Teaching Practices, Student Engagement, and Learning Outcomes in China's Ideological and Political Courses: A Mediation Analysis

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ABSTRACT:
Ideological and political courses are compulsory in every Chinese university, yet how their teaching shapes learning remains underexamined. This study examined how five teaching practices—teaching clarity, instructional design, interactive methods, formative feedback, and value integration—relate to learning outcomes in these courses, and whether student engagement mediates those relationships. Using a quantitative cross-sectional design, survey data were collected from 400 undergraduates and analysed with reliability testing, Pearson correlation, multiple regression, and a mediation analysis based on the causal-steps procedure, supplemented by bias-corrected bootstrapping with 5,000 resamples. All five teaching practices were positively and significantly associated with learning outcomes, together explaining 72.5% of the variance, and student engagement partially mediated every relationship, with all indirect effects significant. Interactive methods and value integration were the strongest contributors. The findings extend student engagement theory and constructivist learning theory to a compulsory, value-laden curriculum and identify engagement as the mechanism linking effective teaching to learning.

Keywords: teaching practices, student engagement, learning outcomes, mediation, ideological and political education.

1. Introduction

Teaching quality is widely recognised as a major determinant of learning in higher education. Distinct teaching practices—the clarity of instruction, the design of the course, the use of interactive methods, the provision of formative feedback, and the integration of values—together shape how students participate in learning and how well they perform. International policy frameworks reinforce this view, treating student engagement as an essential competence that effective teaching must cultivate across its behavioural, cognitive, and emotional dimensions (UNESCO, 2018). Yet most of this evidence comes from elective, skills-based courses in individualistic settings; how these mechanisms operate in compulsory, value-laden curricula remains comparatively underexamined.

The context of ideological and political courses in Chinese universities is distinctive. These courses are compulsory for all undergraduates, and their purpose extends beyond the transmission of knowledge to the shaping of attitudes, beliefs, and a

political consciousness aligned with socialist values. Since 2016, national policy has urged universities to make these courses more interactive and more closely connected to students' lives. In practice, however, many students experience them as abstract, theoretical, and disconnected from daily concerns, and when this happens, engagement weakens and learning outcomes fall short of what the curriculum intends. The result is a gap between the stated aims of policy and the lived reality of the classroom, a gap with both pedagogical and broader social significance given the role these courses play in the formation of citizens.

The problem has several interlocking facets. Teaching clarity may be insufficient, leaving abstract political theory poorly understood. Course design often relies on the textbook and remains detached from students' experience. Large classes constrain interaction, so that most students listen passively. Formative feedback is sparse, with assessment frequently confined to a final examination. And value integration can devolve into the recitation of political slogans, prompting resistance rather than internalisation. Each weakness suppresses engagement; together they undermine the dual mission of these courses to convey knowledge and to support moral and political formation.

Against this background, the present study develops and tests a mediation model in which the five teaching practices are hypothesised to influence learning outcomes both directly and indirectly through student engagement. The study pursues two objectives: first, to examine the direct effects of the five teaching practices on learning outcomes; and second, to examine whether student engagement mediates those relationships. In doing so, it brings two established traditions—student engagement theory and constructivist learning theory—to bear on a curricular setting in which they have rarely been tested, asking not only whether effective teaching matters, but how and why it works.

Research across national systems has linked each of the five practices to learning. Teaching clarity is consistently associated with comprehension and motivation, and instructional design—particularly the constructive alignment of activities and assessments with intended outcomes (Biggs, 2003)—shapes the conditions under which students engage. Interactive, dialogic methods predict deeper learning, although interaction succeeds only when it involves genuine cognitive exchange rather than superficial activity. Formative feedback improves self-regulation and performance when it is timely, specific, and actionable (Carless & Boud, 2018). Value integration drives the perceived relevance that sustains engagement in courses with explicit normative content.

Running through this literature is a recurring finding: student engagement frequently mediates the relationship between teaching quality and academic performance (Wong & Liem, 2022). Engagement is understood as the energy a student invests in learning across behavioural, cognitive, and emotional dimensions, and several studies report partial rather than full mediation, with teaching practices retaining a direct effect alongside the indirect path through engagement. This dual-pathway structure is what the present study tests in the Chinese context, where the relationship is complicated by features largely absent from Western studies: compulsory attendance, a politically sensitive subject matter, and the possibility of strategic rather than authentic participation.

