

Planning for Planning Education: An Academic Forum

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Editor's Note: Urban and rural planning in China is undergoing profound change. Adjustments in the course of urbanization, the establishment of the territorial spatial planning system, rapid advances in digital-intelligence technologies, and increasingly diverse social needs are jointly reshaping the discipline and its educational system. Under the theme "Planning for Planning Education," this forum brings together leading scholars and practitioners to discuss the nature of the discipline, educational models, technological empowerment, and talent development. Their reflections both review past experience and look ahead to the future.

Upholding Fundamentals while Innovating: Consolidating the Disciplinary Foundation

Academician Duan Jin, Professor Huang Yaping, and other contributors argue that the core of urban and rural planning is space, which distinguishes the discipline from other fields. Whether responding to urban governance in an era of regeneration or coordinating all territorial elements within the new planning system, spatial planning and design remain the planner's central competence. Upholding fundamentals while innovating does not mean clinging to tradition. It means strengthening spatial-design capability and understanding spatial laws while integrating economics and management, ecology, public administration, and other fields, so as to cultivate professionals who combine breadth with specialization. As Professor Wang Shifu observes, the central value of planning education is to create better spaces, a mission that must be carried forward through thinking that is both scientific and artistic.

Demand-Oriented Reform: Reshaping the Educational System

Professor Shi Nan emphasizes that reform should begin with demand. As government functions change, professional boundaries blur, and public participation deepens, planning education must move from a single pathway to diversified preparation. Professor Zhang Yue's interpretation of the new Degree Law provides institutional support for differentiated education by level and type: undergraduate programs should emphasize general education and foundations, whereas graduate education should distinguish more clearly between professional and academic degrees. Professor Leng Hong further proposes extending teaching content from urban-rural space to territorial space and using virtual reality and intelligent technologies to create two-way interaction between teaching and learning in the information age.

Digital-Intelligence Empowerment: Opening New Disciplinary Frontiers

Professor Yan Fengying, Professor Zhuo Jian, and others call on planning to embrace digital-intelligence technologies and reconstruct systems of dynamic sensing and decision-making. Big data and artificial intelligence are not merely tools; they are important forces shifting the planning paradigm from experience-driven to science-driven practice. By building spatiotemporal dynamic models and intelligent decision-support systems, planning education can cultivate new-engineering professionals who are proficient in conventional spatial design as well as data interpretation and technological application. Associate Professor Chen Zhiduan proposes differentiated, tiered training to strengthen disciplinary resilience and enable graduates to work across territorial governance, urban regeneration, ecological restoration, and other settings.

Collaborative Advancement: Responding to the Questions of Our Time

The discipline carries growing responsibilities in relation to ecological civilization, Chinese modernization, and other national strategies. Professor Hua Chen argues that planning education should shift from transmitting knowledge to stimulating thought, thereby developing foresight and innovation. Using urban regeneration as an example, Professor Yang Jianqiang stresses multidisciplinary collaboration and closed-loop practice so that students confront the real challenges of complex social problems. These explorations show that planning education is not only professional training but also the transmission of values, with the public interest as its purpose and the people-centered city as its original commitment.

Conclusion

Transformation is difficult, but it also creates new opportunities. This forum responds to current problems while looking toward the future. It calls on academia and practice to adopt a more open stance, deepen interdisciplinary integration, and strengthen collaboration among government, industry, universities, and research institutions. Only through such collective effort can urban and rural planning education maintain its direction amid rapid change and continue contributing knowledge and wisdom to better human settlements in harmony with nature.

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Reflections and Explorations on Educational Reform for the Future Development of Urban and Rural Planning

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In August 2023, Southeast University convened a strategic seminar on the development of architecture, planning, and landscape architecture. I proposed three reforms for the future of urban and rural planning. After extensive discussion and broad support from the planning faculty, we began a bold experiment. It was a difficult but necessary step in response to changes in the professional environment, industry transformation, and disciplinary development.

1. Challenges

Urban and rural planning now operates against new conditions of changing urbanization, economic development, social transformation, and energy transition. Cities face urgent problems such as climate-related disasters, public emergencies, decline in older districts, and excessive real-estate development. The discipline must also respond to big data, artificial intelligence, and wider technological change. Targeted educational reform is therefore urgent: planning must preserve its disciplinary identity and strengths while developing teaching models suited to future needs. The challenge is not merely to reach a conceptual consensus, but to implement reform in ways appropriate to the characteristics of each university.

At Southeast University, for example, reform must build on established strengths in spatial research and design and pursue a strategy of a strong core, broad foundations, and multiple pathways. A strong core means reinforcing the space-centered capabilities of the discipline and the university's advantages in spatial research and design. Broad foundations mean that students should not be confined to a single field. Multiple pathways mean combining design thinking and technical methods with planning, architecture, management, big data, intelligent technologies, and related fields. This transition requires coordinated reform of teaching, admissions, program length, and faculty development; teachers themselves must also commit to lifelong learning.

2. Curriculum Reform

Talent development must emphasize professional values and a sense of mission while strengthening the discipline's own core capacities. New competitive advantages should then be developed outward from this foundation.

The disciplinary core includes spatial planning for land-use control and spatial design for improving, regenerating, and operating human settlements. Future planners must understand the laws of urban-rural development and the scientific dimensions of major social and cultural issues, while also mastering the technical tools and methods required for research and applied practice.

The transformation of planning requires a corresponding transformation of the curriculum. Foundational education should be rigorous and broad. Training in spatial planning and design should not be reduced to manual skills or the production of schemes; it should be closely connected to urban history and culture, theories of spatial development, and understanding of socioeconomic needs. Students should also learn big-data methods, remote sensing, simulation, and artificial intelligence. Before undergraduate foundations are secure, excessive emphasis on formal design innovation is inappropriate. Greater attention should be given to students' ability to identify and formulate problems, and design studios should be organized around solving them. Planning education can

thereby move beyond judging students solely by the quality of their design products and open toward more diverse forms of development.

