Chapter 16
Envisioning the Future of Planning and Planning Education

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Abstract Seeking to chart future trends, this chapter examines historical aspects in the discipline's development, practitioners' viewpoints, opinions from planning educators, and contributions from this forward looking Part of the book to develop and substantiate a vision of future planning curricula and educational approaches. While results from a survey of leading planning educators broadly reconfirm stalwart values of the planning field ("the pillars of planning"), some suggestions were posited in regards to more explicit integration of education for post-sustainability, resilience, and ecosystems concepts. Furthermore, interdisciplinary, diversity, pluralism, and the fields' long-standing experience of participatory working should be turned into a virtue to bolsters the field's academic standing given trajectories that promote university-community engagement, partnership and collaborative working with industry, government and society.

Keywords Planning education · Future · Interdisciplinarity · Leadership · Post-sustainability · Resilience

Introduction

It is difficult to predict the future, as many misjudgments in the past illustrate. Greater accuracy is achievable for short-term predictions compared to longer term ones. One reason for predictions to fail is that humans and societies can and do regularly influence the path of development through deliberate action. Given the challenges faced in respect to urban agglomerations, overcoming pollution, congestion, and resource shortages, it is vital to ensure future planning graduates have

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the relevant skills, values, and knowledge to facilitate appropriate planning interventions. What then are the competencies future planners will need? What knowledge and which values are to be conveyed and what might be the most appropriate pedagogies and delivery mechanisms?

In line with other visioning exercises, our ideas for twenty-first century planning education build on a wide base and evidence. We draw on four sets of inputs in particular. First, we gain insights from historical developments. Then, opinions and views from practitioners (second input, Chap. 21) and from planning educators (third input) are triangulated and examined in conjunction with wider societal challenges, urban and regional development, and trends in (higher) education. Fourth, we draw clues and inspiration from innovative practices in planning education as outlined in the contributions hereafter (Chaps. 17–20). We hope that our suggestions for content, format and models of future planning education programs elaborated in the concluding part of this chapter stimulate much needed exchanges and discourse in the field and help to implement adjustments to curricula and programs proactively rather than reactively.

Insights from History

History demonstrates that planning and planning education are tied closely to institutional and societal contexts (e.g., Frank et al. 2014; Gurran et al. 2008; Keller et al. 1996). Educators typically have endeavored to adapt curricula to cater to emerging demands in society and practice. Growing environmental concerns in the 1970s, for example, led to the integration of more environmental planning topics in planning curricula (e.g., Dalton 2001). More recently, (economic) globalization and the rise of pan-international agencies is suggesting a weakening of the importance of the nation state in favor of larger socially, economically, and ecologically linked regions. In Europe, this has led to the development of the 1999 European Spatial Development Perspective (ESDP) and a host of cross-national funding opportunities for cities and municipalities as well as pan-European legislation (laws and directives) with considerable implications for planning in each of the sovereign states of the union. To prepare future planners to cope with these international influences, planning educators started to develop new courses and programs covering subjects such as ‘European (strategic) planning’, ‘international spatial and economic reorganization’, and ‘transboundary planning’ (Dühr et al. 2016; Frank 2013). Some of these programs feature novel formats and collaborative delivery by multiple institutions in different countries as well as multilingual instruction to underline the international nature of their curricula. The focus and format of planning education is also influenced by technology (web, big data, and social media), as well as concerns over climate change, resource shortages, and the persistence of informality in urban development among other things.

Views From Practice

When updating curriculum content, advice and guidance is regularly solicited from practitioners to ensure future graduates are employable (see, e.g., Guzzetta and Bollens 2003; Ozawa and Seltzer 1999; Scholl 2012). Selected practitioner opinions from US-based certified planners are presented in the final chapter of Part III. Paul Zucker's and Lee Brown's suggestions (Chap. 21) that planning education consists of a mix of skills development and classical "education" as well as developing personalities are not exactly breaking new ground, but nevertheless provide food for thought in respect to future planning education. Should curricula develop locally relevant knowledge first and then expand to global issues? Should skills development precede more theoretical content or the reverse? Put another way, would it be best to provide a broad education based on general principles in the first degree while leaving a special, context-specific set of courses to a second (advanced) degree? Should students learn context-specific material on the job? Or, should we become more flexible on the sequence of education and move beyond (Perloff's 1957) generalist with a specialism construct? More flexible pathways are already becoming a reality in some global regions and it may be useful to extend this to other places. The notion of life-long learning recurs and from a European perspective an awareness of international differences is also a frequent request from practitioners (e.g., Greif 2012).

