

# Understanding the Significance of Integrated Teaching: IKS, Economics, and English Literature - A Pilot Study

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**Abstract:** *Indian Knowledge Systems (IKS) play a key role in moral and spiritual development. They offer wisdom that helps individuals build ethical values and a deeper sense of purpose. However, modern education focuses mostly on technical and theoretical learning, often leaving out these important traditional lessons.. To address this gap, a teaching model which covers Vedantic principles, sustainable development goals and an essay from English literature(Walden) has been suggested by [Joshi, E., & Swathy, M. (2025)] from the chapter 'From Ancient Wisdom to Modern Action: Vedanta, English Literature and the Sustainable Development Goals'.In Transforming Higher Education Through Indian Knowledge Systems (Vol. 2, pp. 133-137). This research implements that teaching method on about 30 Undergraduate Students of Humanities in a pilot study of that teaching methodology. A Pre-test and Post-Test experimental model has been used to gauge the understanding of the three way interdisciplinary topic. Additionally, the questionnaire includes feedback of the blended teaching method.*

*It should be noted that though modern education divides these topics into three separate subjects- IKS, Economics and English Literature; this method strives to understand the conceptual and ethical similarity of the topic through an integrated approach. The hypothesis states that students connect this integrated type of learning with real life, making concepts easier to understand and remember. It also nurtures ethical thinking and spiritual awareness. The study shows that integrating IKS into the Humanities creates a meaningful and holistic view for the students.*

**Keywords:** Indian Knowledge system, Vedanta, Sustainable Development Goals, Interdisciplinary teaching, integrated approach, English Literature

## I. INTRODUCTION

Modern education often divides subjects into separate areas of study. By integrating these fields, education becomes more than just acquiring knowledge. It fosters self-awareness, ethical decision-making, and social responsibility. IKS nurtures mindfulness and cultural understanding. Economics provides practical insights into sustainability and fairness. Literature builds empathy and deeper reflection on human nature. This interdisciplinary approach ensures education is not just academic but meaningful and relevant. A well-rounded education—rooted in tradition yet adaptable to modern needs—empowers students to engage thoughtfully with the world.

### Background And Significance of The Study

This research deals with links in three subjects- IKS, Economics and English literature. One of the links is seen between Vedantic Principles, SDG 12 and Transcendental Literature(Walden).

### Vedanta and Its Philosophical Insights

Vedanta, one of the core philosophies of Indian thought, which takes cues from Upanishads and Bhagavad Gita, is all about understanding the self and the universe. It teaches that everything is interconnected—our true nature (Atman) is



not separate from the ultimate reality (Brahman). This philosophy emphasizes truth, self-discipline, and detachment from material desires. Thinkers like Adi Shankaracharya championed non-dualism (Advaita Vedanta), which was further propagated by Swami Vivekanand. Vedanta teaches that we are not separate from nature but deeply linked to it. These ideas don't just belong to ancient texts—they remain relevant today, offering a way to live harmoniously in a world driven by materialism and individualism.

### **Sustainable Development Goals (SDGs) and Their Economic Perspective**

The Sustainable Development Goals (SDGs), set by the United Nations, address urgent global challenges like poverty, inequality, and climate change. Instead of short-term economic growth, they advocate for a long-term, sustainable approach to development.

### **Transcendentalism in English Literature: Thoreau's *Walden***

Transcendentalism, a 19th-century movement, encourages self-reliance, simplicity, and deep reflection—values that resonate with both Vedanta and sustainable living. Henry David Thoreau's *Walden* captures this spirit, narrating his experiment of living in solitude by a pond, away from societal distractions. His work challenges materialism, emphasizes the importance of nature, and promotes mindful living.

### **Significance**

#### **Integrating Vedanta, SDGs, and Transcendentalism**

Traditionally, subjects like Indian Knowledge Systems, Economics, and English Literature are treated as separate fields. However, this study argues that these disciplines share deep ethical and conceptual connections. By learning in an integrated way, students don't just memorize theories—they relate them to their lives. The hypothesis suggests that this kind of learning makes concepts easier to understand, encourages ethical thinking, and nurtures a broader sense of awareness.