3. Admissions Reform

The planning profession is adjusting its business structure and service models, and planning practice itself is changing. Education should therefore attend to the full range of spatial competencies: evaluating the value of spatial resources, planning spatial form, designing and making places, governing spatial control, and providing services for spatial operation. Southeast University's planning discipline developed from architecture and previously admitted only science-track students. It now admits students from both the humanities and sciences, a change better suited to cultivating the diverse professionals required for future planning and development.

4. Program-Length Reform

Southeast University has shortened its undergraduate planning program from five years to four while retaining the existing duration of graduate study. Planning education should serve the territorial spatial planning profession, but no single program can cover every professional task. As the field expanded, the knowledge system and curriculum accumulated ever more content. The market now requires broad general foundations as well as deep specialization, and many positions expect at least a master's degree. Master's education should therefore offer multiple directions on top of a broad undergraduate base.

Under the new arrangement, the first three years can provide general foundations, while the fourth allows students to choose among planning and design, digital technology for governance, and other tracks according to their strengths. Graduate education can connect with these diversified undergraduate backgrounds and form a new educational ecosystem. Undergraduate, master's, and doctoral objectives should be coordinated; the disciplinary core should remain stable while planning works actively with other fields. Reform must extend systematically from syllabi and course structures to practical teaching, enabling disciplines, professions, and industry to work together in responding to diverse needs.

The scale of planning education will move from rapid expansion toward more rational development. Different types of institutions face different problems. While preserving general education in the professional core, planning programs should develop distinctive pathways and coordinate across the profession, using reform and innovation to meet new demands.

Planning Education Reform Must Be Demand-Oriented

SHI Nan (Executive Vice President and Secretary-General, Urban Planning Society of China; Professor-Level Senior Urban Planner; Deputy Chair, Subcommittee on Teaching Guidance for Urban and Rural Planning in Higher Education, Ministry of Education)

The principal products of planning education are planning professionals and planning knowledge. How should planning education change? The answer depends above all on demand.

First, who needs planning education? Good planning work depends on educational support. For decades, the planning functions of government, the planning profession, and the academic discipline largely overlapped, and planning schools supplied personnel efficiently to government departments and planning institutes. Demand has now changed. Within government, planning expertise is needed not only in natural-resources departments but also in housing and urban-rural development, development and reform, agriculture and rural affairs, culture and tourism, ecology and environment, transportation, and emergency management. The era in which planning departments and planning

institutes were the sole destinations for graduates, and planning education monopolized their professional supply, is over. Diversified employment requires degree education to transform. China has also become an urban society. Decision-makers at all levels and ordinary citizens need planning knowledge. In addition to degree programs, planning education must assume responsibilities for foundational, general, continuing, and public education. Universities should offer courses in urban and planning literacy to students in other majors so that all graduates acquire basic knowledge of cities and planning and more people understand the laws of urban development and the role of planning.

Second, what kind of planning professionals does the era require? Planning education has traditionally centered on job skills, especially planning and design. Demand, however, is no longer confined to planning institutes. Community work also requires professional participation. China has hundreds of thousands of urban and rural communities, more than 20,000 incorporated towns, and nearly 3,000 county-level jurisdictions, all of which represent substantial demand for university-trained planners. Even more than 300 prefecture-level cities have not yet achieved full coverage by university-trained planning professionals, and overseas planning-service markets remain underdeveloped. Grassroots and global needs should become important markets for planning education. In an increasingly diverse society, undergraduate education must also cultivate values as an indispensable component of knowledge, skills, and values. This remains a weakness, even though planning education naturally transmits public values and therefore has considerable potential for values-based education.

Third, what knowledge does planning work require? University planning programs began as vocational education grounded in engineering. Planning is no longer the only discipline serving urban development; public administration, public finance, social governance, resources, and environmental studies now participate extensively. Planning teams are no longer composed only of professional planners but are cross-professional and interdisciplinary. The old model of the all-purpose planner is therefore under pressure, and more differentiated, distinctive forms of education are inevitable. The planning knowledge system must be reviewed comprehensively, with particular attention to a weak core and unclear boundaries. Simply shortening program length cannot solve this problem. Undergraduate education is also shifting from elite education toward general capability and quality. Establishing a single undergraduate major of urban and rural planning under the discipline of the same name is increasingly ill-fitted to this broader environment. Schools urgently need to tighten and clarify the core bundle of planning knowledge, develop distinctive and regionally grounded educational models, and determine how the knowledge system should be distributed between undergraduate and graduate education before adjusting program duration.

Finally, what educational model is needed in the information age? Disciplinary development is a major mission of planning education. Whereas past attention centered on undergraduate programs, the focus should gradually shift toward graduate education. Since urban and rural planning became a first-level discipline in 2011, its second-level fields have not been systematically planned at the graduate level and have instead developed relatively freely. This may be difficult to avoid in an interdisciplinary field, but it has contributed to weak subfields and an unclear overall knowledge structure.

Education in the information age emphasizes students' active inquiry and collaborative learning, a student-centered approach, individual differences, and comprehensive development. Traditional organization of theory and practice courses will be fundamentally transformed by diversified teaching methods, digital resources, online platforms, and artificial intelligence. Only such change can strengthen students' agency and improve the effectiveness of instructional hours and credits.

Education has its own laws of development. Planning education should reduce administrative dependency, strengthen disciplinary self-awareness, coordinate teaching resources at a higher level, and move toward new possibilities.