Re-evaluating the Pillars of Planning

Another, third, input to our visioning exercise stems from academia. In 2013/14 we contacted a non-representative sample of 45 experienced educators from urban, regional, or spatial planning programs and invited them to partake in an email survey on the content and format of planning education in the future. Specifically, we asked

1. "Will there be a shift in core planning values and what will they be? (e.g., in the last century Krueckeberg (1983) and Friedmann (1987) suggested that planning was built on three pillars: Beautification, efficiency and social justice). What will/should be the future pillars of planning?"
2. "What would be, in your opinion, the key competencies and knowledge that planning graduates should have in future (will this differ regionally or will there be global values?)"
3. "How do you see planning education being delivered in future (online, work-based, traditional university degree) and what would be an "ideal" planning education or pedagogies in your view?"

Nearly 50% (22) responses were received (15 male; 7 female). Seven respondents were employed at a variety of European higher education institutions and five

at US universities. The remaining ten responses were from academics working in Asia, Africa, New Zealand, and Australia. For each of the three open-ended questions, respondents were asked to assume a 10-year time horizon. Despite differing planning traditions, divergent nation-specific priorities, and legal circumstances, there was considerable agreement in respect to some issues. It appears that certain universal values and skills associated with the profession exist. We suggest that these universal "planner characteristics" should inform future curricula and any international level program accreditation.

In response to the first question a little more than two-thirds of all respondents suggested that the "pillars of planning" still hold true and remain central to the profession. Several respondents, however, qualified their statements in pointing out that while the values remain central, their interpretation has shifted, or is fluctuating. Moreover, pillars or values may not be given equal weighting and therefore might have differential status depending on national conditions (e.g., beautification). One individual intimated that the focus of planning education in respect to design varies by regions, whereas another suggested that beautification is becoming "muted but problem-solving, design and creativity will rise in importance." The strongest convergence was around social justice, poverty alleviation, and equity. This is reflected in the emerging movement of the "right to the city" that is gaining provenance in multiple forums. Three of the twenty-two respondents suggested that planning tended to focus on protecting or enhancing the "common or public interest" but expressed doubts that the public interest can be clearly defined as societies and their value systems diversify. Two respondents pointed to the growing importance of effective public participation and private–public partnerships. A quarter of respondents proposed that social justice would have to be looked at from a more global scale, that planners and planning must become "more globally aware" as well as inclusive with respect to, for example, gender equity. About two-thirds of the respondents suggested that efficiency should become conceptually broadened to include resource efficiency alluding to future resource scarcity, environmental threats, and the need for nature stewardship. Seven respondents identified climate change issues, environmental justice, and sustainability as key priorities for future planning education and three respondents made reference to a comeback of health/wellness and making places livable as an important issue in planning.

The second question on key competencies and knowledge had respondents stress that "an ability to shape the built environment to increase value (efficiency/beautification) and distribute value (equity/social justice)" was needed. Interestingly, over half of the respondents felt that planners would benefit from greater competencies and knowledge of technology and natural science (ecology) as a prerequisite to proactively plan adaptations for urban settlements to climate change, resource shortages, and more frequently occurring environmental disasters. Linked to this were several calls for solid GIS, statistics, and quantitative analysis skills. The ability to work with professionals from other fields ("interdisciplinary dexterity") and apply systems thinking was also seen as important. A second category of competencies identified for future planners was around financial and

management skills and political awareness. Planners should have leadership qualities. A third category included communication and negotiation skills—to become an articulate "spokespersons" as one called it. Communication skills were seen to be vital for community engagement and liaising with politicians and elected officials/governments. This should include an ability to use social media and to critically assess visual presentation by others, media, and websites. Fourth, spatial and global awareness (place matters!) and understanding that planning elsewhere works differently and that known practices may not be the norm. Fifth, students should develop an ability to think critically and to be creative in finding new solutions and to think long term (e.g., 20–50 year time horizon). Two things are noteworthy: First, the fairly large overlap of competencies listed by academics and by practitioners (Chap. 21) and second, not altogether unexpected, no mention of the centrality of comprehensive planning processes, or other standard bearers of traditional planning education.

