratory for Computational Cultural Dynamics and various spiritual organisations are promoting value-based learning with AI chatbots, mobile applications, and immersive technologies. Multi-pronged efforts are being made through initiatives such as the Ministry of Culture, NEP 2020, NCERT, e-Pathshala, Scheme for Safeguarding the Intangible Cultural Heritage, Guru Shishya Parampara Scheme, Ek Bharat Shreshtha Bharat and PM SHRI Schools for cultural preservation and transfer of knowledge to children. Further in the Indian context, a number of initiatives are being taken to inculcate culture, moral values and traditional knowledge among children in different states. For example, the Happiness Curriculum provides education based on meditation, self-reflection, and emotional balance. This work is also being done by various universities at the academic level, so that the texts can be easily understood. In this, many efforts have been made, such as the digitisation of Purāṇas in Indian culture and online searches of databases of technical terms of Sāṅkhya-Yoga. Online search and indexing systems have also been developed for texts like the Mahābhārata, the Nirukta, the Medinīkośa, the Mañkha-kośa, etc.

Bamberg's Cultural Informatics Research Group is using digital technology to preserve and make cultural data and knowledge (history, art, tradition) interactive, with

geogames or digital archives, AI and computational models, etc., to explain cultural knowledge, but no such model has been developed with a focus on children.

Although there has been substantial work in previous research on the digitisation of cultural heritage, the use of technology in moral education, and the computational analysis of cultural contexts, there has been limited attention to the development of AI-based educational models for systematic communication of cultural and moral values to children. Most studies focus either on the preservation and digitisation of cultural data or on analysing the general effects of moral education through technology. Similarly, AI research has often been limited to the analysis and prediction of cultural behaviour. The development of age-appropriate, culturally sensitive and pedagogically structured AI-based value-based learning frameworks for children is still a relatively unexplored area.

The objective of the presented research is to use AI and technology not just to provide information, but to build rational, ethical and culturally aware citizens in children. The technology, if used in coordination with cultural values, moral education, and overall personality development, can significantly reduce the potential repercussions posed by AI. The objective of this research is to make an equally serious effort towards the initiative to make AI safe for the creation of a future-oriented society, as well as to awaken the recognition of right and wrong, conscience and cultural consciousness in children, because ultimately the impact of technology depends more on the consciousness of its user than on its structure. The purpose of this research is to try to equip children with a moral conscience and critical thinking through cultural understanding.

In this context, technology can be used as a positive tool. The use of AI and digital media is to impart cultural knowledge to children, develop their thinking process, and present values by connecting them to contemporary contexts. Through technology, complex concepts can be presented in simple, intuitive, engaging, and visualised forms, making the learning process more effective.

3. Cultural Traditions of Knowledge Transmission and Memorisation

All the religious traditions of the world are rich in spiritual texts such as Hinduism, Buddhism, Jainism, Sikhism, Islam and Christianity that present not only faith-based legislation but also a structured tradition of well-organised life-philosophy, moral discipline and spiritual self-realisation. In these texts, the concepts of purpose, duty, self-restraint, social responsibility and ultimate liberation of human

life are philosophically systematic. Classical literature such as the Vedas, Upaniṣad, Tripiṭaka, Āgama, Gurubānī, Quran and Bible have been functioning as knowledge systems in their respective cultural contexts. Their core tone has been associated with the spirit of self-development, moral balance, and collective well-being. Historically, religious education was not only informative but also transformative; that is, its purpose was to build the character, consciousness and social conduct of the individual.

4. Education and memorised tradition

Memorised tradition was a central feature of ancient religious education systems. The memorisation of religious texts was not only a means of preserving the text, but also a cognitive, ethical, and spiritual practice.

