A Review on Factors Shaping Undergraduate Curriculum and Their Impacts

Tong Yang

Southeast University

This review study aims to examine the external and internal factors that influence undergraduate curriculum development and how they shape the curriculum by using the theory of curriculum management as the primary reference. Firstly, this study clarifies the definition, types, and components of the curriculum. Next, significant external and internal factors that affect the curriculum are categorized to provide a structured understanding of the existing literature. Finally, this study organizes the impact of these factors on the undergraduate curriculum accordingly. In conclusion, although previous studies on curriculum management have identified the key internal and external factors and discussed how these factors impact the curriculum, a comprehensive framework for analyzing how each external and internal factor operates within each university has not yet been established. Therefore, more empirical studies should be conducted in the future to provide a more complete understanding of this mechanism.

Keywords: undergraduate curriculum, curriculum management, internal factors, external factors

As enrollment rates in higher education continue to rise and the scale of higher education institutions increases, universities are faced with the challenge of improving the quality of their curriculum to bridge the gap between graduation and enrollment stages of education. In order to efficiently improve the quality of their classes, universities must systematize and visualize their curriculum, and work systematically on curriculum reform. To achieve this, it is necessary to identify and understand the internal and external factors that influence the curriculum during the formulation phase, and how the curriculum is shaped under these influences.

Previous curriculum theories have mainly focused on primary and secondary education (Eisner, 1979; Henry, 1961;

This study was funded by the MOE (Ministry of Education) Project of Humanities and Social Sciences, Grant 22JYC880100 (Policy Changes and Reforms in the Last 30 Years Concerning the Linkage Between General Education and Specialized Education in Japanese Undergraduate Programs), as well as the Project of Social Science Foundation of Jiangsu Province, Grant 22JYB016 (A China-Japan Comparison on the Policy and Its Reform Concerning the Linkage Between General Education and Specialized Education in Undergraduate Programs).

Correspondence concerning this article should be addressed to Tong Yang, Southeast University, School of Foreign Languages, 2 Southeast University Road, Nanjing, 211189, China. E-mail: yangtong32@qq.com

Kelly, 2009; Larry, 1992; Tanner, 1988), with relatively little research on undergraduate curriculum. However, when organizing these theories from the 1950s to the present, they can be broadly divided into four areas: curriculum definition and classification, curriculum management, curriculum design, and curriculum assessment. These areas address research questions such as what elements should be included in an undergraduate curriculum, how decisions should be made and what factors may have impact on the curriculum during its formulation stage, how systematics should be maintained during implementation, and how effectiveness can be measured during the evaluation stage.

The focus of this study falls under the category of "curriculum management" with viewpoints from curriculum planners and university administrators. By reviewing the approaches and methodologies presented in the theory of curriculum management, the main finding is that the primary external and internal factors shaping the undergraduate curriculum have been identified and somewhat classified. However, some of these factors are common, while others are different, and they have not yet been theoretically categorized. Additionally, previous studies have not provided a clear logical basis for the specific relationship of these factors to the curriculum. Even when making a plan for an important

curriculum reform, academic administrators may know what kinds of factors should be considered during the decision-making process, but how these factors interact with the undergraduate curriculum remains ambiguous. Therefore, this study is conducted to fill these two research gaps from the following three perspectives: the definition of the curriculum and its possible inclusion elements, the external and internal factors that shape the undergraduate curriculum, and the impact of these factors on the undergraduate curriculum.

Definition, Types and Components of Curriculum

To investigate the curriculum as a research topic, we need to begin by answering the question: what is curriculum? The definition of curriculum can be broadly or narrowly categorized. The following paragraphs will identify the components of curriculum in both senses.

Curriculum in the broad sense encompasses not only the content taught by educational institutions, but also the knowledge, experiences, and values that students acquire through it. It includes all the institutional and social factors that can affect the decision-making process of curriculum development and implementation. In other words, the broad concept comprises all aspects of the curriculum, such as objectives, subjects, content, teaching methods, learning outcomes, and education evaluation (Huang, 2008, pp. 19–20).

