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Standards and Institutional Approaches in Landscape Architecture Education: Case of Turkey

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Abstract

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Since the end of the 19th century, landscape architecture, a transdisciplinary profession, has defined a quality educational framework with many global and local institutions to train competent professionals. The education of landscape architecture in Turkey is predicated on experiential learning, emphasizing the triad of design, planning, and management within the purview of TYYC and PEMDER's standards. The objective of this research is to ascertain the current state of the landscape architecture education environment, considering the educational standards of Turkey. Within the scope of the study, the undergraduate program curriculums of 10 universities from various faculties in Turkey were analyzed. According to results, landscape architecture curricula in Turkey vary among institutions, emphasizing theory, design and technology, professional practice, structural materials, plant materials, and out-of-field courses. As a result, landscape architecture education in Turkey evolves while maintaining differences from established educational standards.

Keywords: Landscape architecture; Education standards; Institutional Approaches.

1. Introduction

The profession of landscape architecture is characterized by its transdisciplinary medium, engaging with various fields including natural sciences, art, engineering, design, and urban planning (Amen, Afara, and Nia 2023; Amen and Nia 2020). By the conclusion of the 20th century, landscape architecture educational programs, initially established at Harvard University incorporated a range of disciplines to instruct landscape architects. Landscape architecture education, which has proliferated globally, offers specialized training programs across various academic disciplines to equip landscape architects with the expertise to address challenges associated with the nature and social needs. The current environment, characterized by its heterogeneity in educational approaches, has given rise to a press for precise delineations regarding the professional competencies that individuals are expected to acquire. Institutions and organizations on a global and regional scale have launched to work a quality educational environment creation, determine the basic topics of the landscape architecture profession, and set the structure of the curriculum. Nevertheless, institutions adapt their curricula to align with the specific needs of their geographical regions and professional approaches, contingent on their prioritized subjects. In fact, these established standards offer the opportunity to regulate educational capacities to institutions.

In the context of higher education, the Higher Education Institution of Turkey (YOK) has established the Higher Education Competency Framework-TYYC, which delineates the qualifications that individuals should acquire at each level of education. The pedagogy of landscape architecture, with its origins in the Ottoman Republic, persists in various faculties within contemporary conditions, operating within the parameters described by YOK. The TYYC learning outcomes portray landscape architecture pedagogy through the integration of architecture, art, and environmental sciences. Therefore, knowledge, skills, and competencies that students acquire as a result of curricula construct in an interdisciplinary framework. Conversely, the Landscape Architecture Education Association (PEMDER), a non-governmental organization dedicated to the advancement of the discipline and education of landscape architecture, has formulated learning objectives, curriculum structure, and learning outcomes in alignment with global landscape architecture educational methodologies. Both standards, which facilitate the evaluation of landscape architecture curricula from various perspectives about theory, design, planning, management, technology, and technical structure,

serve as a pivotal opportunity to comprehend the prevailing teaching methodologies employed by institutions and to establish the requisite conditions for enhancement.

The objective of the present study is to ascertain the present status of landscape architecture education in Turkey within the framework of the aforementioned standards that have been developed for the landscape architecture education and training process. In this context, the Turkish Higher Education Competency Framework (TYYC) and the competencies identified by the Landscape Architecture Education Association (PEMDER) for the discipline of landscape architecture serve as reference points. The curricula of the leading landscape architecture institutions in Turkey were reviewed according to these competencies. The results of the evaluation process demonstrated that the specified topics were incorporated into the curricula to varying extents. However, their teaching subjects can exhibit variability according to the pedagogical approaches adopted by their own institutions and faculties. Therefore, the current educational opportunities provide the versatile working environment necessary for the effective implementation of landscape architecture. These standards are predicated on the preservation of diversity in education as a tool for setting the general framework of curricular programs (Figure 1).

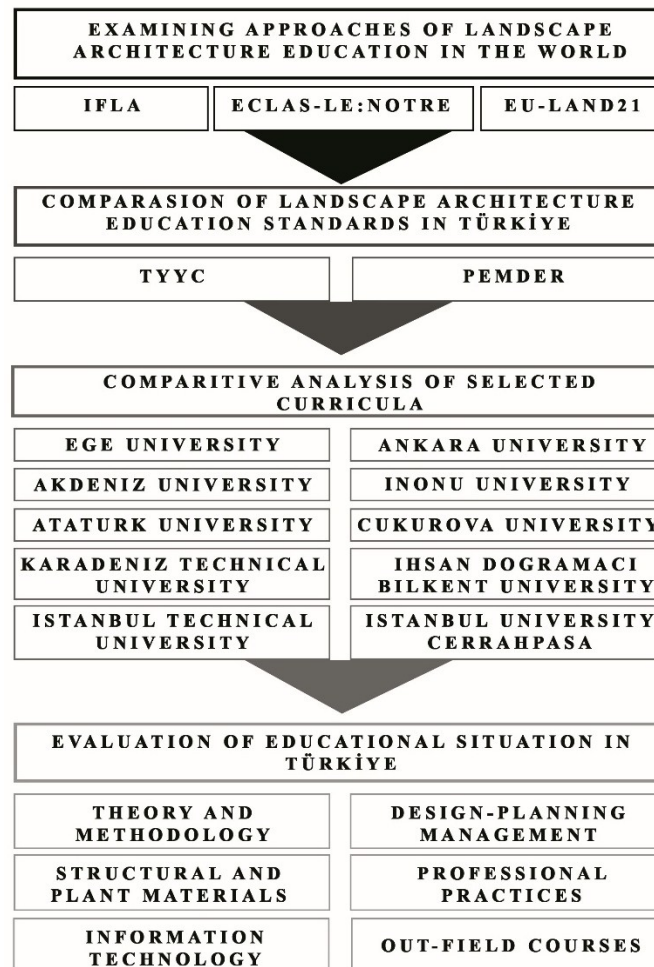


Figure 1. Structure of the Study (Developed by Authors).