Bringing Indian Knowledge Systems into humanities education can help students become more well-rounded individuals. By engaging with philosophy, environmental consciousness, and literature, they develop critical thinking skills and a deeper understanding of the world. This study highlights the importance of holistic education and the need to blend traditional wisdom with modern learning for a richer, more meaningful educational experience.

### **Research Questions**

How does integrating Indian Knowledge Systems (IKS), Economics, and English Literature in teaching influence students' understanding of the interconnectedness between these disciplines?

What are students' perceptions of the effectiveness of an integrated teaching approach that combines IKS, Economics, and English Literature in enhancing their learning experience?

How does this interdisciplinary teaching method impact students' ability to apply concepts from IKS, Economics, and English Literature to real-world scenarios?

### **Purpose of the Study**

- To examine how integrating Vedanta, SDGs, and transcendental literature helps students understand the connections between philosophy, sustainability, and literature through a blended teaching model covering topics from all three areas.
- To assess students' perceptions of interdisciplinary teaching in enhancing their engagement and comprehension of Vedanta, SDGs, and transcendental literature.
- To evaluate the impact of this integrated learning method on students' ability to apply these theoretical concepts in real-life scenarios, thereby creating a framework for ethical and moral development of the students.
- The integration of IKS, especially Vedanta Philosophy, into modern education has gained significant attention for its potential to enhance learning and contribute to Sustainable Development Goals (SDGs). The pace of exploring this topic has increased significantly after introducing IKS in the NEP 2020 Syllabus.



## **II. LITERATURE REVIEW FOR INTEGRATION OF IKS AND HUMANITIES**

Joshi & Swathy explored how integrating vedantic philosophy into English Literature will foster ethical reasoning and advance the achievement of SDG in higher education.

Singh (2020) calls attention to IKS that encourages context-aware education which helps students create a connection between ancient Indian thought and the contemporary challenges.

Desai (2019) put the stress on globalisation of IKS, showing how vedantic principles like Aparigraha and Dharma align with sustainability education.

Klein(2018) claimed that bridging disciplines enhances student engagement and critical thinking.

Mohan (2019) showed case studies in which literature and philosophy were combined to teach sustainability and ethics, and the result was higher retention rates.

Rao and Nair (2021) connected self-inquiry and non-dualism with English texts by exploring the vedantic frameworks existing in literature studies.

Patel and Rao (2020) illustrated that case based learning using ancient indian texts which enhanced the ethical reasoning and problem solving skills.

Srinivasan (2021) examined student reflections in those academic courses which integrate Bhagavad Gita principles with behavioural economics, revealing increased self-awareness and clarity in decision making.

Smith (2018) called attention to Harvard's use of Indian Philosophy in Global ethics courses, reporting higher student engagement when compared with traditional methods.

Raj (2019) highlighted that through interactive activities, Multidisciplinary approaches improve retention rates and conceptual clarity.

Kumar (2021) demonstrated how education focusing on SDG using ancient knowledge creates a sense of social responsibility among the students.

Patel (2021) claims that experiential learning enhances student engagement and comprehension.

Garg (2023) compares non dualism of advaita vedanta with dualism of western literary traditions, giving insights on language, meaning, knowledge and is useful for exploring connectedness with SDGs.

Raghavendra (2025) offers an interdisciplinary approach in the context of development and sustainability, analysing contemporary socio-cultural issues in India.

### **Research Gap**

The Literature review highlights the rising significance of IKS and need for intermediary approaches. However, the limitations in empirical research, especially when it comes to integrating IKS with Humanities, is clearly visible. This study fills this research gap by implementing a teaching model integrating Vedantic principles, English Literature and the Sustainable development goals.