Returning to Origins, Responding to Change, and Shaping the Future

YAN Fengying (Professor, Department of Urban and Rural Planning, School of Architecture, Tianjin University; Member, Urban and Rural Planning Discipline Review Group of the Academic Degrees Committee of the State Council)

The discipline should return to its origins and remain centered on high-quality human settlements. It must respond actively to changing social and professional needs and, in the digital-intelligence era, use advanced technologies to open new research fields and strengthen governance capacity. By studying the scientific questions of dynamic planning and reinforcing the capacities required by the era within the educational system, urban and rural planning can achieve a broader future.

1. Returning to Origins: Serving Planning Practice

The "Kaogong Ji" section of the Rites of Zhou records that "the master craftsman builds the capital, nine li square, with three gates on each side; within are nine north-south and nine east-west avenues, each nine carriage tracks wide; the ancestral temple lies to the left and the altar of soil and grain to the right, the court faces forward and the market lies behind." This description of capital-city spatial organization in the Spring and Autumn and Warring States periods was preserved as an occupational code and transmitted as professional knowledge to train later generations of builders. It offers an early image of planning knowledge and education in China.

Today, the fundamental task remains the optimization of land-use patterns through spatial allocation, the improvement of human settlements, and the promotion of regional sustainability. Urban and rural planning has developed from a single technical practice into a complete system of planning preparation, implementation, and management, together with an associated body of theory and knowledge. Its fundamental disciplinary and educational mission has therefore remained constant: to serve the high-quality development of human settlements. Planning education should pursue knowledge innovation and talent development around this goal to meet the needs of the new era.

2. Challenges and Key Issues: Keeping Planning in Step with the Times

Since the beginning of the twenty-first century, the profession, discipline, and educational system have faced substantial challenges. Internally, the industry has lagged behind social needs. Existing planning systems are too static for rapidly changing urban and rural conditions, weakening their guidance and constraints and reducing their practical influence on development and governance. Talent development remains tied to a static plan-making paradigm, so graduates' knowledge and skills do not fully meet the demands of more dynamic and intelligent spatial governance, limiting the depth and breadth of planners' participation.

Externally, ecological civilization has risen to the level of national strategy, and the modernization of spatial governance has become a major objective. The central policy on establishing and supervising the territorial spatial planning system created a top-level framework that responds to China's socioeconomic and ecological needs and guides reform and innovation. Planning and its educational system must keep pace with technological development and national strategy by adjusting curricula and training models.

3. The Digital-Intelligence Era: Dynamic Urban-Rural Planning and Governance

Internet technologies, big data, and artificial intelligence have generated new drivers of spatial development, new forms of urban-rural flows, new ways of perceiving human settlements, and new routes to high-quality development. As part of the national governance system, planning must use advanced digital-intelligence technologies for timely and dynamic sensing, scientifically precise planning, and evidence-based decision-making.

New technologies have expanded the discipline and enriched its theories and methods. They provide three important directions: ① dynamic urban-rural sensing based on real-time data collection and analysis, including transport flows, population movement, and land use; ② spatiotemporal simulation under multiple objectives, using dynamic models that reflect real-time change and support scientific simulation and optimization; and ③ intelligent decision-support systems based on artificial intelligence and machine learning to improve dynamic decision-making.

Planning education should use the digital-intelligence era to optimize course content and teaching methods and cultivate professionals who combine planning theory, data-analysis competence, and technical practice. Future planners need both conventional spatial-planning capabilities and digital-intelligence skills so that they can drive and practice new forms of urban-rural governance.

The Core Value and Renewal of Urban and Rural Planning Education

WANG Shifu (Vice Dean and Professor, School of Architecture, South China University of Technology; Member, Urban and Rural Planning Discipline Review Group of the Academic Degrees Committee of the State Council; Member, Subcommittee on Teaching Guidance for Urban and Rural Planning in Higher Education, Ministry of Education)

During the decade in which China's urbanization rate rose from above 50 percent to more than 66 percent, urban and rural planning became a first-level discipline and continued to develop through the integration of teaching, research, and practice. It remained closely connected to the frontier of urbanization and assumed important responsibilities for educating professionals, producing knowledge, and serving society. As urbanization slows, unresolved problems from rapid growth, new requirements for high-quality development, and transformation of the national spatial planning system all require planning education to preserve its original commitment to creating better spaces while responding actively to social and technological change. The urgent question is how to innovate through continuity and establish a higher-level educational system.

1. Core Value: Creating Better Spaces

The core value of urban and rural planning education is to create human settlements with local identity and vitality through innovative spatial design and scientific spatial planning, guided by ecological civilization and harmony between humanity and nature, and to meet people's evolving aspirations for livable environments and better lives. Creating better space is not merely a technical profession; it embodies deeper social responsibility and a broader vision of human settlement.

Drawing on the historical experience of city building, planning education has developed a system of knowledge and skills through practice-based research and academic construction. It systematically cultivates professionals with planning thinking and serves spatial needs at different stages of urbanization through participatory practice. Planning thinking inherits functional-spatial and morphological design from architecture while developing the integrative and coordinating thinking required by public administration. It produces values, principles, and methods for urban spatial development. Master plans allocate land rationally, optimize spatial structure, and secure public

facilities in support of national urbanization and local development, while detailed plans guide development and regeneration at the micro scale to meet everyday needs.

Planning education generally comprises undergraduate and graduate stages. Undergraduate professional education aims to develop the ability to plan and design built form that is functional, attractive, and spatially appropriate. It begins with spatial-aesthetic training and progresses from small to large scales, simple to difficult objects, and straightforward to complex problems. Design studios provide the main line of integrated capability training, while principles and theory courses develop methods. Graduate education centers more directly on disciplinary development and frontiers in urban research and planning practice. Through research, practice, and thesis work, students build on spatial-design foundations to develop problem analysis, investigation, logical reasoning, and comprehensive coordination. Leading planning professionals typically combine solid spatial-design foundations with systematic urban research, integrative capacity, and practical experience, reflecting the discipline's core value of creating and realizing better spaces.

