Evaluation and Analysis of College Students' General Education Courses from the Perspective of Learning Experience

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Abstract: This study explores undergraduate students' experiences with general education courses and examines the factors influencing these experiences, with the aim of providing insights for improving course design and implementation. From April to June 2024, 474 students from a university in Hangzhou were surveyed using an anonymous questionnaire distributed both online and in person. The questionnaire covered demographic information, awareness of general education, and a standardized scale assessing learning experiences. After excluding invalid responses, 421 valid questionnaires were collected, yielding a response rate of 88.81%. Statistical analysis using SPSS 27.0 revealed that gender, academic year, political affiliation, and place of origin significantly affected students' learning experiences (P < 0.05). Overall, students expressed a high level of satisfaction, with interest and perceived relevance of course content being key factors influencing engagement. Notably, male students and sophomores reported higher levels of satisfaction.

Keywords: General Studies, Learning Experiences, College Students

1. Introduction

General education constitutes a vital component of higher education. It not only fosters students' critical thinking, communication, judgment, and discernment skills, but also serves as a fundamental avenue for nurturing well-rounded individuals across moral, intellectual, physical, aesthetic, and practical domains^[1].General education enables students with diverse academic backgrounds to engage with a broad spectrum of disciplines and intellectual traditions, thereby expanding their knowledge systems and contributing to the development of a well-rounded personality^[2], It is characterized by its interdisciplinary and cross-professional scope. In recent years, driven by the rise of globalization and the knowledge-based economy, the significance of general education has become increasingly pronounced, making it a focal point in the reform of higher education^[3]. The Ministry of Education has explicitly emphasized the importance of general education in universities, advocating for its role in fostering the holistic development of students. However, despite its wide theoretical recognition, the practical implementation of general education continues to face multiple challenges, including the alignment of course content with discipline-specific curricula, pedagogical innovation, and disparities in the quality of online offerings. These challenges have led to low completion rates, reduced student engagement, and suboptimal learning experiences in practical settings^[4]. Some general education courses enroll more than one hundred students. Although a blended learning model—combining online and offline instructionis employed, insufficient supervision and evaluation mechanisms frequently lead to unsatisfactory learning outcomes. Therefore, this study surveyed undergraduate students at a university in Hangzhou to examine their learning experiences in general education courses and to identify influencing factors, with the goal of offering evidence-based recommendations to support the enhancement of general education in higher education.

2. Objects and Methods

2.1 Objects of the study

Between April and June 2024, a convenience sampling method was employed to recruit undergraduate students from a university in Hangzhou. An anonymous questionnaire survey was administered both online via the Wenjuanxing platform and through in-person distribution. The inclusion criteria were: (1) being a currently enrolled undergraduate student, and (2) providing informed consent and agreeing to participate voluntarily in the study. The exclusion criterion was: individuals who declined to participate in the study.

2.2 Methods of investigation

The questionnaire comprised three sections. The first two sections focused on demographic information and students' awareness and experiences regarding general education courses. These sections were developed by the researchers and included items on gender, academic year, major, factors influencing classroom concentration in general education courses, views on interdisciplinary and crossdisciplinary learning, and evaluations of course satisfaction. The third section comprised a scale designed to assess students' learning experiences in general education courses.Drawing on a review of relevant literature, the research team adopted the College Elective Course Teaching Quality Evaluation Questionnaire developed by Huang Juan et al., [3] which was informed by the College Student Experience Questionnaire (CSEQ), the National Survey of Student Engagement (NSSE), and Australia's Course Experience Questionnaire (CEQ). The questionnaire comprises two subscales: one assessing the experience of the learning process, and the other evaluating the experience of learning outcomes. The subscales demonstrated high internal consistency, with Cronbach's alpha values of 0.917 for the learning process scale and 0.911 for the learning outcomes scale, confirming the reliability and validity of the instrument. The learning process subscale consists of five dimensions: effective teaching, in-course communication and feedback, clarity of goals and standards, appropriate level of difficulty and workload, and fair assessment. The learning outcomes subscale comprises two dimensions: perceived improvement in competencies and overall course perception. Responses were recorded using a five-point Likert scale, where 1 indicated "strongly disagree" and 5 indicated "strongly agree."

2.3 Statistical Analysis

Data were first entered and cleaned using Microsoft Excel, followed by statistical analysis conducted with SPSS version 27.0.Descriptive statistics, including frequencies and percentages, were used to summarize demographic characteristics of the participants. Independent sample t-tests were used to compare means between two groups, while one-way analysis of variance (ANOVA) was employed for comparisons among multiple groups. Multiple regression analysis was conducted to identify factors influencing learning experience scores. A p-value less than 0.05 was considered statistically significant.

