Employer perceptions of Planning Education in South Africa

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Abstract

The changing nature of planning has raised questions about what skills, competencies, values and literacies should be the focus of planning education, both internationally and in South Africa. This article reports on a survey of planning employers which questioned their perceptions of the relevance of planning education and of the appropriateness of the Bloemfontein competencies, a list of competencies drawn up by South African planning schools in 2000. The study found that planning employers largely felt that planning education is relevant, and that the Bloemfontein competencies are appropriate. As is the case internationally, creativity, problem solving abilities and critical thinking are highly valued, and communicative and organizational capacities are increasingly seen as key issues. Concerns were raised however over the competence of graduates in these realms, raising questions again about the focus of planning education.

WERKGEWERS SE PERSEPSIES OOR BEPLANNINGSONDERRIG IN SUID-AFRIKA

Die veranderende aard van beplanning laat vrae ontstaan omtrent watter vaardighede, bekwaamhede, waardes en 'geleerdhede' die fokus moet vorm van beplanningsonderrig – nie net internasionaal nie maar ook in Suid-Afrika. Hierdie artikel lewer verslag oor 'n ondersoek wat gedoen is onder werkgewers van beplanners om hulle persepsies rondom die relevansie van beplanningsonderrig vas te stel, sowel as die gepastheid van die Bloemfontein-bekwaamhede; 'n lys van bekwaamhede wat in 2000 deur Suid-Afrikaans beplanningskole opgestel is. Die studie het bevind dat werkgewers grotendeels vind dat beplanningsonderrig relevant is en dat die Bloemfontein-bekwaamhede gepas is. Net soos dit internasionaal die geval is, word kreatiwiteit, probleemoplossing en kritiese denkvermoë belangrik geag, en kommunikatiewe en organisatoriese kapasiteite word al hoe belangriker. Kommer heers egter oor die bekwaamhede van gegradueerdes op hierdie gebiede, wat weer vrae laat ontstaan oor die fokus van beplanningsonderrig.

IZIMVO ZABAQESHI NGEMFUNDO YOCWANGISO LWEEDOLOPHU NEENGINGQI EMZANTSI AFRIKA

Uhlobo ucwangciso lweedolophu neengingqi elutshintsha ngalo livusa imibuzo malunga nokuba, luluphi na olona lwazi nobuchule olufanele ukujongana nemfundo yocwangciso lweedolophu neengingqi apha eMzantsi Africa nakumazwe angaphandle. Lengxelo imalunga nophando olwenziwe kubaqeshi babacwangcisi beedolophu neengingqi ngezimvo zabo ekufanelekeni kwemfundo yocwangciso lweedolophu neengingqi nasekulungeni kwe Bloemfontein competincies, uluhlu olwenziwa ngabezikolo zocwangciso lweedolophu neengingqi zase Mzantsi Afrika kunyaka ka 2000. Oluphando lwafumanisa ukuba ikakhulu abaqeshi babacwangcisi beedolophu neengingqi bakholwa ekubeni imfundo yocwangciso lweedolophu neengingqi ifanelekile yaye ne Bloemfontein competencies zilungile. Nanjengoko kunjalo nakumanye amazwe ehlabathi, ubuchule, ulungiso ngxaki, nengqiqo zibalulekile kakhulu, yaye ubuciko nokukwazi ukuphatha zezona zinto zijongwe njengezibalulekileyo. Kusenjalo ke kodwa amakhwinibe aye aveliswa ngenxa yentobanangaba abantu abasundula ukuphuma ezikolweni zemfundo yocwangciso lweedolophu neengingqi abanazo ngokupheleleyo ezimpawu zibekwe apha ngentla, ntoleyo ke eveza imibuzo ngelona cala imfundo yocwangciso lweedolophu neengingqi ejolise ngakuyo.

1. INTRODUCTION

The nature and orientation of planning education, and its relationship to planning practice have long been debated. Perloff (1957:3), one of the earliest writers on planning education argued that "the future of city planning is certain to be greatly affected by the type and quality of education provided in our institutions of higher learning". The changing environment for planning and the emergence of new forms of planning practice internationally have led to a resurgence in debates about what constitutes appropriate planning education (e.g. see Friedmann (1996), Sandercock (1999), Poxon (2001), Oszawa and Selzer (1999), Rakodi (1996), Hamza and Zetter (2000)). The core skills, competencies, values and literacies that planning education should engender, and to what extent planning education should emphasise immediately usable skills versus more general literacies, have been central to this debate.