2. Development of The Landscape Architecture Curriculum

Curriculum development in higher education is a complex and dynamic process influenced by both global and regional factors. It encompasses considerations such as subject matter, teaching methodologies, and educational levels. Effective curriculum design integrates key elements, including innovative teaching strategies, relevant content, technical skill development, adaptability to diverse contexts, social relevance, and philosophical inquiry. These components collectively enhance the educational experience and prepare students for success in an evolving academic and professional landscape (Thompson, 1975, p. 251; Geelmuyden, 2022). Programs aimed at fostering professional skills are grounded in historical and cultural values, institutional practices, and a broad spectrum of professional expertise (Levander & Mikkola, 2009, p. 275). In higher education, curriculum development follows systematic processes to meet global and local quality standards, moving beyond institutional and departmental perspectives. A significant initiative in this regard is the Bologna Process, which was designed to create a cohesive European higher education system, enhance student mobility, and foster competition among institutions (European Commission, 2022). By establishing numerical equivalence across curricula in Europe, the Bologna Process has played a crucial role in the development of accreditation agencies that assess educational quality based on professional disciplines (Cabuk, 2018). Accreditation boards evaluate the competence and capacity of educational programs, define learning objectives based on professional requirements, structure curriculum content accordingly, and assess the acquisition of professional knowledge, skills, and competencies upon program completion (Kaynak Altınduzgun & Cosgun, 2020, p. 2).

The discipline of Landscape Architecture, which has an integrated relationship with ecology, art, society, and technology, started in 1900 at Harvard University with an educational approach to the design, planning, and management of urban and rural green spaces (Dümpelmann, 2022, 121). Since its inception, landscape architecture has embraced a transdisciplinary approach, necessitating the establishment of teaching standards within curriculum programs to ensure the acquisition of professional competencies. Many global and regional institutions, organizations, and studies exist in this context. Notably, the IFLA (International Federation of Landscape Architects), ECLAS (European Council of Landscape Architecture Schools), and the Le: NOTRE (Landscape Education New Opportunities for Education and Research in Europe) initiative provide significant reports on education and accreditation in landscape architecture. Additionally, the LAAB (Landscape Architecture Accreditation Board) and the LAAC (Landscape Architecture Accreditation Council) set the standards for the programs in North America. Besides these well-known international examples, each country also has its own local accreditation agency (Sayan Atanur et al., 2020; Cabuk, 2018; Kılıçaslan, 2020).

In accordance with the educational standards established by the International Federation of Landscape Architects (IFLA) in 2008, the objective of landscape architecture curriculum programs is to instill in the next generation of landscape architects the concept of a global environment where the inhabitants reside and where the social and cultural milieu is harmoniously aligned with nature. In the context of landscape architecture education, the curriculum is meticulously designed to cultivate a foundation of theoretical and methodological expertise. Students are expected to demonstrate mastery of the discipline's core concepts, while also cultivating a profound understanding of the natural and cultural environment. This understanding is further reinforced by an acute awareness of environmental needs, a commitment to technological advancement, and the acquisition of professional ethical values. In anticipation of an education process estimated to span 3 years, the IFLA opted to offer 180 ECTS programs, contingent on the stipulations of the Bologna process (Table 1).

Table 1. IFLA/UNESCO Charter for Landscape Architectural Education (IFLA, 2008, 5-6).

| |
|--|
| Goals |
| a decent quality of life for all the inhabitants |
| an approach to landscape planning and design interventions which respects the social, cultural, physical and aesthetic needs of people |
| an ecologically balanced approach assuring sustainable development of the built environment |
| a public realm landscape which is valued and expressive of local culture. |
| Acquisition of knowledge |
| History of cultural form and an understanding of design as a social art |
| Cultural and natural systems |
| Plant material and horticultural applications |
| Site engineering including materials, methods, technologies, construction documentation and administration, and applications |
| Theory and methodologies in design and planning |
| Landscape design, management, planning and science at all scales and applications |
| Information technology and computer applications |
| Public policy and regulation |
| Communications and public facilitation |
| Ethics and values related to the profession |
| Standards |
| Bologna Declaration states that a bachelor program (the first cycle degree) can be of 180 ECTS. |

Building upon the established standards of the IFLA, a collaboration was initiated in 2010 with ECLAS and Le:Notre to delineate the competencies to be acquired through the educational process. This collaborative effort has created the fictionalization of a unified framework for landscape architecture education across Europe. The primary competencies scheduled to be acquired in the course of this advanced instructional process are the identification and evaluation of landscapes, in addition to the formulation of action strategies that are congruent with the inferences derived from the initial assessment. These standards, developed under the assumption that higher education curricula should provide both general and discipline-specific competencies, delineate a multidimensional pedagogical framework for landscape architecture instruction. The programs endeavor to imbue young professionals with the competencies to perform in both independent and collective capacities, to demonstrate critical and inquisitive mindsets, a receptiveness to furthering their knowledge, a robust capacity for social interaction, and the aptitude for leveraging contemporary technological resources. The program's structure ensures the acquisition of discipline-specific competencies in landscape architecture, encompassing theoretical and methodological frameworks, design, planning, and management principles, as well as materials, tools, and professional practices (Table 2).

