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*Original Paper*

# Applying Behavioral Science to Value-Oriented and Civic Education: A Case Study of Zhuangzi Philosophy Course

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## Abstract

In recent years, value-oriented and civic education has gained increasing attention in higher education, highlighting the integration of ethical and social responsibility dimensions into subject teaching. This study investigates the incorporation of such elements into a *Zhuangzi* reading course through innovative pedagogical approaches. Drawing on perspectives from behavioral science, the research examines how these instructional strategies influence students' cognitive engagement, classroom participation, and moral reasoning. The findings indicate that this integration fosters students' critical thinking and ethical reflection, illustrating that behavioral science frameworks can effectively evaluate and support the convergence of traditional humanities content with contemporary educational aims.

**Keywords:** Civic and Ethical education, Higher education pedagogy, Behavioral science approaches

## 1. Introduction

The cultivation of students' values, ethical awareness, and sense of social responsibility has emerged as a central priority in higher education reform globally, often framed under the terms "values education," or "civic education." In China, a national initiative commonly translated as "Curriculum-based Values Education" mandates the systematic integration of ethical and civic learning objectives across all university courses. While policy discourse emphasizes the importance of such integration, there remains a notable gap in empirical research examining how values education can be operationalized in specialized humanities courses, particularly with attention to observable behavioral and cognitive outcomes. Traditional approaches in philosophy education often remain confined to textual analysis and abstract reflection, leaving questions about the practical cultivation of ethical reasoning, moral engagement, and civic sensibility largely unanswered.

This study addresses this gap by examining the incorporation of values-oriented and civic learning components into a university-level *Zhuangzi* reading course. Leveraging behavioral science frameworks, it investigates how innovative pedagogical strategies—such as flipped classrooms, multimedia resources, online communication platforms, and interactive discussions—shape not only students' cognitive engagement but also their observable learning behaviors, reflective capacities, and moral reasoning. By systematically tracking behavioral indicators, classroom interactions, and qualitative reflections, the research demonstrates a concrete model for embedding ethical and civic dimensions into classical philosophy instruction. Its contribution lies in bridging theoretical humanities content with measurable educational outcomes, offering evidence-based insights for educators seeking to cultivate both intellectual and moral growth. In doing so, the study provides a replicable framework for integrating classical texts with contemporary values education, highlighting the potential for humanities courses to serve as active sites for student ethical formation and social responsibility development.

## 2. Background and Theoretical Foundations

Values-oriented and civic education has gained increasing prominence in higher education worldwide as a critical means of fostering students' ethical development, civic responsibility, and social consciousness. Across diverse national contexts, scholars and policymakers have recognized that

imparting disciplinary knowledge alone is insufficient; universities must also cultivate the moral compass, social engagement, and intercultural competencies needed for responsible citizenship in increasingly complex, interconnected societies.

Within this global discourse, China's initiative commonly translated as "Curriculum-based Values Education" represents a large-scale national effort to embed ethical, civic, and social responsibility goals systematically into all academic disciplines (Ministry of Education of China, 2017; Guo & Guo, 2021). Rather than confining moral development to designated political theory courses, the policy envisions every course as a potential platform for value formation, aiming to align individual student growth with broader societal aspirations.

Despite the policy's prominence, empirical research examining the practical effects of such integration remains relatively underdeveloped, particularly in terms of its influence on observable student behaviors, cognitive engagement, and learning outcomes (Zhao & Zhou, 2019). Existing scholarship often emphasizes qualitative reflections, normative arguments, or policy analysis, leaving a gap in understanding the behavioral processes underlying value internalization in educational contexts. This gap underscores the need for interdisciplinary approaches that link values education to robust theoretical frameworks capable of capturing shifts in student motivation, participation, and ethical reasoning.

Behavioral science perspectives offer particularly valuable tools in this regard. Self-Determination Theory (Deci & Ryan, 1985) emphasizes the central role of intrinsic motivation and the fulfillment of basic psychological needs—autonomy, competence, and relatedness—in fostering deep learning and value internalization. When students experience autonomy-supportive environments and meaningful social connections, they are more likely to engage authentically and integrate targeted ethical principles into their personal frameworks. Similarly, Bandura's Social Learning Theory (1977) highlights the role of observational learning, modeling, and social reinforcement in shaping moral behavior, suggesting that value education is not solely cognitive but also socially situated, mediated by peer interactions, instructor modeling, and classroom culture.

In the domain of classical philosophy education, courses on Eastern traditions such as the *Zhuangzi* hold unique potential for values education due to their profound ethical insights and humanistic spirit (Zhang 2020). Yet in many settings, such courses remain dominated by textual analysis and theoretical exposition, with limited emphasis on fostering active student participation, critical reflection, or behavioral change. The challenge lies in designing pedagogical approaches that move beyond passive reception, prompting students to deliberate on ethical issues, relate philosophical ideas to contemporary social realities, and ultimately experience personal value transformation.

Only a small number of studies have explored how interactive, student-centered, and behaviorally informed teaching methods can revitalize classical philosophy courses, enabling students to embody ethical insights through experiential learning (Wang & Liu, 2020; Tan & Wong, 2022). Such research suggests that integrating flipped classrooms, multimedia resources, collaborative discussions, and reflective practices can significantly enhance engagement and deepen value assimilation.

Building on this emerging body of work, the present study applies behavioral science principles to the design and evaluation of a *Zhuangzi* reading course that incorporates values-oriented and civic learning objectives. By systematically assessing how targeted pedagogical strategies influence both cognitive understanding and observable learning behaviors, this research seeks to bridge the gap between classical philosophical knowledge and contemporary educational aims, contributing to global conversations on the integration of humanities and moral education.

