

# Best Practices of Liberal Arts Education: Curricula in Liberal Arts Colleges<sup>1</sup>

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**Abstract.** As the primary example of best practice of liberal arts education, curricula in American liberal arts college have some distinctive features. Guided by the principle of integrating curriculum breadth and depth, both general education and major courses in liberal arts colleges may develop in a balanced way. Even the curriculum implementation at liberal arts colleges is fully reflective of the idea of liberal arts education. Small class sizes enhance students' participation and promote intimate relations between faculty and students, and teachers' investment in teaching occupies most of their time, which provides the conditions for high quality teaching. With the full cooperation of faculty, interdisciplinary curricula and majors are being developed continuously. All of these factors contribute to the nature of liberal arts education in liberal arts colleges' curricula.

**Keywords:** liberal arts college, liberal arts education, curriculum design principles, curriculum structure, curriculum implementation

## Introduction

As higher education becomes increasingly integrated into social life, liberal arts colleges continue to focus on traditional liberal arts education, with the goal of cultivating students' minds. This cultivation leads them to become more and more detached from the American community. Liberal-arts students have become virtual academic islands who regard applied learning as secondary to mental training (Lang, 1999). Beyond this, the academic character of a liberal arts education in a competitive environment has caused liberal arts colleges to lose favor with students.

Within the context of higher education, questions regarding liberal arts education are frequently raised. Over the past 30 years, one of the most critical changes in American higher education has been the gradual shrinking of the arts and sciences core of education and the continuous expansion of

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vocational and professional programs (Brint, Riddle, Turk-Bicakci, & Levy, 2005). Enrollments in the liberal arts, particularly English, literature, and the other humanities, have declined precipitously while enrollments in vocational education have increased sharply (Kimball, 2015).

This is not to say, however, that the value of liberal arts education has diminished. As the essence of American higher education, liberal arts education embodies the spirit of democracy, even the American spirit. Liberal arts education is perhaps more important now than ever before. Even some research universities have been incentivized to become more liberal arts focused as they aim to be more competitive in the undergraduate market. These kinds of universities, such as Harvard and Duke, can be called “liberal arts research universities” (Brint, Riddle, Turk-Bicakci, & Levy, 2005). Compared to research universities, how is liberal arts education unique in liberal arts colleges? The notable features of American liberal arts colleges include their small size and creation of a residential immersive learning community, insisting on a four-year liberal arts education which includes all students and the whole campus. The academic regimen of liberal arts colleges was intended to develop personal character and intellect, to achieve the ultimate goal of training “the whole person,” who is prepared to meet civic responsibilities intelligently (Lang, 1999). These features, including their small size and a focus on intellectual and personal development, have created an institutional climate particularly effective in shaping student development (Hanson, Weeden, Pascarella, & Blaich, 2012). The critical component of a liberal arts college is found in the aims and objectives (i.e., the breadth of learning and the cross-subject integration of learning) of the curriculum (Crimmel & Henry, 1993). Curriculum is an essential element of the liberal arts educational tradition, and all decisions made by liberal arts colleges are rooted in the content and form of their educational programs (Kushner, 1999). It can be said that curricula in liberal arts colleges define the best practice of liberal arts education.

There is a large body of relevant literature on the curriculum of the liberal arts college. Results from a thorough search of the literature suggest that these studies focus mainly on the various elements of the curriculum, teaching approaches, and curricular reform at liberal arts colleges. The breadth and depth of curriculum elements are two key components of the liberal arts curriculum: “Learning across the curriculum remains important at the undergraduate level, and the depth component of the curriculum often culminate in some kind of large senior projects” (Bailyn, 2020, p.164).