Table 2. Competences according to ECLAS Guidance (Bruns et al., 2010, 16-19).

| | | |
|---|--------------------------------------|---|
| Core Competences | | |
| <ul style="list-style-type: none"> • Identification and assessment of landscapes • Actions of landscape planning, design and management | | |
| General Competences | | |
| Instrumental competences | Interpersonal competences | Systemic Competences |
| Capacity of analysis and synthesis | Critical and self-critical abilities | Capacity for applying knowledge in practice |
| Problem solving | Teamwork | Research skills |

| | | |
|--|--|--|
| Decision making | Interpersonal skills | Capacity to learn |
| Basic general knowledge | Ability to work in an interdisciplinary | Capacity to adapt in new situation |
| Oral and written communication in own language | Appreciation of natural diversity and multiculturalism | Understanding of cultures and customs of other countries |
| Elementary computing skills | Ability to communicate with experts in other fields | Capacity to generate new ideas |
| Knowledge of a second language | | Ability to work autonomously |
| Grounding in basic knowledge of profession | Ethical commitment | Leadership |
| | | Project design and management |
| Information management skills | | Initiative and entrepreneurial spirit |
| Capacity of organization and planning | Ability to work in an international context | Concern for quality |
| | | Will to succeed |
| Subjects Competences | | |
| 1- Theory and Methodology in Landscape Architecture | | |
| 2- Planning, Design and Management | | |
| a. Landscape Design, Landscape Planning and Management | | |
| b. Urban Open Space Planning (and Policy) | | |
| c. Interpretation and Conservation/Management of Cultural Landscapes | | |
| d. Conservation/Management of Parks and Gardens | | |
| e. Planning/Design for Infrastructure Projects (and Landscape Impacts) | | |
| 3- Vegetation and Materials | | |
| a. Materials and Construction Techniques | | |
| b. Vegetation Establishment and Plant Materials | | |
| 4- Information Technology in Landscape Architecture | | |
| 5- Professional Practice of Landscape Architecture | | |

The EU-Land 21 project, which is a component of the Erasmus+ Strategy, was developed as a response to regulating the existing gaps with current conditions in the training guides that had been prepared by the IFLA and ECLAS. The project's development has resulted in the following determinations regarding the undergraduate and master's curriculum programs:

- The programs are to comprise a minimum of 240 ECTS.
- At least 50% of the programs are to consist of studio or project-generated courses.
- Internship programs are to comprise a minimum of 15 ECTS.
- A final project or graduation thesis is to be required.
- Issues related to society and the environment (climate change, inclusive planning, food security) are to be adapted to the programs.
- The programs are to provide general competencies in addition to the university's approach.
- There are to be programs that support cooperation (interdisciplinary, inter-university, inter-country).

In contemporary landscape architecture education, sub-categories pertaining to the fundamentals of landscape architecture and the project subject have been integrated into the existing competencies. Consequently, the curricula underwent a transformation, with an increasing emphasis on raising awareness about the conservation and management of each open and green space (Table 3).

Table 3. Current competencies targeted in landscape architecture education (EU-Land21, 2018).

| Type of competence | Blocks of Competences / Learning Line | |
|--|---------------------------------------|--|
| Basic | G1 | Landscape architecture foundation, background and supporting competences |
| Theory | A1 | Theory and Methodology in Landscape Architecture |
| Process of Planning, Design & Management | B1 | Landscape Design |
| | B2 | Landscape Planning |
| | B3 | Landscape Management |
| Categories of projects | C1 | Urban Open Space Planning and Policy |
| | C2 | Interpretation and Conversation/ management of Cultural Landscapes |
| | C3 | Conservation/Management of Parks and Gardens |
| | C4 | Planning/Design for Infrastructure Projects (and Landscape Impacts) |
| Vegetation & Materials | D1 | Materials and Construction Techniques |
| | D2 | Vegetation Establishment and Plant Materials |
| Tools | E1 | Information Technology in Landscape Architecture |
| Practice | F1 | Professional Practices of Landscape Architecture & Entrepreneurship |

The first step in the education of landscape architecture in Turkey began with the establishment of agricultural schools due to the need for agricultural production (Sarıkaya, 2017, 25; Kaynakçı Baydar & Boz, 2022, 531). After the proclamation of the Republic, with the establishment of the Ankara Higher Agricultural Institute - Ornamental Vegetation Branch in 1933, the foundation of today's undergraduate programs in Landscape Architecture was laid and the content of education developed towards plant production (Ortacesme et al., 2014, 31). In 1968, the Department of Ornamental Plants and Horticulture within the Agricultural Engineering undergraduate program of Ankara University Faculty of Agriculture graduated the first landscape architects in Turkey (Gültekin, 2019; Ankara University, 2025).

Until 2002, landscape architecture education, which was associated with the Faculties of Agriculture and Forestry, experienced a significant change with the establishment of the Istanbul Technical University Landscape Architecture Undergraduate Program within the Faculty of Architecture (ITU, 2025). ITU has taken the first step evaluating the discipline of Landscape Architecture under the title of “Design and Planning” in Turkey. In this context, institutions providing education in the Faculties of Forestry and Agriculture have started to show a tendency towards the field of Architecture and Design (Guzel & Erdem Kaya, 2024; Guzel, 2020, 60).

The Higher Education Council (YOK) is the governing body responsible for the oversight of higher education procedures in Turkey. YOK developed the Turkish Higher Education Competence Framework (TYYC) to identify the minimum learning outcomes to be achieved at each education level by following Turkey's accession to the Bologna Convention in 2008. In accordance with this framework, a consensus has been reached among subject-matter experts regarding the knowledge, skills, and competencies necessary to facilitate learning processes across various professional disciplines and educational levels (YOK, 2025). For landscape architecture education, the initial teaching standards were introduced by YOK in 2011 (YOK, 2011a; YOK, 2011b; YOK, 2011c). Conversely, institutional arrangements and academic studies were conducted for a quality landscape architecture education framework. In 2009, a consensus was reached by the Landscape Architecture Department Presidency Council (PEMKON) regarding the optimal framework for the education, which was determined to be within the purview of the faculties of Architecture (Guzel, 2020, 123). A series of workshops, which also served as a preparatory measure for subsequent initiatives, were held in 2014, 2018, and 2024 to assess the prevailing educational methodologies in the programs (Ortacesme, 2015; Uzun et al., 2019).