For example

- In the Vedic tradition, the correct pronunciation and memorisation of the Vedas were the basis for the preservation of knowledge.
- In the Buddhist Sangha, oral memorisation of sutras was the medium of community discipline.
- The memorised practice of Agamic texts by Jain monks was associated with self-restraint.
- In the Islamic tradition, *hifz* (memorisation of the Quran) was considered a spiritual discipline.
- In Christian monasteries, the memorisation of hymns and scriptural passages was related to the process of meditation.

This tradition was not just for the preservation of knowledge, but was based on the belief that internalised knowledge becomes part of the individual's consciousness. When texts are not merely read, but are established in memory, they create the possibility of discovering new meanings according to the circumstances. In the present global context, the in-depth philosophical study of religious texts seems to be limited to the religious leadership class—such as priests, monastics, clerics, or clergy—respectively. The general society is attached to these texts on a symbolic, cultural or ritualistic level, but can be observed a decline in their interpretive and philosophical engagement.

The growing temporal nature of formal education, the utilitarian tendency of knowledge, and the rapid information culture of digital media have marginalised the tradition of deep learning and memory. Numerous sociological and psychological studies indicate that the current generation appears to be experiencing a crisis of moral reasoning, self-regulation, and existential clarity. Long-term verbal memory training showed

changes related to plasticity in the brain, which are related to the development of areas associated with memory and attention. These results show that memory-based practice can not only be a means of knowledge preservation but also a form of cognitive training (Kumar, Singh & Paddakanya, 2021).

In some studies, religious activities, such as the recitation of sacred texts or the practice of memorisation, were also found to be positively correlated with cognitive development and mental health (Abdullah, 2025; Ganguly et al., 2021). In such a scenario, the memorised tradition of religious texts can be rethought not just as a religious practice, but as a cognitive-ethical training method. Listening, reading, or memorising the Quran can be a useful remedy for improving physical and mental health (Rozali, 2022). When a text is not just read, but is established in memory, it becomes part of the person's inner dialogue. This internalised knowledge can activate moral discernment according to the circumstances.

Religious narratives and classical themes can be helpful in developing children's imagination, language learning, and moral wisdom. In this context, "memorisation" can be considered as an educational tool for the promotion of moral-cultural literacy rather than a means of constructing a narrow religious identity (Senthilkumar and Shubhlakshmi, 2024). Memorisation here is not merely memorisation, but the process of understanding the meaning, context, and message of the original text.

The methods of remembrance developed in the Vedic oral tradition were not merely mechanical rote memorisation, but the development of memorisation, concentration, hearing, and intellectual discipline. When students listen to and repeat an original text over and over again, the text is permanently established in their minds. Later, in different situations of life, the same memory becomes the basis of contemplation and understanding for them (Besra, 2025).

Through the chanting of the Torah, the reader does not merely read the scripture but establishes a deeply personal and community connection with it. Remembrance, music, and group interaction play a crucial role in this process, making the sacred text part of the individual's spiritual experience (Stephen, 2024). Modern digital platforms such as Tarteel, Huffaz, Mu'alim (Qur'an) and Scripture Stack (Bible) are encouraging the memorisation tradition of sacred texts using artificial intelligence, voice-recognition, and progress-tracking techniques. These tools facilitate sequential rendering of verses/verses, partial concealment for recall testing, responding to pronunciation errors, and repetition-based practice, effectively adapting the traditional memorisation method to the digital environment.

5. The Bhagavadgītā as a Value-Based Learning Framework for Children

cultures can communicate their moral and cultural knowledge to children more effectively through modern technological means. The Śrīmad Bhagavadgītā, a distinct cultural tradition, has been used as an illustrative reference in this study to illustrate how value-based education can be linked to the contemporary lives of children.

yadā yadā hi dharmasya glānir bhavati bhārata abhyutthānam adharmasya tadātmānam srijāmyaham -Bhagavadgita, 4.7

5.1 AI-Based Shloka Recitation (TTS Integration)

In the first step of this process, the verse is pronounced correctly and clearly with the help of TTS technology.