### **3. Research Context, Course Design, and Methodological Framework**

The study was conducted with a sample of approximately 50 undergraduate students who were enrolled in the *Zhuangzi* reading course at the university. The participants, ranging in age from 18 to 22 years old, included both male and female students. They represented diverse academic backgrounds and majors, though all had chosen the course as part of their general education or humanities requirement. While some participants had previously encountered classical Chinese philosophy through high school curricula or personal reading, others had little to no prior exposure, engaging with the *Zhuangzi* for the

first time in this setting. Their familiarity with broader ideological education also varied, providing a heterogeneous group that offered a valuable basis for examining different levels of receptivity, interpretation, and engagement with the philosophical texts. This diversity within the sample not only ensured a balanced representation of perspectives but also allowed the study to investigate how students with different educational experiences and cultural dispositions approached the themes of Zhuangzi.

The *Zhuangzi* reading course was meticulously crafted to achieve a harmonious balance between rigorous philosophical inquiry and practical ethical reflection. Its overarching aim was to provide students with a multidimensional and comprehensive understanding of the text, addressing not only its profound metaphysical insights but also its enduring moral and social implications. By doing so, the course sought to transcend purely academic analysis and foster meaningful personal and societal value engagement.

The curriculum was organized around a carefully curated selection of core chapters from the *Zhuangzi*, chosen for both their philosophical depth and ethical significance. These chapters included *In the Human World* (人间世), *Wandering Far and Unfettered* (逍遥游), and *The Great Source as Teacher* (大宗师). Each chapter was selected to illustrate distinctive philosophical ideas—for example, the tension between social convention and individual authenticity, the nature of freedom and spontaneity, and the cultivation of moral and intellectual excellence—while simultaneously addressing ethical questions that remain relevant today. By focusing on these texts, the course aimed to provide students with concrete examples of how classical Chinese philosophy engages with enduring human concerns, such as the balance between personal autonomy and social responsibility, the pursuit of self-cultivation, and the evaluation of ethical action in complex social environments. This structure allowed the course not only to introduce foundational *Zhuangzi* concepts but also to connect these ideas to contemporary moral and civic reflection, making the material both accessible and meaningful for modern learners.

*In the Human World* serves as a critical examination of social conventions, moral norms, and the human condition. It challenges taken-for-granted assumptions about society and individual roles, encouraging students to question the foundations of social order and to reflect on the complexity of human existence. This module invites learners to engage in critical ethical reflection on issues such as conformity, authenticity, and moral relativism.

*Wandering Far and Unfettered* articulates the ideal of spiritual freedom and naturalness, which lies at the heart of Daoist philosophy. This chapter introduces students to concepts of liberation from social and psychological constraints, emphasizing harmony with the Dao and an embrace of spontaneity and openness. The ethical implications of this ideal—such as cultivating resilience, humility, and adaptability—are explored in depth, connecting ancient wisdom with modern life challenges.

*The Great Source as Teacher* delves into cosmic principles, metaphysical unity, and the cultivation of the self. This section guides students through reflections on the relationship between individual and cosmos, highlighting self-cultivation as a moral and spiritual endeavor. Students are encouraged to consider the implications of these teachings for personal development and ethical leadership.

Each module was pedagogically scaffolded to support progressive learning, beginning with foundational comprehension—such as close textual reading and interpretation—and gradually advancing toward more sophisticated analytical and hermeneutical challenges. This incremental approach fostered both the acquisition of substantive philosophical knowledge and the development of critical ethical reasoning skills. The scaffolded design ensured that students not only understood the theoretical content but also engaged in reflective and dialogical processes essential for internalizing values.

A key feature of the course design was the deliberate integration of educational objectives aimed at fostering moral character development, social responsibility, and cultural awareness. Rather than treating these aims as peripheral or supplementary components, the curriculum seamlessly embedded them within the philosophical inquiry of *Zhuangzi*'s texts. This integrative approach not only deepened students' understanding of classical philosophy but also encouraged critical reflection on its applicability to contemporary social and ethical issues. By linking traditional thought with present-day

challenges, the course sought to cultivate in students a sense of ethical agency and a commitment to responsible citizenship. Such alignment between philosophical study and value cultivation underscores the potential for classical scholarship to contribute meaningfully to holistic education that nurtures both intellectual rigor and moral sensibility.

To support these objectives, the course also included critical reflections on the socio-political dimensions embedded within *Zhuangzi*'s text, encouraging students to consider questions of governance, justice, and the role of culture in shaping individual and collective life. Through this culturally resonant pedagogy, the course sought to foster a sense of belonging and identity rooted in China's rich philosophical heritage, while simultaneously promoting openness, critical thinking, and a global perspective.

Overall, the course design represented an innovative fusion of traditional scholarship, ethical cultivation, and ideological education, positioned to empower students not only as learners of philosophy but as reflective, socially responsible individuals capable of applying ancient wisdom to the complexities of modern life.

As far as teaching intervention is concerned, the course employed a comprehensive suite of innovative pedagogical strategies, carefully grounded in behavioral science and educational psychology principles.<sup>1</sup> These strategies were deliberately selected and integrated to address multiple dimensions of learning motivation, cognition, and social interaction. Building on these foundational principles, the course transformed conventional instructional techniques into a cohesive, creatively orchestrated learning ecosystem. Rather than employing flipped classrooms, multimedia, discussions, and online platforms as isolated tools, the course strategically integrated them to function synergistically, each amplifying the impact of the others. Preparatory readings and online quizzes did more than transfer knowledge—they primed students for inquiry, reflection, and ethical deliberation. Multimedia resources were not merely supplementary illustrations but served as immersive conduits for philosophical imagination, bringing abstract *Zhuangzi* concepts into vivid, relatable experience. Classroom discussions and small-group activities extended this cognitive and affective engagement into collaborative spaces, where students actively tested ideas, negotiated meaning, and practiced moral reasoning. Online communication platforms further bridged in-class and out-of-class interactions, creating a continuous reflective loop that reinforced autonomy, social learning, and ethical awareness. In this way, familiar pedagogical methods were reimagined as a dynamic, interactive constellation of practices, collectively fostering both intellectual rigor and value-oriented development. Specially speaking,

1. Flipped Classroom Model: The flipped classroom model constituted the cornerstone of the course's instructional design.<sup>2</sup> Prior to each class session, students were assigned targeted and thematically organized readings from both primary *Zhuangzi* texts and relevant secondary literature.<sup>3</sup>

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<sup>1</sup> Please refer to Slavin, R. E. (2012). *Educational psychology: Theory and practice*. Allyn & Bacon. This text provides a foundational understanding of how cognitive, motivational, and social dimensions interact in learning. Applying these principles to a classical humanities course allowed the design of interventions that are sensitive to students' cognitive constraints while promoting ethical reflection, thereby bridging theory with practice in a value-oriented curriculum.