The Landscape Architecture Education Association (PEMDER) was established in 2018 to cultivate the discipline and education of landscape architecture on both a local and global scale. The organization facilitates collaborative efforts and administers accreditation processes to promote excellence and professional standards within the field (PEMDER, 2025). In 2020, PEMDER's application to become a local accreditation agent was approved by the Higher Education Institution Accreditation Organization (YOKAK), a development that signaled its commitment to enhancing the quality of landscape architecture education (PEMDER, 2022).

3. Material and Methods

Alongside the pedagogical frameworks designed for higher education programs in Turkey, studies specifically focused on the discipline of landscape architecture have established certain educational standards. This study is dedicated to assessing the influence of educational standards on the transdisciplinary structure of landscape architecture. The research comprises three distinct stages, each meticulously designed to explore the pertinent dimensions of this field. In the initial phase of the study, the Turkish Higher Education Qualifications Framework (TYYC) and the Landscape Architecture Education Association (PEMDER) were identified as key organizations involved in the establishment of landscape architecture education in Turkey, guided by specific standards. The standards developed by both institutions were carefully analyzed concerning knowledge acquisition, skill development, and competency attainment. In the second phase of the study, a comparative analysis was conducted on the undergraduate curricula of ten universities from different faculties, each esteemed for their leadership in landscape architecture education in Turkey. To examine the curriculum programs, titles such as Theory, Design and Planning, Professional Practice, Information Technologies, Structural and Vegetable Materials, and Out-of-Field Courses have been established by aligning with the discipline-specific competencies outlined in the standards of landscape architecture education. The selected curricula have undergone a thorough evaluation based on predetermined criteria. Based on the evaluation results from the final stage, the focus points of institutions have been identified.

3.1 Sample Detection

The distinct characteristics of each region in Turkey, along with the diversity of academic programs and the opportunities presented by geographical conditions and borders, play a significant role in shaping the development of landscape architecture education. In this context, ten schools from different faculties that stand out in terms of institutionalization of the educational process have been selected as a sample (Figure 2). The reasons for the selection of the samples listed according to their dates of establishment are given below.

1. Ankara University - Faculty of Agriculture (1946) as Turkey's first university to support the development of Landscape Architecture education nationwide from Central Anatolia.
2. Çukurova University - Faculty of Architecture was established in 1969 as the pioneering institution for landscape architecture education in the Mediterranean region. The program began within the Faculty of Agriculture, with the esteemed support of the University of Ankara.
3. As the first institution to offer landscape architecture education in the Aegean region, the Faculty of Agriculture at Ege University (established in 1976) remains one of the few places providing this education.
4. Istanbul University-Cerrahpaşa's Faculty of Forestry established the first official undergraduate program in Landscape Architecture in Turkey in 1984, leading to the graduation of the country's inaugural Landscape Architects (IU-C, 2025).
5. The Faculty of Forestry at Karadeniz Technical University, established in 1990, has played a pivotal role in advancing Landscape Architecture Education in the Black Sea Region.
6. Atatürk University - Faculty of Architecture and Design (1990) is the first university in the Eastern Anatolia Region to provide Landscape Architecture education within the Faculty of Agriculture.
7. Ihsan Doğramacı Bilkent University was established in 1991 at the Faculty of Fine Arts, Design, and Architecture, offering Turkey's first interdisciplinary undergraduate program in Urban Design and Landscape Architecture.

8. Akdeniz University - Faculty of Architecture, established in 1991, has made noteworthy contributions to the institutionalization of Landscape Architecture Education at the local level.
9. Istanbul Technical University - Faculty of Architecture (2002) introduced landscape architecture education within Turkey's "Faculty of Architecture" and is the only internationally accredited institution in this field.
10. Inonu University - Faculty of Fine Arts is the first "Faculty of Fine Arts" to offer Landscape Architecture Education in the Eastern Anatolia Region, established in 2007.

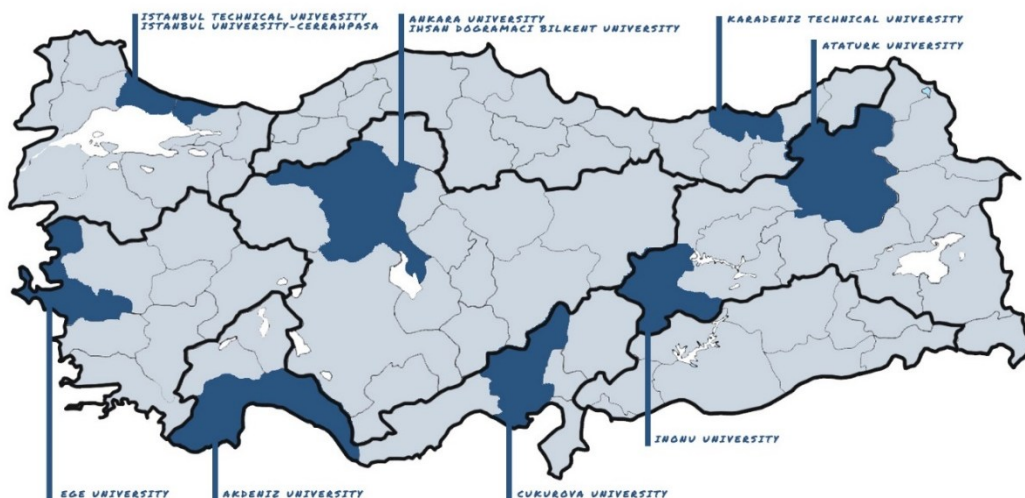


Figure 2. Geographical locations of selected samples (Developed by Authors).

4. Results

Within the framework of TYYC, the discipline of Landscape Architecture shapes the learning outcomes at the intersection of "Architecture", "Art", and "Environmental Science" (YOK, 2011a; YOK, 2011b; YOK, 2011c.) In this national framework, learning outcomes are categorized under six headings.