5.2 Learner Repetition and Voice Interaction

The student will then attempt to repeat the verse spoken by AI. This process enhances active participation.

5.3 Pronunciation Analysis and Feedback

The AI-based voice-recognition system will analyse the student's pronunciation. If a word is mispronounced, such as dharmasya or glānirbhavati, the system will suggest the correct pronunciation, highlighting the mistake. In this way, the student gets a quick and personalised response.

5.4 Iterative Practice and Mastery

The student will continue to practice until he speaks the verse with precision and confidence. This process develops memory power, concentration, and linguistic correctness.

5.5 Word-by-Word Meaning Exploration

When the student is able to speak the verse with the correct pronunciation, the next step is to explain the meaning of each word of the verse in simple language.

yadā yadā – Whenever

hi – definitely / indeed

dharmasya – dharma or morality

Perform actions while being established in yoga, abandoning attachment, O Dhananjaya. Being equal in success and failure, equanimity is called yoga.

That is, by keeping the mind in a stable and balanced state

yoga-sthaḥ – established in a state of mental balance

In this research, no attempt has been made to evaluate any one religion, scripture or tradition by keeping it at the centre. It seeks to identify a universal educational approach whereby different

glānir – fall or decline, weakness

That is, the loss or weakening of dharma

abhyutthānam – rise, increase

adharmasya – of unrighteousness or evil

That is, the growth or spread of unrighteousness

tadā ātmānam srijāmi aham – then I manifest myself

This process clarifies both language comprehension and philosophical meaning.

The Meaning of Loss of *dharma*

- The Fall of Truth: When People Begin to Lie
- Lack of justice when injustice begins to happen
- Lack of compassion: When people become unkind to each other
- Immorality: When the wrong seems to be considered right

Growth of Unrighteousness:

- When evil, violence, greed, and selfishness begin to spread in society, then *dharma* becomes weak

5.6 Contextual Storytelling and Cultural Connection

Krishna tells Arjuna that whenever there is a loss of dharma and an increase in unrighteousness on earth, then I myself incarnate in the ages to protect the virtuous, destroy the wicked and restore dharma.

Has this ever happened in the past? The incarnation of Maryādā Puruṣottama Rāma, the life of Kṛṣṇa, and the Narasimha Avatāra to protect the devotee Prahlāda are some examples. The stories of these avatāras can be made interesting and engaging through animation and storytelling. In this way, children can not only understand moral values in a better manner but also connect with them practically.

yoga-sthaḥ kuru karmāni saṅgam tyaktvā dhanañjaya, siddhy-asiddhyoḥ samo bhūtvā samatvaṁ yoga uchyate - Bhagavad-gita 2.48

kuru– perform

karmāni– actions

saṅgam– attachment

tyaktvā – abandoning

Dhanañjaya – Arjuna

siddhi – success

asiddhi – failure

siddhy-asiddhyoh– in both success and failure

samaḥ– equal

bhūtvā – becoming

samatvam – equanimity (state of balance)

yogaḥ– yoga (state of inner balance)

ucyate – is called

This verse explains the basic principle of Karma Yoga.

Simple Meaning (Meaning) - O Dhananjaya (Arjuna), you should do your duty by being established in Karma Yoga. While performing actions, let go of attachment to the fruit. Have the same feeling in both success and failure, because this equality and balance of the mind is called yoga.

Philosophical Meaning (In-depth Understanding)

This verse explains the basic principle of Karma Yoga.

- Performing actions in a yogic manner - working by keeping the mind in peace, alertness and spiritual balance. That is, the mind should not be affected by anxiety, fear or greed while working.
- Giving up attachment to the fruit – Man should do karma, but should not be overly attached or worried about the result.
- Equal Feeling in Success and Failure – If there is success, there should be no arrogance, and if there is failure, there should be no disappointment.
- This is yoga – when the mind is balanced in every situation,

So that equanimity is the real sum.