The third question sought to explore future delivery mechanisms and program formats. Answers differentiated on one hand between delivery modes and who delivers (university or professional training provider) and on the other hand curriculum and planning specializations. In respect to the former, there are those that strongly believe that university-based planning education (preferably face to face, on campus) will remain the preferred modus operandi (both by students and educators). These views are contrasted by a second group of respondents who foresee a greater diversity of delivery modes in future, ranging from online, professional training courses to traditional on campus delivery of university programs. About one quarter of the respondents felt that a combination of modes will become increasingly available leading to "multimodal education" where learners can switch between modes throughout a life-long engagement with education and training. Such hybrid flexible models of delivery would allow learners to benefit not only from direct face-to-face contact and online provision but also from specialist courses and programs offered jointly by consortia of institutions. Sharing program delivery between different providers may be particularly advantageous for smaller countries with fewer resources. Approximately one-third of the respondents suggested planning education should include work-based, experiential learning elements in form of internships, service-learning and the like—emphasizing the benefits students derive from reflecting on practice and theoretical knowledge in turn. Some also noted that learning differs nowadays from the past and predict this trend to grow stronger, with students demanding more input, engagement, interactive pedagogies and more personalized (student-centered) learning. In time, competency-focused learning rather than a comprehensive curriculum-based education may become the standard, meaning students learn whenever they need to find out about something which supports a life-long learning approach.

Additionally some respondents suggested a future distinction of planning programs into three streams, where programs either focus on urban design/urbanism, policy/public administration and management, or economic planning and geography. Reflecting on answers to earlier questions, it seems that another future focus should be environmental issues although none of the respondents specifically

mentioned this. How otherwise will planning graduates address issues of climate change adaptation of urban areas and sustainability?

And, while generally treated as taboo, some respondents also wondered whether the increasingly shorter time frames for degree programs, with 3-year undergraduate and 12 months executive masters (at least in some parts of the world) make it difficult or even impossible to introduce students to a very complex profession and how this may be rethought.

Emergent Themes and Innovative Pedagogies

The innovative developments in planning education, which center on themes rather than countries and regions and which are illustrated through the contributions in Chaps. 17–20 represent the fourth input to our vision. They offer valuable ideas for a twenty-first century planning curriculum.

A first prominent theme is "*University-community engagement, partnerships and collaboration"*. Chapter 17 by Schlossberg et al. offers an adaptable template as a means to create high impact university-community partnerships which can employ a cross-section of disciplines to foster sustainable development in a city or region. The approach is facilitated by a time-limited contract between a university or college and a city, county or region. In contrast to other service-learning type programs, the place-based program focus means that schools of urban and regional planning are in an enabling position to lead such efforts. The considerable uptake of the approach by other institutions in the US and elsewhere evidences its transferability. The "*University-community engagement, partnerships and collaboration"* theme shows that planning education can be a leading actor in transforming cities and places. The theme has emerged independently yet in similar form in the African context with planning school's cooperating with NGO's such as Slum Dweller's International (SDI) to actively provide support for change in unplanned settlement areas (Chap. 10). Both examples represent a scaling up of more individual and isolated efforts undertaken by planning faculty for many years. Engagements and partnerships can be highly fruitful and rewarding for those involved but they are not without risks (to learners, educators or communities). Their implementation requires careful instructional design and further research as Angotti et al. (2011), Bose et al. (2014) and Winkler (2013) for example attest in their reflections on collaborative service-learning in design and planning.

The theme also resonates with Neuman's evaluations of "The Collaborative Interdisciplinary Studio" (Chap. 18) albeit examples are at program rather than institutional level. The main focus of this contribution is, however, the value of studio and project teaching and how this pedagogy can be harnessed to address a second theme of importance to planning education—"*literacy in interdisciplinary working and thinking*." Schuster (1950) has and many practitioners (Chap. 21) still do emphasize interdisciplinary as a vital skill. Interdisciplinarity plays a key role in discourses on cocreation and coproduction, which inevitably require different

stakeholders to interact. Yet, while interdisciplinarity is part of the profile used to describe planners, pedagogies to support the development of interdisciplinary thinking skills are not as well developed as one might think or hope (e.g., Ellis et al. 2008, see also Wilson and Beatley, Chap. 20).