- "Theoretical and Factual Knowledge",
- "Cognitive and Practical Skill",
- "Communication and Social Skill",
- "Learning Skill",
- "Ability to Work Independently and Take Responsibility",
- "Domain-Specific Competencies"

According to TYYC, the conceptual and factual knowledge gains the place of the landscape architecture in science, society, and the World, material and production techniques, professional practice, information acquisition-research-measurement-evaluation methods and, legal processes. The acquisition of cognitive and practical skills focuses on concept development, problem identification and solution generation, multidimensional thinking and perception, interdisciplinary interaction, discourse theory, and practice integrity at the point of perception of the information obtained. Adopting competencies in communication, social Life, learning, and taking responsibility determined by TYYC is associated with serving the society, mastering technology, written-visual-verbal communication, critical thinking, and individual-group work in landscape architecture education. The competencies that must be cultivated in the field or discipline are delineated by capabilities of universal professional problems identification, natural-cultural values protection, knowledge with social and professional values synthesis, proficiency in project preparation, application, following-up, creative thinking, aesthetic thinking, and establishing cooperation. Publishing the initial draft of the Turkish Higher Education Competency in 2008, which remains in effect today, marked the inaugural institutional framework for landscape architecture education (Figure 3).

The Landscape Architecture Education Association (PEMDER), an authorized entity for the oversight and accreditation of landscape architecture education in Turkey, has outlined the criteria deemed essential for the education to achieve both quantity and quality per its accreditation guidelines (PEMDER, 2022). The programs define their educational objectives by the core missions of their institutions and faculties, stay up to date with the support of internal and external stakeholders, and construct their methods of measurement and evaluation according to the determined criteria for a quality educational environment. The curriculum includes both general and vocational courses, which are designed to encompass basic, natural, and social sciences, as well as fine arts and other scientific disciplines. It is expected that at least 50% of all courses will focus on planning and design, while at least 25% will be elective courses, with some electives available outside of the program. According to determined qualitative and quantitative values, the learning outcomes of the curricula are divided into four categories as knowledge, skill, behavior, and discipline-specific competencies. Discipline-specific competencies are also organized into five major headings and six subheadings (Figure 3).

1. Theory and Methodology of Landscape Architecture
2. Planning, Design, and Management
 - a. Landscape Planning, Landscape Design and Landscape Management
 - b. Urban Green and Open Space Planning and Policy
 - c. Conservation and Management of Cultural Landscapes

- d. Planning, Design, and Environmental Impact of Infrastructure Projects
- 3. Professional Practice
- 4. Information Technologies in Landscape Architecture
- 5. Structural and Vegetative Material
 - a. Structural Materials and Construction Techniques
 - b. Plant Materials and Ecology

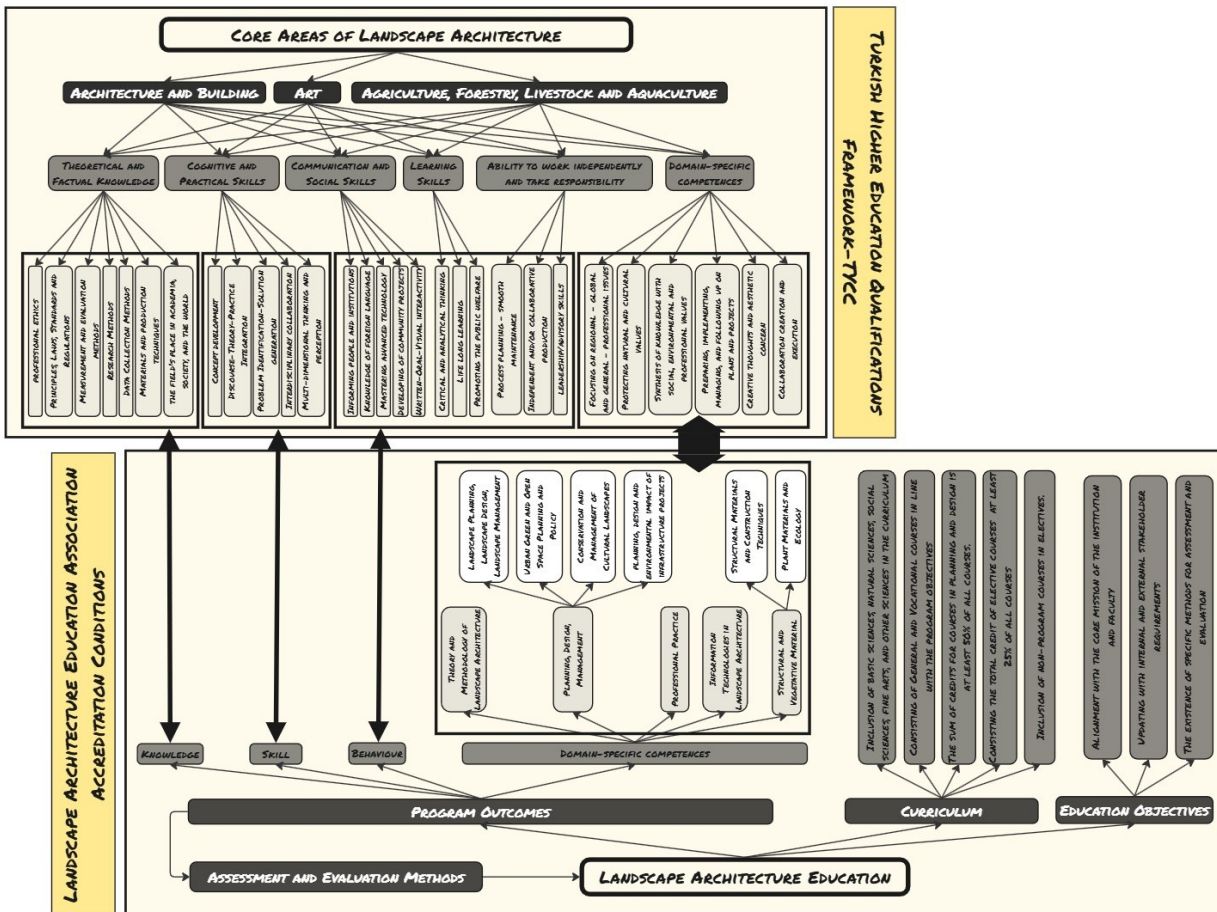


Figure 3. Learning Matrices of TYC and PEMDER (YOK, 2011a; YOK, 2011b; YOK, 2011c; PEMDER, 2022).