From the learner's perspective, the broad sense of curriculum can be divided into three categories of educational content: educational curriculum, total curriculum, and hidden curriculum (Kelly, 2009, pp. 5-12). The educational curriculum is designed with an emphasis on the purpose and content of the curriculum to prevent it from being too vocational. The total curriculum takes into account the overall objectives and rationale of the curriculum, including the standards of the educational institution in which the curriculum is located. The hidden curriculum refers to the culture, values, and attitudes of the educational organization. Goodlad (1979, pp. 33-37) and Goodlad & Maurice (1966, pp. 29-39) classified curriculum into social, institutional, and instructional levels. The social level of curriculum refers to the educational content that is determined by politicians, administrators, professional specialists, and influential scholars through social and political processes. The institutional level of curriculum refers to the educational content determined by an educational institution from among its major domains of knowledge and knowing, taking into

consideration such aspects as topics and themes for each grade level. The instructional level of curriculum is the content that individual faculty members plan and strive to deliver to their students.

From the perspective of curriculum planning, the broad sense of the curriculum can be classified into three types based on the phases of implementation: the planned curriculum, the actual curriculum, and the experienced curriculum (Snyder, Bolin, & Zumwalt, 1992, pp. 427–428). The planned curriculum is the educational plan that the planner believes is feasible and assessable. The actual curriculum is what teachers communicate to students based on their understanding. The experienced curriculum is the content that individual students actually accept based on their background and abilities. Cuban's (1992, pp. 221–223) classification is similar to this. He regarded the curriculum as a series of events planned by the university and implemented by the administrators and teachers, with the aim of students learning specific knowledge, skills, and values.

Curriculum in the narrow sense refers to regular courses or curricula offered at higher education institutions. For instance, Ikato (1985) defined the undergraduate curriculum as an educational and research plan designed for knowledge learning and skills acquisition, in accordance with the mental and physical development of students, for promoting their socialization process (Ikado, 1985, p. 14). Similarly, Ratcliff (1997, p. 7) defined curriculum as an educational plan for an institution. These studies define curriculum in the narrow sense as one comprehensive plan, not only focusing on the content of education but also including the decision-making elements, such as planning, implementation, and evaluation of the curriculum. Thus, the elements of the planning phase in the broad sense of the curriculum, such as objectives, learners, and evaluation of education, are also part of the curriculum in the narrow sense. In other words, both curricula share common elements. However, in terms of educational content, the narrow sense of the curriculum excludes non-formal parts, such as extracurricular activities and students' values. Moreover, it does not consider the individual factors, such as the psychological and emotional factors of the organization, society, and its members.

Current research overwhelmingly examines the curriculum from the perspectives of individual elements, while some studies suggest the need for a framework and a clear definition that encompasses all of these elements (Lattuca and Stark, 2009, pp. 6–11; Stark & Lattuca, 2008, pp. 320–322). These studies argue that when considering a curriculum as

an "academic plan," it should include the perspective in which to view both extensive and incremental change at the organizational, program, and course levels. Therefore, the curriculum should include the following eight elements that cover all macro and micro aspects during the formulation phase of curriculum design. These elements are: (1) Purpose: the knowledge, skills, and attitudes that students are expected to acquire; (2) Content: the subjects selected to convey specific knowledge, skills, and attitudes; (3) Sequence: the arrangement of subject matter and experiences; (4) Learners: the characteristics and needs of the learners; (5) Instructional process: the learning activities and teaching methods for learners to acquire knowledge; (6) Instructional resources: the educational environment, such as textbooks, media, and classrooms used during teaching; (7) Assessment and Evaluation: the strategies to measure whether the planned learning outcomes have been accomplished; and (8) Adjustment: the overall improvement of the plan based on learning experiences and evaluation. It is worth noting that both "purpose" and "content" are interdependent.

In summary, the curriculum can be defined broadly or narrowly. The broad definition considers all aspects of the curriculum, including purposes, subjects, content, teaching methods, learning outcomes, and educational evaluation, while the narrow definition focuses only on the regular courses or curricula offered at higher education institutions. To provide a comprehensive understanding of the curriculum, it is useful to consider the curriculum as an academic plan accompanied by a string of coherent decision-making from a complete perspective at both the macro and micro levels. A framework that encompasses all elements, such as the one proposed by Stark and Lattuca, should be considered.