### **Hypothesis**

This study hypothesizes that integrating Vedanta, Sustainable Development Goals, and transcendental English literature into a single interdisciplinary framework enhances student learning by making abstract concepts more relatable and interconnected, encouraging ethical thinking and a holistic understanding of sustainability and self-awareness.

## **III. METHODOLOGY**

This study takes an experimental approach to explore how an integrated teaching model—combining Vedantic principles, Sustainable Development Goals (SDGs), and transcendental themes from English literature—impacts student learning. A group of 30 undergraduate Humanities students participated in a pilot study of a structured learning program that merged these three disciplines.

The study followed a pre-test and post-test experimental design to assess students' comprehension and engagement with the interdisciplinary concepts. Initially, students took a pre-test to measure their existing knowledge of Vedanta, SDGs, and transcendentalism in literature. A teaching model which covers Vedantic principles, sustainable development goals and an essay from English literature(Walden) has been suggested by [Joshi, E., & Swathy, M. (2025)] from the chapter



‘From Ancient Wisdom to Modern Action: Vedanta, English Literature and the Sustainable Development Goals’. In *Transforming Higher Education Through Indian Knowledge Systems* (Vol. 2, pp. 133-137). Based on this teaching model, a 45 minute interactive lecture and discussions that explored the overlapping themes across these fields was designed and implemented by the researchers. After completing the learning program, a post-test was conducted to evaluate their progress in understanding, retention, and real-world application of these ideas.

Additionally, qualitative feedback was gathered through the questionnaire that invited students to reflect on their learning experience. Their responses provided valuable insights into how this interdisciplinary approach influenced their engagement, ethical reasoning, and ability to relate abstract concepts to their lives.

#### IV. RESULTS

##### Hypothesis Testing

H0 - Integrating Vedanta, Sustainable Development Goals, and transcendental English literature into a single interdisciplinary framework *does not enhance* student learning by making abstract concepts more relatable and interconnected, fostering ethical thinking, and encouraging a holistic understanding of sustainability and self-awareness.

H1 - Integrating Vedanta, Sustainable Development Goals, and transcendental English literature into a single interdisciplinary framework *enhances* student learning by making abstract concepts more relatable and interconnected, fostering ethical thinking, and encouraging a holistic understanding of sustainability and self-awareness.

A workshop was conducted among the students of Arts, where the teachers from different disciplines implemented the prescribed teaching model. A total of 29 students attended this workshop. The data obtained was tested using the Wilcoxon Signed-Rank Test, which is a non-parametric test used to compare paired samples before and after an intervention. It helps determine whether there is a significant difference in students' understanding of Vedanta, Sustainable Development Goals (SDGs), and Transcendentalism in English Literature after integrating these concepts into an interdisciplinary teaching framework.

The test finds a correlation between the two independent variables (understanding the positive effect between the pre-test and post-test). It is an alternative to the paired t-test when the data is not normally distributed. When the data is ordinal or not normally distributed, this test is used. T-Test was also considered for analysis. However, since the data is not evenly distributed and sample size is small, the data does not satisfy the assumptions of a t-test.

A low p-value ( $p < 0.05$ ) suggests a significant improvement in students' understanding post-workshop, while a high p-value ( $p > 0.05$ ) indicates no significant difference.

Knowledge Area	Test	W-Statistic	P-value	Significant?
Rate your pre-existing Knowledge of Vedanta Philosophy	Wilcoxon Signed-Rank	519.5	0	Yes
Rate prior Knowledge about SDGs	Wilcoxon Signed-Rank	373	0.00005	Yes
Rate your Knowledge of "Transcendentalism" in English Literature	Wilcoxon Signed-Rank	470	0.00001	Yes

Since the p-value is low, i.e., less than 0.05, we accept Alternate hypothesis

#### V. DATA INTERPRETATION AND ANALYSIS

A] Analysis of Quantitative data collected pre and post-workshop

1. Vedanta Philosophy ( $p = 0.00000$ ,  $W = 519.5$ )

A highly significant improvement in students' understanding of Vedanta post-intervention.