Its meaning in life – this verse teaches that

- Do your duty with full devotion
- Don't worry too much about the result
- Keep the mind steady in success and failure

Only then does a person become calm, intelligent, and spiritually strong.

6. Core Idea

- Memorise the verse so that the verses gradually become a permanent part of his memory and contemplation
- Explain the semantics in simple words (words familiar to children) - so that they not only repeat but also understand its meaning.
- Explain the meaning of the verse - Objective- To clarify the philosophical and moral meaning of the verse, so that children develop a perspective.

- Animation, presentation by reels or short stories - Objective - To present the idealistic, theoretical, and philosophical knowledge of the scriptures in a practical form
- Establishing a Connection to the Present Life - The Scriptures Knowledge should be presented by connecting it with the daily life, problems, interests, lifestyle, etc. of the children, so that they do not consider it as mere theoretical knowledge, but also as a guide to adopt in life.
- Giving small practical tasks - The practice of equanimity, the practice of doing good deeds without any result, the practice of helping others selflessly, etc. Purpose - Our nature is formed by our small actions. To build a good nature from childhood, give small tasks to children.

7. Technique of Data Creation and Processing

This method will generate systematic training data using sequential steps, which will be used to train AI based tools and present cultural and moral teachings in digital form.

Selected verses, narratives, and teachings from various religious texts will be compiled to prepare research data rich in cultural and moral knowledge. An integrated dataset will be created by collecting different types of information for each verse.

7.1 Resource Identification: First of all, authentic religious texts and sources will be identified. For this, various religious texts, digital repositories, academic databases, official websites of universities, research journals and authentic books will be used. Texts related to moral values and life guidance will be selected from these sources.

Ex. Śrīmad Bhagavadgītā, Rāmāyaṇa, Mahābhārata, Manusmṛti, Brahma Vaivarta Purāṇa etc.

7.2 Scriptural Text, Story and Cultural Context Collection - Verses from selected texts will be collected, and each verse will be accompanied by relevant cultural references, historical examples, and explanatory material. This dataset will include the original Sanskrit verse, IAST transliteration, word-by-word meaning, brief interpretation, moral or cultural message, related narrative or cultural examples, and elements for each verse.

This information will be compiled on the basis of authentic books, research articles, classical commentaries and university sources.

Semantic Meaning and Moral Scenario Development - Semantic analysis of the meaning of each verse will be done to

Understand its meaning. In this, the semantic concepts related to the verse will be identified.

In addition, various social and behavioural situations related to the shlokas will also be prepared so that these teachings can be linked to practical life contexts. Techniques such as natural language processing and concept mapping can be used for semantic analysis.

The two ślokas given above are examples of this.

7.3 Authentic Translation and Content Validation - The translation and interpretation of the verses will be verified based on authentic sources to ensure the authenticity of the dataset. Research journals, authentic books, official publications of universities, digital libraries and academic database sources will be used in this process. Based on these sources, a comparative study of the material will be done to find a correct and authentic interpretation in the dataset.

7.4 Audio and Speech Dataset Creation for AI Training - An audio dataset related to the pronunciation of verses will be generated to train the AI-based tool. This dataset will include the pronunciation of pure Sanskrit, slow speed and normal speed. Additionally, speech samples will also be compiled, taking into account different pronunciation patterns and possible errors.

The ASR system will also be trained using diverse voice datasets, including speech data from children across different age groups, as well as from both male and female voices. This approach will enable the system to accurately recognize and process children's speech.

7.5 Practical Exercises and Interactive Data Generation –

Various exercises and activities will be devised based on the classical teachings, which will aim to present the moral messages of the verses in practical terms. These activities may include the following types of content –

Situation-based questions-What should you do if someone tells a lie?

Examples related to moral judgment-Examples will be provided to help children understand right and wrong.

Interactive Exercises- You will not get angry for the whole day' or 'You will help others' can be included. Additionally, animation and multimedia content can also be produced for visual presentation. Various digital tools and animation software can be used for this.