2. Educational Renewal: Toward Spatial Science

Planning concerns not only the suitability and quality of spatial development but also environmental protection, ecological harmony, cultural continuity, social governance, and urban-rural coordination. Rapid growth has exposed weaknesses in understanding spatial laws and interdisciplinary integration. Territorial spatial planning now extends from built urban and rural environments to all territories and elements, requiring broader theory and skills. Big data and artificial intelligence create new tools for decisions but also the risk that technological dependence will fail to address real-world complexity.

Comprehensive renewal is therefore necessary. In teaching methods, schools should introduce forward-looking courses, digital-driven methods, artificial intelligence, and spatial simulation, and establish spatial laboratories linking virtual and physical environments. Students can simulate spatial-development scenarios in digital-twin city models, directly observe planning effects, strengthen skills, and develop creativity and responsibility for the urban future. In curriculum reform, modular structures can introduce interdisciplinary courses jointly developed with information science, environmental science, sociology, economics, ecology, and related fields. This can add the scientific spirit often missing from design training and reinforce planning as a spatial science with both natural- and social-science attributes. In practical education, stronger government-industry-university-research platforms should bring real projects into the classroom with professional mentors. Students should practice the roles of policy-maker, planning implementer, technical adviser, and community representative, learn to understand conflicts among interests, and develop negotiation and decision-making abilities.

Through these reforms, planning education can renew itself while preserving the core value of better space. It can integrate multiple disciplines and move from spatial design, research, technology, and institutions toward spatial science; derive locally grounded theory and methods from China's urbanization; respond to intelligent technological innovation; and serve increasingly diverse social needs.

Tiered and Differentiated Reform of Urban and Rural Planning Education under the New Degree Law

ZHANG Yue (Party Secretary and Professor, School of Architecture, Tsinghua University; Deputy Chair, Subcommittee on Teaching Guidance for Urban and Rural Planning in Higher Education, Ministry of Education)

The Degree Law of the People's Republic of China entered into force on January 1, 2025, replacing the former degree regulations. A major breakthrough is that, beyond bachelor's, master's, and doctoral levels, the law explicitly distinguishes academic and professional degrees and awards them by disciplinary category and professional-degree field. Urban and rural planning education is therefore entering a new stage of reform differentiated by level and type.

1. Professional-Degree Graduate Education

As the Ministry of Education steadily expands professional-degree graduate education and gives professional and academic degrees equal standing in the national catalogue, professional master's programs will become the principal venue for training practitioners in the planning profession.

(1) Growth in the number of programs and enrollment. Incomplete statistics from the professional-degree steering committee indicate that professional master's students already account for roughly two thirds of master's enrollment at institutions offering such degrees. Localities and universities also have greater autonomy in establishing programs.

(2) Increasingly clear professional fields. In the latest disciplinary description, the professional areas within urban and rural planning (0853) remain less precise than in many engineering degrees, but they are beginning to differentiate into planning and design, planning management, and technical consulting.

(3) Stronger practice courses and requirements. The previous tendency to train academic and professional students together will gradually change. Tsinghua University, for example, plans to make all master's education professional from 2025 onward and to establish compulsory frontier-practice courses jointly with Tsinghua Tongheng, the China Academy of Urban Planning and Design, territorial spatial planning institutes, and the development and reform authorities. Project-based work will reinforce professional practice in enterprises and public institutions.

(4) Diversification of degree theses. In addition to conventional thematic research, professional master's theses now include design research and survey research. Future categories could include case analysis and public-policy reports, with evaluation and quality review tailored to each type.

(5) Industry-oriented employment. Chairs of professional-degree steering committees are generally drawn from the relevant ministries, reflecting the objective of education and technology serving high-quality industry development. The proportion of graduates employed in the relevant sector will therefore become an important indicator for universities and supervising authorities.

2. Academic-Degree Graduate Education

According to the Ministry of Education's opinion on advancing differentiated development of academic and professional graduate education, academic degrees should primarily serve knowledge innovation.

(1) Clarifying disciplinary substance and the knowledge system. First-level disciplines are organized by knowledge systems, should be broad rather than narrow, and should remain relatively stable. To retain its first-level status, urban and rural planning (0833) must strengthen its foundational disciplinary attributes, deepen theory, broaden academic horizons, and reinforce scientific-method training. Stability should rest on breadth and depth rather than rapid adjustment to changes in professional practice.

(2) Authorization centered on doctoral programs. The same policy states that new degree-awarding institutions should in principle provide professional rather than academic master's education, and fields offering both types should prioritize professional-degree authorization. Doctoral programs

in urban and rural planning will therefore become the main basis of academic graduate education, emphasizing innovation and quality rather than the number of degrees awarded.

3. Undergraduate Education

As more professional education moves to professional graduate programs, ordinary undergraduate institutions will increasingly differentiate into research-oriented and application-oriented types. Undergraduate education will accordingly develop both general and distinctive characteristics.

(1) Clustering plus specially designated majors. Revisions of undergraduate catalogues have repeatedly reduced the number of majors, grouped them into broader categories, and then added specially designated majors under those categories. Urban and rural planning (082802) remains a basic major under architecture within engineering. Related fields include human geography and urban-rural planning under geographical sciences, land-resource management and urban management under public administration, and newer specially designated majors such as human-settlement science and technology and urban design.