According to the comparison of TYC and PEMDER standards, TYC organizes teaching outcomes under knowledge, skills, and field-specific competencies headings. Conversely, PEMDER categorizes the learning markers as knowledge, skills, behavior, and discipline-specific competencies in four headings. The interrelationships of these titles belonging to both institutions correspond as Theoretical and Factual Knowledge (TYC) to Knowledge (PEMDER), Cognitive and Applied Skills (TYC) to Skill (PEMDER), Cognitive and Practical Skill, Communication and Social Skill, Learning Skill, Ability to Work Independently and Take Responsibility (TYC) to Behavior (PEMDER), Field Specific Competencies(TYC) to Domain-Specific Competencies(PEMDER). Upon evaluation of the titles "Acquisition of Field and Discipline Specific Competencies" in terms of the requirements of the professional discipline of landscape architecture, both institutions associate landscape architecture education with Design, Planning, Management and Professional Practice (Figure-4). The analysis results reveal that the landscape architecture learning approach in both institutions emphasizes the rational and professional facets of the discipline. Considering the worldwide mission of landscape architecture is to develop viable solutions to global environmental problems, the educational process in Turkey comes forward with the existence of applied learning methods based on scientific, social, and aesthetic principles.

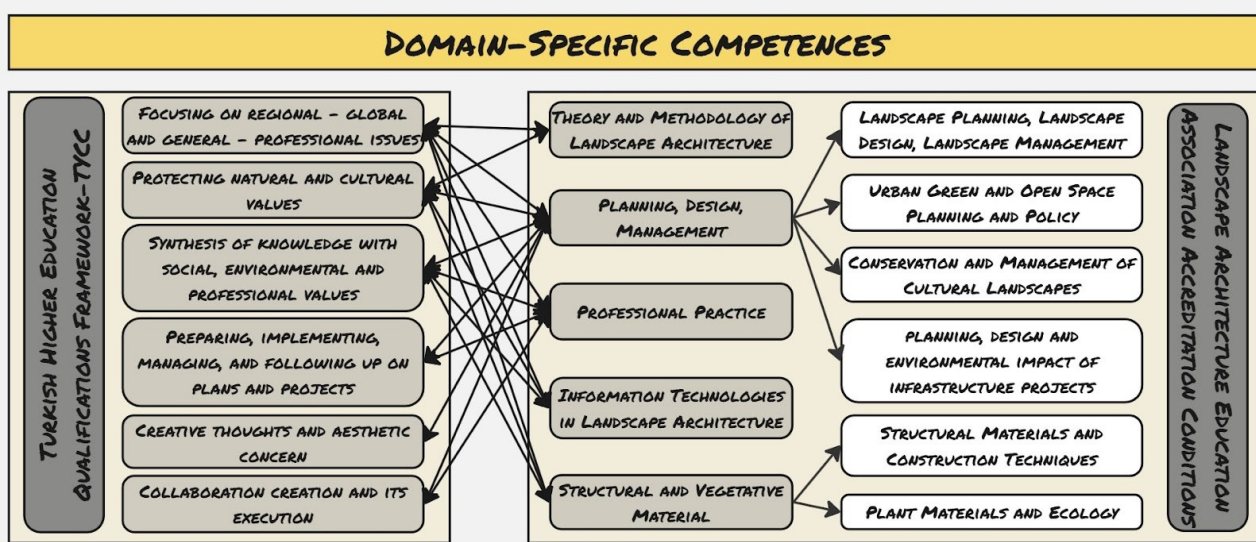


Figure 4. Comparative analysis of discipline-specific competencies according to TYYC and PEMDER learning outcomes.

Landscape architecture education in Turkey is mainly carried out in the faculties of Forestry, Agriculture, Architecture, and Fine Arts. To assess the impact of the diversity of faculties on the curriculum programs, an analysis was conducted by the professional discipline-specific competency acquisition criteria established by the Landscape Architecture Education and Science Association (PEMDER) and the Turkish Higher Education Qualifications Framework (TYYC) (Table 4).

Table 4. Comparison of selected curriculum programs according to the themes of the learning outcomes.