How can a liberal arts college become more liberalized? The program of general education should be directed toward intelligent, engaged citizenship; the program of specialized education should train students not for a specific calling but for a group of related occupations (Klapper, 1947). In addition, as for the design and innovation of the teaching approach in the liberal arts curriculum, scholars often choose one subject or one specific course as a case study. Stewart (2004) discussed the teaching approach of the University Seminar at Seattle Pacific University. Moor and Roberts (1989) explored statistics in the liberal arts, the teaching of statistics, and the role of a statistician at a liberal arts college. Following the case studies of two different at-risk students in studying,

Applegate, Quinn, and Applegate (1994) summarized a new integrated approach to teaching reading that was needed to help college students struggling with reading skills to learn to cope with advanced academic material. In addition, adding research activities to an undergraduate business course has been regarded as an innovative teaching strategy for improving educational standards (Griesemer & James, 2011, p.742). The most discussed issue is curricular reform. Some reforms that have been studied were simply administrative, while others were inspired by the desire to improve the educational facilities of the colleges. Real curricular revisions begin with setting rational objectives for the projects (Binkley, 1938). Other curricular adjustments are responses to the pressures of vocationalism (Paulsen, 1990).

Before proceeding, it is necessary to clarify two phrases: liberal arts education and general education. Here we use “liberal arts education” rather than general education; while some find the two terms synonymous (Pattison, 1977), they do differ somewhat. General education and liberal arts education are often “the shared part of the curriculum required for most students” (Godwin & Altbach, 2016). General education is multidisciplinary because it requires students to take various courses from a wide range of subjects. By comparison, liberal arts education is interdisciplinary because it integrates different ways of understanding the self and cultivates students’ critical thinking and problem-solving abilities, moral quality, and sense of social responsibility (Jung & Fajardo, 2019, p.8-9). The concept of liberal arts education is more representative of the current idea of liberal arts colleges. Establishing more interdisciplinary courses is the current trend in liberal arts colleges’ curricula.

This paper aims to explore the best practice of liberal arts education—the liberal arts college—in terms of the curriculum, to learn how to better handle the relationship between general education and professional education. Some key elements, such as the design principles, structure, and implementation methods of the curriculum, are included. The section on curriculum components focuses on how to establish, organize, and arrange them, and the section on curriculum implementation methods mainly explores the uniqueness and innovation of teaching methods. The data for this study came from the rankings of the top 50 liberal arts colleges in the 2020 *U.S. News and World Report*, with a focus on the top 15. The sample was balanced according to size (with enrollments of about 2000) and relatively high selectivity (U.S. News & World Report, 2020). Retaining the common educational idea of “whole-person education,” these colleges’ curricula are not designed to cater to current students’ concerns about the job market. While the sample does not cover all liberal arts colleges in America, and all of the institutions considered are both relatively highly selective and expensive, they are representative of the common characteristics of curricula in liberal arts colleges, for others carry almost the same curricular structure and programs, including balanced development of the general education curriculum and major curriculum, first-year seminar, interdisciplinary courses, etc. Each curriculum’s arrangement, organization, content, and other related data were obtained from the college websites, and the supporting materials came from

interviews. About 30 people, including students, alumni, and faculty, were interviewed. Through data-encoding and statistical analysis, we have gained a deeper understanding of the curriculum's current state at liberal arts colleges.

## Curriculum design principles

The design principle of a curriculum is a kind of criterion or standard to be used as a guideline in curriculum setting. The innovative plea of liberal arts education is seeking balance; if institutions abandon either breadth or depth, American higher education may risk losing its capacity to cultivate the whole person (Logan & Curry, 2015). Striking the right balance between the breadth and depth of the curriculum is the most important principle for curriculum design. However, the unity of curriculum principle has evolved throughout its long history. From the time Harvard was founded in 1636, the curriculum of American colleges and universities has been in continuous transformation. Boning, K. described it as a swinging pendulum altering between periods of integration and periods of fragmentation, reflected in general education and professional education (Boning, 2007). Before the mid-1800s, the unified curriculum was coherent as there was no division between general and specialized education (Rudolph, 1977). At that time, breadth and depth were truly integrated. From the mid-19th to the late 19th century, with the rise of Industrial Revolution, demand for vocational training grew. The land-grant institutions created under the 1862 Morrill Act offered a practical and vocational education. Meanwhile, several liberal arts colleges carried out curricular reform, and the elective system came into being. Students got the opportunity to tailor their studies, and faculty gained the freedom to pursue their own interests (Boning, 2007). Specialization became prominent, and general education faded. The breadth of the curriculum was ignored. Woodrow Wilson, resident of Princeton, criticized such a separation: "Knowledge is trustworthy only when it is balanced and complete" (Wilson, 1970, p.291). Later, distribution requirements were adopted across many liberal arts colleges, a system which has survived to this day. Under this system, students were required to choose courses in some distribution subjects, like humanities, science and social science, to ensure the breadth of the curriculum. The current reform is generally considered to have originated with the 1977 release of *Mission of the College Curriculum* by the Carnegie Foundation for the Advancement of Teaching (Gaff, 1980, p.17-30). As a result, the integration of breadth and depth of curriculum in liberal arts colleges was improved by modifying distribution requirements and improving connections between general education and majors (Stark & Lattuca, 1997).