This suggests that integrating Vedanta into the curriculum made the abstract concepts **more relatable and understandable**.



2. SDGs Knowledge ( $p = 0.00005$ ,  $W = 373.0$ )

A statistically significant increase in awareness of SDGs.

Indicates that an interdisciplinary approach helped students **grasp the importance of SDGs better**.

3. Transcendentalism in English Literature ( $p = 0.00001$ ,  $W = 470.0$ )

A highly significant improvement in understanding Transcendentalism.

Suggests that integrating philosophy, sustainability, and literature made abstract literary themes **more tangible**.

The study provides strong evidence supporting the hypothesis. The integration of Vedanta, SDGs, and Transcendentalism enhanced student learning across all three measured areas. The significant improvement suggests that this interdisciplinary approach successfully makes abstract concepts more relatable and fosters deeper intellectual engagement.

B] Analysis of Student responses on the Link between Vedantic Principles, SDGs and Walden and about 'Way of Life'  
In the post-workshop survey, Students were able to connect Vedantic Principles, SDGs, and Thoreau's Walden and this helped students relate abstract concepts like simplicity, sustainability and ethical living. They also recognised that these frameworks emphasise detachment from materialism, harmony with nature and self-reliance, aligning with SDG's focus on Responsible consumption and environmental protection. Besides this, there was a shared emphasis on self-awareness and moral responsibility, showing that the interdisciplinary approach fostered a deeper understanding of sustainability and ethical living. Overall, this integration made complex ideas more relatable, encouraging critical thinking and a holistic approach to personal and environmental well-being.

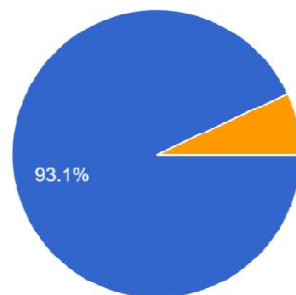
Students were asked to mention any lesson they learned about 'way of life'. Students highlighted the significance of simplicity and mindfulness in daily choices, such as choosing reusable items to promote sustainability and reduce waste. They also emphasised on self-sufficiency and responsible consumption, identifying the need for balance between economic development and environmental preservation. Ultimately, students recognised the interconnectedness between human and nature, emphasising that ethical living and sustainability are essential for both personal well being and the planet's future.

C] Direct Observations

CHART I

Do you think there is any relation between Veda

29 responses



Most of the students could find a relation between Vedanta, SDGs and Transcendentalism. This shows the success and effectiveness of this interdisciplinary teaching model.

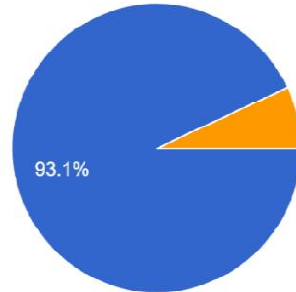




CHART II

Does knowledge of 'Vedanta Principles' help in t

29 responses



Approx. 93 percent of the students agreed that knowledge of Vedanta Principles help in better understanding of Economics and Literature. This proves that an interdisciplinary teaching framework helps students gain new insights about learning and they will find learning interesting as it connects things with real life.

**Discussion and Observations**

In this research work, the researchers tried to prove that Integrating Vedanta, Sustainable Development Goals, and transcendental English literature into a single interdisciplinary framework enhances student learning by making abstract concepts more relatable and interconnected, fostering ethical thinking, and encouraging a holistic understanding of sustainability and self-awareness.

As per the analysis done based on the primary data collected by the researchers, there were important findings that came to notice. Different findings and observations enumerated below.

Interdisciplinary Learning Works – Combining Vedanta, SDGs, and Transcendentalism effectively enhances student comprehension.

Philosophy in Education – Vedanta helped bridge abstract concepts with ethical thinking, reinforcing holistic education.

Sustainability Awareness – SDG knowledge improved, indicating that interdisciplinary methods can enhance real-world applicability.