Internal and External Factors Shaping Undergraduate Curriculum

The undergraduate curriculum is shaped by both internal and external social influences simultaneously. Previous studies that have treated and categorized both internal and external factors as their research objects include Miles (1964), The Carnegie Foundation (1977), Conrad (1978), Cuban (1979; 1992), Kliebard (1988), Larry (1992), Civian et al. (1997), Lattuca and Stark (1997; 2009), Hachtmann (2012). Among these studies, Henry (1961), Eisner (1979), Garcia and Ratcliff (1997), Popkewitz (1987) specifically focus on external factors that influence undergraduate curriculum.

External Factors and Their Classification

Terms related to external factors include "influence," "factors," and "forces." Previous studies have shown that the curriculum can be affected by these influences both directly and indirectly. Two theoretical perspectives can help us understand the influence of external factors on the curriculum.

From a structural perspective¹, the influence of individual teachers on education is minimal. Instead, education is determined by the structure of society and societal expectations, including national and local government policies, available resources, the size of educational institutions, parental and student expectations of education, labor market employment, and standards required in enrollment examinations. Additionally, the type of education, the duration of its offering, and its quality may be further constrained (Blenkin, Edwards, & Kelly, 1992, p. 62).

From a sociohistorical perspective², it is essential to consider the historical context and social structure of each period to understand the realities of the curriculum. More practical studies are required to clarify how subjects and the structure of disciplines have changed over time (Goodson, 1987). In short, whether they are reformers or teachers who actively engage in education, they are unable to operate independently, but are situated in an environment strongly defined by the society's structure and its historical circumstances. Society is composed of complex elements, and while the individual impact of these elements on educational institutions is not clear, it can be understood that faculty members and the educational organizations they are involved with or belong to are affected by these elements. Thus, to proceed with curriculum reforms as intended, it is important to instill an understanding among faculty members regarding the influences from society, to gain their cooperation.

Leducational reform is considered an innovation, and there is significant research in the field of sociology that provides insights into the reasons for change and the reform process. Blenkin, Edwards, and Kelly (1992) summarized several significant sociological perspectives for analyzing educational reform. Among these perspectives, the structural perspective (Ball, 1987; Hargreaves, 1989; Habermas, 1976) emphasizes that educational reform must align with the macrolevel social structures and needs, such as economic and political conditions. This perspective sees education as a means of providing human resources with the necessary skills and characteristics to meet labor market demands, thus satisfying productive and consumptive demands. (Blenkin, Edwards and Kelly, 1992, pp. 60–61).

² A sociohistorical perspective offers a useful framework for interpreting curriculum change. This perspective interprets the history of the curriculum subjects, their origins, and why they are the way they are (Goodson, 1987, p. 8).

As mentioned above, since external factors are so complex and difficult to identify, in this section, the author would like to summarize them into four categories: society, economy, politics and educational environment, which could almost cover all of the classifications in previous studies. For instance, Garcia and Ratcliff (1997) categorized external factors into four types, which include population, politics, economy, and science and technology. "Population" refers to the diversity of enrollment, the number of people, culture, and changes in values. "Science and technology" encompasses the development of science and technology in ICT, the advancement of academic knowledge, and the emergence of new disciplines. "Politics" pertains to educational policies published by the government, while "economy" involves changes in labor market demands, involvement of the business community, and job opportunities. Since "population" and "science and technology" are closely related to social development and the structure of society, they can both be included in the category of "society." Lattuca and Stark (2009, pp. 12-13) did not provide a specific categorization of external factors, but identified several important factors, including changes in the labor market (economy), social development (society), government policies (politics), and relevant organizations external to higher education institutions such as disciplinary associates, accrediting agencies and media (educational environment). Notably, in the United States, the role of higher education communities, including accrediting agencies, institutions, and higher education advocacy organizations, is significant (Henry, 1961; Eisner, 1979; Popkewitz, 1987).

Internal Factors and Their Classification

Previous studies have identified many themes about the internal factors of higher education institutions. In this section, the author categorizes them into two types, namely "participant factors" at the micro level and "institutional-level factors" at the macro level, for a more structured understanding of existing literature. "Participant factors" consist of students, faculty members, university presidents, deans, and department chairs, and they are more closely related to the internal aspects of faculty and students, such as their attitudes, values, career histories, extracurricular activities, and life experiences.