The third theme for future planning education is "*sustainability* or *post-sustainability*" (Chap. 20) and the role of the natural environment in human settlements. This has been—like interdisciplinarity and engagement—for some time part of many curricula in planning and planning education. However, there is no simple or agreed way on what makes a place sustainable or resilient and education for sustainability remains a challenge.

A fourth and final theme emerging from the contributions is "*technology*" and its transformative influence on the operation of and life in cities and indeed how education itself is being delivered (Chap. 19). The opportunities associated with new technologies, social media and so forth are vast and open up, in parallel, new teaching and program delivery mechanisms and new ways of understanding, analyzing, and managing cities. At present, the majority of educators have hardly begun to consider how to employ technology creatively in planning education. The modern planning curriculum will have to incorporate teaching with and about technology in the city. Planning students will need to learn how modern technologies are impacting on and can reshape urban living and urban spaces so they can guide policies accordingly.

In sum, these four themes: (a) university-community engagement, partnerships and collaboration, (b) interdisciplinarity, (c) post-sustainability and (d) technology, together with ideas collected from historical insights, practice and planning educators are forming the elements of our proposed framework for future planning education.

Ideas for Twenty-First Century Planning Education

With over 50% of the world's population now living in urbanized areas, the importance of well-planned, functioning cities and metropolitan areas cannot be emphasized sufficiently (e.g. UN-Habitat 2016). The ecological footprints of these urban agglomerations far outstrip capacities and calls for alternative city conceptions such as regenerative-restorative cities (World Future Council 2014) or smart/sharing cities (McLaren and Agyeman 2015) are gaining currency in a race to enhance sustainability and build healthy living environments.

We believe, therefore, that the planning project—i.e., the tasks for planners—will need to be reframed and newly interpreted. We further argue that rethinking curricula, pedagogies and delivery modes are likely insufficient. The best programs are no good if they are not recognized and supported. The status of universities, their purpose and funding mechanisms have become increasingly contested in recent decades by the massification of higher education (Trow 2000), global competition and a push to make university–society links explicitly relevant in

economic terms. As a result, smaller disciplines viewed as economic "loss-makers" have come under threat or have indeed been eliminated—with planning not being immune to such peril. Thus the planning education community needs to consider the field's "intellectual" space in society and the university (e.g., Bertolini et al. 2012; Davoudi and Pendlebury 2010) and how programs and courses can be best positioned.

Reframing the Pillars of the Planning Domain

Many of the academics participating in our survey reconfirmed the value set of planning but have also suggested that the interpretation of values is shifting. In this vein, we suggest to reframe the three original pillars and add a fourth one (Fig. 1). "Beautification" may be better conceived as *well-being and health.* The characteristics that make a city attractive to visitors and residents such as parks and open spaces do also contribute to creating a "healthy" environment in which people and their businesses thrive physically, socially and economically (Chap. 20). Efficiency (i.e., optimizing functionality of the city) ought to be reconceived as *resource management* looking at land, water, energy, and food as well as other urban

