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Article

Explaining the curriculum planning challenges at Tehran University and providing a practical guide to improving the curriculum

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Abstract

A comprehensive and deep understanding of curriculum development is crucial in the field of higher education. Curriculum development, an important aspect in this field, requires a multifaceted approach. Using qualitative methodology, this study provides practical guidance for improving the curriculum of Tehran University by carefully examining the planning challenges. The research was carried out in several stages, culminating in the design of a practical guide to improve the curriculum. First, a review study was conducted on studies based on university curriculum models. Then, using the phenomenological strategy and unstructured interviews, this study investigated the concept of academic curricula and the challenges facing the higher education curricula planning system from the perspective of faculty members. In the final step, using the insights from the previous steps, a focus group was formed to develop a practical curriculum development guide. This guide covers three main dimensions: basic curriculum planning features, application-oriented features, and implementation requirements. This study used data triangulation to ensure the validity of the research findings, integrating the insights from interviews, document reviews, and academic consensus. The proposed model of the current research can serve as a suitable basis for revising the university curriculum. Diversity in the attitude and culture of the university is evident in the proposed model.

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Curriculum, curriculum planning; faculty members; university

Introduction

Higher education is one of the most valuable institutions that society has at its disposal for progress and development. On the one hand, higher education preserves and transmits the value of cultural heritage and the ruling values of society. On the other hand, it responds to social needs regarding the acquisition, dissemination, and development of knowledge and technology (Schofer et al., 2020). It also has a wide sphere of influence in other institutions and economic and political sectors of society (Acemoglu & Robinson, 2008). In recent decades, the higher education system has been faced with the rapid and ever-increasing changes and developments of societies with fundamental issues, including; The composition of students, innovation and transformation in the field of higher education, the transfer of universities and

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centers of higher education from the geographical space to national, regional and international levels, challenging traditional higher education through transnational higher education, entrepreneurial attitude and job creation in graduates and Use of information and communication technology (Mense et al., 2018). This represents new issues and topics in today's higher education (Farastkhah, 2019). New topics have caused a kind of complexity and change in the university and its curriculum (Krause, 2022). This complexity and change is the same understanding that Pinar (1995) put forward under the title "understanding curriculum" and "currere." Such ideas challenge traditional curriculum views of what a set of content or skills should be taught. Instead, they frame the curriculum as an ongoing dialogue that reflects the historical, cultural, and political contexts in societies (Lambert & Biddulph, 2014; Pinar, 2012, 2013).

Therefore, as changes; transform the historical, cultural, and political contexts in societies and their educational systems, the view of learning, learners, learning factors, education, educational process, and subjects involved in university curricula will change (Luckett & Shay, 2020). A point of view that considers it necessary to change the direction of university curricula in the direction of the complexities of the modern world and the narratives of learners and has a more comprehensive and non-colonial view of education (Ingersoll, 2023). Knowing the curriculum and organizing its components and elements in a coherent, dynamic, and flexible program requires knowledge that all university faculty members should know (Lieff, 2009). However, this knowledge and understanding should not be instrumental or static (Pinar, 2012). Rather, university lecturers consider different effects, such as gender, race, politics, and culture, in shaping educational experiences and outcomes. Such an attitude can understand the complexities and changes in teaching and learning processes with critical thinking.

On the other hand, a curriculum is the essence of any type of education, which, in combination with effective teaching methods, guarantees the efficiency and effectiveness of the educational system (Tam, 2014). Therefore, determining the optimal structure of a curriculum system and selecting the organization of content have been preoccupations of policymakers in educational systems. This is important for higher education. The curriculum of higher education is a powerful scientific and social tool that outlines how and limits the transfer of knowledge and skills. At the same time, it is considered a vast experience for students. It is also the platform for the formation of the best processes in the university system, that is, learning (Khan & Law, 2015). Curricula are the most important tools for realizing the goals and missions of any educational system. By nature, higher education requires a suitable curriculum to achieve its goals and missions.