Chinese scholarship affirms the importance of clarity, design, and interaction, but also reveals a persistent gap between the rhetoric of reform and its realisation in the classroom. Students approach these compulsory courses with mixed motivations—some from genuine interest, others from obligation—and large classes constrain the interaction and feedback that reform documents call for. Existing studies tend to examine one or two practices in isolation rather than combining several in a single model, and the mediating role of engagement has received limited quantitative attention in this specific curriculum. These conditions make the Chinese case not merely a site at which to apply international teaching theory, but an occasion to extend it, asking whether the general principles of engagement and constructivist learning hold where the goals of cognitive development and value formation are pursued together.

The study is grounded in two complementary theories. Student engagement theory holds that the more physical and psychological energy students invest in educationally purposeful activities, the more they gain; engagement is the bridge between the conditions a university creates and the results students achieve (Astin, 1984; Kuh, 2009). Constructivist learning theory holds that knowledge is actively constructed through interaction and the making of personal meaning rather than passively received (Piaget, 1973; Vygotsky, 1978). Engagement theory predicts that greater investment yields better outcomes; constructivism explains why—because active involvement enables meaning-making and the genuine adoption of values. Together they justify the conceptual framework tested here: the five teaching practices are expected to raise engagement, which in turn improves learning outcomes.

2. Methodology

Design. The study employed a quantitative, cross-sectional survey design, which is well suited to testing relationships among several measured variables in a large sample and aligns with the premise that engagement is a measurable construct mediating the effect of teaching on learning. A cross-sectional design cannot establish causal direction as an experiment would, but it can detect associations and test mediation efficiently across a geographically dispersed national population. Experimental and longitudinal alternatives were judged infeasible: varying teaching practices across sections would require institutional coordination and raise ethical concerns in compulsory courses, while following students across semesters would face high attrition and access constraints.

Participants and sampling. The population comprised undergraduate students enrolled in the compulsory ideological and political courses required of all students in Chinese universities. Using the Krejcie and Morgan (1970) table, a minimum of 384 respondents was required to represent a population of this size at a 95% confidence level with a 5% margin of error; to allow for incomplete responses and support robust analysis, a sample of 400 undergraduates was used (Memon et al., 2020). A stratified random sampling strategy was adopted: universities were first grouped by region and type, and students were then sampled from each stratum, reducing sampling error relative to simple random sampling. Inclusion criteria were enrolment in at least one semester of an ideological and political course, willingness to participate, and the ability to complete an online questionnaire.

Instruments. Data were collected with a structured questionnaire in two parts. The first recorded demographic information: gender, year of study, field of study, university type, and region. The second measured the seven constructs of the study—teaching clarity, instructional design, interactive methods, formative feedback, value integration, student engagement, and learning outcomes—with five items each, for a total of 35 items adapted from instruments validated in prior research. All items were rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A pilot test with a separate group of 30 students confirmed acceptable internal consistency, and minor wording adjustments were made on that basis (Bujang et al., 2024).

Procedure. The questionnaire was distributed online to students across the sampled institutions. Participation was voluntary and anonymous, and informed consent was obtained before completion. Responses were screened for completeness, yielding a final dataset of 400 complete cases with no missing data.

Data analysis. Analysis proceeded in four stages. Descriptive statistics summarised the central tendency and dispersion of each construct; Cronbach's alpha assessed the internal-consistency reliability of the seven scales; Pearson correlations examined the bivariate associations among the constructs; and multiple linear regression, organised according to the causal-steps logic of Baron and Kenny (1986), tested both the direct effects of the teaching practices on learning outcomes and the mediating role of student engagement. To strengthen the mediation analysis beyond the causal-steps procedure, the indirect effects were additionally evaluated with bias-corrected bootstrap confidence intervals based on 5,000 resamples (Preacher & Hayes, 2004), and multicollinearity was assessed through variance inflation factors.

Analyses were conducted in standard statistical software on the full sample of 400 cases.

3. Results

Sample profile. The 400 respondents were close to evenly divided by gender (205 women, 51.2%; 195 men, 48.8%). The sample was concentrated in the later years of study: third-year students formed the largest group (36.2%), followed by fourth-year (26.8%) and second-year (24.0%), with first-year (7.2%) and extended-study students (5.8%) making up the remainder. Fields of study were well distributed, led by the social sciences (29.5%) and engineering and technology (25.2%). Provincial universities (35.2%) and research universities (32.5%) together accounted for roughly two-thirds of the sample, and regionally, Eastern China (37.0%) and Central China (29.5%) predominated, followed by Western China (23.0%) and Northeastern China (10.5%).