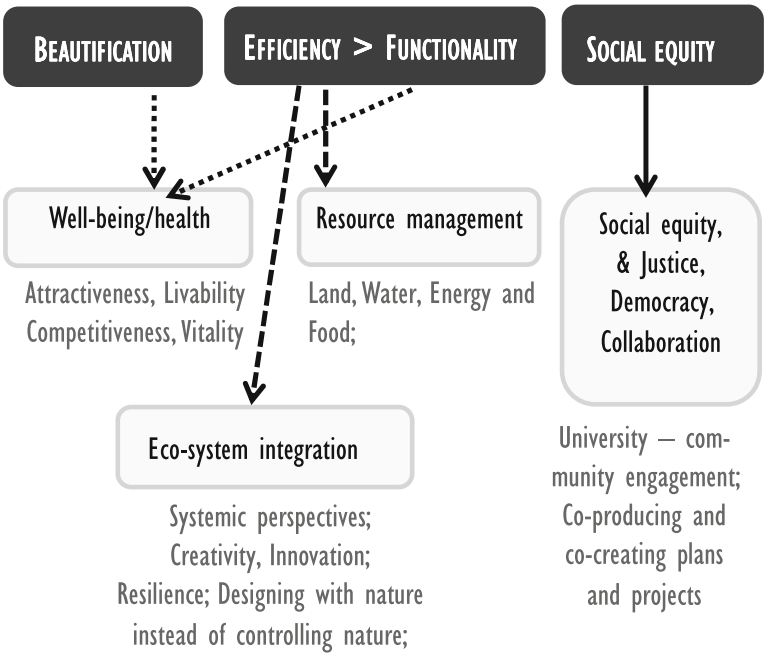

Fig. 1 Reframing the pillars of planning

resources. Future planners need to be able to understand big data technologies to secure the best set up in urban management while embracing *(eco-)systems thinking* to conceptualize urban systems in multifunctional terms. This may include adaptable management techniques that exploit the multifunctionality of green infrastructure for water management rather than controlling or taming nature at all cost. Social equity is the pillar that remains but its meaning is explicitly expanded to include issues like justice, democratization of development and planning and collaborative (community-based), participatory planning.

Future Key Skills, Knowledge Areas and Pedagogies

Participatory planning has been advocated for decades by scholars like Arnstein (1969) and organizations such as the United Nations (UN-Habitat 2009). It leads generally to better projects and user satisfaction (e.g., Wates 2000). The role of planners as facilitators in co-learning and collaborative planning will be essential and requires a firm place in future curricula. Planners will need to be versed in the different techniques of public participation ranging from workshops and charrettes to the use of social media, gaming, and virtual reality tools.

Given the consensus on the importance of preparing planners to provide effective responses to climate change, natural resource protection and management, comprehensive coverage of these topics seems fundamental. Achieving resource efficiency will require both, behavioral and technological solutions. Considerable efficiencies in energy use can be made, for instance, through "smart" equipment that monitors and automatically adjusts energy generation to usage patterns. Smart phone apps can help motorists find parking spaces and thereby reduce the amount of time and fuel (and pollution) spent searching for a space in congested inner cities such as Rome, London, or New York. Smart (city) technology will be big business in future and many large corporations are making considerable investments in this area including IBM, Siemens, Cisco systems. Technologies can and will be implemented top-down or bottom up and planners need to be aware of the possibilities and pitfalls involved. Professor Batty of the Centre for Advanced Spatial Analysis (CASA) University College London, is adamant that "it's time for a huge revolution in planner's training to be much more scientifically literate, for them to be educated in new technologies" (Boardley 2014, p. 11).

Addressing the urban issues of the twenty-first century will require the concerted efforts of a range of professions. The field of planning has progressed interdisciplinary working processes perhaps more than other fields (Chap. 18). Leading interdisciplinary teams will be a key opportunity for future planners.

Finally, planning education must adequately cover locally unique regulations and norms within the context of shared concerns at the international level, as well as enable planners to seek out and derive best practices from looking beyond the local.

This requires a greater level of curriculum internationalization. Some degrees may even focus exclusively on international planning—not in the sense of international development planning or aid—but considering transnational planning issues (as in marine and coastal planning, or ecosystems and watershed planning, international transport). The globalization and internationalization of many major cities in the world means that future practitioners must also have skills in working with different ethnic groups.

Pedagogically, we believe that action-oriented learning via projects or work-based settings should make up a significant proportion of planning education. Opportunities to gain international and interdisciplinary working experiences will be vital. There may also be more collaboration between practice and universities to link research and implementation. The contributions by Schlossberg, et al., Newman, and Wilson and Beatley (Chaps. 17, 18 and 20) offer good examples that could be integrated more widely into planning education.

Planning Education "Space"

Despite the creation of dedicated planning education programs in a growing number of countries, many planning academics remain rightly concerned that planning as an independent, standalone discipline continues to be contested and is considered inferior compared to other disciplines such as architecture or engineering (Geppert and Cotella 2010). The fact that planning does not fit neatly into the accepted mold of a classical science, nor into that of a design discipline, can prove to be problematic. The field's (academic) contributions are often undervalued as common performance measures fail to capture planning's diverse, interdisciplinary achievements in a cumulative manner. Yet, many planning programs are accredited by their respective national or professional bodies and the field scores comparatively high for fitness for purpose and student employability.