For liberal arts colleges, breadth is their essential, primary requirement, as well as the root of the curriculum. A curriculum in a liberal arts college covers all the major subjects of arts and sciences, requiring students to master basic knowledge and skills in all these subjects. For example, with more than 50 areas of study across the humanities, natural sciences, and social sciences (Williams College, 2020), Williams College offers a large number of opportunities to discover and pursue academic

interests. One of the more popular opportunities is the Winter Study Program. It provides a broad development platform and independent choice for students, encouraging them to expand beyond their comfort zone and keep learning during their winter vacations. Amherst College offers 40 majors in the arts, humanities, natural sciences, and social sciences, and more than 850 courses, with more than 6,000 available through the Five College Consortium, which consists of Amherst College, Hampshire College, Mt. Holyoke College, Smith College and the University of Massachusetts Amherst (Amherst College, 2020). A large knowledge field and rich content are the main manifestations of breadth in the liberal arts. Abundant study areas, majors, courses, and programs aim to give students as much access to new knowledge as possible.

The curriculum distribution requirement is another powerful tool for expanding students' educational breadth. Although approaches to curricular breadth vary widely from one liberal arts institution to another, distribution requirements are commonly accepted and applied. Typically, students are asked to complete a required number of courses in particular categories, such as humanities and arts, social science and natural science, and several compulsory curriculum fields, such as literature and art, mathematics and science, or history. Students are free to choose courses in each category, regardless of the specific content of each course. The definition and courses required in each area vary from institution to institution. For example, Williams College's curriculum distribution requirements are designed to ensure that students can obtain distributed learning across the whole scope of the curriculum, which is divided into three areas: Languages and the Arts, Social Studies, and Science and Mathematics (Williams College, 2020). All students are required to complete at least three graded semester courses in each division, of which two must be completed by the end of the student's sophomore year. Bowdoin College also has a series of distribution requirements and division requirements to obtain a broad education, including five distribution areas (Mathematical, Computational, or Statistical Reasoning; Inquiry in the Natural Sciences; Exploring Social Difference; International Perspectives; and Visual and Performing Arts) and three divisions of the curriculum: Natural Science and Mathematics; Social and Behavioral Sciences; and Humanities. Students must complete at least one credit course in each area and division (Bowdoin College, 2020).

The emphasis on general and powerful intellectual methods is the main feature of a liberal arts education. By nature, it is interdisciplinary, promoting good citizenship and a broad worldview (Moore & Roberts, 1989). Interdisciplinary courses and an emphasis on their interdisciplinary nature are the critical means by which to broaden the curriculum. Liberal arts colleges require students to explore widely and master various ways of thinking and solving problems, rather than merely studying within their own field. Different colleges have made great efforts to encourage "interdisciplinary." Williams College has done so through Interdisciplinary Studies, a curriculum designed to facilitate and promote innovation an interdisciplinary conceptual focus and experimental pedagogical form. The Interdisciplinary Studies offerings support faculty and student efforts to develop a curriculum that responds creatively to the intellectual needs and modes of teaching or learning that currently fall

outside of the conventional pattern (Williams College, 2020). Vassar College, according to its criteria for awarding degrees, requires students to choose courses that are cross-departmental or from different departments to meet the requirements of their majors. If a student is majoring, for example, in economy of social science, in addition to completing the required economics courses, he or she must also take a number of courses in other categories (including natural science, humanities, and art), to obtain a bachelor's degree. The essence of liberal arts education is interdisciplinarity, and an interdisciplinary course not only helps faculty integrate different thinking modes and innovation in their teaching but also helps meet students' varying intellectual needs.