(2) Smaller professional-course modules. Many research universities are adopting broad-based admissions and wider training, with shorter professional stages and fewer total credits. They must continuously refine the efficiency and effectiveness of professional courses. Application-oriented universities may be less affected, but should connect closely to employment needs in their industries and regions and to progression into professional graduate education.

Do Not Abandon Fundamentals for Secondary Concerns: Advance Integration and Expansion

HUANG Yaping (Chief Professor and Huazhong Outstanding Scholar, School of Architecture and Urban Planning, Huazhong University of Science and Technology; Member, Subcommittee on Teaching Guidance for Urban and Rural Planning in Higher Education, Ministry of Education)

Since the early 2020s, reform of territorial spatial planning and changes in urban development have ended the previous boom in planning practice. The profession has shifted from a sunrise to what some regard as a sunset field, and university admissions have weakened. Both practice and education are searching for a way forward. In this downturn, schools are revising training plans, but reform must avoid panicked experimentation and the abandonment of fundamentals for secondary concerns.

1. Changes in Times and Circumstances Make Transformation Imperative

In a period of profound global change, urban development has shifted from incremental expansion toward the regeneration of existing areas. Expansion-oriented blueprint planning is giving way to improvement-oriented diagnostic planning, and urban regeneration has become a central task. Changes in the objects of planning require disciplinary expansion and educational response. Professional work is also diversifying: watershed planning, ecological restoration, comprehensive territorial improvement, intensive land use, resilient disaster prevention, urban-rural integration, child- and age-friendly development, complete communities, urban-village renewal, dual-use infrastructure for ordinary and emergency conditions, urban-regeneration implementation plans, and territorial implementation monitoring are among the many emerging tasks. Planners therefore need broader knowledge and capabilities. As a practice-oriented profession, planning education must adjust to these changes and cultivate innovative practitioners suited to contemporary needs.

2. Responding to the Crisis without Reaching for the Wrong Cure

In the post-construction era, large-scale urban expansion is largely over, major infrastructure systems are substantially established, and demand for conventional planners is declining. Some describe urban planning as being in existential crisis. Different groups have proposed different remedies.

The operations school argues that urbanization has shifted from capital-intensive growth to operational growth and that planning must move from creating spatial assets to generating returns from those assets, aligning the discipline with economics and management. The technology school regards conventional planning as experience-based and argues for integration with big data and artificial intelligence, moving toward planning plus AI. The governance school sees planning as having moved from design to technology and now toward governance, calling for stronger training in leadership, management, policy, public service, and communication.

Each position contains some truth in light of planning's evolution from physical-environment planning to comprehensive strategic planning and resource management. Yet none should become the dominant direction of talent reform. Replacing the disciplinary structure with economics and management would at best produce second-rate accountants; sharply reducing spatial-design training in favor of AI would produce second-rate engineers who happen to understand planning; and turning planning into public administration would produce graduates without distinctive competence. Such strategies would abandon the foundation and surrender the discipline's core advantage.

3. Strengthen the Foundation and Expand in Multiple Directions

Four decades of planning contributed greatly to China's urbanization. The new era requires reconstruction of planning theory and knowledge to serve Chinese modernization and territorial governance. As Academician Wu Zhiqiang has argued, the era calls for renewed planning education, but renewal should stabilize the core and expand the boundaries. Reform should combine a strengthened foundation with diversified expansion.

Strengthening the foundation means retaining spatial planning and design as the root of the profession. Experience reviewing urban-regeneration implementation plans in Wuhan has reinforced that only planners can comprehensively coordinate functional and industrial development, intensive reuse of land, facility adjustment, spatial innovation, project portfolios, and financial balance. Specialists in industrial strategy, finance, and development can contribute in their own domains, but they lack the central capacity for spatial design and reconstruction. Urban operations depend on spatial innovation, and the planner is the overall strategist of urban operation.

In the new era, the main line of education should remain territorial spatial planning. A core sequence should connect planning fundamentals, planning and design principles, plan preparation, and spatial-form design, enabling students to master the principles, contents, and methods of master planning, detailed planning, and urban design. The purpose of urban planning is to organize land use and space rationally and create sustainable, high-quality human settlements. Abandoning or substantially weakening spatial planning and design would therefore sacrifice the foundation.

Diversified expansion refers to fields of spatial planning and design plus. It should include both additional knowledge and additional technology. According to institutional strengths, knowledge modules may draw on economics and management, public administration, geography, and ecology. Technology modules should be differentiated according to students' quantitative foundations, technical strengths, and employment aspirations. Different schools and students need different combinations and multiple exit pathways. As the saying goes, the discerning change with the times,

and the wise adapt to circumstances. Consolidating fundamentals while innovating should guide reform.

From Transmitting Professional Knowledge to Cultivating Planning Thinking

HUA Chen (Professor, College of Civil Engineering and Architecture, Zhejiang University; Member, Subcommittee on Teaching Guidance for Urban and Rural Planning in Higher Education, Ministry of Education)

Many future teachers will hold doctoral degrees. Supervising doctoral students through the lens of one's own academic experience may seem straightforward, almost like writing another dissertation. Teachers often possess more accumulated knowledge and research because they began learning earlier. Lectures traditionally transmit what students do not yet know. But when students have already read the teacher's dissertation or mastered the material to be taught, repetition loses value. Once genuinely engaging content becomes scarce, students naturally focus on how to obtain grades efficiently, turn their attention elsewhere, or simply disengage.

Teaching confined to professional knowledge does not realize the full potential of education. Not every student will pursue a doctorate, and degree level is not an absolute measure of teaching effectiveness.