| | Ankara University | Akdeniz University | Ataturk University | Cukurova University | Ege University | Ihsan Dogramaci Bilkent University | Inonu University | Karadeniz Technical University | Istanbul Technical University | Istanbul University-Cerrahpasa |
|---|-------------------|--------------------|--------------------|---------------------|----------------|------------------------------------|------------------|--------------------------------|-------------------------------|--------------------------------|
| Total number of Courses in the Curriculum | 103 | 71 | 80 | 89 | 98 | 54 | 102 | 68 | 61 | 113 |
| Number of Required courses for Graduation | 76 | 60 | 55 | 76 | 80 | 44 | 72 | 48 | 48 | 73 |
| 1-Theory and Methodology of Landscape Architecture | 8 | 7 | 4 | 4 | 4 | 9 | 11 | 3 | 5 | 8 |
| 1-Theory and Methodology of Landscape Architecture % | %8 | %10 | %5 | %4 | %4 | %17 | %11 | %4 | %8 | %10 |
| 2-Planning, Design, Management | | | | | | | | | | |
| Landscape Planning, Landscape Design, Landscape Management | 25 | 22 | 28 | 33 | 23 | 28 | 33 | 29 | 31 | 33 |
| Landscape Planning, Landscape Design, Landscape Management % | %24 | %31 | %35 | %37 | %23 | %52 | %32 | %43 | %51 | %29 |
| Urban Green and Open Space Planning and Policy | 6 | 4 | 4 | 1 | 7 | 13 | 5 | 11 | 15 | 8 |
| Urban Green and Open Space Planning and Policy % | %6 | %6 | %5 | %1 | %7 | %24 | %5 | %16 | %25 | %7 |
| Conservation and Management of Cultural Landscapes | 1 | 1 | - | - | 1 | 4 | 3 | 2 | 6 | 3 |
| Conservation and Management of Cultural Landscapes % | %1 | %1 | - | - | %1 | %7 | %3 | %3 | %9 | %3 |
| Planning, Design and Environmental Impact of Infrastructure Projects | - | 1 | 3 | 1 | - | 5 | 1 | 1 | 5 | 3 |
| Planning, Design and Environmental Impact of Infrastructure Projects % | - | %1 | %4 | %1 | - | %9 | %1 | %1 | %8 | %3 |
| 3-Professional Practices | 14 | 10 | 11 | 19 | 12 | 10 | 22 | 6 | 4 | 16 |
| 3-Professional Practices % | %14 | %14 | %14 | %21 | %12 | %19 | %22 | %9 | %7 | %14 |

| | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 4-Information Technologies in Landscape Architecture | 4 | 3 | 7 | 7 | 4 | 3 | 9 | 3 | 9 | 6 |
| 4-Information Technologies in Landscape Architecture % | %4 | %4 | %9 | %8 | %4 | %6 | %9 | %4 | %15 | %5 |
| 5-Structural and Vegetative Material | | | | | | | | | | |
| Structural Material and Construction Techniques | 2 | 3 | 3 | 3 | 2 | 1 | 2 | 6 | 3 | 5 |
| Structural Material and Construction Techniques % | %2 | %4 | %4 | %3 | %2 | %2 | %2 | %9 | %5 | %4 |
| Plant Materials ve Ecology | 18 | 17 | 17 | 21 | 20 | 5 | 18 | 15 | 6 | 24 |
| Plant Materials ve Ecology % | %17 | %24 | %21 | %24 | %20 | %9 | %18 | %22 | %10 | %21 |
| 6-Out-of-field Course | 24 | 9 | 14 | 13 | 24 | 12 | 13 | 7 | 9 | 20 |
| 6-Out-of-field Course % | %23 | %13 | %17 | %15 | %24 | %22 | %13 | %10 | %15 | %18 |

To reveal the quantitative framework of different programs, the total number of courses in the curriculum and the course load required for graduation were examined with the data from the institutional webpages. Upon review of the total number of courses, varied specifically as one program contained fewer than 59 courses, three institutions provided between 60 and 79 courses, another three institutions offered between 80 and 99 courses, and three institutions had more than 100 courses available. Notably, the highest number of courses is determined in Istanbul University-Cerrahpaşa (IU-C), while Ihsan Dogramacı Bilkent University (IDBU) has the lowest course load. The qualitative evaluation of the curricula was also conducted under six categories by "Theory," "Design-Planning-Management," "Information Technologies," "Professional Practice," "Structural and Plant Materials," and "Non-Field Courses." The results obtained within the Landscape Architecture Theory and Methodology scope reveal that this course subject constitutes 10-20% of the courses for four institutions, 5-9% for three institutions, and 4% for three institutions. The highest number of Theory and Methodology courses was determined at Inonu University (11 courses), while Ihsan Dogramacı Bilkent University has the highest course proportion in the curriculum (17%) in this subject.

Classified courses under the Design, Planning, and Management are evaluated according to four critical areas as landscape planning, landscape design and management (1), urban open and green space planning and policy (2), the protection and management of cultural landscapes (3), and the planning, design, and environmental impacts associated with infrastructure projects (4). Considering that some courses correlate with three titles like landscape planning, design, and management, the Design and Planning theme is critically foremost for each school with the highest number of courses in the curricula (33 courses, 51-52%). Besides, the sub-heading of Urban Open and Green Space Planning and Policy (24-25%), Conservation and Management of Cultural Landscapes (7-9%), and Planning, Design, and Environmental Impacts of Infrastructure Projects (8-9%) show variable percentiles between the analyzed curricula. Especially examining the preservation and management subject highlighted by the universal landscape architecture vision, the protection of the cultural landscape subject remains in the background for Turkey, which has a deep history. In the fields of Design, Planning, and Management, the curricula of Istanbul Technical University (ITU) and IDBU, with a course ratio of 51-52%, are noteworthy, as Cukurova, Inonu, and Istanbul University-Cerrahpaşa programs become prominent with 33 design-oriented courses offered in total.

The unique characteristic of landscape architecture is its ability to integrate structural and vegetative elements to create harmonious compositions. Curriculum assessments indicate that the courses primarily focus on the scientific and aesthetic aspects of plants. The highest proportion of courses in this subject is set at Akdeniz and Cukurova Universities by accounting for 24%, while the highest number of courses exists at Istanbul University-Cerrahpaşa (24). The courses on the application of structural materials in the curriculum are prominent at Karadeniz Technical University (accounting for 9% of courses) and at Istanbul University-Cerrahpaşa (5). Within this framework, the curricula of Akdeniz, Cukurova, KATU, and IU-C universities focus on the technical intricacies of landscape architecture.