The depth of the curriculum is the “professional” side of curriculum learning. It generally comprises a major or a well-defined interdisciplinary area, accounting for about half of the degree program (Bailyn, 2020, p.164-165). At the end of the last semester of their sophomore year, all students are required to declare their major, for the purpose of deepening their understanding of the major, mastering some specific knowledge points in the field, and grasping necessary skills. Many colleges allow students to study two majors so that they can pursue both their “interest major” and their “practical major.” With the choice of a major, the focus of learning shifts from breadth to depth. The scope of the curriculum can be clearly understood through the course catalog, but the depth of the curriculum is demonstrated only indirectly. In order to satisfy the demands of the educational objectives, the professional requirements and undergraduate research of different colleges can be explored. Williams College, for example, has clear professional requirements to ensure that all Williams students can get a disciplined and cumulative study experience in an important field of intellectual inquiry. The primary goal in the last two years of the Swarthmore College curriculum is to expose students to their chosen research field and to assist them in creating and synthesizing knowledge independently (Swarthmore College, 2020). Over a century ago, Carleton College began to promise students a “liberal and thorough” education. That goal is still reflected in the College’s graduation requirements, which aim to engage students in a wide range of disciplines, and enable them to concentrate on a major subject (Carleton College, 2020). Depth is equally crucial for a liberal arts college. The requirement of learning depth is highlighted in the educational objectives of each liberal arts college.

Engaging undergraduates in research activities has been identified as a creative strategy for improving education both in colleges and universities of America (Boyer, 1998, p.17-18). Liberal arts colleges encourage and support undergraduates in participating in scientific research for the purposes of expanding their research fields and building a foundation for their future academic paths. More than half of their students have participated in scientific research projects, including cooperative research with professors and independent application projects. Research practices concentrate mainly on the periods of summer research, winter study, and some small projects arranged by the professors in class during the regular term. The manner of scientific research among students of different majors differs significantly; for example, in mathematics, two or three mathematics majors

are usually led by the professor to complete a research project, then required individually to show the research results at the end of the study. Biology majors, on the other hand, usually complete their task through independent investigation, experimentation, and data analysis.

## Curriculum structure

Rudolph traced the current liberal arts curriculum requirements back to the 1866 report of Andrew White, the first president of Cornell University, in his book *American College and University: A History*. The report pointed out that “the organization of undergraduate education should include professional-oriented curriculum (major curriculum for short) and general education curriculum” (Rudolph, 1991, p.18-27). Based on the above curriculum principles, we can also see that the curriculum structure of American liberal arts colleges includes a general curriculum, which is generally implemented in the first two years, and a major curriculum, implemented in the last two years. The curriculum’s organizational structure should not be divided into low-level or high-level courses, but the four-year undergraduate course is a single curriculum. The curriculum functions, however, have some differences. The general curriculum mainly cultivates basic knowledge and skills, such as writing, expression, and communication. Then, equipped with this training, students can explore their interests through extensive exploration, and conduct in-depth research through the major curriculum. The general curriculum can be thought of as the basis for and premise of the major curriculum’s learning; in other words, the major curriculum is a continuation and extension of the general curriculum. Both are connected and integrated.

Liberal arts education trains one to understand the world better and become a functioning, contributing member of the world (Iversen, 1985). The general curriculum is the best representative of a liberal arts education. General education courses are characterized as “wide,” and breadth is their most basic requirement. The emphasis is on “comprehensive;” the comprehensive cultivation of students’ basic skills to prepare them with the necessary tools to enter major learning. The general education curriculum focuses on training students in basic skills in all areas: among them, writing skills and language skills are mentioned by many colleges.

To transform research into effective knowledge, however, communication is necessary. The University of Richmond has designed a series of requirements for communication skills, offering some related courses, such as Rhetoric and Communication Studies, to immerse students in frequent and intensive oral communication and speech. Some colleges, like Carleton College, combine this with the seminar curriculum, called a Writing Seminar (or writing course), as a required course for first-year students. This seminar uses discussion and writing as the means through which to explore and refine ideas, focusing on all stages of the writing process, including preparing, drafting, modifying, and receiving feedback from professors and students. Discussion helps stimulate thinking and creativity while writing trains students in expression.