**Suggestions and Recommendations**

- The study emphasizes the following recommendations in the field of education. Suggestions have been made for policy makers, teachers and future researchers.
- To standardise the incorporation of at least two such classes on a weekly basis in the syllabus with respect to the integration perspective as per NEP 2020.
- Teachers can provide a blended masterclass to integrate topics which have similar learnings.
- Colleges may provide a FDP for teachers for gaining knowledge in IKS. This will enable teachers to integrate teachings from IKS to Modern Education.
- Further research should be conducted to explore the long-term effects of interdisciplinary education on students' academic performance, ethical behavior, and societal contributions.
- Need of the hour to rethink on primary aim of education - The making of a responsible and Good Human Being over materialism, narcissism and animality in this fast moving world.



### Limitations

- Due to time constraints, only a 45 min lecture could be conducted between the pre-test and post-test
- Technical aspects from Economics and English need to be addressed while teaching integration [excluded from IKS and Philosophy]
- The sample size was too small, with only 29 students, which may not represent the large student population.
- With not large size, it would impose limitation on our study to generalise the results and observations of the research to other college and students
- This study was limited to Vedanta, SDGs and Walton and failed to include the broader range of interdisciplinary perspectives

### Direction for future researchers

- A more comprehensive test can be designed for deep understanding of students' comprehension
- A null set can be added to understand the effectiveness of integrated learning
- Explore the integration of additional disciplines beyond Vedanta, SDGs, and Transcendentalism to assess the broader applicability of interdisciplinary education.
- Work on the long-term effects of interdisciplinary learning on student understanding, ethical behavior, and real-world application of concepts.
- Conduct research across various educational levels like school, undergraduate, and postgraduate to assess the impact of interdisciplinary approaches at different stages of learning.

## VI. CONCLUSION

In conclusion, the study demonstrates that integrating Vedanta, Sustainable Development Goals and Transcendentalism into an interdisciplinary educational framework significantly enhances student learning. The data collected from the post-workshop analysis shows a significant improvement in students' understanding of these concepts, calling attention to the effectiveness of combining philosophy, sustainability, and literature. The interdisciplinary approach not only made abstract ideas more relatable but also stimulated ethical thinking, self-awareness, and an in depth connection to sustainability. Students were able to acknowledge the interconnectedness of these disciplines and understand their practical applications in daily life, especially in terms of ethical living, sustainability, and personal well-being. This research supports the importance of holistic education, which blends traditional wisdom with modern knowledge, creating a more comprehensive and meaningful learning experience that encourages students to think critically and act responsibly in the world.

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**APPENDIX**

Chart 1.1 shows direct observation, stating inclination of the links between the three topics

Do you think there is any relation between Vedanta  
29 responses

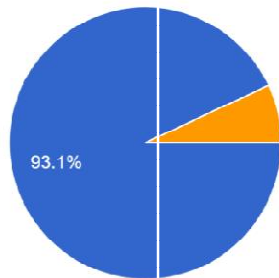


Table 1.1 shows the subjective analysis of Student responses on the Link between Vedantic Principles, SDGs and Walden

Sr. No.	Theme	Example Responses
1)	<b>Simplicity Minimalism</b>	<ul style="list-style-type: none"> <li>- "Try to live a simple life where you use minimal resources which will help to connect with your soul."</li> <li>- "To live life simply and to conserve the environment one step at a time."</li> <li>- "Vedanta, SDGs, and Walden align in simplicity,</li> </ul>