Regarding the "institutional-level factors," Lattuca and Stark (2009, p. 13) identified the following three categories as having the greatest impact on the undergraduate curriculum. The first category is the mission, type, and public nature

of higher education institutions. The institutional mission encompasses the values, goals, and identity or vision of the university or college. In the United States, there are six types of higher education institutions according to the Carnegie Classification, including associate colleges, baccalaureate colleges, master's colleges and universities, doctorate-granting universities, special focus institutions, and tribal colleges. In contrast, in China, universities can be classified based on their public nature, which refers to the relationship between the university and the government. National universities, public universities, and private universities have different curricula due to their varying degrees of institutional control. The second category is the resources of the university, including both financial resources (budget) and human resources (teachers and staff). The third category is governance, which pertains to the mechanisms for decision-making regarding the curriculum and the allocation of roles between faculty members and university administrators involved in decisionmaking.

In summary, developing an effective curriculum requires considering the transformation of institutional mission and faculty, student culture to accommodate newly introduced values and culture, the readjustment and reallocation of financial and human resources, and a clear governance structure. These factors can be interpreted from various theoretical perspectives and methodologies, offering different insights into the process of educational change in curriculum reform.

Firstly, with respect to institutional culture and philosophy, it can be interpreted from a cultural perspective³. The culture of an educational institution has a dual role: interpretive and normative (Blenkin, Edwards and Kelly, 1992, p. 45). Institutional culture provides clues for understanding educational reforms and events, but also has the effect of norming the direction of these reforms. In addition, institutional culture is not stable and homogeneous over time and space, but varies with the size of the institution, social context, students' ages and organizational structure (p. 45). Therefore, it is natural for resistance to arise when the ideals contained in the reform do not align with the prevailing culture inherent in the educational institution (Rudduck, 1986,

³ The cultural perspective, as studied by Deal (1990), Rudduck (1984; 1986), Maris (1974), and Blenkin, Edwards, & Kelly (1992), analyzes the process of educational reform in the context of social norms and values. This perspective questions the meaning of the transformation itself, rather than just managing the reform process. Its goal is to minimize conflicts among departments and foster cooperation among them.

p. 7).

Secondly, rational allocation of resources and governance are always discussed together in previous studies. From a technological perspective⁴, the university is seen as a rational and systematic institution artificially controllable and capable of having its structure changed. Teachers are seen as "rational adopters" capable of understanding and implementing the value of proposed reforms (Blenkin, Edwards and Kelly, 1992, p. 40). When viewed from this perspective, it is important to understand how efficient change can occur according to the intended objectives, and the allocation of resources and a clear governance structure are important to achieve this. From a micropolitical perspective⁵, faculties and departments are in conflict with their own principles, values and compete with each other using their resources and power to maintain or increase their own interests (Blenkin, Edwards and Kelly, 1992, p. 53). Therefore, to understand the change in curriculum, it is necessary to focus on the allocation and use of resources within educational institutions (Hoyle, 1982, p. 88). On the other side, a micropolitical perspective can interpret educational reform either pessimistically or optimistically. That is, when conflicts arise, the side with more resources and power is more likely to emerge victorious, while the weaker side is more likely to compromise (Blenkin, Edwards, and Kelly, 1992, p. 55). Therefore, the curriculum is often seen as a compromise in a pessimistic sense rather than an agreement between faculties or departments. However, in some cases, conflicts may bring about a clearer understanding of the actual goals of each unit and what needs to be done collaboratively (MacIntyre, 1985, p. 64). Consequently, conflicts can be resolved by redistributing interests among faculty members, enabling a more equitable resolution.

Thirdly, with regard to governance, the organization that drives decision-making mechanisms is seen as a particularly important factor affecting educational reform (Dressel, 1963; Tyler, 1949). Tyler (1949, pp. 83–84) stated that the horizontal and vertical relationships between organizations within an institution must be taken into account when making

educational reforms. In particular, Dressel (1963, pp. 42–46) argues that the individual divisions constituting the university lack unity despite their high degree of independence, and those countermeasures that neutralize the independence of the departments, like the establishment of interdisciplinary courses, are needed to improve the coherence of the curriculum.

To sum up, since there are diverse perspectives, even on the same internal factor when analyzing the process of curriculum reform, it is important for researchers to be aware of which stance they can adopt before discussing their influences on the undergraduate curriculum. Additionally, as the internal factors are also as complex as the external ones, it is obviously impossible to identify the influences covering all internal factors in each category. It is thereby necessary to select important ones and ignore some of them according to both the purpose of each research and the theoretical perspectives the author has chosen.