The first-year seminar is the course most typical of the general curriculum. It is an introduction to the core expressions and academic research of a liberal-arts education, designed especially for first-year students. Through some teaching methods, including critical reading and thinking, discussion, sharing, and research, as well as clear and effective writing, the intellectual and academic aspects of students' thinking habits are shaped. This seminar constantly forces students out of their comfort zones and encourages them to maintain a brave dialogue with professors and classmates. The seminar leaves an indelible impression on every student's heart. Just as the Bowden College's saying: "Ask Bowdoin seniors about their favorite memories, and you'll hear about the first-year seminar over and over again." A good general curriculum not only broadens students' world outlook but also strengthens their life-long learning habits from different perspectives.

The major curriculum is not training for a specific occupation, nor for a life as a professional scholar, but for the intelligent person of the world (Richardson, 1924, p.254-255). The study of the major courses is arranged in the last two years: that is, after the declaration of a major. By this point, students have been exposed to a wide range of knowledge and have mastered the necessary basic learning tools. They may also have encountered a particular knowledge field, which requires in-depth and extensive training for their professional fields. The major curriculum is the main way students explore deeply and study intensively. In general, the major curricula of liberal arts colleges cover a major, an interdisciplinary major, and a special major designed by students themselves. A variety of majors provide a complete consultation system to help students plan their personalized courses.

The major is the core area of learning for students. Each department is responsible for planning the structure and content of learning within the major. Generally, at least eight courses can be taken as a major, and students can complete these eight courses in the major department or complete six and take the other two courses in associated fields after being approved by the department or a principal advisor. Williams College encompasses 25 departments, 36 majors, 13 concentrations, and several special programs. Concentration means concentrating on a course, subject, or subject areas, such as cognitive science, which includes psychology, computer science, philosophy, mathematics, and other elements. They don't offer any minor degrees, requiring instead a focus on the concentration. To be eligible for the Bachelor of Arts degree at Williams, students must pass 32-semester courses (4 per semester), among which at least 9 courses must be in their major field; some majors also require students to complete an additional course or a winter study course in their junior or senior year (Williams College, 2020). There are also specific regulations for course study. Some majors require a core curriculum as a basic introductory course. Taking an interviewee from Denison University as an example, students who intend to major in communication must complete two core courses: Theorizing Communication and Research in Communication. Students must also complete different levels of courses (a higher level representing a more difficult course), including one course at level 100, one course at level 200, three courses at level 300, one course at level 400, and one

additional course at any level (Denison University, 2020). The number of courses and introductory course requirements guarantee that students can learn step by step without gaining only superficial knowledge in their major.

Even the major curriculum emphasizes the breadth and diversity of knowledge in liberal arts colleges. It provides scientific support for teachers to develop the curriculum and respond creatively to intellectual demands and teaching modes beyond the current traditional model. Then interdisciplinary majors have also been created, which involve more extensive knowledge fields and more diverse curriculum contents than an ordinary major. The Political Economy curriculum at Williams College, founded in 1946, offers the oldest interdepartmental major at the college. The program was designed to help students understand the multiple ways in which politics and economics interact in the formation of public policy. Political Economy majors acquire a mastery of economics and broad knowledge of American and international political contexts. This interdisciplinary major requires 14 regular courses and one experiential course in the fields of economy, political science and international relations. Through the interdisciplinary curriculum, students can integrate the knowledge and methods of different disciplines.

### **Curriculum implementation method**

Their small size is the main feature which distinguishes liberal arts colleges from other higher education institutions in America. According to the Common Data Sets of research samples, the class size of the top 50 liberal arts colleges was significantly smaller than the top 50 research universities. The proportion of classes with fewer than 20 students is 70% on average in liberal arts colleges, and most classes have between 10-19 students, without any classes with more than 50 students. By comparison, research universities have more large-scale classes, and about 50% classes have more than 20 students. Small class sizes are also associated with a low student to teacher ratio. The average ratio of students to teachers is less than 9:1 in liberal arts colleges. This facilitates frequent interaction between faculty and students, and provides an opportunity for effective curriculum implementation. For students, it's conducive to maintaining learning concentration and enhancing class participation. An interviewee who studied in both a liberal arts college and a research university discussed the teaching effect of these two differently-sized universities:

*If the class is small-sized, students may have more chances to communicate with each other and also the professor pays more attention to you. But research universities will not have such a situation. There must be some undergraduates who skip classes, but no one will manage them.*

Compared with research universities, the advantage of liberal arts colleges also lies in classroom teaching, especially “good teaching and high-quality interaction with teachers” (Seifert et al., 2010). In many top universities, efforts to align teaching with pedagogies of effective practice do not “count” much in the metrics related to faculty, while, good teaching is expected and rewarded in liberal arts

colleges (Walsh & Cuba, 2009). Liberal arts colleges rarely have any graduate teaching assistants, and professors teach all undergraduate courses. Even if the professor takes leave, substitute professors are available to teach the class. Professors in these colleges devote most of their time and energy to teaching. Based on the analysis of the teacher database of the National Higher Education Institute, Leslie found that professors at American liberal arts colleges place more emphasis on teaching than do those at other four-year universities (Leslie, 2002). Only those who identify with the teaching-oriented idea of liberal arts education will choose to teach in liberal arts colleges. Faculty come to liberal arts college for teaching, not for information. Usually, they regard the classroom as a “sharing meeting” of their own experience rather than the completion of a teaching task. They also invite experts to experience sharing meetings. The college’s emphasis on professors’ role as classroom teachers and professors’ own interests make an intimate learning community.

During the process of curriculum implementation, Liberal Arts Colleges aim to train every student to be a “liberal arts student.” Students’ participation and initiative are particularly emphasized. All of the teaching activities are developed on the basis of students’ learning. They empower every student rather than instill knowledge. In other words, the institution gives students all kinds of resources, pays attention to the training of students’ abilities, and enables them to enhance their expertise in all aspects during the process of knowledge exploration. This cultivation integrates into teachers’ daily teaching. For instance, an interviewee of Carleton College stated:

*Our class is not simply the professor delivers lectures. Group discussions and group assignments are arranged frequently. Our professors facilitate us to discover knowledge. He will not give you the answer directly, but let us discuss first, and then he will guide you in that direction. Finally, he will say what it is.*

The teaching method is also more “liberal arts.” Unlike research universities, the teaching in liberal arts college attaches more value to the link between extensive knowledges. Even some major curricula also combine a range and depth of knowledge, in order to dig out its general features. Clear and organized classroom instructions and in-depth learning methods contribute to the growth of critical thinking and cognitive needs (Pascarella et al., 2013). Seminars are the most common form of curriculum. Students’ classroom discussion and oral presentations enhance their critical thinking, and verbal and non-verbal expression skills. The quality of the seminar, however, depends on students’ participation and performance.

Some liberal arts colleges have developed new teaching methods to meet students’ diverse needs. Amherst College, for example, encourages teachers to teach new knowledge in different ways, such as thinking, pairing, and sharing. In this method, students spend 2–5 minutes considering the answers to the questions alone, then 5–10 minutes sharing their ideas with their classmates. Students’ individual thinking helps them organize and reflect on their own ideas when they discuss in pairs. After the discussion, they form a thinking framework to help them to share their refined views with the whole class. Another example is the drawing of a concept map. Students can understand the

relationship among complex concepts through individual or teamwork in order to promote the development of their creative thinking abilities. In a concept chart, the concept is represented in the form of a hierarchy. The top of the chart is occupied by the most inclusive and general concept, and the rest comprises the lower levels (i.e., the more specific and less general concepts) of the hierarchy. Moreover, teachers also adhere to the principle of linking theory and practice, attaching importance to students' experiential learning. Experiential learning in liberal arts colleges provides learning opportunities in instructors' and students' interests. The practical approaches include but are not limited to community service, off-campus practice, on-site teaching, etc. For example, Williams College offers experiential learning opportunities in more than a dozen areas, including art and culture, education, community and economic development, history, politics, media and technology, health and welfare, and religion and spirit. If students don't find the opportunity or resources they want, the college will create a specific one for them. They can teach in local or New York City schools, conduct consultation for local governments or non-profit organizations, guide high-risk youth, provide income-tax assistance to low-income people, or conduct urgently needed research in public health. These kinds of experiential learning opportunities are not available to everyone in other larger institutions of higher education.