Table 1 Demographic Profile of Respondents (N = 400)

Characteristic	n	%
Gender: Female	205	51.2
Gender: Male	195	48.8
Year: First year	29	7.2
Year: Second year	96	24.0
Year: Third year	145	36.2
Year: Fourth year	107	26.8
Year: Extended study	23	5.8
Field: Social Sciences	118	29.5
Field: Engineering / Technology	101	25.2
Field: Natural Sciences	81	20.2
Field: Humanities	74	18.5
Field: Other	26	6.5
Institution: Provincial university	141	35.2
Institution: Research university	130	32.5
Institution: Vocational college	65	16.2
Institution: Private / independent	46	11.5
Institution: Other	18	4.5
Region: Eastern China	148	37.0
Region: Central China	118	29.5
Region: Western China	92	23.0
Region: Northeastern China	42	10.5

Note. Percentages may not sum to exactly 100 due to rounding.

Reliability. All seven scales demonstrated strong internal consistency. Cronbach's alpha ranged from .891 for formative feedback to .915 for value integration, with teaching clarity at .905, instructional design at .904, interactive methods at .899, student engagement at .893, and learning outcomes at .896. Every coefficient comfortably exceeded the conventional .70 threshold, indicating that the items within each construct measured a coherent underlying dimension.

Table 2 Internal-Consistency Reliability of the Seven Scales

Construct	Items	Cronbach's α
Teaching clarity	5	.905
Instructional design	5	.904
Interactive methods	5	.899
Formative feedback	5	.891
Value integration	5	.915
Student engagement	5	.893
Learning outcomes	5	.896

Note. All coefficients exceed the conventional .70 threshold.

Descriptive statistics. Perceptions of all seven constructs were moderately positive, with composite means between 3.40 and 3.65 on the five-point scale. Teaching clarity received the highest mean (M = 3.64, SD = 1.00), followed by value integration (M = 3.59, SD = 1.02) and instructional design (M = 3.57, SD = 0.98). Learning outcomes stood near the midpoint (M = 3.54, SD = 1.00). The lowest means were recorded for interactive methods and student engagement, which were identical at M = 3.40. The relatively low rating of interactive methods is consistent with the literature on large-class instruction, and the parallel low rating of engagement anticipates the relationship examined in the mediation analysis.

Table 3 Descriptive Statistics for the Seven Constructs (N = 400)

Construct	M	SD	Min	Max
Teaching clarity	3.64	1.00	1.00	5.00
Instructional design	3.57	0.98	1.00	5.00
Interactive methods	3.40	1.02	1.00	5.00
Formative feedback	3.43	1.00	1.00	5.00
Value integration	3.59	1.02	1.00	5.00
Student engagement	3.40	1.02	1.00	5.00
Learning outcomes	3.54	1.00	1.00	5.00

Note. Items measured on a five-point Likert scale

(1 = strongly disagree, 5 = strongly agree).

Correlations. The Pearson correlation matrix showed positive and statistically significant associations among nearly all constructs. The strongest relationship was between student engagement and learning outcomes ($r = .78$, $p < .001$), a magnitude that anticipates the central role of engagement in the model. Among the teaching practices, value integration showed the strongest associations with both learning outcomes ($r = .56$) and engagement ($r = .52$). Each practice correlated with engagement between .46 and .52 and with learning outcomes between .48 and .56, all significant at $p < .001$. The single exception was the weak correlation between teaching clarity and interactive methods ($r = .06$, $p = .25$), indicating that these two practices vary largely independently.

Table 4 Pearson Correlations Among the Seven Constructs (N = 400)

	1	2	3	4	5	6	7
1. TC	—						
2. INSD	.22	—					
3. IM	.06	.18	—				
4. FF	.18	.21	.19	—			
5. VI	.22	.19	.23	.28	—		
6. SE	.46	.49	.47	.47	.52	—	
7. LO	.48	.50	.49	.50	.56	.78	—

Note. TC = teaching clarity; INSD = instructional design; IM = interactive methods; FF = formative feedback; VI = value integration; SE = student engagement; LO = learning outcomes. All correlations significant at $p < .001$ except TC–IM ($p = .25$).