The curriculum should be in line with social and economic needs (Stanley & McCoshen, 2012). Therefore, any academic reform depends on the reform of curricula (Ehlers et al., 2019). Therefore, designing, compiling, and revising curricula play a fundamental role in the success or failure of university education. According to Cunningham et al. (2007), curriculum design is one of the most important challenges for university professors because arranging curriculum elements in a way that leads to learning is a difficult task. However, it should be remembered that what is going on in the university as a teaching, learning, and research process may change under the influence of expectations, organizational culture, goals and missions, university functions, university system elements, and support processes (Largani & Yadegarzadeh, 2022). For this reason, the existence of flexible and appropriate practical patterns and guides can make it easier for faculty members and university curriculum planners to accompany and make decisions about designing and developing curricula.

O'Neill (2015) interpreted having a pattern in developing university curricula as having a detailed plan to achieve the goals and emphasized that no model is perfect and cannot be used without considering the mission and goals of the university. Choosing the model and pattern of curriculum development in higher education, although it leads to the facilitation of actions, is usually faced with difficulties that are rooted in the type of view of decision-makers as the most key element in the development of programs, which (Stark & Lattuca, 1997) call dependence. It is called a disciplined culture. A variety of university curriculum models have been proposed to describe theoretical connections and observable behaviors. The study of curriculum patterns in higher education shows that theorists and decision-makers have considered different goals and perspectives throughout the history of higher education. Examining and comparing existing models will increase transparency and recognition of these models and their impact based on the designed goals. This recognition plays an effective and important role in corrective measures and revision of university curricula. The necessity addressed by the current research is in the first step.

Curriculum is the main element of the higher education system and the most fundamental tool for providing students with knowledge, experience, and skills to provide services to society. Therefore, deciding on the process of compiling and revising it is a very important and, at the same time, sensitive issue. Therefore, awareness of the perceptions and challenges of the university curriculum can be helpful in the design and formulation of the university curriculum and its development. Because it will lead to a comprehensive view and comprehensive, accurate, and deep confrontation with the curriculum phenomenon (Khan & Law, 2015). One of the categories that is most used in the field of curriculum is the category of curriculum development (Fathi Vajargah, 2006). This process is based on the current needs of society and industry, as well as professional competencies and skills. Be derived from the expertise of curriculum planners. The negligence that exists in the system of designing and compiling university curricula. Based on this, the current research has been done to develop a practical guide for the curriculum in the university, and taking into account the importance of the curriculum in realizing the goals of higher education, an attempt has been made to address the importance, quality, goals, and missions of higher education and the current situation. The curriculum planning process and the challenges faced as a result thereof should be examined. In fact, to respond to the needs of those involved, including faculty members and managers of educational groups, who lack a comprehensive curriculum guide for an academic course and prepare a lesson plan.

The evidence shows that the curriculum in universities is not prepared based on scientific principles; the curriculum is prepared by people who prepare them based on a specialized view of the field and knowledge structure, and the majority of them lack educational knowledge and knowledge of curriculum studies (Fathi Vajargah, 2006; Largani & Chaharbashlou, 2022). Curricula do not have a proper understanding of the main needs of learners and society and do not meet these needs. The results of the present research can help in the formulation of each of the elements of the curriculum, from the goals of the academic course to the goals of each course to the way of choosing the organization of the content, the choice of teaching methods, and evaluation models; it has helped the administrators of the curricula in universities. The output of this research is a practical, step-by-step guide for curriculum designers. The most important innovation in this research is its methodology. Curriculum templates at the level of higher education have been prepared at the macro level, but they do not help academic staff compile the curriculum, and basically, these templates

cannot be used to compile the curriculum in educational groups or faculties. The purpose of the current research was to investigate and analyze the challenges of the curriculum process and to suggest practical measures to address these issues. Practical guidance with an emphasis on higher education missions and university vision.

Research Background

Therefore, as many researchers have paid attention to the analysis and examination of university curriculum patterns, it is worth mentioning some research backgrounds in the direction of the importance of the current research. Rahimi and Dehghani (2020) investigated the nature of the community-centered curriculum model and proposed a model for revising higher education curricula. Based on the fact that the skills needed by society are included in the university curriculum. On the other hand, Taghizadeh et al. (2022) investigated the elements and components of the practice-based curriculum model in higher education. They focused on the elements of the goal, content, teaching-learning strategies, materials and resources, teaching-learning opportunities, learning environment conditions, and evaluation. Finally, they presented elements with a focus on application and practice in the proposed university curriculum model. Chamani et al. (2022), examined knowledge management components in higher education curricula and proposed a model. Salimi (2015) also proposed an application model for interdisciplinary curriculum design in higher education. For this purpose, the existing patterns were examined with an interdisciplinary focus.