1. When Teachers and Students Have Equal Access to Information

Undergraduates have textbooks, supporting materials, images, academic conferences, specialist forums, and abundant online information. In the internet age, students no longer receive supposedly new or frontier knowledge later than teachers do, although textbooks and organized knowledge inevitably lag behind practice. Beginners struggle to reconcile systematic textbook knowledge with changing professional reality: the textbook says one thing, reality appears different, and online discussion is too fragmented to organize. A teacher who merely follows the textbook cannot explain the profession or resolve these doubts; one who focuses only on current topics may satisfy a narrow group of doctoral students but still fail to provide undergraduates with their first intellectual foundation.

If students seldom speak, the teacher may have filled all available time, or students may not expect useful answers beyond textbooks and online links. They may fear appearing unprepared or be overwhelmed by materials sent previously. When students raise no questions, instructional time is likely being used inefficiently.

2. When Non-Planning Students Want to Learn Planning

Professional-development courses offered by planning schools often serve officials and other non-specialists. Organizers understand that people in many fields need planning knowledge for their work without wishing to become planners. Short-term teaching cannot simply compress a textbook. It must use reliable planning thinking and feasible planning methods to offer a planning perspective on cross-boundary problems. This real demand challenges conventional, systematic professional education with a practical question: how can planning be learned in a short time?

3. When Learning Planning Can Be Flexible

Planning curricula are already crowded, and every new demand, body of knowledge, and skill is treated as indispensable. Required-course hours cannot be reduced, so electives remain limited. If instruction continues to center on transmitting knowledge, AI may soon replace much of the teacher's

function. More efficient teaching, more diverse student needs, and more active classroom questioning require a shift from knowledge delivery toward resolving doubts and guiding inquiry.

Courses should introduce material that challenges both teachers and students, preventing rote recitation by teachers and passive attention by students. The sequence of textbooks can still provide structure, but repetition should be removed. When information reaches teachers and students at the same time, the teacher's role is to organize a process that turns the unknown into the known by every possible means. When a student knows something the teacher does not, the student can also teach. Education should ignite thought rather than merely transfer information. Once teachers and students enter a genuine process of inquiry, questions increase and the pressure to answer them becomes a force for improving teaching.

4. When Planning Education Cultivates Foresight Quotient

Urban planning is planning activity centered on urban space and urban problems, but every field contains needs and problems that require planning. Professional education may last four, five, seven, or more than ten years, yet feedback from practice continually returns professionals to lifelong learning. Whatever its duration, planning education quietly cultivates a capacity that may be called foresight quotient: facing the future, identifying feasible means, constructing a relatively complete solution, and realizing an anticipated objective.

With AI, professional learning should not produce more collectors of facts, information couriers, or walking hard drives. The network age encourages constant scanning and leaves too little time for reflection. Sound habits of thinking allow people to act under either abundant or limited knowledge, identify directions for continued learning, and find routes toward objectives. Strengthening foresight quotient reveals the distinctive character of planning education regardless of its length or content. In planning thinking, intelligence supplies methods and foresight evaluates them; emotional intelligence supplies patience and foresight lengthens its horizon; financial intelligence creates feasibility awareness and foresight develops long-term return pathways. With planning thinking, uncertainty and the future cease to be reasons for anxiety; one simply prepares to meet what comes.

The Role of Urban Regeneration in Disciplinary Transformation and Planning Education

YANG Jianqiang (Professor, School of Architecture, Southeast University; Chair, Urban Regeneration Committee, Urban Planning Society of China; Member, National Steering Committee for Graduate Education in Professional Degrees in Urban and Rural Planning; Member, Subcommittee on Teaching Guidance for Urban and Rural Planning in Higher Education, Ministry of Education)

Within the broader framework of ecological civilization, integrated national development, governance modernization, and Chinese modernization, urban regeneration has become a major concern of central and local government and society as a whole, and a principal task in the second half of China's urbanization. National policy has called for urban-regeneration action, and the 20th National Congress emphasized people-centered cities, improved planning, construction and governance, transformed development models for megacities, and the creation of livable, resilient, and smart cities. The July 2024 decision on comprehensively deepening reform identified urban-rural integration as a major task and called for sustainable regeneration models, policies, and regulations. These changes give urban regeneration new missions and content and make comprehensive reform of planning education urgent.

In the regeneration era, the land-finance model is increasingly unsustainable and large-scale development is declining. Planning is shifting from engineering demand and land-approval tools

toward urban operation, industrial upgrading, regeneration, community building, public administration, and governance. Decision-making is moving away from purely top-down processes toward complex negotiations concerning property owners, the distribution of land-value gains, compensation, land consolidation and reserves, repair of unsafe and deteriorated housing, and protection of public interests. Implementation is also moving from relatively separate urban planning, urban design, architectural design, and construction toward closed-loop management across the full cycle from planning and design to engineering, construction, operation, and maintenance. These changes challenge established habits and require bold exploration in knowledge systems, teaching organization, and educational methods.

First, China needs a theoretical and methodological system of urban regeneration suited to its own conditions and a corresponding improvement in the disciplinary structure. Urban regeneration is not merely physical renovation; under new urbanization it reconstructs both material and human space and brings together functional adjustment, industrial transformation, intensive land use, conservation of traditional and historical environments, and continuity of neighborhood social networks. Research should examine the city as a living organism, explain development and change, identify difficulties in practice, reveal the substance and mechanisms of Chinese urban regeneration, and establish locally grounded theories and methods.

Second, planning education should establish curricula and training models suited to regeneration. Urban regeneration is simultaneously a highly integrated technical issue, a complex social issue, and a policy issue in which many contradictions of modernization are concentrated. Its implementation is shaped by policy, administration, finance, law, and target management. Education must shift from accumulating knowledge toward comprehensive professional capacity. It should cross disciplinary boundaries, integrate the engineering tradition of planning with the humanities, social sciences, and public administration, and use major regeneration research and scenario-based practice to cultivate holistic, systems, and bottom-line thinking. Students need systematic understanding of law, industry, property rights, infrastructure, land use, markets, and public participation so that they can address complex real-world problems.