Direct effects. Entered together in a multiple regression, the five practices explained 72.5% of the variance in learning outcomes, a strong and significant model, $F(5, 394) = 207.49$, $p < .001$. Each practice was a significant positive predictor: interactive methods ($\beta = .31$) and value integration ($\beta = .31$) were the largest, followed by teaching clarity ($\beta = .29$), instructional design ($\beta = .27$), and formative feedback ($\beta = .25$), all at $p < .001$. A parallel model predicting student engagement was likewise significant, explaining 65.1% of the variance, $F(5, 394) = 146.96$, $p < .001$. Variance inflation factors in both models were close to 1.0, confirming that multicollinearity did not compromise the estimates.

Table 5 Standardised Regression Coefficients for the Five Teaching Practices

Predictor	$\beta \rightarrow$ Learning Outcomes	$\beta \rightarrow$ Engagement
Teaching clarity	.29	.28
Instructional design	.27	.28
Interactive methods	.31	.30
Formative feedback	.25	.23
Value integration	.31	.28

Note. Learning-outcomes model: $R^2 = .725$, $F(5, 394) = 207.49$, $p < .001$. Engagement model: $R^2 = .651$, $F(5, 394) = 146.96$, $p < .001$. All coefficients significant at $p < .001$.

Mediation. The conditions for mediation were met at each causal step: the five practices significantly predicted learning outcomes; they significantly predicted engagement; engagement significantly predicted learning outcomes; and, when engagement was added, the direct effects were reduced but remained significant. Considered alone, engagement was a powerful predictor of learning outcomes ($\beta = .78$, explaining 61.4% of the variance). In the full model containing both the practices and engagement, the variance explained rose to 75.2%, $F(6, 393) = 198.37$, $p < .001$, and engagement remained a significant predictor ($\beta = .28$, $p < .001$). The coefficient for each practice declined once engagement entered the model—teaching clarity from .29 to .22, instructional design from .27 to .19, interactive methods from .31 to .23, formative feedback from .25 to .18, and value integration from .31 to .23—so that the pattern is one of partial mediation.

Table 6 Direct Effects Before and After Adding Student Engagement

Predictor	β (total)	β (with mediator)	Reduction
Teaching clarity	.29	.22	.07
Instructional design	.27	.19	.08
Interactive methods	.31	.23	.08
Formative feedback	.25	.18	.07
Value integration	.31	.23	.08

Note. Full model with engagement: $R^2 = .752$, $F(6, 393) = 198.37$, $p < .001$; engagement $\beta = .28$, $p < .001$. All direct effects remained significant, indicating partial mediation.

Bootstrap indirect effects. Each indirect path was evaluated with bias-corrected bootstrap confidence intervals based on 5,000 resamples. All five indirect effects were significant, as none of the confidence intervals contained zero: value integration (.145, 95% CI [.089, .203]), instructional design (.137, 95% CI [.082, .194]), interactive methods (.130, 95% CI [.078, .186]), formative feedback (.130, 95% CI [.081, .187]), and teaching clarity (.127, 95% CI [.079, .179]). The narrow spread across the five predictors indicates that engagement does not respond disproportionately to any single teaching practice; rather, all five contribute to learning outcomes through engagement at a broadly comparable magnitude.

Table 7 Standardised Indirect Effects Through Student Engagement With Bootstrap Confidence Intervals

Predictor	Indirect effect	95% CI [LL, UL]
Teaching clarity	.127	[.079, .179]
Instructional design	.137	[.082, .194]
Interactive methods	.130	[.078, .186]
Formative feedback	.130	[.081, .187]
Value integration	.145	[.089, .203]

Note. Bias-corrected bootstrap confidence intervals based on 5,000 resamples. All indirect effects are significant; no interval includes zero. LL = lower limit; UL = upper limit.

4. Discussion

The findings answer both research questions. First, all five teaching practices were positively and significantly associated with learning outcomes. Because the design is cross-sectional and based on self-report, these are best understood as robust predictive associations rather than causal demonstrations. The relative magnitudes are instructive: interactive methods and value integration emerged as the largest contributors, a pattern consistent with both Astin's (1984) account of involvement and the constructivist emphasis on dialogic, meaningful activity. In a curriculum where content can be perceived as one-way transmission, the prominence of interaction suggests that opportunities to discuss, question, and connect ideas to lived experience matter especially, while the prominence of value integration indicates that ideological content is learned more effectively when connected to students' real concerns.