<sup>2</sup> Reach every student in every class every day. International Society for Technology in Education. The flipped classroom is not merely a logistical adjustment but a pedagogical philosophy emphasizing student agency. Its integration here allowed students to engage in anticipatory cognitive work and ethical reflection before class, transforming passive exposure to classical texts into an active, value-driven inquiry.

<sup>3</sup> Ziporyn, B. (2020). *Zhuangzi: The essential writings*. Hackett Publishing. Secondary literature, particularly modern exegesis, was crucial for scaffolding students' comprehension. Ziporyn's interpretations illuminate textual ambiguities and philosophical implications, allowing the integration of behavioral insights with classical textual engagement, thus operationalizing humanities content for pedagogical assessment.

Complementing these readings, students completed online quizzes constructed not only to assess basic comprehension but also to activate and scaffold relevant prior knowledge. Grounded in cognitive load theory and constructivist learning principles, this preparatory work aimed to enhance learner autonomy and readiness, thereby maximizing the cognitive resources available for active engagement during in-class activities. The quizzes were designed with immediate feedback mechanisms, allowing students to self-monitor their understanding while providing instructors with valuable real-time diagnostic data. This enabled dynamic adjustment of lesson plans to address common misconceptions, focus on challenging concepts, and tailor discussions to students' evolving needs, embodying principles of formative assessment and responsive teaching.<sup>4</sup> Additionally, by embedding reflective prompts in quizzes, the course transformed routine assessment into a generative space for ethical exploration, allowing students to rehearse moral reasoning in tandem with cognitive mastery.

2. Multimedia Resources: Recognizing the diversity of student learning preferences and the potential barriers posed by abstract philosophical material, the course integrated a rich array of multimedia resources. These included professionally produced educational videos, animated dramatizations of key *Zhuangzi* stories, and interactive visual aids such as concept maps and infographics. Drawing upon dual-coding theory and multimedia learning theory (Mayer, 2014)<sup>5</sup>, these resources were designed to support both verbal and visual processing channels, thereby enhancing comprehension and retention. For example, animated renditions of *Zhuangzi* narratives vividly illustrated complex philosophical ideas such as “free and easy wandering,” transforming intangible concepts into concrete, memorable experiences. By contextualizing the text within engaging visual and auditory frameworks, multimedia resources helped bridge historical-cultural gaps and made the material more relatable and meaningful for contemporary learners. This multimodal approach also aimed to sustain attention and motivation, crucial factors identified in behavioral engagement research.<sup>6</sup>

3. Interactive Classroom Discussions and Small Group Activities: Classroom time was intentionally reimaged as a dynamic arena for co-creation, debate, and ethical experimentation. Rather than treating discussion as a perfunctory exchange of interpretations, the course leveraged social constructivist principles and Vygotsky's zone of proximal development to cultivate a living laboratory of ideas, where students collaboratively wrestled with *Zhuangzi*'s philosophical provocations. Discussions encouraged learners not only to analyze texts critically but also to perform thought experiments, testing how classical notions of freedom, virtue, and human flourishing might unfold in contemporary ethical dilemmas. Small group activities functioned as incubators for reflection and experimentation, providing a psychologically safe environment in which quieter students could assume meaningful roles, model ethical reasoning, and observe peer strategies in real time. These interactions fostered social scaffolding, allowing participants to internalize complex moral concepts while negotiating divergent perspectives. Facilitators acted less as didactic authorities and more as guides for intellectual exploration, strategically intervening to clarify conceptual ambiguities while leaving space for emergent interpretations. Through this integration of dialogue, collaboration, and reflective practice, classroom interaction became not merely a vehicle for comprehension but a transformative space where

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<sup>4</sup> Feedback here serves a dual function: it corrects misconceptions and simultaneously fosters meta-cognitive reflection on moral and civic dimensions of philosophical inquiry, demonstrating how instructional feedback can extend beyond knowledge acquisition into value cultivation.

<sup>5</sup> Mayer, R. E. (2014). *Incorporating motivation into multimedia learning*. Elsevier. Multimedia learning principles justify the use of animations and concept maps not only for comprehension but for fostering ethical and civic reasoning. Presenting philosophical ideas through multiple modalities encourages students to engage critically with content rather than passively receiving information.

<sup>6</sup> Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. Behavioral engagement research emphasizes attention, effort, and persistence as key predictors of meaningful learning. By designing activities that sustain attention and motivate students, the course connects cognitive engagement with ethical reflection, demonstrating an empirical grounding for value-oriented humanities pedagogy.

cognitive, social, and ethical capacities converged, reinforcing autonomy, relatedness, and intrinsic motivation as posited by Self-Determination Theory.

4. Online Communication Platforms: The course extended the classroom into a continuous, interactive intellectual ecosystem through the strategic use of multiple online platforms, including institutional learning management systems (LMS), discussion forums, and instant messaging applications such as WeChat. These digital channels were not mere logistical tools; they became virtual laboratories for collaborative inquiry and ethical experimentation, bridging formal instruction with informal reflection. Students could pose questions, debate interpretations, and co-construct meaning asynchronously, transforming isolated learning moments into a collective exploration of philosophical and civic ideas. The platforms also enabled iterative metacognitive practice: learners could revisit discussion threads, annotate key points, track their evolving understanding, and connect textual insights to personal and societal ethical dilemmas. From a behavioral standpoint, the online space reinforced accountability, social presence, and community norms, as active participation was both visible and valued. Prompt instructor feedback and engagement modeled reflective and responsible academic behavior, cultivating a culture where collaboration, ethical deliberation, and self-directed growth were embedded into the fabric of daily learning. In this way, digital communication transformed from a supplementary convenience into a central conduit for cognitive, social, and moral development, seamlessly integrating value-oriented education into every interaction.