Diba Vajari et al. (2011) reviewed experiences and research achievements in conceptualizing higher education curriculum patterns. In their research, while examining the experiences and views presented in the field of higher education curriculum planning, they tried to classify the presented models in the form of one of the categories of prescriptive or normative models, descriptive models, conceptual models, and strategic models of curriculum planning in higher education. Dehghani et al. (2011) examined conceptual patterns in the curriculum domain. They examined the conceptualization of models in education and training, the description of models, and the types of models in the field of curriculum, as stated in specialized sources. Then, while providing examples of models, they analyzed the conceptual model in the field of curriculum. On the other hand, Bazargan et al. (2011) explained the model of the strategic curriculum of higher education from a phenomenological perspective, that is, the design of this experience of the curriculum shows how to create links between lived experiences, previous learning, and real conditions. It is evolving Mymand et al. (2011), in research titled "Presenting a guidance pattern of curriculum development based on the study of the level of awareness of faculty members about major factors of curriculum planning in Islamic Azad University (Kerman branch)" found that the level of knowledge of the faculty members about the various elements of needs assessment, methods The selection of educational objectives, the method of selecting content, the method of organizing content, the method of presenting content, the use of educational technology, and educational evaluation are at the intermediate level. However, their level of knowledge about the curriculum development process based on curriculum models and theories is low.

Finally, Fathi Vajargah (2006) focused on university curriculum patterns in their research. The basic goals of curricula in universities are based on attention to the general goals and missions of higher education, which include the following areas: specialized, general education,

knowledge cultivation and development, and teacher and trainer training. In order to achieve the above goals and make decisions in the field of curricula, it is necessary to act based on a suitable and comprehensive model. It regulates the patterns, structure, goals, content, and educational process of educational courses in a way that promotes progress across different educational levels. Various types of university curriculum planning models have been presented, which, while explaining the goals and characteristics of the university curriculum and introducing various types of curriculum models in higher education, have introduced the strategic planning model as a desirable model. Therefore, the purpose of this research is to explain the challenges in the curriculum and provide practical solutions by examining the perceptions of academic staff members regarding the existing curriculum and by searching for curriculum patterns that were previously designed in the Iranian academic community.

Method

The current research was conducted to examine the challenges of the curriculum and provide practical guidelines for improving and developing the curriculum of the University of Tehran in Iran. For this purpose, several steps were taken, as well as an appropriate methodology. In the first step, a systematic review was conducted to identify the points of focus and neglect in the Iranian higher education curriculum patterns that were originally designed. A review of scientific databases (e.g., Google Scholar, Noormax, Magiran), documents of curriculum studies associations, reference books, and quarterly journals related to the keywords "model design", "framework design", "determination of curriculum components", "higher education curriculum", "university curriculum", "curriculum models in higher education" and "university curriculum models" were conducted. As a result, after applying the appropriate filters, The scientific and research grade of the article, appropriate connection with the research topic, and year of publication (last two decades), a number of 57 valid articles were identified and placed in the initial review stage. Finally, after studying the abstract and research results, 11 articles were selected for a more detailed and final review. Study, categorization, and the focus and neglected points in the university curriculum were identified. Research based on indicators such as;

- Conceptual framework of "curriculum models in higher education"
- Research approach
- The research method used
- Template elements
- Research findings according to the research indicators.

In the second step of the research, the perceptions and challenges of the university curriculum were investigated. For this purpose, with a qualitative approach and a phenomenological strategy, data were collected using semi-structured interview tools with university faculty members. The participants of this research were selected using the purposeful criterion-oriented sampling method. In the end, until the 12th interview, theoretical saturation was achieved. The sample selection criteria; They were interested in participating in the research, had a specialized doctorate, were a member of the academic staff, had full-time teaching experience at the university, and had experience in designing and revising the university curriculum. In this step, the activity of data collection and analysis was performed in parallel so that the identified conceptual evidence was correctly coded (preliminary, primary, open, and axial), and the main categories were identified.