Influences of Internal and External Factors on Undergraduate Curriculum

As there is a complex web of connections between external and internal factors that cannot be easily isolated, examined and assessed (Larry, 1992, p. 224), we discuss their influences together in this section. External and internal factors both have a significant impact on the undergraduate curriculum, and their influence can either facilitate or inhibit changes.

In the United States, external factors have a significant impact on changes in the undergraduate curriculum. This is because educational institutions are often seen as a means to correct major societal deficiencies (Kliebard, 1988, p.28), and they are vulnerable to social changes due to unclear educational goals, technology use, education outcomes, and decision-making roles (Cuban, 1979, pp. 159-163). As a result, curricular changes are often driven by social trends and labor market needs, rather than having a clear direction (Kliebard, 1988, pp. 31-32). Therefore, educational institutions are in a passive position when it comes to curricular change. Nonetheless, Garcia & Ratcliff (1997, pp. 132-133) suggest that university administrators and curricular practitioners should determine which external factors are most pressing based on their institutional characteristics and philosophies, and actively use external factors as facilitators for quality assurance and curriculum improvement, rather than passively accepting all of them. In addition, Larry (1992, p. 218)

⁴ The technological perspective, as studied by Lieberman and Rosenholtz (1987), Ponder and Doyle (1977), Schon (1983; 1987), Giroux (1989), Marris (1974), Reid et al. (1987), is useful for analyzing and evaluating all aspects of educational reform at the implementation level. This perspective views the university as a production line that has been broken down into independent elements for ease of evaluation.

⁵ The micropolitical perspective, as studied by Deal (1987), Dalton (1988), Ball (1987; 1989), Richardson (1973), Hoyle (1982), Reid et al. (1987), emphasizes that conflicts naturally occur among parties or groups with different interests, heterogeneity, and positions.

emphasized that while no change is completely free from external influences, there are instances where individuals and groups voluntarily initiate, adopt and implement designs for change without any coercive force from society or government. This means that the efforts of the university or college itself in strategically selecting external factors that align with their admission or resource advantages should not be ignored, as they can turn external pressures into motivations for educational changes. In summary, the influence of external factors on the undergraduate curriculum depends on how universities and colleges respond to these external forces. Therefore, it is crucial to consider both external and internal factors when developing an effective curriculum that aligns with institutional goals and values.

While external factors are generally seen as the main drivers of curricular change, internal factors also play a role. Internal factors tend to be more diverse and less influential (Lattuca and Stark, 2009, p. 26). For instance, the cultural norms, values, and attitudes of faculty members, which have an interpretive and normative role, can affect the direction and success of educational reforms (Blenkin, Edwards, and Kelly, 1992, p. 45). Moreover, institutional-level factors such as mission, resources, and governance structure can have a significant impact on the undergraduate curriculum (Lattuca and Stark, 2009, p. 13). The reasonable allocation of resources and clear governance structure are essential for achieving efficient change in the undergraduate curriculum.

With regard to the impact of internal factors on the undergraduate curriculum, it is essential to note that institutional culture and governance structure can be both facilitators and inhibitors of educational reform. Regarding institutional culture, faculty members who belong to the same discipline share common knowledge, values, attitudes, and practices, while also having a strong sense of identification. To promote curriculum reform at the institutional level, it is necessary for faculty members in each unit to agree on the content of the curriculum and cooperate with members in other units. Without such agreement and cooperation, curriculum reform is likely to be resisted by teachers (Civian et al., 1997, p. 648). Therefore, with some degree of agreement between faculty members and students, the obstacles to reform would be lessened, and cooperation can be expected between individuals of different cultures and among departments. Regarding the governance structure, facilitators for curriculum reform include improving cooperation among departments, resolving conflicts of interest among different groups, establishing faculty communities at the institutional level, and improving conditions for course evaluation and faculty promotion (Civian et al., 1997, pp. 65–70). On the contrary, organizations that are vertically segmented by discipline within the university, conservative and hierarchical structures, and a high degree of independence in departmental decision-making and role assignments can hinder curriculum reform (Civian et al., 1997, pp. 65–70).