It is worth noting that the use of specific teaching methods must be grounded in the fundamental principles of “truth,” “goodness,” and “beauty.” In other words, when teaching Chinese philosophy, it is essential to approach it with a sincere desire to educate and inspire students to pursue and practice goodness, by employing beautiful language or by methods such as the use of literature, to touch their hearts. This orientation resonates deeply with the objectives of value-oriented and civic education, as explored in my case study of the Zhuangzi reading course. In that course, students were not only introduced to the textual and philosophical dimensions of Zhuangzi but were also encouraged to reflect on how the text could shape their moral sensibilities and civic awareness.

From the perspective of behavioral science, the integration of “truth,” “goodness,” and “beauty” into pedagogy provides a more holistic framework for influencing students’ attitudes and behaviors.<sup>7</sup> “Truth” ensures that philosophical concepts are presented accurately and with intellectual rigor, thereby cultivating critical thinking. “Goodness” emphasizes the ethical dimension, guiding students toward the internalization of moral values and civic responsibility. “Beauty,” meanwhile, speaks to the affective dimension of education: it acknowledges that values are not absorbed solely through logical instruction, but also through emotional engagement and aesthetic experience. In practice, this means that reading Zhuangzi is not reduced to the transmission of doctrinal knowledge; rather, it becomes an occasion for aesthetic appreciation and moral cultivation, whereby students encounter the transformative power of philosophical discourse.

For example, in the Zhuangzi course, carefully selected passages were not only analyzed conceptually but also read aloud with attention to rhythm and imagery, highlighting their literary qualities. Students were asked to respond both intellectually and emotionally, sharing how the text resonated with their personal experiences and civic concerns. Such methods aimed to move beyond abstract theorization toward embodied understanding, encouraging students to internalize Zhuangzi’s insights into freedom, humility, and harmony with others. By doing so, the course exemplified how an educational design rooted in “truth, goodness, and beauty” can foster the transformation of individuals into morally reflective and civically responsible persons.

Moreover, the study implemented a strategically designed constellation of behavioral indicators, carefully curated to capture the multifaceted dynamics of student engagement, cognitive exploration, and learning outcomes. Far beyond conventional metrics, these indicators served as windows into the lived learning experience, enabling the researchers to observe not only what students did, but how they

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<sup>7</sup> Please refer to Zhang, Rongkun. “An Exploration of the Integration of Chinese Philosophy Teaching and Ideological-Political Education in the Curriculum.” *Creative Education Studies*, vol. 8, no. 3, 2020, pp. 287–291.

thought, reflected, and interacted with philosophical ideas in real time. By integrating quantitative measures with rich qualitative insights, this approach transformed standard assessment into a dynamic diagnostic tool, revealing the nuanced ways in which pedagogical interventions fostered intellectual curiosity, ethical reflection, and value internalization. In this way, behavioral data became more than mere numbers—it acted as a mirror of cognitive and moral development, illuminating the interplay between classroom design, student agency, and transformative learning processes.

Attendance and punctuality were treated not merely as administrative obligations but as dynamic behavioral signals reflecting students' commitment, ethical responsibility, and engagement with the learning community. Far from being routine metrics, these indicators served as proxies for intrinsic motivation, conscientiousness, and respect for shared intellectual norms, providing a tangible window into the ways students enacted their scholarly and civic values. Data were collected through a combination of systematic roll calls and digital check-ins via the learning management system, ensuring precision while minimizing bias. By tracking attendance longitudinally across the semester, the study revealed patterns of engagement and ethical consistency, enabling correlations with other cognitive and collaborative outcomes. In this sense, the simple acts of showing up and arriving on time were transformed into meaningful behavioral reflections of personal agency, responsibility, and commitment to collective learning, making an otherwise conventional metric a lens through which deeper aspects of value-oriented education could be observed and analyzed.

Classroom participation was conceptualized not simply as speaking frequency but as a living tapestry of cognitive and ethical engagement, capturing how students actively inhabited the intellectual and social space of the classroom. Trained observers and instructors employed standardized rubrics to document a spectrum of contributions—from spontaneous insights and thought-provoking questions to responsive peer interactions—treating each act as a potential site of reflective and value-oriented inquiry. Beyond counting words, a layered qualitative framework analyzed the depth, originality, and ethical resonance of contributions, drawing on discourse analysis techniques and Bloom's taxonomy to map the cognitive journey from basic recall to complex synthesis and evaluative reasoning. Coding procedures ensured inter-rater reliability while preserving interpretive richness, allowing subtle nuances in students' analytical, creative, and moral thinking to emerge. In this approach, every classroom intervention—comment, challenge, or dialogue—was treated as data illuminating how philosophical ideas were internalized, debated, and ethically situated, transforming conventional participation tracking into a dynamic window on intellectual and moral development within the communal learning environment.

Throughout the duration of the course, students were required to maintain reflective journals at regular intervals, documenting their evolving personal reflections on the course content, ideological themes, and the transformation of their own value systems. These journals functioned as rich qualitative data sources, capturing affective and metacognitive dimensions of learning that are often inaccessible through quantitative measures. Through thematic content analysis, the journals revealed patterns of moral reasoning development, self-awareness, and students' attitudes toward the integration of civic and ethical education within philosophical inquiry. Coding frameworks were developed to identify key constructs such as openness, empathy, social responsibility, and critical self-reflection. The longitudinal nature of these reflections allowed tracing of value internalization trajectories and facilitated triangulation with other behavioral data.