8. AI-Supported Cultural Learning Framework

An AI-supported cultural learning framework will be developed based on the dataset prepared earlier. In this framework, the AI system will be trained by integrating different types of data (verse, meaning, narrative, moral concept, circumstance, and audio). Content verification, annotation and training process will be followed by experts at each stage to ensure the reliability of the system. The key steps of the framework will be as follows.

8.1 Knowledge database creation - The compiled dataset will be organised into a consolidated knowledge database, with each verse accompanied by the original verse, IAST transliteration, semantics, brief interpretation, ethical/cultural message, related narrative, Situational examples and audio pronunciations will be attached. This structure will facilitate easy acquisition and analysis of data for the AI system.

8.2 Meaning Generator Development – The AI model will be built based on the meaning and interpretations of the verses. The dataset will be annotated with semantic tags and verified by language experts. The model will be trained on the annotated dataset, and the accuracy of the meanings generated will be improved through an expert.

8.3 Story Generator Development – An AI-based Story Generator will be developed using narratives and cultural references. Each narrative will be linked to the concept tags of the verse and the moral concept. Through expert validation and iterative training, the model will ensure the quality and relevance of the narratives.

8.4 Scenario Interpreter Development - AI models will be trained by establishing connections between ethical concepts and behavioural situations. Verses and social\ behavioural situations will be added through concept mapping. After verification by the specialist, the model will be able to recognise the appropriate verses and moral messages according to the circumstances.

8.5 Audio Processing and Feedback Module Development - The audio module will be developed to practice and improve the pronunciation of verses. The steps will include audio recording, annotation, sound analysis by Praat, and the use of TTS and ASR technology. Results obtained from ASR will be provided with immediate feedback on errors by comparing them to the reference audio.

ASR, TTS tools, digitisation of diverse cultural data, indexing, and digital video creation of stories like the Panchatantra, e-learning¹ have already been developed by school of Sanskrit and Indic studies, Jawaharlal Nehru University, Similar individual efforts have already been made, such as BharatGen's¹ Sarvam AI, Vachan, Suktam, Bhashini's² ASR and TTS models in various languages, and the Bible learning platform³ If all these technologies are integrated together, a comprehensive and fruitful AI-based environment can be developed for children's cultural and moral learning.



E-learning animated stories⁴

9. Features of the Proposed AI System

The proposed AI-based cultural learning system aims to present traditional cultural and moral knowledge in a more systematic, accessible and participatory manner through modern technological means. The system will include a variety of structural and functional features through which classical teachings can be presented not just as textual content but as a holistic learning experience. The salient features of the system are as follows:

9.1 Integration of Traditional Knowledge and Artificial Intelligence -

This system seeks to integrate the knowledge contained in ancient religious and cultural texts with modern AI techniques. Through this integration, traditional knowledge can be systematised, preserved and presented more effectively through technological means.

9.2 Multi-dimensional knowledge structure –

A key feature of the system is the multi-dimensional knowledge structure of verses. Each verse will be accompanied by a variety of supporting information, original verse, IAST transliteration, semantic and concise explanation, moral message, related narrative or cultural context, situational

examples, and audio pronunciation of the verse in an integrated form. The system will thus provide the user with an opportunity for deep and structured learning while providing different levels of information related to the verse on a single platform.

9.3 AI-based Meaning and Interpretation Feature -

The proposed system will have the ability to present the meaning and concise interpretation of verses through AI-based analysis. This system will be able to present the key moral and philosophical messages of the verses in a clear and organised form based on datasets and semantic annotations.

9.4 Narrative-Based Presentation -

The system will present stories and cultural references related to the shlokas to make the classical teachings more intuitive and interesting. This approach can help to understand abstract philosophical ideas in narrative terms and make the learning process more meaningful.

9.5 Pronunciation Analysis and Feedback System -

The system may include a special module for the practice and correction of the pronunciation of verses.