In the preliminary coding according to Saldaña (2013), before coding and labeling the semantic units, the researchers first collected each observation based on judgmental, purposeful, and informational sampling. The axis was studied many times, and the important parts that contained information were separated from other parts that did not have information importance. In the initial coding, key concepts and ideas in the data were identified and named without any predetermined interpretation or structure. In fact, initial coding is an iterative process based on continuous adaptation to past documents and analysis (Stough & Lee, 2021). The goal of the researcher at this stage of coding; Analysis is the breaking down of meaningful units into manageable units for initial labeling, called primary codes (Chun Tie et al., 2019).

Therefore, after preliminary coding and crushing meaningful units, 57 primary codes were extracted. In the next step, open coding, the codes were grouped into larger categories that represented patterns and key concepts according to (Creswell, 2022). In fact, preliminary and primary coding is also in the open-coding stage, which ends with an open-coding categorization. At this stage, the researcher can analyze and interpret the meaningful relationships in the data to gain a deeper understanding of the research topic (Villiger et al., 2022). The same process was used by the researchers involved in the present study, and the initial codes were adjusted and modified many times at this stage based on the notes, the opinions of the researchers, and other coders. The final categorization was performed. As a result, there are three main categories: The fundamental features of the university curriculum, the practical features of the university curriculum, and the implementation requirements of the university curriculum. Finally, no larger categories were identified in the axial coding stage, and the three main categories identified in the open coding stage were considered. In addition, the selective coding step, which is related to the foundations' data strategy, was not considered. A continuous matching technique, peer checking, and participants and university curriculum experts were used to check the validity and reliability of the identified conceptual codes and categories.

The third and last step is to provide practical guidelines for improving the university curriculum based on the stages of developing the higher education curriculum in basic patterns and identifying the alignment and disparity of the findings in the two previous steps, the qualitative approach and the focus group strategy were used. The focus group consisted of 20 university curriculum experts, related and subject experts from the Ministry of Science, Research, and Technology of Iran, and university faculty members. Based on the categories identified in response to the previous parts of the research, i.e., the focus points and omissions of the designed university curriculum patterns and the perceptions and challenges of the university curriculum in Iran, under the guidance of the secretary of the meeting, an in-depth review of the findings was conducted to provide a practical guide. Finally, oral and expert evidence from the group members was implemented and coded (preliminary, primary, open, and axial). From the identified categories, guiding and practical strategies for improving the university curriculum were proposed. The data triangulation method was also used to validate the research data. The data obtained from the review study, interviews, and focus group verification were compared, and the components of all three sources were used to provide practical guidelines.

Results

In this section, the extracted findings were obtained in several stages according to the qualitative approach. In the first stage, it was important to know the patterns and frameworks of the university curriculum. This study identifies the alignment and misalignment of curriculum frameworks in Iran and at Tehran University and the basic patterns through a review and document study. The suggested university curricula in Iran were extracted from the literature. The works published in the field of higher education curricula have mostly prescribed a special model for compiling or changing higher education curricula and have explained their application fields.

The review of the literature shows that the models provided have focused the most on the design of curriculum elements and have designed the model based on a thematic approach. It cannot be claimed that the presented models offer much innovation other than the difference in thematic approaches in other cases. Considering that prescriptive models actually provide a framework as a guide for designing and developing curricula, and at the same time, most of the reviewed studies have actually designed a framework, it seems that it is better in studies with the theme of designing a model of the type. It is recommended to use the conceptual word "framework". Designing prescriptive patterns (providing a framework) is one of the important activities of curriculum planners and decision-makers, and university education is also bound to designing and implementing prescriptive patterns (determined frameworks) in the curriculum. However, the focus of attention that researchers should pay more attention to is the extent to which they pay attention to the larger dimensions of the curriculum, not the elements and content of the curriculum. The content-based curriculum pattern is considered the oldest and most extensive pattern, that is, a content-based curriculum organization. The main goal of this type of curriculum is to acquire basic knowledge. The presented problems are the type of problem with a clear structure, that is, their solution is already known, and students must explain the solution to the problem based on the determined content. The most desirable patterns are those that engage students in problem scenarios that closely resemble authentic real-life situations.