The previous studies in the 90s on the impacts of internal and external factors on the undergraduate curriculum have limitations. While internal factors such as academic philosophy and culture, human and financial resources, and the structure of departments and the governance framework have been presented, no clear logical basis has been provided for their specific relationship to the curriculum. Moreover, although the undergraduate curriculum is influenced by external factors from society, many studies have only considered the internal factors within the university and have not discussed how external factors affect the content of the undergraduate curriculum.

However, progress has been made in this trend since the beginning of the 21st century. Huang (2008, p. 23) identified several analytical perspectives and research frameworks that address the undergraduate curriculum, including academic philosophy and purpose, government policies, the structure of higher education, curriculum at the institutional/departmental/discipline/course level, and learning outcomes. In particular, Huang emphasized that the relationships among these elements are not a top-down approach that influences curriculum from its purpose to its outcomes, but rather, various elements and contents interact with each other. Therefore, it is necessary to focus on the relationships among them.

The conceptual model presented in "Shaping the College Curriculum: Academic Plans in Context" (Lattuca and Stark, 2009, p. 5) provides a comparatively comprehensive framework for analyzing the interplay of internal and external factors that influence the undergraduate curriculum. This model recognizes that the curriculum is situated in both the social and educational environments, and internal factors are further divided into institutional and unit levels. The main institutional factors include missions and goals, financial and human resources, and governance structure (faculty roles, administrative and board roles), while unit level factors include program mission, decision-making processes, faculty members' beliefs and values, and relationships with other programs and student characteristics. All components of the

curriculum⁶ are influenced by internal and external factors, and the relationship between them is interdependent. The model highlights the importance of understanding the multi-layered influences at the institutional, departmental, and program levels in shaping the curriculum.

However, while previous studies have discussed the ways in which internal and external factors impact the curriculum, they have not presented a framework for analyzing how these factors are intertwined and their joint impact on the curriculum. Therefore, more empirical research is necessary to construct a more complete framework while validating the existing one.

Conclusion

This study reviews previous research on curriculum management and the following key conclusions can be drawn.

Firstly, it is necessary to appropriately define the curriculum according to the objectives and perspectives of each study. For example, if the research is conducted from the perspective of the institutional level or from academic administrators, it would be more appropriate to deal with the content of the curriculum in a narrower sense. On the other hand, if the research is carried on from the viewpoint of the individual level and student learning outcomes, it is necessary to view the curriculum in a broad sense. In this case, we should take into account micro aspects such as learners' characteristics, campus culture, students' psychology in classroom, and educational tools. Note also that the same components of the curriculum can have different meanings when the curriculum under study is different. For example, the component "instructional resources" refers to the textbooks used, media and educational environment, and lectures or seminars when it covers classes at the individual level. However, when it covers the curriculum at the institutional level, it refers to the actual use of financial and human resources of the entire university.

Secondly, since the external factors that influence the curriculum are involved in so many aspects of social life both from a structural and a sociohistorical perspective, it is very difficult to enumerate each of them and to identify which factors are the source of their influence. Nevertheless, they can be summarized into three categories by the author, which are society (science, technology, population and mass media),

economy (labor market) and politics (government policies and plans). However, the range of influence of these external factors on the curriculum depends not only on the responses from educational institutions that may be accommodating, tactical, or voluntary but also on each country's educational circumstances. For example, in the United States, where there is a high degree of marketization in higher education, accrediting agencies hold considerable influence over the curriculum. All higher education institutions must undergo peer reviews from these authorities to validate their degrees and credits. As a result, accrediting agencies have a significant impact on the curriculum in all types of higher education institutions. In East Asia, by contrast, higher education market is strongly regulated by governments, so external factors such as government policies and plans are likely to play a larger role.

Thirdly, the internal factors that influence the curriculum can be broadly classified into two types by the author, namely, participant factors at the micro-level and institutionallevel factors at the macro-level. Participant factors refer to individual influences on the curriculum, including attitudes, values, and life experiences, whereas institutional-level factors emphasize the influence of academic philosophy, resource allocation, and governance. When examining the impact of resource allocation and governance on the curriculum, both technological and micropolitical perspectives exist. The former stresses institutional efficiency, while the latter highlights agreement among departments over competition for resources. Therefore, to analyze the impact of these internal factors on the curriculum, researchers need to specify the perspective they are adopting in advance and make an objective choice on all levels of internal factors to filter out the key factors according to their research purpose.