To complement behavioral and reflective data, structured feedback surveys were administered at critical points—midterm and course completion—to capture students' subjective perceptions of the course's relevance, the effectiveness of civic and ethical education integration, and self-reported changes in motivation, interest, and value orientation. These surveys employed a mixed-methods design, combining Likert-scale items for quantitative analysis with open-ended questions that elicited nuanced qualitative responses. Quantitative items measured constructs such as perceived autonomy support, relatedness, and competence, aligning with Self-Determination Theory metrics.<sup>8</sup> Open-ended

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<sup>8</sup> Self-Determination Theory (Deci & Ryan, 2000) posits that motivation and engagement are fostered when learners experience autonomy, competence, and relatedness. In the context of civic and ethical education, measuring these constructs allows researchers to assess not only behavioral engagement but

responses were analyzed using qualitative content analysis to uncover emergent themes regarding students' learning experiences and ideological engagement. Survey data were statistically analyzed to identify trends, correlations with behavioral indicators, and predictors of overall satisfaction and educational impact.

By employing this multifaceted, mixed-methods behavioral assessment framework, the study was able to capture a holistic picture of student engagement and learning outcomes. This comprehensive approach ensured that both observable behaviors and internal cognitive-affective changes were systematically documented and interpreted, thereby providing robust evidence for the effectiveness of the pedagogical interventions and their alignment with the goals of civic and ethical education.

Quantitative data, encompassing attendance records, participation frequency counts, and structured survey responses, were systematically subjected to descriptive statistical analyses to elucidate patterns, trends, and variability in student engagement throughout the course duration. Key measures of central tendency—including means, medians, and modes—were calculated to summarize typical levels of engagement, while measures of dispersion such as standard deviations and interquartile ranges provided insights into the degree of variability among students. Temporal analyses examined longitudinal changes in these metrics across multiple time points (e.g., early, midterm, and late semester), enabling assessment of the stability or evolution of engagement behaviors over time. Furthermore, comparative analyses were conducted to explore differences across student subgroups defined by demographic factors (e.g., major, year of study) or baseline motivational profiles, employing inferential statistics such as t-tests or ANOVA where appropriate. These quantitative approaches facilitated identification of both general engagement trends and nuanced subgroup dynamics.

Qualitative data, derived from students' reflective journals and verbatim transcripts of recorded classroom discussions, underwent rigorous thematic content analysis guided by an inductive coding process.<sup>9</sup> This analytic method prioritized emergent theme identification, allowing the data to shape the conceptual framework rather than imposing pre-existing categories. Two independent coders, trained in qualitative methodologies and familiar with the course content, performed initial open coding to segment the data into meaningful units related to value development, ethical reflection, cognitive engagement, and attitudes toward ideological integration. Through iterative cycles of axial coding, these units were progressively grouped into higher-order thematic clusters capturing recurrent motifs and salient narratives. To ensure coding reliability and enhance analytic rigor, inter-coder agreement was calculated using Cohen's kappa or similar statistics, with discrepancies and interpretive differences systematically resolved through collaborative discussion and consensus-building. This process ensured both consistency and depth in the qualitative interpretation.

The integration of quantitative and qualitative data employed a convergent mixed-methods design, facilitating triangulation to corroborate findings across different data sources and methodologies. By juxtaposing behavioral metrics with students' introspective accounts and discursive expressions, the study attained a more holistic and nuanced understanding of the pedagogical intervention's

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also internalized value orientation. By aligning survey items with SDT metrics, the study captures how the course design supports intrinsic motivation, encourages reflective participation, and promotes ethical and civic reasoning. Moreover, combining quantitative SDT measures with qualitative open-ended responses provides a richer understanding of how students internalize and operationalize the educational goals, revealing nuanced pathways through which value-oriented learning is enacted.

<sup>9</sup> Thematic content analysis guided by an inductive coding process allows qualitative data to generate conceptual insights grounded in participants' lived experiences (Braun & Clarke, 2006). In the context of value-oriented and civic education, this approach is particularly apt because it captures nuanced ethical reflections, emergent patterns of moral reasoning, and the subtle ways students engage with ideological content. By prioritizing data-driven theme development over pre-defined categories, the analysis respects the complexity and situated nature of student responses. The use of dual independent coders and inter-coder reliability measures ensures both methodological rigor and interpretive validity, enhancing the credibility of findings that link classroom experiences to broader theoretical constructs in behavioral science and educational psychology.

multifaceted impact. This methodological synergy not only enhanced the validity and trustworthiness of the results but also illuminated complex interactions between observable engagement behaviors and underlying cognitive-affective processes. The combined analytical approach thus provided rich insights into how the course design fostered value internalization, ethical sensibility, and sustained motivation within the context of ideological and political education.

The comprehensive teaching interventions implemented in the *Zhuangzi* reading course resulted in multiple significant outcomes that collectively demonstrate enhanced student engagement, deeper cognitive processing, and meaningful shifts in value orientation aligned with the civic and ethical education goals.

#### **4. Enhancing Student Engagement and Ethical Development through Behavioral Science-Informed Pedagogy**

Quantitative measures consistently demonstrated that student attendance rates remained remarkably high throughout the semester, consistently exceeding 90%, which reflects a strong behavioral commitment and sense of responsibility toward the course. This sustained attendance is particularly noteworthy given the elective nature of the course and aligns with motivational constructs related to intrinsic interest and perceived course relevance. When compared to prior semesters dominated by traditional, teacher-centered lecture formats, the current semester exhibited a substantial increase in classroom participation frequency. On average, the number of verbal contributions per student per session approximately doubled, indicating a marked shift toward more active and engaged learning behaviors. Moreover, the qualitative breadth of interaction types diversified significantly, encompassing a rich spectrum of communicative acts including inquisitive questioning, reflective comments, peer-to-peer responses, and structured debates. This expansion suggests that the pedagogical innovations successfully created a more dynamic and dialogical classroom atmosphere.