Finally, digital-intelligence technologies should be used more fully in planning education, with particular emphasis on spatial analysis. Big data, artificial intelligence, simulation, and remote sensing are increasingly used in planning decisions and regeneration evaluation. To overcome inaccurate diagnosis, weak data integration, and fragmented optimization, students should learn comprehensive evaluation under multiple objectives, scales, and interacting systems and use analytical and intelligent tools to optimize urban space. This provides new possibilities for solving the multi-objective, multi-scenario, and multi-system problems of urban regeneration.

Timely Renewal in Response to Change

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Urban and rural planning graduates work in planning, design, consulting, management, decision-making, and research related to spatial governance; professional education is therefore fundamentally organized around spatial governance. Chinese universities have educated large numbers of planners on this basis and contributed substantially to national strategy and local development. Although conventional urban and rural planning is transforming into territorial spatial planning, its graduates

remain a core professional force. Space has always been the center of the knowledge system and will remain so. Yet understanding of space must be developmental and dynamic: the priorities of spatial planning change over time, and the meaning of space must expand and deepen accordingly.

Under new urbanization, ecological civilization, and the territorial spatial planning system, professionals need a holistic understanding of territorial space and of a system covering all territories and elements. They should recognize how planning and implementation support scientific control of spatial resources, high-quality urban-rural development, and a Beautiful China. At the same time, population change, evolving social demand and behavior, new information and energy technologies, and global climate change reshape spatial composition and organization. Education must therefore renew its content and methods while retaining space as its central concern.

In content, education should first deepen the transition from urban-rural space to territorial space. No single major can carry the entire territorial spatial planning knowledge system, but planning students need its basic principles, a broad perspective, and overall coordination capability. Second, when development is no longer measured by unrestrained expansion, space becomes increasingly scarce and valuable. High-quality development requires more scientific decisions in allocation, fine-grained control, performance, design, implementation, and management. Students need stronger ability to identify factors affecting space and analyze relevant laws and mechanisms. Courses should therefore add appropriate economics, society, ecology, environment, policy, quantitative analysis, modeling, data analysis, and research methods. Third, territorial spatial planning creates diverse paths for institutions. Each university should clarify its place, tasks, and role in the overall talent system and strengthen distinctive training. Within institutions, course clusters and modules can differentiate design-oriented and policy-oriented pathways. Appropriate interdisciplinarity is essential to innovative, compound talent capable of meeting diverse demands.

In methods, planning education should continue to combine classroom study with applied practice and strengthen platforms integrating government, industry, universities, research, and teaching. Students need full participation in practice to understand the complexity and contradiction of real spatial problems, develop professional responsibility, and improve coordination, communication, and collaboration. Lectures should be combined with discussion to avoid one-way knowledge transmission and to develop autonomous learning and creative thinking. New technologies should empower education through information systems, artificial intelligence, virtual reality, and augmented reality, creating visual spatial scenarios and enabling intelligent and interactive learning.

Diverse Models and Differentiated Pathways: Urban and Rural Planning Education under an Uncertain Future

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Changes in the stage of urban development, professional reform, management functions, and technology have created unprecedented crises and challenges. Traditional planning business is contracting, career prospects are uncertain, and anxiety has spread through planning education. Under enrollment pressure, many institutions are rapidly shortening programs and reforming training models. Confidence in classroom education is weakening, conventional knowledge no longer fits rapidly changing practice, demand for graduates has declined sharply, and more than 30 percent work outside planning. The discipline must reassess its new conditions, clarify its core and knowledge system,

explore diverse talent models, and improve the resilience and future adaptability of planning education.

1. Developmental Shock: Uncertainty in the Professional Environment

The profession faces a complex and changing environment. Urbanization is shifting gear, requiring transitions from incremental construction to regeneration, from construction to operation, from speed to quality, and from built urban-rural environments to all territorial spaces and elements. These long-term and irreversible shifts require comprehensive reconstruction of the discipline's knowledge structure. Climate change, frequent disasters, political and economic instability, and accelerating technological transformation create unprecedented uncertainty for urban operation and planning. Adjustments in management functions also change professional practice as value drivers move from physical-space construction to comprehensive development strategy and resource-environment management.

2. Systemic Iteration: Contemporary Change and Innovation in the Discipline

Modern planning was born and repeatedly transformed in response to changing values and purposes. Governance structures, development strategies, social ideas, and public needs all influence the discipline. China's planning has moved from learning Western approaches and combining Chinese and Western knowledge, through local practice and boundary expansion, to current functional adjustment and systemic reconstruction. Today, in building a community with a shared future for humanity and advancing Chinese modernization, the discipline should iterate in a more open, inclusive, and plural manner.

Traditional knowledge was organized around the growth of new space and centered on engineering and architecture, giving the discipline a clear engineering orientation. It was practice-oriented and addressed real problems, but often lacked investigation of underlying mechanisms and rigorous methods of inference. Contemporary planning is more strongly interdisciplinary. It must respond to urban value creation, modern governance, and social and humanistic concerns. Its knowledge system should integrate economics, sociology, public administration, geography, ecology, and related fields around spatial planning and management. Its methods should draw on associated theories and technologies, strengthen data analysis, scenario simulation, and intelligent inference, and investigate the laws and mechanisms of urban-rural systems more scientifically.