Finally, the approaches and methodologies presented in the theory of curriculum management recognize that external factors significantly impact the curriculum. However, while the impact of internal factors is acknowledged, their linkages with external factors remain ambiguous. Additionally, emerging factors such as artificial intelligence, robotics, metaverse, and social reform movements, along with the flexible inner meanings of existing factors such as assessment mandates, accreditation requirements, and transferability issues, pose new challenges to curriculum development. Due to their specificity, these factors cannot be covered in a single study and require further discussion in future research. Furthermore, a framework for examining how each factor operates within each university has not

⁶ The eight components of curriculum are purpose, content, sequence, learners, instructional process, instructional resources, evaluation, and adjustment.

yet been developed. Therefore, it is crucial to conduct case studies to empirically investigate the mechanisms through which external and internal factors exert their influence at the institutional, departmental, and program levels of the university on the curriculum. This is a critical issue for future research to provide a more comprehensive understanding of the mechanism through which the undergraduate curriculum is shaped.

References

- Ball, S. J. (1987). The micro-politics of the school. Routledge,
- Ball, S. J. (1989). The micro-politics of the school: Baronial Politics.
 In M. Preedy (Ed.) Approaches to curriculum management. Open
 University Press: Milton Keynes.
- Blenkin, G. M., Edwards, G., and Kelly, A. V. (1992). *Change the curriculum*. London: P. Chapman.
- Civian, J. T., Arnold, G., Gamson, Z.F., Kanter, S., & London, H. B. (1997). Implementing change. In J.G. Gaff., J. L. Ratcliff., and Associates (Eds.), Handbook of the undergraduate curriculum: A comprehensive guide to purposes, structures, practices, and change (1st ed., pp. 647–660). San Francisco: Jossey-Bass.
- Conrad, C. F. (1978). The undergraduate curriculum: A guide to innovation and reform. Boulder: Westview Press, Inc.
- Cuban, L. (1979). Determinants of curriculum change and stability, 1870–1970, In J. Schaffarzick and G. Sykes. (Eds.), *Value conflicts* and curriculum issues (pp. 139–196). Berkeley, CA: McCutchan.
- Cuban, L. (1992). Curriculum stability and change. In P.W. Jackson (Ed.), Handbook of research on curriculum (pp. 216–247). New York: Macmillan.
- Dalton, T. H. (1988). The challenge of curriculum innovation: A study of ideology and practice. The Falmer Press, London.
- Deal, T. E. (1987). The culture of schools, In L. T. Sheive and M.
 B. Schoenheit (Eds.). *Leadership: Examining the elusive, ASCD yearbook 1987*. Alexandria, VA: Association for Supervision & Curriculum Development Publisher.
- Deal, T. E. (1990). Reframing reform. *Educational Leadership*, 47(8), 6–12.
- Dressel, P. L. (1963). The undergraduate curriculum in higher education. Washington, D. C.: The Center for Applied Research in Education, Inc.
- Eisner, E. W. (1979). The education imagination: On the design and education of school programs. London: Collier Macmillan Publishers.
- Garcia, M., & Ratcliff, J. L. (1997). Social forces shaping the curriculum. In J. G. Gaff., J. L. Ratcliff., and Associates (Eds.). Handbook of the undergraduate curriculum: A comprehensive guide to purposes, structures, practices, and change (1st ed., pp. 118–136). San Francisco: Jossey-Bass.
- Giroux, H. A. (1989). Schooling for Democracy: Critical Pedagogy in the Modern Age. Routledge, London.