In the next stage, it was intended to represent the concept of the curriculum and identify the issues and problems of the curriculum system in Iranian universities, such as Tehran University. To respond to the aforementioned main purpose, interviews were conducted on the concepts of the curriculum and the problems and solutions of the university curriculum planning system from the faculty members' point of view. The open and axial codes are described in a general way and separated by objectives, as shown in Table 1.

According to Table 1, the three main dimensions of the fundamental features of the curriculum features based on the applications of the curriculum, and the implementation requirements of the university curriculum from the point of view of faculty members in response to the representation of the concept of the curriculum and issues and problems and Curriculum development solutions were identified. In the next step, to answer the last question based on the stages of developing the curriculum of higher education in the basic patterns and recognizing alignment and misalignment from the focus group consisting of 20 curriculum planning specialists and a number of curriculum subject specialists and some relevant experts in the Ministry of Science, research and technology, and universities, we used. Based on a detailed understanding of the curriculum process in the university, in accordance with the opinions and views of faculty members, and the identification of existing issues and problems, a practical guide is prepared and presented in two parts.

Table 1. The main categories identified in response to the research objectives

Main Categories or Axial Codes	Open (primary) Codes or Subcategories
Fundamental features of the university curriculum	Curriculum planning is a dynamic and skill-oriented process; predictable process; a combination of tradition and specialization; Curriculum design includes specific processes that must be paid attention to all the obvious and hidden components involved in it; oriented. Need; attention to the factors of society and at the university level; the need to pay attention to scientific value creation in the country and world, synergy, teamwork, and developmental perspectives in curriculum planning; need for specialized steps in planning and implementation; predetermined process; the need to pay attention to skills, competence, and dynamism in planning; the need to pay attention to executive infrastructure in curriculum design; the presence of a curriculum planning specialist in the design, compilation, and implementation of curricula; zoom gives full attention to all direct and indirect beneficiaries, small and large, native or non-native; attention to the prediction of the infrastructure and resources needed in planning to achieve deeper learning; attention to the effective role that students can have in planning Curriculum revision should be done with the presence of professors and curriculum planning experts; The need to have a written program in the process of designing and preparing course headings and preventing administrative problems; The necessity of all-round attention in the matter of lesson planning in the preparation of the headings so that all effective factors are considered (socioeconomic); attention and predict the changes that an implemented curriculum will create in students and prepare for its consequences; attention to the existing and required infrastructure to respond to the needs of society; attention to optimization and training of people who create value; planning to bridge the gap between curriculum or designed topics and the realities of society and create a useful interaction between the two; designing evaluation models that go beyond existing formats; the need to pay attention to the design of new programs and to prevent repetition of previous programs with little or no return; the opinions of all stakeholders should be considered in policymaking; transitioning from quantity and the illusion of quality and reaching components that view quantities and qualities as realistic and valuable.
The practical features of the university curriculum	Curriculum planning should be based on skills and competencies; attention to global findings and attitudinal and process changes in other countries; attention to all factors involved in the curriculum and its relationship with courses and technical skills; attention to comparative studies and compare them with the current situation in the country; curriculum revision should be conducted by professors and curriculum planning experts; removing redundant courses and requiring correction of badly designed or non-applicable courses; providing more executive spaces for practical lessons.
The implementation requirements of the university curriculum	The need to pay attention to the necessary skills and knowledge of professors in the implementation by curriculum planner; attention to experience in teaching; the need for supervision from design to implementation; attention to the presence of a curriculum planning specialist in the design, compilation, and implementation of curricula; the need to anticipate obstacles and requirements in implementation; attention to the skills training of professors in the matter of lesson planning to implement it more successfully; in addition to executive requirements, the presence of responsible professors is also necessary; reducing administrative processes that slow down; attention to self-monitoring evaluation and training to groups of professors and employees to monitor the implementation; increasing the authority of faculties and departments; dismissal of professors and lecturers who do not have scientific results

A) The Structure of Curriculum Development at Tehran University

The structure of curriculum development at Tehran University requires the establishment and operation of curriculum improvement and quality control committees at two distinct levels to ensure standardized procedures and policies: first, the curriculum improvement and quality control committees at colleges and campuses, and second, the committee on the improvement and quality control of university curricula. Each committee follows a specific composition structure that includes educational assistants, heads of faculties and campuses, directors of educational groups, two curriculum planning experts, and two experienced teachers, ensuring comprehensive representation from all key stakeholders.