Second, student engagement partially mediated each of the five relationships. The structure of association runs along two parallel routes: a direct route from teaching practice to learning outcome, and an indirect route through engagement. Because both routes remained significant, neither is exclusive. Well-designed teaching appears insufficient on its own unless it also succeeds in eliciting genuine engagement; the bootstrap-confirmed indirect paths indicate that part of teaching's association with outcomes operates precisely through the degree to which students become engaged. That the indirect effects were so similar in magnitude reinforces a single lesson: engagement is cultivated not by any one technique but by a coordinated combination of practices (Wong & Liem, 2022).

The study contributes to student engagement theory by demonstrating that engagement retains explanatory power in a compulsory, value-laden curriculum, which differs markedly from the elective, skills-based courses where most engagement research has been conducted; this broadens the conditions under which the theory holds rather than challenging it. With respect to constructivist learning theory, the prominence of interactive methods and value integration supports the proposition that learning occurs through dialogic and contextually meaningful activity, and the partial-mediation result specifies engagement as a measurable empirical correlate of the active meaning-making that constructivism theorises but rarely tests directly. The two theories prove complementary: the study casts learning in value-directed compulsory courses as a relational process and identifies engagement as the link between the constructivist emphasis on meaning-making and the engagement-theory emphasis on involvement.

These findings carry practical implications for those who teach and design these courses. Clarity remains foundational: lecturers should decompose difficult ideas, connect them, and make the purpose of each lesson explicit rather than assuming that exposure alone conveys abstract theory. Course design deserves treatment as a substantive determinant of engagement rather than an administrative formality, which argues for institutional investment in training on constructive alignment (Biggs, 2003). Interactive methods, among the strongest predictors, suggest that these courses are most effective when students discuss, question, and respond rather than listen passively. Formative feedback should be strengthened through more immediate, specific, process-oriented assessment rather than reliance on a final examination (Carless & Boud, 2018). Value integration indicates that values are best connected to students' interests, social experiences, and future responsibilities. Finally, the robust role of engagement implies that it should be treated as a strategic teaching outcome in its own right.

Several limitations should be acknowledged. The cross-sectional design precludes causal inference; longitudinal or quasi-experimental designs would allow within-person change and intervention effects to be examined. The reliance on self-report raises the possibility of common-method bias, particularly in a politically sensitive setting; triangulation with observation, instructor ratings, or performance records would mitigate this. The analysis used Cronbach's alpha and the causal-steps procedure rather than confirmatory factor analysis and structural equation modelling, although the bootstrap analysis already strengthens the mediation evidence. The sample, concentrated in the later years of study and in eastern and central institutions, was not perfectly proportionate to the national distribution. And the single-mediator model leaves open the contribution of related mechanisms such as motivation, self-efficacy, and perceived autonomy support.

5. Conclusion

This study examined how five teaching practices—teaching clarity, instructional design, interactive methods, formative feedback, and value integration—relate to learning outcomes in China's compulsory ideological and political courses, and whether student engagement mediates those relationships. Drawing on survey data from 400 undergraduates, it found that all five practices were positively and significantly associated with learning outcomes, that engagement was strongly associated with outcomes, and that engagement partially mediated each of the five relationships, with the indirect paths confirmed by bootstrap testing. The effectiveness of these courses is therefore multidimensional: it depends on a coordinated combination of clear explanation, coherent design, genuine interaction, useful feedback, and meaningful value relevance, and it works in part through the degree to which students engage.

Future research should pursue the agenda implied by these limitations: longitudinal and quasi-experimental designs to support causal inference; multi-source data to reduce common-method bias; structural equation modelling with bootstrapped indirect effects to test construct validity more fully; regionally stratified sampling to enable multi-group comparison; replication across course types and national contexts; and multiple-mediator models that isolate the contributions of motivation, self-efficacy, and perceived autonomy support alongside engagement. Pursuing this agenda would deepen

and extend the account offered here. What the present study establishes, within its scope, is that engagement is the thread connecting good teaching to genuine learning in a curriculum where that connection matters a great deal.

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