- Goodlad, J. I. (1979). The scope of the curriculum field. In J. I. Goodlad and Associates (Eds.) *Curriculum inquiry: The study of curriculum practice* (pp.17–42). New York: McGraw-Hill.
- Goodlad, J. I., & Maurice, N. R. (1966). The development of a conceptual system for dealing with problems of curriculum and instruction. Los Angeles: Institute for Development of Educational Activities. University of California.
- Goodson, I. F. (1987). School subjects and curriculum change. The Falmer Press, London.
- Hachtmann, F. (2012). The process of general education reform from a faculty perspective: A grounded theory approach, *The Journal of General Education*, 61(1), 16–82.
- Habermas, J. (1976). Legitimation crisis. London: Heinemann.
- Hargreaves, A. (1989). Curriculum and assessment reform. Open University Press, Milton Keynes.
- Henry, N. B. (Ed.) (1961). Social forces influencing American education: The sixtieth yearbook of the national society for the study of education. Chicago: The University of Chicago Press.
- Hoyle, E. (1982). Micropolitics of educational organizations. *Educational Management and Administration*, 10, 87–98.
- Huang, F. T. (2008). Daigaku karikyuramu no bunnseki wakugumi: Karikyuramu kenkyu no tenkai wo tegakari toshite, *Daigaku Ronsyuu*, 39, 15–31.
- Ikado, F. (1985). Daigaku no karikyuramu, Tokyo: Tamagawa University Press.
- Kelly, A. V. (2009). The curriculum: Theory and practice. SAGE Publications Limited.
- Kliebard, H. M. (1988). Fads, fashions, and rituals: The instability of curriculum change. In L. N. Tanner (Ed.). Critical Issues in Curriculum: Eighty-seventh Yearbook of the National Society for the Study of Education (pp. 16–33). L.N. Chicago: The University of Chicago Press.
- Larry, L. (1992). Curriculum Stability and Change. In Jackson, P.W. (Ed.). Handbook of Research on Curriculum (pp. 216–247). New York: Macmillan.
- Lattuca, L. R., & Stark, J. S. (1997). Shaping the college curriculum: Academic plans in action. Allyn and Bacon Press.
- Lattuca, L. R., & Stark, J. S. (2009). Shaping the college curriculum: Academic plans in context. San Francisco: Jossey-Bass.
- Lieberman, A., and Rozenholtz, S. (1987). The Road to School Improvement: Barriers and Bridges. In J.I. Goodlad (Ed.) *The Ecology of School Renewal*, University of Chicago Press.
- MacIntyre, A. (1985). After virtue: A study in moral theory. Duckworth, London.
- Marris, P. (1974). Loss and Change. London: Routledge & Kegan Paul.
- Miles, M. B. (Ed.). (1964). *Innovation in education*. New York: Bureau of Publications.
- Ponder, G. A., and Doyle, W. (1977). The Practicality Ethic in Teacher Decision-Making. Interchange, 8(3), 1-12.
- Popkewitz, T. S. (Ed.). (1987). The formation of school subjects: The struggle for creating an American institution. London: Taylor & Francis Printers Ltd.
- Ratcliff, J. L. (1997). What is a curriculum and what should it be. In

- J. G. Gaff., J. L. Ratcliff., and Associates (Eds.), *Handbook of the undergraduate curriculum: A comprehensive guide to purposes, structures, practices, and change* (1st ed., pp. 5–29). San Francisco: Jossey-Bass.
- Reid, K., Hopkins, D., & Holly, P. (1987). *Towards the effective school*. Oxford: Basil Blackwell.
- Richardson, E. (1973). The Teacher, the School and the Task of Management. London: Heinneman.
- Rudduck, J. (1984). Introducing innovation to pupils. In D. Hopkins and M. Wideen (Eds.) Alternative perspectives on school improvement. London: The Falmer Press.
- Rudduck, J. (1986). Understanding curriculum change. Division of Education, University of Sheffield.
- Stark, J. S., & Lattuca, L. R., (2008). Curriculum perspectives and frameworks. In C. F., Conrad, and J. Jonson (Eds.), *College and Undergraduate curriculum: Placing Learning at the Epicenter of Courses, Programs and Institutions* (pp. 315–330), Boston: Pearson Custom Publishing.
- Schon, D. A. (1983). *The reflective practitioner: How professionals think in action*. London: Temple Smith.
- Schon, D. A. (1987). Educating the reflective practitioner. Jossey-Bass Publishers, San Francisco.
- Snyder, J., Bolin, F., & Zumwalt, K. (1992). Curriculum implementation. In P.W. Jackson (Ed.), *Handbook of research on curriculum* (pp. 402–435). New York: Macmillan.
- Tanner, L. N. (Ed.). (1988). Critical issues in curriculum: Eighty-seventh yearbook of the national society for the study of education. Chicago: The University of Chicago Press.
- The Carnegie Foundation for the Advancement of Teaching. (1977). Missions of the College Curriculum: A Contemporary Review with Suggestions. San Francisco: Jossey-Bass.
- Tyler, R. W. (1949). Basic principles of curriculum and instruction. Chicago: The University of Chicago Press.