		<p>sustainability, self-awareness, and ethical living, promoting harmony with nature and collective well-being."</p> <p>- "Walden embodies these ideals through minimalism and deep connection with nature."</p>
2)	<b>Detachment from Materialism</b>	<p>- "The parallels between Brahman and the Oversoul, renouncing materialism (Maya), and leading a life of simplicity."</p> <p>- "Detachment from materialistic values."</p> <p>- "There is a link between the three focusing on sustainability. It highlights the concept of self-reliance, freedom from the materialistic world, and having a deep connection with nature and oneself."</p>
3)	<b>Sustainability and Responsible Consumption</b>	<p>- "It says to consume resources thinking properly about the next generation."</p> <p>- "Use resources in a limited way."</p> <p>- "The need for more leads to destruction and that is why we need to make solutions like SDGs."</p> <p>- "Sustainability isn't about just saving, it's about utilizing new techniques and living our lives with what we have."</p>
4)	<b>Interconnectedness Nature and Humanity</b>	<p>- "It relies on the interconnectedness of nature and human beings. It tells about being one with nature."</p> <p>- "These three concepts are interconnected, and the basis of these is nature, environment, and human life."</p> <p>- "All are related to environmental sustainability in very unique ways."</p> <p>- "Vedantic principles, SDGs, and Walden all emphasize simplicity, self-reliance, and harmony with nature, advocating for spiritual growth, sustainable living, and environmental preservation for individuals and for all others."</p>
		- "Self-realization is important."



5)	<b>Spiritual Growth and Self-Realization</b>	<ul style="list-style-type: none"> <li>- "Vedantic principles emphasize self-realization, harmony with nature, and ethical living, aligning with the Sustainable Development Goals (SDGs) on well-being, environmental sustainability, and social justice."</li> <li>- "Achieving this through a spiritual, moral, and knowledgeable path. It is necessary for us to understand and imbibe it in our daily lives."</li> <li>- "Vedanta, SDGs, and Walden all advocate for a mindful, ethical, and sustainable way of life, emphasizing spiritual growth, social responsibility, and environmental consciousness."</li> </ul>
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Chart 2.1 shows direct observation, stating inclination towards creating a base of IKS for value addition in modern Education

Does knowledge of 'Vedanta Principles' help in bett  
29 responses

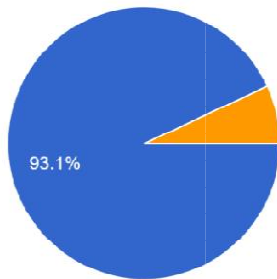


Table 2.1 Analysis of Student responses on 'Way of Life' wrt the integrated teachings of Vedanta Philosophy, SDGs and Walden

Sr. No.	Theme and Description	Example Responses
1)	<b>Simplicity and Minimalism</b> A simple life, free from unnecessary materialism, leads to greater contentment and	<ul style="list-style-type: none"> <li>- "A simple and mindful way of life leads to greater contentment."</li> <li>- "Live life to the fullest with limited resources."</li> </ul>



	<p>fulfillment. Living with fewer possessions helps in self-awareness and deeper connections with nature</p>	<ul style="list-style-type: none"> <li>- "Simplicity."</li> <li>- "He who owns little but wants for nothing is the richest of all."</li> </ul>
2)	<p><b>Sustainability and Responsible Consumption</b> A responsible way of living includes mindful use of resources, avoiding waste, and ensuring sustainability for future generations. Small actions can have a big impact.</p>	<ul style="list-style-type: none"> <li>- "Sustainability—small acts can have big impacts (e.g., cloth bag over plastic bag)."</li> <li>- "Minimalism."</li> <li>- "One must consider responsible consumption."</li> <li>- "It's about thinking and using resources efficiently without harming the environment."</li> <li>- "Having a sustainable lifestyle in current times is very important for the environment as well as our well-being."</li> </ul>
3)	<p><b>Spiritual Awareness and Connection with Nature</b> Life is about balance, self-awareness, and harmony with nature. Observing and learning from nature brings wisdom and inner peace.</p>	<ul style="list-style-type: none"> <li>- "Human and nature are one."</li> <li>- "Keeping eyes open and being observant to the things in nature that are obviously teaching us a lesson."</li> <li>- "Way of life inculcates how we live with our values and morals."</li> <li>- "To think critically, spiritually."</li> <li>- "Nature plays a major role in life as we humans are part of nature."</li> </ul>