TTS technique will be used to recite the correct pronunciation of the verses.

ASR technology will be used to recognise the user's pronunciation Tools like PRAAT can be used for sound analysis, with the help of which sound properties such as frequency, rhythm and pauses can be studied. Based on this, the system will be able to provide appropriate feedback to the user about possible pronunciation errors.

9.6 Interactive and multimedia-based learning experiences -

The system can include a variety of interactive and multimedia content, such as

- Situational questions
- Examples of ethical judgment
- Audio-visual presentation
- Animation-based interpretation

The use of these media can make the learning process more engaging, participatory and effective.

10. Expected Outcomes

The proposed AI-based cultural learning system is expected to yield the following important results.

10.1 Child-Centric Pedagogy -

This research will present a new children-centric pedagogy, which will attempt to explain traditional classical knowledge through modern technology. Through this approach, the moral and cultural teachings

¹ <https://bharatgen.com/text-models/>

² <https://bhashini.gov.in>

³ <https://www.scripturestack.com/>

⁴

https://sanskrit.jnu.ac.in/download/elearning_animated_stories.zip

contained in the scriptures will be presented in a simpler, structured and engaging manner.

10.2 Direction of safe use of digital mediums -

This AI-based system can encourage the positive and educational use of technology. Thus, an effort can be made towards using digital devices as a medium of knowledge and value-based learning instead of just a means of entertainment.

10.3 Development of Moral Values and Rationality in Children -

Through verses, stories, and moral messages, children can help in the development of discriminative understanding and willpower to distinguish between right and wrong. Thus, this system can contribute to the development of moral values from an early age.

10.4 Development of interest in classical texts -

Often, the language and style of spiritual and scriptural texts seem complicated for the new generation. This AI-based system can present these texts in a simpler and more engaging form through the meaning, narrative, and context-based presentation of verses, which can develop an interest in children and young people.

10.5 Context-Based Understanding of Scriptural Texts -

Through AI-based analysis, an attempt will be made to connect the ideas contained in the verses to different life situations. This will enable the user to understand how classical teachings can be relevant in contemporary social and personal contexts.

10.6 Development of Moral Thinking and Reasoning Ability -

Through AI-based analysis, an attempt will be made to connect the ideas contained in the verses to different life situations. This will enable the user to understand how classical teachings can be relevant in contemporary social and personal contexts.

10.6 Technological representation of traditional oral traditions -

The study of scriptures in the Indian knowledge tradition has been done through oral tradition for a long time. The proposed system can provide a new medium to preserve and understand these oral traditions through digital technologies.

10.7 Possibility of Reducing Cultural and Spiritual Distance -

Keeping in mind the growing gap between the new generation and traditional cultural-spiritual knowledge in contemporary society, the

system strives to present classical knowledge through digital and AI-supported means. Thus, it can be helpful in establishing a dialogue between the current generation and cultural traditions.

11. Future Scope

11.1 Age-Adaptive Interpretation System -

In the future, this research can be expanded in the direction of how to explain the teachings of cultural and spiritual texts to children of different age groups at different levels. Through AI, the complexity, examples, and interpretation of content can be customised according to age.

11.2 Multilingual Presentation and Game-Based Learning -

This model can be further developed in different languages, enabling children from different cultural backgrounds to understand these teachings in their mother tongue. Also, cultural learning can be made more interesting and experiential through game-based learning and interactive activities.

11.3 Culturally Safe AI Systems for Children -

In the future, AI models may be developed that provide safe digital environments for children and present content that addresses cultural and ethical boundaries. This will enable children to get proper cultural direction along with the use of technology.

11.4 Use of Advanced AI and Natural Language Processing -

Further advanced AI and NLP technologies can be used to develop a deeper interpretation of verses and statements, automatic narrative generation, and better semantic understanding, so that the teaching process can be made more effective.

11.5 Mobile and Web-Based Learning Platforms -

Based on this framework, mobile and web-based learning platforms can be developed, through which users will be able to access cultural and moral teachings from any location.