3. Results

3.1 General information on survey respondents

A total of 474 questionnaires were distributed. After excluding 38 incomplete responses and 15 with completion times under 100 seconds, 421 valid responses were retained, resulting in a valid response rate of 88.81%. Among the respondents, 95 were male (22.6%) and 326 were female (77.4%). The majority of participants were first- and second-year students, accounting for 72.4% and 19.7%, respectively. The primary reason for selecting general education courses was interest in course content, cited by 192 students (45.6%). The leading factor affecting students' concentration in general education courses was the perceived irrelevance or lack of interest in course content, reported by 45.4% of respondents. The most preferred instructional method was traditional lecturing (28%), followed by video-based learning (22.8%).

3.2 Analysis of differences in college students' learning experience in general education courses

This study examined the impact of individual student characteristics on their learning experiences in general education courses through a comparative analysis. Results revealed statistically significant

associations between students' learning experiences and variables such as gender, academic year, political affiliation, and residential location (P < 0.05)(Table 1).One-way analysis of variance (ANOVA) revealed significant differences in learning experiences across academic years (F = 8.600, P < 0.05).Sophomore students exhibited the highest satisfaction levels (M \pm SD = 3.97 \pm 0.65).Regarding political affiliation, students who were Communist Party members demonstrated the highest satisfaction with their learning experience (M \pm SD = 4.22 \pm 0.66).Students residing in municipalities or provincial capital cities reported more favorable learning experiences (M \pm SD = 3.88 \pm 0.60).

Table 1 Differential analysis of college students' learning experience in general education courses

Variable			N	$M\pm SD$	F	P	
Learning	Gender	Male	95	3.87±0.64	7.520	< 0.05	
Experience		Female	326	3.83±0.43			
	Academic	Freshman	305	3.66±0.49	8.600	<0.05	
	Year	Sophomore	83	3.97±0.65			
		Junior	27	3.93±0.74			
		Senior	6	3.54±0.76			
	Political	Party Member	10	4.22±0.66	6.439	< 0.05	
	Affiliation League		282	3.68 ± 0.50			
		Masses	129	3.81±0.65			
	Residential	Rural or Town	201	3.77±0.55	3.306	< 0.05	
	Location	County or Small City	184	3.66 ± 0.55			
		Municipality or 36 3.8		3.88±0.60			
		Provincial Capital					

3.3 Multifactors Analysis of Influencing College Students' Learning Experience in Liberal Studies Courses

We used scores from learning experience and outcome questionnaires as dependent variables. Independent variables included only those identified as statistically significant in the preceding univariate analysis. A multiple linear regression analysis was subsequently performed. The multifactorial analysis revealed that both gender and academic year had statistically significant effects on students' experiences and learning outcomes in general education courses. Among the identified factors, academic year exerted the most substantial effect (Table 2).

Table 2 Multifactor analysis

Learning Outcomes

Learning Experience						Learning Outcomes			
Variable	В	SE	β	t	P	SE	β	t	P
Gender	-0.152	0.065	-0.113	-2.345	< 0.05	0.072	-0.102	-2.101	< 0.05
Academic Year	0.141	0.041	0.168	3.469	< 0.05	0.045	0.164	3.363	< 0.05
Political Affiliation	0.066	0.055	0.059	1.210	0.227	0.061	0.034	0.687	0.492
Place of Residence	-0.017	0.042	-0.020	-0.407	0.684	0.047	0.030	0.629	0.530

Learning Experience

4. Discussion

4.1 General education satisfaction among college students exhibits a predominantly positive trend

The findings of this study indicate that 79.1% of surveyed students reported high overall satisfaction with general education courses, suggesting that such courses are, to a certain extent, aligned with students'academic needs and expectations. Specifically, most respondents acknowledged the value of instructional quality, clearly defined course objectives, interactive communication, diverse assessment strategies, and the opportunities for interdisciplinary and cross-major learning. These results are consistent with the core objectives of general education—namely, to cultivate students' holistic competencies—and underscore the constructive role such courses play in fostering multidimensional academic and personal development. However, the survey findings reveal that the primary factor undermining students' engagement in general education courses is the perceived irrelevance of the content and a general lack of interest. Although many students are initially drawn to appealing course titles, they often find the actual content monotonous, which leads to diminished classroom participation and limited collaborative engagement. Interest has long been recognized as a critical motivational driver

that compels students to invest significant time and effort in academic activities^[5]. This study found that students gave relatively favorable ratings for communication and feedback in general education courses, whereas evaluations of teaching quality were comparatively lower. At present, general education classrooms predominantly employ a unidirectional teaching model, often characterized by a pervasive "silent atmosphere." Diversified instructional approaches are more effective in stimulating student engagement and play a critical role in enhancing pedagogical outcomes. As reported in the study by Yang Tianhua et al.^[6], A modular, relay-style instructional model involving multiple instructors facilitates a pedagogical shift from rote knowledge delivery to the cultivation of critical thinking, holistic competence, and transferable skills. This flexible approach integrates structured discussions, formal debates, team-based collaboration, literature exploration, and oral communication training. Through instructional practice, students are subtly guided to develop divergent thinking, nurturing their intrinsic motivation and intellectual curiosity for problem exploration.