The committees are entrusted with specific duties that comprehensively cover all aspects of curriculum development and oversight. Their responsibilities include continuous monitoring of existing curricula, conducting detailed reviews and evaluations of curricula in relation to university missions, examining and approving curriculum evaluation criteria, reviewing and approving new curricula proposals, approving patterns and curriculum frameworks for different academic courses, and preparing and approving regulations and guidelines related to curricula. Each of these duties plays a vital role in maintaining curriculum standards and ensuring educational quality across the institution.

To ensure effective implementation of these responsibilities, the committees incorporate additional curriculum specialists and subject experts alongside university administrators. This expanded membership ensures a thorough evaluation of all curricula based on the specific criteria outlined in the institutional guide. The two-tiered committee structure, combined with diverse expertise and clearly defined responsibilities, creates a comprehensive system for curriculum development and oversight that serves the university's educational mission while maintaining high academic standards. All proposed curricula and modifications must pass through this structured evaluation process, ensuring consistency and quality in curriculum development across all academic programs.

B) Curriculum Planning

One of the major challenges in curriculum development at Tehran University involves achieving consensus among faculty members regarding the main activities and stages of curriculum planning. This challenge is particularly complex due to the diverse views, experiences, and backgrounds of faculty members. The situation is further complicated by the predominantly discipline-oriented perspective of faculty members, who often focus solely on their field's academic structure without sufficient consideration of educational principles and curriculum development theory. To address this challenge, the integration of curriculum specialists has been proposed to help balance traditional discipline-oriented approaches with contemporary educational methodologies.

The suggested curriculum pattern for Tehran University addresses these challenges through a two-part framework. The first part focuses on study and analysis of needs, operating at both macro and micro levels. At the macro level, the framework examines broader institutional needs identified through previous curriculum implementation and detailed needs assessments. This includes identifying general student needs, such as research methodology requirements for master's students in social sciences and management fields, and understanding undergraduate students' primary challenges. The first part encompasses three key stages: conducting comprehensive needs assessments from multiple stakeholder

perspectives (students, professors, and graduates), performing comparative studies of curricula in developed countries, and analyzing Tehran University's long-term strategic plans and policies.

The second part, curriculum design, follows a systematic nine-step process. It begins with establishing the curriculum's existential philosophy and mission, which are aligned with social needs and university strategic policies. The process then progresses through determining governing principles, identifying student qualifications and skills, developing curriculum templates, setting specific goals, and detailing course content and teaching strategies. The final stages involve creating and testing a trial version, evaluating its strengths and weaknesses, and preparing the final curriculum version. This comprehensive structure ensures that curriculum development integrates both disciplinary expertise and educational principles while maintaining alignment with institutional goals and stakeholder needs. Each step in this process is designed to contribute to the development and enhancement of curriculum quality, ensuring a balanced approach between traditional academic rigor and modern educational needs.

Discussion

In the present study, the results were identified through several stages, examining the challenges in the university curriculum process and providing a practical guide at Tehran University. Through a comprehensive methodology that included a systematic review of curriculum models, in-depth interviews with faculty members, and focus group discussions with curriculum experts and stakeholders, the analysis revealed three main themes that shape curriculum development: the basic characteristics of curriculum planning, the characteristics based on curriculum planning applications, and the executive requirements of curriculum planning. This multi-dimensional approach reflects the complex nature of higher education transformation in recent decades (Schofer et al., 2020).

Regarding the first theme, which emerged from faculty members' perceptions of the university curriculum, its challenges, and solutions, several key characteristics were identified. As Largani and Yadegarzadeh (2022) emphasize, curriculum planning should be inherently dynamic and responsive to changing educational needs, which aligns with our findings of a skill-based, needs assessment-based approach. Furthermore, it was found to be value-based, development-oriented, competence-based, participatory, student-centered, comprehensive, and interaction-oriented. The analysis revealed significant challenges, including the absence of curriculum planning experts in educational groups and program design based primarily on professors' preferences. These challenges echo the findings of previous studies in Iranian higher education curriculum development (Fathi Vajargah, 2006; Zain al-Dini Maimand et al., 2009).