Returning to the notion that in future planning programs may offer three or four different streams (public administration/management, design/urbanism, economic/strategic planning, and environmental planning), a cursory review of existing provision shows that planning education is already covering different foci depending on the university faculty where the program(s) are housed. Table 1 illustrates the wide range of intellectual homes of planning and associated programs across a few countries and universities. At University of Dortmund (Germany), for example, spatial planning has been granted its own faculty which offers both undergraduate and postgraduate degrees. This is a rare setup and seeing planning as part of larger built environment faculties of various orientations or as part of a social science faculty is more common. Often a number of different specializations or programs are offered through one and the same department. Conversely, the University of Łodz (Poland) offers two separate undergraduate and three master programs in planning in parallel but through different faculties, each focusing on different planning aspects. For those familiar with the diverse intellectual roots of

the discipline, it is unsurprising to find planning education programs within a wide range of faculties spanning the entire spectrum from the social or environmental sciences to the design (landscape architecture, architecture) and engineering fields. It is undeniable that these diverse environments mirror the complex and varied aspects of the profession.

Comments from practitioners (Chap. 21) underscore time and again that planning practice requires individuals with both a general understanding of planning concepts and different disciplinary specializations. In fact, different disciplinary groundings for entry in master programs have been and still are widely encouraged. From a practice view, the diversity of planning programs and their association with different cognate fields is not necessarily an issue as they will result in different student profiles. The challenge for the field is to convey a coherent core skills/knowledge set across this diversity to outsiders and future graduates.

Prominent university leaders in North America such as Duderstadt (2003) and Wilson (1998) claimed that future progression of knowledge will depend less on reductionism but instead will likely be achieved through new (mixed) methods that support inter- and transdisciplinary research which cut across the boundaries of disciplinary silos. This offers hope and a policy window for planning to gain or regain lost territory. Planning is naturally positioned at the interface of a variety of disciplines in a brokering position, connecting and linking disciplines through its unique lenses of spatiality and action (see Chap. 17).

Working across boundaries and in an interdisciplinary or transdisciplinary manner can lead to new insights (Davoudi 2010); however, these insights do not occur automatically but require real engagement (Wagner et al. 2014). It also does not it involve abolishing disciplinary boundaries. Webster (2008), in fact, argued that enhancing awareness of differences amongst disciplines and specializations may lead to a fuller acknowledgement of what each discipline can contribute to find a solution to a problem compared to another. Such clarity about differences will help build respect for disciplinary strengths and encourage working in a complementary rather than competitive manner, and to cocreate and coproduce solutions.

It seems therefore that planning and planning schools may be able to improve their institutional standing given current leanings toward inter- and transdisciplinary working. Strategies may involve a repositioning within an institution but details depend to a large degree on the academic setting in which any particular program is situated to start with. Conceptually, two existing typologies (Fig. 2a, b) and a potential future ideal can be distinguished (Fig. 2c). Drawing on Table 1 earlier, planning (PLAN) at present is either a smaller element in a larger overarching faculty or college (Fig. 2a) in the natural sciences, social sciences, or the design/engineering disciplines; or, alternatively, but rarely a free-standing autonomous institutional unit (Fig. 2b). In each case, planning draws on and links with relevant other subjects (OS). Self-contained units as in type (b), will likely have weaker external links as certain aspects of associated disciplines are already embedded within the faculty/college itself. Once a planning education provider has identified its type, a first step would be to map disciplinary boundaries ("sharpen-up" in Webster's (2008) terminology) to discover synergies, differences

Table 1 Diversity of academic homes and planning program foci

Country	Institution/faculty/college	Planning education program(s)[a]	Discipline environment
USA	University of Michigan, College of Architecture and Urban Planning	Master of Urban and Regional Planning Master of Urban Design	Architecture, Planning
	University of Southern California, Price School of Public Policy, Department of Urban and Regional Planning	Master of Urban Planning Master in Public Policy Master in Real Estate Development Master in Public Administration Master in Health Administration	Social sciences, Public policy
UK	University of Manchester, School of Environment, Education and Development,	BA urban and Regional planning BA environmental management MSc Urban Design and International Planning MSc Planning MSc urban regeneration and development MSc environmental impact assessment and management	Environment, economics, Policy
	Heriot-Watt University, School of Energy, Geoscience, Infrastructure and Society	BSc urban planning and property development MSc Urban and Regional Planning MSc Sustainable urban management MSc Urban Strategies and Design	Engineering/ Architecture/Environment
Germany	Technical University Dortmund, Faculty of Spatial Planning	BSc Spatial Planning MSc Spatial Planning MSc SPRING (Spatial Planning for Regions in Growing Economies)	Spatial planning
	University of Applied Science Stuttgart, Faculty of Architecture & Design, Dept. of Urban Planning	Master of Urban and Regional Planning	Architecture/Design
Poland	University of Łódź, Faculty of Geography	BSc Spatial Planning, MSc Spatial Planning (both jointly offered with Faculty of Management)	Geography