4.2 Interdisciplinary learning as a cornerstone for fostering collaborative innovation in general education

The importance of interdisciplinary learning in general education has become increasingly pronounced, particularly in the context of today's knowledge-driven economy and global interconnectedness. Survey data revealed that 63.2% of students perceived cross-disciplinary and crossmajor learning as highly important, underscoring their recognition of the value of integrated, multidomain knowledge. For instance, the interdisciplinary general education course Historical Narratives of the Chinese Economy focuses on linking traditional legacies with modern developments and strategically incorporates global perspectives to enrich the breadth and depth of the curriculum^[7]. This approach enables students to identify, reflect upon, and critically analyze problems, thereby fostering more dynamic and interactive classroom engagement.It empowers students to transcend conventional disciplinary boundaries as they explore solutions to complex problems. In doing so, they broaden their intellectual horizons and are encouraged to discover, synthesize, and apply interdisciplinary knowledge in an integrative manner. As a result, this pedagogical strategy fosters the development of talent equipped with interdisciplinary collaborative innovation capabilities. However, a common pitfall among instructors is the over-specialization of general education courses, stemming from the misconception that such courses are merely auxiliary to disciplinary education [8]. The curriculum design of general education courses should be grounded in the core philosophy of liberal education and aligned with students' genuine learning needs^[9].

4.3 Analysis of factors influencing students' learning experiences in general education courses

Multivariate analysis revealed that both gender and academic year exerted statistically significant effects on students' learning experiences in general education courses. The analysis indicated that male students consistently scored higher than their female counterparts in both perceived learning experience and learning outcomes. Male students reported an average score of 3.87, slightly higher than the 3.83 reported by female students. This finding suggests that, despite females comprising the majority of the sample (77.4%), male students reported a more favorable learning experience. One possible explanation is that male students may differ in terms of classroom engagement or course-related expectations. These findings offer pedagogical insights, suggesting that instructors might adapt their teaching strategies to better address gender-specific learning traits and enhance instructional effectiveness. Academic year also emerged as a salient factor affecting the quality of students' learning experiences. Sophomore students reported the highest levels of satisfaction, potentially due to their greater adaptation to university life, as well as more developed reading habits and learning strategies. In contrast, first-year students may still be acclimating to the academic demands, instructional styles, and overall pace of university-level learning[10]. Therefore, in designing general education curricula, universities should account for the diverse developmental needs of students at different academic stages, with particular emphasis on offering enhanced support and guidance for first-year students.

4.4 Optimizing Course Design and Pedagogical Approaches

With the rapid advancement of the digital age, online general education courses have become increasingly prevalent, accompanied by a substantial expansion in educational resource sharing. University students now benefit from nationwide access to distinguished instructors via online video lectures, live-streamed classes, MOOCs, and micro-lectures. Online general education courses are gaining widespread popularity, featuring broad curricular coverage across diverse academic disciplines,

which greatly expands students' intellectual horizons. Additionally, they help mitigate the shortage of qualified teaching staff at many institutions. A study conducted by Wang Yanlong et al. revealed that the majority of students favored a blended learning model that integrates both online and in-person instruction^[11]. Students are often able to audit general education courses online prior to formal enrollment, allowing them to make informed decisions based on individual interests. Instructors responsible for general education courses often fall into one of two pedagogical extremes when determining course content. First, some instructors overlook students' prior academic preparation, directly transplanting disciplinary course frameworks into general education classrooms, thereby impeding students' comprehension. Second, general education is often misinterpreted as a superficial or oversimplified derivative of other disciplinary domains^[12]. Instructors serve not merely as content deliverers, but as architects and facilitators of general education experiences. Through lectures, seminars, and guided readings, they are positioned to cultivate students' intellectual maturity and comprehensive growth—ultimately bringing them closer to the essential aims of education^[13]. However, in actual classroom practice, meaningful interaction and dialogical engagement remain largely absent from the pedagogical horizon of many instructors.

4.5 Limitations and Directions for Future Research

This study is subject to several limitations in terms of data collection and analysis, such as a relatively small sample size and a geographically constrained sample drawn from a single university in Hangzhou. These constraints may limit the generalizability and external validity of the findings. Future research should consider expanding the sample scope to encompass institutions of varying types and from diverse geographic regions, thereby yielding more comprehensive and generalizable insights. In addition, future studies may delve deeper into other potential influencing variables—such as students' intrinsic motivation or instructors' pedagogical approaches—to inform more refined strategies for the design and implementation of general education curricula.

5. Conclusion

In summary, this study identified critical factors influencing college students' learning experiences in general education courses and proposed evidence-based recommendations for pedagogical enhancement. These findings provide not only practical guidance for improving general education practices in higher education, but also establish a foundational basis for continued scholarly inquiry in the field.

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