11.6 Advanced Pronunciation Analysis System -

In the future, voice analysis techniques can be further developed to more accurately analyse the subtle aspects of pronunciation, such as rhythm, intonation, and sound structure, making it easier to learn the correct pronunciation of a verse or traditional text.

11.7 Use of this model in the study of various texts -

This approach is not limited to moral education but can also be useful for the study and presentation of various cultural and spiritual texts in the future, so that traditional knowledge can be presented in a more accessible and systematic form through modern technology.

11.8 Continuous Development of Feedback-Based Cultural Data -

Cultural data and learning materials can be continuously updated based on feedback from users and changing socio-cultural challenges, making the system more relevant and effective over time. This model can be further developed in different languages, enabling children from different cultural backgrounds to understand these teachings in their mother tongue. Also, cultural learning can be made more interesting and experiential through game-based learning and interactive activities.

12. References

- Abdullah. (2025). Education in the Vedic era: A historical and philosophical study. *International Journal of Novel Research and Development*, 10(9)
- Alfusanah, F., Ramada, E., Mukarohmah, A. H., Fathurrohman, A., Anwar, C., & Anwar, S. (2024). The urgency of value education in forming students' character in the era of Society 5.0. *TOFEDU: The Future of Education Journal*, 3(5):1957–1963
- Andryani, R., Gernowo, R., and Negara, E. S. (2024). The potential of virtual reality technology in children's learning success. *Indonesian Research Journal in Education (IRJE)*, 8(1),374–387.
- Banerji, S. C. (1999). A Brief History of Dharmasāstra. *Abhinav Publications*.
- Besra, S. (2025). Memory techniques in the Vedic oral tradition and their application in education. *International Journal for Multidisciplinary Research*, 7(6).
- Che Wan Mohd Rozali, W. N. A., Ishak, I., Mat Ludin, A. F., Ibrahim, F. W., Abd Warif, N. M., & Che Roos, N. A. (2022). The impact of listening to, reciting, or memorizing the Quran on physical and mental health of Muslims: Evidence from systematic review. *International Journal of Public Health*, 67, 1604998.
- Clair, M. (2025). Missional contextual theology for Christian ethics and education in the age of disruption: A framework for scholars, practitioners, and faith-based educators. *ResearchGate*.
- Dubey, V. K. (2012). *Vedang Shiksha Sahitya me Vyasshhiksha ek Parisheelan*. Doctoral thesis, Dr. Rammanohar Lohia Avadh University, Faizabad, India.
- Farisia, H. (2020). Nurturing religious and moral values at early childhood education. *Didaktika Religia*, 8(1).
- Frananda, A., Niva, M., and Maharjan, K. (2024). The positive impact of memorizing the Qur'an on the cognitive intelligence of primary school children. *World Psychology*, 3(1):128–144.
- Ganguly, M., Mohanty, S., Mishra, S., & Patra, S. (2021). Impact of Sanskrit prosody on anxiety, mindfulness, and self-concept in young adolescents: A four-armed control trial. *Yoga Mimamsa*, 53(2), 85–92.
- Girish, S. and Jairam, R. (2025). Impact of Bhagavad Gita teachings on cognitive abilities of adolescents. *International Journal of Innovative Research in Technology*, 12(8).
- Gupta, P. (2025). Integrating tradition and technology: Relevance of the Indian knowledge system today. *Archives*.9(14).
- Kumar, U., Singh, A., & Paddakanya, P. (2021). Extensive long-term verbal memory training is associated with brain plasticity. *Scientific Reports*, 11(1), 9712.
- Kok, C. L., Koh, Y. Y., Ho, C. K., Teo, T. H., and Lee, C. (2024). Enhancing learning: Gamification and immersive experiences with AI. In: *TENCON 2024 – 2024 IEEE Region 10 Conference*, pp. 1853–1856.
- Kristjánsson, K. (2025). Recent developments in the field of moral education—and some prompts for authors, old and new. *Journal of Moral Education*, 54(4):519–525.
- Lamb, M. and Brooks, E. (2026). Teaching virtue literacy: A strategy for character education in the university. *Journal of Moral Education*.
- Latif, E., Mai, G., Nyaaba, M., Wu, X., Liu, N., Lu, G., Li, S., Liu, T., and Zhai, X. (2023). AGI: Artificial General Intelligence for Education. *arXiv*.
- McLoughlin, S. and Kristjánsson, K. (2025). Virtues as protective factors for adolescent mental health. *Journal of Research on Adolescence*, 35(1):e13004.
- Mesurado, B. and Resett, S. (2025). 'Little Hero', a web-based intervention to promote moral values among children: A study of its development and effectiveness. *Journal of Moral Education*, pp. 1–29.
- Miswanto, M., Lestari, D., and Nurhayati, D. (2024). The role of digital in early childhood Islamic education. *International Journal of Early Childhood Education and Development*, 3(1):207–212.