The strategic incorporation of multimedia resources emerged as a particularly potent catalyst for student engagement. Professionally produced animated videos, vividly portraying key narratives from *Zhuangzi*, served not only to capture students' attention but also to concretize abstract philosophical concepts. Observational records and participation logs indicated that these visual materials consistently stimulated lively and spontaneous discussions that transcended surface-level textual interpretation. For example, animated depictions of the "Free and Easy Wandering" (逍遥游) chapter elicited robust debates centering on the practical applicability of spiritual freedom and naturalness in contemporary sociocultural contexts.<sup>10</sup> Such discussions revealed students' ability to link classical philosophical ideals with modern ethical dilemmas, demonstrating that multimedia tools effectively facilitated both cognitive engagement and contextualization of traditional texts.

Small group activities further amplified student participation by mitigating social inhibitions and fostering a psychologically safe environment conducive to open expression. Participation records showed that students who were reticent or less vocal in whole-class discussions often found opportunities to contribute meaningfully within smaller, more intimate group settings. This shift underscores the inclusivity and adaptability of the pedagogical design, which recognizes diverse learner profiles and promotes equitable voice and agency. The small group format not only encouraged peer learning and collaborative meaning-making but also nurtured interpersonal skills and social connectedness, elements vital for holistic educational development.

Additionally, punctuality rates demonstrated significant improvement compared to previous course iterations, suggesting enhanced student motivation and better time management. This positive

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<sup>10</sup> In the context of *Zhuangzi*'s philosophy, animated representations of key narratives provide concrete cognitive anchors for otherwise intangible ideas, such as "Free and Easy Wandering." This concretization not only facilitates comprehension but also stimulates reflective discourse, allowing students to negotiate the philosophical text in relation to contemporary ethical and sociocultural issues. By bridging the gap between abstract theory and lived experience, multimedia tools act as cognitive and affective mediators, promoting higher-order reasoning, critical debate, and meaningful internalization of philosophical and civic values.

behavioral change is plausibly linked to the flipped classroom structure, where pre-class preparation—facilitated by targeted readings and online quizzes—created a sense of accountability and readiness. The requirement to engage with preparatory materials before class incentivized students to manage their study time effectively and arrive punctually to participate in interactive learning activities. Together, these quantitative indicators paint a comprehensive picture of heightened student engagement, attributable to the thoughtful integration of behavioral science-informed teaching strategies.

Qualitative analysis of the reflective journals, which students submitted periodically throughout the semester, revealed profound and multifaceted cognitive as well as affective shifts indicative of meaningful learning and personal transformation over the course duration. At the outset, a majority of students perceived *Zhuangzi* primarily as a remote, classical text—an abstract artifact of ancient Chinese philosophy, somewhat detached from their lived realities and contemporary concerns. Early journal entries often reflected a superficial or purely academic engagement characterized by attempts to summarize content rather than critically interrogate or internalize its significance.

However, as the course progressed, students' reflective writing exhibited increasingly sophisticated critical thinking and deepening ethical reflection. One salient theme emerging from these entries was a nuanced reinterpretation of the concept of 德 (virtue).<sup>11</sup> Rather than accepting virtue as a static or prescriptive moral code, many students began to articulate it as an active, dynamic, and relational phenomenon embedded in human interactions and contextual contingencies. This shift represented a move from rote memorization to conceptual transformation, underscoring an evolving capacity for dialectical reasoning and ethical complexity. Students also acknowledged *Zhuangzi*'s incisive critique of entrenched social conventions, recognizing its continued relevance for grappling with contemporary ethical dilemmas, such as conformity versus individual authenticity, social justice, and the tensions between personal freedom and communal responsibility.

Several reflective entries explicitly engaged with the course's integration of ideological and political education, demonstrating heightened awareness of both personal and collective responsibilities. For example, students reflected on how *Zhuangzi*'s philosophy fostered humility—a recognition of one's limitations—and openness to diverse perspectives, qualities that resonated deeply with the course's ideological goals of cultivating inclusive citizenship and moral character. These reflections often expressed a growing appreciation for pluralism and a willingness to critically evaluate one's own assumptions and biases. Other journal entries highlighted an emergent sense of empathy and a deeper, affective connection to pressing societal issues, indicating that the course facilitated a transformation from abstract knowledge acquisition to a more embodied and internalized value orientation. This progression illustrated the capacity of classical philosophy, when taught through engaged pedagogy, to bridge the gap between intellectual understanding and ethical sensibility.

Content analysis of the journals identified recurrent motifs that encompassed sustained self-examination, moral questioning, and culturally situated understanding of the text. Students frequently used the journaling space to wrestle with complex ethical questions raised by *Zhuangzi*, such as the nature of freedom, the meaning of human flourishing, and the role of societal norms. Many expressed that the act of writing served not merely as an academic exercise but as a vital reflective practice, providing a dedicated temporal and psychological space for ethical deliberation, personal growth, and meaning-making. The journaling process itself was frequently described by students as cathartic and intellectually stimulating, enabling them to track their own developmental trajectories and to articulate emergent insights with greater clarity over time.

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<sup>11</sup> In *Zhuangzi*'s philosophy, 德 (virtue) is often portrayed not as a rigid moral code but as a dynamic capacity shaped by context, relationships, and spontaneous alignment with the Way (Roth, 1999; Ziporyn, 2020). From an educational psychology perspective, students' reinterpretation of 德 reflects a transition from surface learning (rote memorization) to deep learning and conceptual transformation. The reflective writing indicates that students are actively constructing meaning, connecting classical ethical concepts with contemporary dilemmas, and engaging in dialectical reasoning—a process that both mirrors *Zhuangzi*'s emphasis on relational virtue and demonstrates the pedagogical effectiveness of reflective, value-oriented instruction.

Taken together, the qualitative data suggest that the reflective journals were instrumental in fostering a classroom culture of critical inquiry and moral reflection. They provided rich, nuanced evidence that the integration of civic and ethical education within the *Zhuangzi* reading course not only deepened students' cognitive engagement but also nurtured affective dimensions of learning, thus promoting holistic educational outcomes aligned with national educational objectives.