## **Concluding remarks**

As one type of elite undergraduate education, the liberal arts college has existed in the United States for more than three hundred years. Compared with other higher education institutions in the United States, liberal arts colleges have a unique campus environment and atmosphere whose curriculum and educational model shape students' minds and those of the nation's elites. As mentioned above, the small size, low ratio of students to teachers, as well as the tradition of a residential system ensure every student can be fully immersed in the community environment, including experience of liberal arts education, the full use of resources and the close and deep interaction between students and teachers. With high recognition of liberal arts education as the organizational spirit of liberal arts colleges, faculty members are more willing to invest in undergraduate teaching, and students are more active in the classroom, consequently, the liberal arts education can be better implemented.

Meanwhile, the world is in the middle of a transformation in its social order, and globalization has brought about several changes in higher education. Some values, such as internationality, excellence, fairness, and diversity are more critical than ever before. No matter how pure a college's pursuit of truth and knowledge is, once the important link between curriculum and the greater interests of society is broken, the college endangers its future (Hook, 1939). It is frequently questioned and discussed whether a high-cost liberal arts education is useful for students' employment and how to maintain such a high-cost elite education: "the college is having both an identity crisis and a financial crisis" (Commager, 1977). The small-scale feature of liberal art college means high running costs.

Substantial tuition fees and donations, especially alumni donations, cover the most expensive liberal arts universities' costs. The average student's donation of elite liberal arts college is higher than other institutions. That is a cycle system. High investment in personal training promotes high feedback. The cycle system in top liberal arts colleges works better than in lower ranked colleges. As costs grow, colleges who can't maintain this expensive education have gone out of business. Besides, the number of liberal arts colleges funded by public finance in the United States is very small. Public finance emphasizes investment maximization, democracy and fairness. But, the short-term benefits of liberal arts colleges are unapparent, and liberal arts education has function as a kind of elite education, historically. Whatever its future, the independent liberal arts college has been a study in persistence amid change, continuity amid adaptation (Pfniester, 1984). "An undergraduate liberal arts education aims to provide students with the knowledge, values, and skills that will prepare them for active, effective participation in society" (Barker, 2000, p.2). The ultimate goal focuses on the development of the student as a "human." Its expertise lies in fostering students' adaptability, which is conducive to their career potential and sustainable development.

Some crucial ideas of American undergraduate education, including liberal arts education and general education, have been adopted by many East Asian countries such as China, Japan and Hong Kong, etc., which provides new perspectives for curriculum reform. Some common measures, for example, adding curricula and curricula credits in humanities to ensure their status, and expanding basic and interdisciplinary courses are used to strengthen general education. But undergraduate education in these countries is still dominated by their traditional mode of stressing professional education and national identity (Huang, 2018). The conflict of cultural values between "West" and "East" will influence the effectiveness of curriculum reforms. How to carry out a "liberal curriculum" under the professional system is the key problem for many East Asian countries. The curriculum and idea of liberal arts colleges just offer us some inspiration and references. The guidance of integrating breadth and depth into a general education curriculum, the cornerstone of liberal arts colleges, embodies all departments and faculties to consider each other and coordinate their work so as to produce larger "products," such as "people with liberal arts education" (Clark, 1984, p.46). Furthermore, major curricula are also well integrated into the liberal arts education atmosphere of liberal arts colleges. Major curricula contain wide and diverse knowledge, supporting students' open learning, and teachers' curriculum development cooperation. Teaching is the foundation of high quality undergraduate education in liberal arts college, which is often praised. Teaching is the basis of any higher education institution's survival and sustainable development, which need to be strengthened and innovated. The curricula in liberal arts colleges can be unique in American higher education, rooted in small-scale residential learning communities which should be a point of focus for researchers, rather than merely the study of curriculum setting or content (Yang, 2016, p.34). Curriculum reform should draw more attention to the "liberal arts education" nature of curriculum and the creation of an intimate learning community.

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