- Nurhabibah, S. (2025). The relevance of Jean Piaget's theory of moral development in addressing the challenges of the Society 5.0 era. *Proceedings of International Conference on Education (ICE Proceedings)*,3(1):233–238.
- Nursiti Khodijah D., S., Saptiani, S., Santi, N. E., and Utama, M. M. A. (2023). Investigation of religious and moral values in children in the digital era. *Jurnal Asy-Syukriyyah*, 24(2):212–227.
- Park, S. Y., Do, B., Yourell, J., Hermer, J., and Huberty, J. (2024). Digital methods for the spiritual and mental health of Generation Z: Scoping review. *Interactive Journal of Medical Research*, 13:e48929.
- Ramadhani, T., Widiyanta, D., Sumayana, Y., Santoso, R. Y., Agustin, P. D., and Al-Amin. (2024). The role of character education in forming ethical and responsible students. *International Journal of Graduate of Islamic Education (IJGIE)*, 5(2)110–124.
- Razza, R. A., Liu, Q., Feng, R., Hao, X., Kirkman, K. A., and Merrin, G. J. (2025). Cultivating adolescents' self-compassion through mindfulness: The role of self-regulation at both the individual- and classroom-level. *Contemporary School Psychology*, 29:843–854.
- Ruhyat, E., Sugiyanto, S., Sukmana, E., Mariati, M., Hayati, S., and Muliawati, K. I. (2026). The capitalization training for MSMEs actors in Waringin Jaya Village, Bojonggede Subdistrict, Bogor Regency. *TOFEDU: The Future of Education Journal*, 5(1).
- Sulastrri and Ismail. (2025). The application of technology-enhanced learning in the development of Islamic religious education in early childhood. *Absorbent Mind: Journal of Psychology and Child Development*, 5(1):64–75.
- Senthilkumar, R., & Subhalakshmi, R. T. (2024). How religious texts influence cognitive development in children. *Journal of Science Technology and Research*, 705–714.
- Trček, D. (2022). Cultural heritage preservation by using blockchain technologies. *Heritage Science*, 10(6).
- University of Bamberg. (n.d.). Recent studies in cultural informatics emphasize digital heritage mapping.
- Wang, W. and Xu, X. (2024). Transformation and development of intangible cultural heritage through technology. *Journal of Library & Information Science in Agriculture*, 36(1).
- Warmansyah, J., Zalzabila, Z., Yuningsih, R., Sari, M., Helawati, V., and Sari, E. N. (2023). Educational technology applications for enhancing religious and moral values in early childhood development: A bibliometric analysis. *Tarbiyah al-Mustamirrah: Jurnal Pendidikan Islam*, 4(2):154–168.
- Zsila, Á. and Reyes, M. G. (2023). Pros & cons: impacts of social media on mental health. *BMC Psychology*, 11(1):201.