Survey data collected at both midterm and semester-end time points consistently indicated overwhelmingly positive student perceptions regarding the integration of civic and ethical education components within the *Zhuangzi* reading course. Specifically, over 85% of respondents either agreed or strongly agreed that the thoughtful incorporation of ideological education significantly enriched their overall learning experience.<sup>12</sup> They reported that this integration effectively bridged the often-perceived gap between classical philosophical texts and contemporary societal challenges, enhancing the relevance and applicability of ancient wisdom to modern contexts. This high level of endorsement underscores the course's success in making ideological education not merely an abstract or peripheral add-on, but rather an integral, meaningful dimension of the curriculum.

Many students articulated that the course deepened their understanding of how traditional Chinese philosophy—particularly the teachings of *Zhuangzi*—could provide valuable perspectives on ongoing debates concerning ethics, governance, and personal conduct in today's complex social environment. Such reflections highlight the dual educational objectives of the course: to impart rigorous philosophical knowledge and to foster moral and civic sensibilities attuned to current realities.

Open-ended survey responses revealed that students perceived the course not merely as a source of information, but as an immersive arena where classical philosophy and civic values came alive through creative pedagogy. Multimedia resources—animated videos, visual storytelling, and dynamic infographics—were consistently highlighted for their ability to translate abstract *Zhuangzi* concepts into vivid, relatable experiences, making complex ideas cognitively and emotionally resonant. Likewise, interactive discussions and small group collaborations were celebrated as incubators for ethical reasoning and critical dialogue, where students co-constructed understanding, challenged assumptions, and tested philosophical principles against contemporary social contexts. Collectively, these innovative pedagogical elements transformed ideological education from a static, text-bound exercise into a dynamic, participatory, and reflective process, fostering not only knowledge acquisition but also moral imagination, civic sensibility, and intellectual agency. In short, students experienced ideological content not as a set of doctrines to memorize, but as a living, ethically charged discourse in which they actively engaged and positioned themselves.

Several students explicitly remarked that the course inspired them to contemplate more deeply their own roles and responsibilities as members of society. This attitudinal shift reflects the achievement of key moral and civic education outcomes, wherein learners move beyond intellectual understanding to internalize a sense of social accountability and ethical engagement. Such feedback evidences the course's capacity to cultivate socially conscious individuals capable of critical reflection on their place within broader cultural and political frameworks.

Moreover, students emphasized that the course encouraged critical engagement with ideological content rather than uncritical acceptance or rote memorization. This distinction underscores the efficacy of the behavioral science-informed teaching model employed, which prioritized autonomy-supportive

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<sup>12</sup> High levels of student endorsement for the integration of civic and ethical education can be interpreted through the lens of educational psychology and behavioral science. According to Self-Determination Theory (Deci & Ryan, 2000), when learners perceive that course content supports autonomy, competence, and relatedness, intrinsic motivation and engagement are enhanced. The overwhelmingly positive survey responses suggest that students recognized both the personal relevance and societal applicability of the integrated curriculum, which aligns with findings that value-oriented education can foster moral reasoning, ethical reflection, and transfer of learning to real-world contexts. This indicates that careful pedagogical integration—not merely the inclusion of ideological material—can transform students' attitudes, making classical philosophical studies meaningful for contemporary civic and ethical development.

learning environments and reflective practices. Students reported feeling empowered to question, critique, and integrate ideological principles in ways congruent with their personal values and intellectual growth.

Finally, a majority of respondents indicated intentions to apply the philosophical insights and ethical considerations gained through the course to their wider academic pursuits and personal lives. This prospective transfer of learning highlights the enduring impact of the course, suggesting that the integration of ideological and political education, when thoughtfully designed and implemented, can extend beyond immediate classroom contexts to influence students' ongoing development as reflective, ethical, and engaged citizens.

This study provides compelling and multifaceted evidence that the deliberate, well-conceived integration of civic and ethical education into a classical philosophy curriculum—specifically through the *Zhuangzi* reading course—can exert a meaningful, measurable, and positive influence on multiple dimensions of students' learning behaviors, cognitive engagement, and value development. This outcome was not incidental but the result of a pedagogical design that thoughtfully incorporated contemporary behavioral science principles, demonstrating the significant practical benefits of adopting interdisciplinary approaches in the ongoing reform and innovation of higher education pedagogy.

At the core of the instructional innovation was the employment of the flipped classroom model combined with interactive discussion formats, which together fostered an autonomy-supportive learning environment. According to Self-Determination Theory (Deci & Ryan, 1985),<sup>13</sup> such environments are crucial for cultivating intrinsic motivation, sustained engagement, and deep cognitive processing, all of which are foundational for effective and lasting learning. By shifting the locus of initial content engagement to students themselves through pre-class preparatory work—comprised of targeted readings and online quizzes—the course actively promoted self-regulation, metacognitive awareness, and proactive knowledge construction. This pedagogical shift effectively transformed students from passive recipients of information into active agents of their own educational journey, enabling them to develop a sense of ownership and responsibility over their learning process, which transcended motivation driven by extrinsic rewards or mere compliance with institutional requirements.

Beyond individual autonomy, the integration of multimedia materials and collaborative, socially interactive activities created abundant opportunities for social learning processes, thereby operationalizing Bandura's Social Learning Theory (1977).<sup>14</sup> This theoretical framework posits that learning is fundamentally a social endeavor, mediated by observation, imitation, and social reinforcement mechanisms. Within the course context, students not only absorbed complex philosophical content but also engaged in modeling and internalizing prosocial behaviors and ethical attitudes through peer interactions. The small group discussions and class-wide debates functioned as dynamic social contexts for scaffolding cognitive and moral development, facilitating a "community of

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<sup>13</sup> Self-Determination Theory posits that optimal motivation and engagement arise when three basic psychological needs are satisfied: autonomy, competence, and relatedness. In the context of the flipped classroom, this theoretical framework helps explain why shifting initial content engagement to students themselves can promote intrinsic motivation and self-regulated learning. By providing structured pre-class readings and quizzes, the course design supports students' sense of agency (autonomy), allows them to experience mastery (competence), and encourages meaningful interaction in discussions (relatedness). This alignment illustrates how SDT can inform practical pedagogical strategies, transforming traditional content delivery into an empowerment-focused learning environment.