In examining the second theme, the analysis aligns with Rahimi and Dehghani's (2020) emphasis on society-oriented curriculum models, focusing on several critical features: curriculum planning based on competence and skill development, with emphasis on comparative studies and continuous reviews aligned with Indigenous conditions. Similar to Taghizadeh et al.'s (2022) findings, our research emphasized the importance of removing superfluous lessons, reviewing poorly designed courses, and paying significant attention to practical lessons in university curricula. Notable challenges included insufficient attention to

all factors involved in the curriculum and its connection with courses and technical skills. These challenges reflect broader concerns about curriculum coherence in higher education (Chamani et al., 2022).

The third theme focused on executive requirements, highlighting various crucial elements: the need for professor skills and knowledge in implementation, attention to teaching experience, monitoring from design to implementation, and expert presence in curriculum planning. As highlighted by Bazargan et al. (2011), the strategic aspects of curriculum implementation require careful consideration of both theoretical frameworks and practical challenges. Additionally, the study emphasized the importance of increasing faculty and group authority, including the ability to dismiss professors who do not demonstrate scientific results. These findings reflect the growing emphasis on quality assurance and accountability in higher education curriculum implementation (Ehlers et al., 2019).

The analysis concluded by presenting solutions that address these challenges through a comprehensive approach. This aligns with recent research by Diba Vajari et al. (2011) on conceptualizing higher education curriculum patterns, emphasizing the need for systematic frameworks that integrate multiple stakeholder perspectives. The solutions include involving curriculum planners, subject experts, and business representatives in the planning process, maintaining structured written programs, and ensuring comprehensive attention to all effective factors - cultural, social, and economic. These recommendations support the transformation towards more dynamic and responsive curriculum development approaches in higher education (Krause, 2022).

Conclusion and Implications

The review-comparative study of Iranian researchers' work on curriculum models and frameworks in Iranian universities revealed several key findings. The analysis showed that existing models predominantly focus on curriculum element design and follow thematic approaches, though prescriptive approaches are gaining increasing significance in university settings. The research demonstrated that curriculum success is closely tied to learner engagement through reality-based scenario design. The study led to the development of a practical curriculum guide for Tehran University through a specialized panel consultation, proposing two fundamental steps: needs analysis and curriculum design. As emphasized by Stark and Lattuca (1997), developing curricula across various scientific fields demands specialized knowledge in information, educational knowledge, and curriculum development, reflecting its status as a specialized discipline with a century-long history in prestigious global universities. This comprehensive approach to curriculum development emphasizes the need for systematic and research-based frameworks that align with both educational principles and contemporary academic standards.

A significant challenge identified in higher education systems is the inadequacy of curriculum development processes. While most universities rely on field experts for curriculum development, these curricula often fall short of meeting educational and psychological principles. The research reveals, as highlighted by recent studies in higher education transformation, that university systems require curriculum evolution from mere knowledge transfer to creating opportunities for research and exploration. This transformation is essential for enabling universities to better respond to societal needs and progress toward fourth-generation status. The findings emphasize that curriculum dynamics play a crucial role in

realizing entrepreneurial university objectives, with success dependent on knowledgeable professors, engaged students, and a systematic university environment as essential elements for achieving educational excellence and societal relevance.

The study's implications suggest several key recommendations for practice and future research. Universities should establish structured curriculum development processes that integrate both disciplinary expertise and educational principles, develop continuous professional development programs focusing on curriculum design and implementation for faculty members, and create mechanisms for regular curriculum review and updating that involve all stakeholders. Future research should examine the long-term impacts of implementing the proposed practical guide, how different institutional contexts might affect its effectiveness, and ways to better integrate technological advancements in curriculum development. Additionally, comparative studies across different universities and cultural contexts are needed to validate and refine the proposed approaches to curriculum development. The study concludes that the pathway to university transformation lies in the dynamic interplay between curriculum design, academic expertise, and institutional commitment to meet evolving societal demands through research-oriented and entrepreneurial approaches.

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