Professional Practice courses, which play a pivotal role in preparing juniors for the sectoral life, should be incorporated into each curriculum according to the standards. While the curriculum of each school attempts to adapt these courses, the percentage of such courses in total is comparatively low according to the analysis. Inonu and Cukurova Universities have become relatively prominent in professional education, with a percentage of 21-22%. In the current technological era, information technology has become increasingly significant in landscape architecture, affecting design, planning, and management processes around the world. Concurrently, this noteworthy enhancement in production frameworks requires an emphasis on the incorporation of information technologies into the curricula. However, the analysis indicates that curricula in Turkey set aside 4% of courses dedicated to digital design and planning software. Istanbul Technical University (ITU) offers the highest proportion of IT courses, accounting for 15% of its curriculum. Landscape architecture curricula have established compulsory courses such as Turkish Language, Atatürk's Principles and History of Turkish Revolution, Foreign Language by the Council of Higher Education (YOK) are non-vocational courses which evaluated as non-field courses in this study, present within the framework of the possibilities of the universities. While out-of-field/non-field courses are included in each institute, pedagogical training in landscape architecture education becomes prominent at Ankara and Ege Universities (23-24%). The pedagogical training of these schools leads to an increase in the course load by the European Credit Transfer System (ECTS) and the number of courses.

According to the evaluation of the curricula, the development of landscape architecture in Turkey reveals discrepancies in the teaching processes depending on the academic missions of the faculties and the professional education approaches of the institutions. The focal points of the landscape architecture education programs are as follows;

- Istanbul Technical University (ITU): Design and Information Technologies
- Ihsan Dogramacı Bilkent University (IDBU): Theory and Design

- Inonu University: Theory and Professional Practice
- Cukurova University: Plant Material and Professional Practice
- Akdeniz University Plant Material
- Karadeniz Technical University (KATU): Design and Construction Material
- Istanbul University-Cerrahpaşa (IU-C): Design and Plant Material
- Atatürk University: Plant Material
- Ankara and Ege University: Non-field courses and pedagogical training.

4. Discussions

Landscape architecture education programs worldwide are included in various academic departments, such as architecture, natural sciences, engineering, design, and fine arts. Current educational programs are also established to graduate according to the needs of the landscape architecture profession as designers, planners, managers, engineers, artists, scientists, and landscape architects (Guzel & Erdem Kaya, 2024). Conversely, the institutions adopt distinct educational philosophies by the respective regions and local contexts. After the war, efforts to rebuild cities in Europe led to the development of programs in landscape architecture education, both scientific and design-focused. (Gröning, 2022; Blanchon et al., 2022). Besides, some European schools adopt the educational approach towards rural planning, while others focus on preserving cultural landscapes and monitoring natural processes (Mazzino & Rinaldi, 2022). In the education of North America, landscape architecture programs encompass mainly technical and aesthetic perspectives, with the overarching objective of addressing the challenges posed by climate change. In addition to preserving cultural landscapes, enhancing plant production is another educational focus for the organizations (Weller & Talarowski, 2014; Johnson & Hill, 2002). As a result of the experienced problems in Asia after the Second World War, reorganizing rural and urban areas has increased the dominance of landscape architecture education. However, Asia, Africa, and Austria regions, which are influenced negatively by climate change under current conditions, develop landscape architecture education with aesthetic and practical solutions.

In this context, the American Society of Landscape Architecture (ASLA) and the Council of Educators in Landscape Architecture (CELA) set criteria and conduct academic studies to ensure the continuity of quality educational programs (ASLA, 2025; CELA, 2025). The European Council of Landscape Architecture Schools (ECLAS) and the International Federation of Landscape Architects (IFLA), which establish the global educational standards, create the learning framework for landscape architecture programs to guide the development of institutions (ECLAS, 2025; IFLA, 2025). Besides, worldwide institutions and organizations for establishing educational standards proceed to enable regional levels of landscape architecture (IFLA Africa, 2025; IFLA Asia-Pacific, 2025; IFLA Middle East, 2025). These entities also act to formulate educational policies that align with the evolving professional landscape. However, the practice of these standards at an institutional level aims to promote academic authenticity, rather than as a constraining factor within educational programs.

The landscape architecture education process for the profession is structured not only on design, planning, and management but is also informed by scientific resources regarding natural processes, urban and social dynamics, and technological advancements. TYYC and PEMDER establish a multidisciplinary framework for a quality educational environment in Turkey through a holistic approach, thereby fostering the academic and professional development of the landscape architecture discipline. Within this overarching structure, landscape architecture education is addressed, encompassing "theory," "planning," "design," "management," "technology," "materials," and "practice. Through the effect of global comprehensive and integrated education, these standards also contribute to the advancement of unique academic approaches and aid in guarding institutional educational vision diversity.

5. Conclusions

As a trans-disciplinary profession, landscape architecture brings together several courses from a wide variety of disciplines in the education process. From this multiple perspective, worldwide teaching standards are prepared to create a quality educational medium. While determined standards provide a framework for curricula, they also allow institutions to customize their educational structure according to their professional emphases. Therefore, to address global and regional problems, the training of experts who are required in the various areas of discipline enables a possibility. According to Turkish landscape architecture education, curricula are delineated by the learning provisions of the TYYC and stipulated pedagogical standards by PEMDER. In such a meticulously constructed education context, programs incorporate coursework encompassing theoretical underpinnings, conceptual design principles, strategic planning methodologies, management strategies, structural components, and professional practices. As a result of this study, the curricula focus on unique or several specific headings by PEMDER, depending on the adopted disciplinary approach of institutions. The diversified training mediums in Turkey contribute to a conducive environment for interdisciplinary collaboration while fostering educated experts in vocational needs. This diversity will facilitate the development of programs that demonstrate local needs sensitivity while being aligned with international standards for globality.

In conclusion, the prevailing diversity of working areas within the Turkish education context enables the emergence of distinctive academic approaches and the establishment of pioneer schools in landscape architecture. Maintaining a dynamic structure in programs reinforces sustainable scientific and professional development while simplifying the process of keeping up with advancements in the discipline.

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Conflict of Interests

The Author(s) declare(s) that there is no conflict of interest.

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