3. Resilient Adaptation: Differentiated and Tiered Educational Models

During rapid urbanization, planning education expanded sharply. By 2024, 229 Chinese universities offered undergraduate programs, 117 institutions were authorized to award master's degrees in planning or professional degrees in urban planning, and 20 awarded doctorates. Despite different institutional backgrounds, programs were broadly similar because they responded to the same demand for rapid development. Today, the unified supply of all-purpose graduates is no longer viable. Education must shift toward differentiated, tiered, multi-directional, and multi-exit models.

Leading institutions, especially comprehensive universities, face particularly severe enrollment pressure; some undergraduate cohorts have fallen to single digits, and graduate programs compete internally with more popular majors. These institutions are becoming pioneers in shortening programs and diversifying education. Local universities, especially architecture-based institutions, face somewhat less pressure and remain at earlier or more cautious stages of reform.

Under shorter program lengths and continuing pressure to expand disciplinary boundaries, modular knowledge systems can provide flexible pathways. A concise core of planning and design

foundations plus understanding of urban laws should be combined, according to institutional mission, regional needs, and local practice, with modules in territorial spatial planning, urban regeneration and community governance, urban-rural heritage conservation, rural planning and construction, and ecological resilience. Such combinations can differentiate creative design professionals, research innovators, comprehensive governance professionals, and interdisciplinary explorers. Institutions can also diversify program routes through integrated pathways such as 3+2, 4+1, and 4+2, thereby improving adaptability to future needs.

Directions for Educating Planning Professionals from the Discipline's Three Fundamental Characteristics

ZHUO Jian (Head and Professor, Department of Urban Planning, Tongji University)

Planning education in China is at a critical point of transformation. It faces changes in the stage of urbanization, professional reform and demand, and digital-intelligence technologies. Schools are actively adjusting undergraduate program length, training models, and curricula according to their own conditions.

As institutional pathways become more differentiated, consensus on the essential core of the discipline is increasingly urgent. Such consensus is the foundation for planning education and an intellectual bond among schools. China's institutional advantages have enabled urban and rural planning to become a field with potential to reach world-class standing, but it remains a relatively young and small discipline with less space and fewer resources than older fields. During transformation, schools must seek common ground while preserving differences and work together to strengthen the discipline. Its three basic characteristics clarify its distinction from other fields and the directions for talent development.

First, urban and rural planning is multidisciplinary. Since modern planning emerged, it has drawn continuously from social, environmental, management, and other sciences. The territorial spatial planning system requires further theoretical and methodological expansion. The discipline should emphasize genuine integration - the reproduction of knowledge across boundaries - rather than the simple addition of subjects. Three educational issues deserve attention:

(1) Clarify the knowledge core. Reduce the volume of required courses and establish a minimum core curriculum covering essential knowledge and capabilities. Provide more time for autonomous learning, encourage interdisciplinary study, and develop students' ability to learn independently.

(2) Build organized disciplinary clusters. Encourage interdisciplinary research and new growth points; support the joint development and sharing of courses and textbooks; and facilitate mobility of faculty across fields.

(3) Establish differentiated talent pathways. As the knowledge system expands, the all-purpose "hexagonal warrior" should no longer be the sole goal. Education should create multiple directions and exits, cultivate different kinds of professionals who combine breadth and specialization, and strengthen organizational and team-working capacity.

Second, urban and rural planning is distinctly practical. Modern planning was born with a mission of social reform. Its engineering classification in China signifies that the discipline must not only identify and understand problems but also propose concrete solutions and implementation paths. Under pressures from academic evaluation, some programs have drifted toward pure science, and some theses are nearly indistinguishable from work in adjacent fields, threatening disciplinary independence. Spatial design must therefore be reassessed as a core capability. In its broad sense, design is not merely

artistic expression; it is strategic organization and the creation of an integrated, innovative solution for a specific purpose. The comprehensiveness, strategy, and innovation of design thinking correspond closely to the capacities required in planning practice. Planning education should cultivate design thinking, though not necessarily train every student as a conventional designer.

(1) Strengthen the application of research outcomes. Research-based design is an effective form of training. Planning and design are instruments of social improvement and public governance rather than pure artistic creation; they must be grounded in research and analysis. Education should develop not only research capacity but also the ability to translate knowledge into action. Bridging the gap between knowing and doing is central to innovation.

(2) Expand integrated government-industry-university-research education. The combination of theory and practice is part of planning's traditional identity. Social practice provides research material and creates real, vivid environments for learning. Leaving the classroom and campus stimulates interest and allows students to experience directly the value and meaning of planning.

(3) Respond proactively to digital-intelligence change. Multi-source big data, computing power, and algorithms create new possibilities for discovering laws within complex urban systems. Technological innovation is irreversible. Digital-intelligence technology will become an important productive tool and open broad prospects for disciplinary transformation. Planning education must be rebuilt on a new digital foundation.

Third, urban and rural planning has a strong public-policy character. In a message to the graduating class of 1986, Jin Jingchang stated plainly that urban planning is concrete work in service of the people. This character means that planning values must take the public interest as their basic standard. Planning often includes the formulation of public policy and can be distinguished from architecture in this respect: architecture generally designs space within a given brief, whereas planning often helps formulate the brief itself. Planning is also an important field through which universities serve society, and social impact should be included in evaluation systems. Three educational issues follow:

(1) Strengthen professional values. Through values-based curricula and thematic study, students should understand national policies, political and economic institutions, laws, regulations, and departmental rules, recognize the practical meaning of planning, and develop an enduring commitment to public interests and service to the people.

(2) Develop responsibility for value creation. Planning as public policy has a major role in allocating spatial resources. Students should strengthen their sense of professional responsibility and regard creating and enhancing value as important tasks, thereby building sustained drivers for urban-rural development.

(3) Cultivate well-rounded professional character. Leadership should be strengthened, together with official and professional writing, oral presentation, communication, and coordination skills required by future planning practice.

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