(continued)

Table 1 (continued)

Country	Institution/faculty/college	Planning education program(s)[a]	Discipline environment
	University of Łódź, Faculty of Management	MSc Env. Planning & Management MSc Management of Local and Regional Government	Management
	University of Łódź, Faculty of Economics and Sociology	BSc Spatial Planning MSc Spatial Planning	Social sciences

[a]listing of programs is not exhaustive but focuses on those most related to the planning field; many departments and faculties offer many more programs

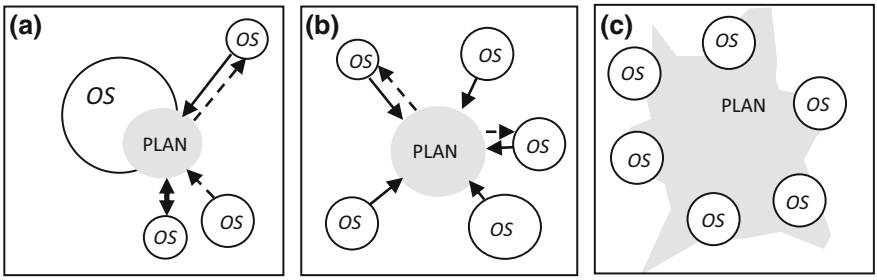

Fig. 2 Typologies of planning education space (adapted from Bertolini et al. (2012), Fig. 1, p. 470)

and joint interests, which then could be systematically explored and broadened. Complementarity will be essential to fostering links with other disciplines. It will be important for planners to impress on other disciplines what its methods and viewpoints can add to any research activity or project work. Figure 2c, offers a new option, where the intellectual space that planning occupies is spread throughout the entire institution and so truly transcends boundaries to other disciplines. This "space" serves then as a collaborative research and education environment, akin perhaps to a neural network where planning delivers the coupling and connective synapses. While this may not be achievable or even desirable, it nonetheless offers a model which triggers a rethinking of the organization of planning related research and education within a university environment. There is a risk, of course, in that when planning education is "everywhere" it may be "no-where."[1]

Given the theoretical embrace of inter- and transdisciplinarity, the lack of more activity in this realm may surprise. The inertia is likely fueled by narrowly conceived discipline-based academic performance criteria which perpetuate a

[1]Borrowing from Wildavsky (1973) "if planning is everything, maybe it's nothing".

traditional silo mentality. Any academic wishing to progress through the ranks will succeed with greater certainty when remaining within the discipline boundaries, publishing in traditional journals, etc. Planning (and many other fields spanning over multiple traditional disciplines) would benefit from more holistic and flexible approaches to performance review that incorporates a wider range of activities (Checkoway 1998) and rewards those working in boundary spanning fields in a more equitable fashion.

Summary

This chapter outlines ideas for the education of planners in the twenty-first century. They derive from suggestions of established planning academics, practitioners, and innovative teaching approaches. Considering the ever greater ecological and environmental pressures that will ultimately pose a real threat to the survival of humankind, we postulate that planning education programs over the next decade must shift their value system (the pillars of planning) to reflect a greater awareness of the natural limits of our planet. We suggest a greater focus on maintaining and restoring the health and well-being of humans and the environment, managing resources smartly, and addressing inequities. As for competencies and skills, planners will need to embrace more scientific knowledge, natural science, and analysis, but also public participation and cocreation. Getting acquainted with a wide range of different scientific styles and paradigms will be key in being effective in interdisciplinary collaborative teams and leading such teams. A variety of educational pathways should be available including online study. Planning education needs to promote global awareness which might include international study embedded in curricula. Planning curricula should also maintain or reintroduce as necessary work-based experiences or internships. Finally planning educators should create opportunities for planning programs to assert their roles in university outreach, university-community engagement activities to facilitate active change in society (Trencher et al. 2014; see also Chaps. 17, 18 and 20).

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