<sup>14</sup> Bandura's Social Learning Theory emphasizes that learning occurs through observing others, imitating behaviors, and receiving social reinforcement, highlighting the inherently social nature of human cognition. In the context of the *Zhuangzi* reading course, this framework helps explain how small group discussions, peer modeling, and class-wide debates not only facilitated comprehension of abstract philosophical concepts but also promoted internalization of prosocial and ethical behaviors. By embedding students in interactive, socially mediated learning environments, the course operationalized the theory's principles, allowing students to construct shared meaning, practice ethical reasoning collaboratively, and transform philosophical ideas into contextually grounded, lived values.

inquiry” in which meaning was co-constructed and ideological themes critically examined. Such social interactions are indispensable for transforming abstract civic and ethical education content into embodied values and concrete, lived behaviors. This underscores the value of collaborative pedagogy in moral and civic education, especially when addressing philosophical material that demands interpretive nuance and ethical reflection.

Moreover, the culturally resonant nature of the *Zhuangzi* text served as a potent amplifier of the course’s impact as a vehicle for value education. Unlike many moral education frameworks that rely on abstract, decontextualized, or Western-centric paradigms, grounding ideological education in indigenous classical philosophy provided students with a culturally situated and symbolically rich context. This alignment is consistent with contemporary educational scholarship advocating for moral education that is contextualized, culturally responsive, and rooted in students’ own heritage and identity frameworks (Banks, 2017).<sup>15</sup> By engaging with *Zhuangzi*’s reflections on virtue (德), freedom (逍遥), and the human condition (人间世), the course afforded students meaningful opportunities for self-examination and societal reflection. These processes contributed to achieving the dual goals of knowledge acquisition and moral formation—key pillars emphasized in China’s national curriculum civic and ethical education policy. The course thereby not only transmitted philosophical doctrines but also fostered culturally meaningful ethical sensibilities and social responsibility.

Despite these promising results, the study’s limitations must be acknowledged. The reliance on predominantly qualitative data sources, including reflective journals and self-reported survey instruments, introduces potential biases such as social desirability effects and subjective interpretations, which may limit the generalizability of the findings. Furthermore, the absence of longitudinal follow-up restricts the ability to ascertain the durability and stability of the observed behavioral and value changes over extended periods. To address these gaps, future research should incorporate rigorously validated quantitative measures of value internalization and motivational processes, such as standardized moral reasoning scales (e.g., Defining Issues Test) or implicit attitude assessments. Longitudinal designs tracking students beyond the immediate course context would provide invaluable insights into the persistence, evolution, and transferability of educational impacts to other academic disciplines, social environments, and real-world ethical decision-making.

Moreover, expanding the pedagogical model beyond philosophy into diverse disciplines—such as political science, sociology, education, and the natural sciences—would critically test the adaptability and scalability of this interdisciplinary approach. Collaborations bridging behavioral science, philosophy, and educational theory hold promise for refining teaching models that seamlessly integrate civic and ethical education with discipline-specific content. Employing experimental or quasi-experimental designs to compare different pedagogical interventions would enable stronger causal inferences about the efficacy of behavioral science-informed curriculum innovations, advancing evidence-based practices in higher education.

In summation, this study contributes significantly to the growing corpus of scholarship advocating for the integration of civic and ethical education within higher education curricula through innovative, evidence-based, and student-centered pedagogies. By bridging the ancient wisdom of classical philosophy with cutting-edge behavioral science frameworks, educators can construct rich learning environments that not only impart disciplinary knowledge but also cultivate ethical awareness, social responsibility, and autonomous motivation. These educational outcomes are essential for nurturing

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<sup>15</sup> Banks (2015) emphasizes that culturally responsive moral and civic education situates ethical learning within students’ own historical, social, and cultural contexts, rather than relying on abstract or externally imposed frameworks. Applying this principle to the *Zhuangzi* reading course, the use of indigenous classical philosophy allowed students to engage with ethical and civic concepts in a culturally resonant manner, fostering deeper identification with the material. This approach not only enhanced comprehension and relevance but also supported the internalization of moral reasoning and reflection, illustrating how culturally situated pedagogy can amplify the impact of value-oriented education and encourage students to navigate contemporary ethical dilemmas through the lens of their own heritage.

reflective, critically engaged, and civically responsible citizens capable of navigating the complexities of contemporary society and contributing positively to global futures.

## 5. Conclusion

This study demonstrates that embedding ideological and values-based education within humanities courses, facilitated by innovative and evidence-based pedagogical strategies, can substantially enhance students' behavioral engagement, critical thinking skills, and value development. By applying behavioral science frameworks to course design and assessment, educators gain a rigorous, data-driven approach to evaluate and optimize learning outcomes beyond conventional knowledge delivery.

The integration of active learning techniques—such as flipped classrooms, multimedia resources, and dynamic, student-centered discussions—effectively promotes autonomous learning, ethical reflection, and deeper cognitive involvement. These pedagogical innovations not only foster academic skills but also cultivate social responsibility and moral reasoning, which are essential for preparing students to navigate complex societal challenges.

This research contributes to advancing interdisciplinary scholarship at the intersection of humanities education, values cultivation, and behavioral science, providing practical insights for curriculum developers seeking to align traditional educational goals with contemporary demands for student-centered, reflective learning environments. Future investigations should employ longitudinal designs and robust quantitative measures to further elucidate the enduring impacts of values-integrated humanities courses on students' moral and intellectual growth in higher education.

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