The transformation of planning in South Africa (Oranje, 1997, Harrison, 1995), and the changing nature of the job market for planning (Todes *et al.*, 2003) poses challenges for planning education. As is the case internationally, planning in South Africa has shifted away from its past technocratic orientation to a more people centred approach, but the breadth of planning has also become more extensive, particularly compared to European planning. South African planning embraces urban, rural and regional contexts; it includes a developmental orientation; and it has gone beyond a focus on the physical and spatial dimensions. The diversity of planning practice poses questions about the appropriate orientation of planning education, and its current relevance.

Some South African planning schools have played leading roles in the changes in planning practice in certain respects, while others have been responsive to change. All planning schools, however, have had to operate within a changing environment and in the context of

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diversifying demands on planning practice that are not of their own making. Planning schools individually have attempted to develop what they see as contextually appropriate curricula, and collectively, they have defined the 'competencies' which planning education should aim to develop in their graduates. The development of what has come to be termed the 'Bloemfontein competencies' in 2000 was a response to the need to provide a definition of the scope of planning to feed into the Standards Generating Body (SGB), which, in terms of a new system of national education, would define planning competencies and outcomes, and would negotiate these with other SGBs. Interestingly, the Bloemfontein competencies have proven to be of international interest, and the document has been brought into recent British debates on the direction of planning education (RTPI, 2003).

A critical question in this context is how planning practitioners and employers perceive the relevance of planning education and the Bloemfontein competencies. This is an important contribution into ongoing initiatives to develop appropriate planning education, although it should not dictate change. Africa's (1993) summary of debates over the relationship between planning education and planning practice warns of the danger of a 'suffocating embrace', as opposed to 'close ties'. While employers frequently expect a greater focus on immediately useable skills than planning schools usually offer, this perspective is perceived as short-sighted by several authors, particularly given the unstable and changing nature of planning (Kitchen, 1999, Grant, 1999, Poxon, 2001). From another perspective, however, Hamza and Zetter (2000) argue that planning education frequently lags behind planning practice in developing countries, so it is critical for planning educators to engage with practitioners around planning education.

With these caveats in mind, the paper presents the results of a recent survey of employer perceptions of South African planning education, and the Bloemfontein competencies. The paper begins by providing an overview of debates on planning

education with regard to the question of the competencies, skills, values and literacies it attempts to deliver. The second section outlines the methodology of the study, while the third section presents the findings of the survey. The paper concludes by critically evaluating the findings and discussing their implications for planning education.

2. INTERNATIONAL PERSPECTIVES ON PLANNING EDUCATION

Debates on the nature of planning education have been closely linked to the processes of change within the practice of planning. The destabilisation of planning as a technocratic, design oriented field, and its broadening scope has posed considerable challenges for planning education internationally. While planning education in some contexts responded by 'adding on' new emphases, resulting in what Batty (in Rodriguez, 1988) termed the 'layer cake' problem, in others, diversity in response by planning schools led to a 'Babel of languages' (Niebanck in Africa, 1993). As long ago as 1957, Perloff identified tensions over whether planning education should focus on producing generalists or specialists, or some combination, over an orientation to technical versus humanistic orientations, and over the split between product and process skills. The contextuality of planning has been highlighted by authors questioning the relevance of planning education in many developing countries (Diaw et al., 2001; Rakodi, 1996; Hamza & Zetter, 2000). What constitutes the 'core' of planning education, and whether a single 'core' can be identified, is thus open to question. The relationship between planning practice and planning education has also been a source of debates. All of these issues are of concern in the South African context.

2.1 Competencies and skills required of planners

Since the 1990s, several studies have been undertaken to attempt to establish the 'core' competencies and skills required of planners in various contexts (e.g. Zehner, 1999; Ozawa & Selzer, 1999; Poxon, 2001). According to the Merriam-Webster on-line dictionary, a skill is the ability to use one's knowledge effectively and readily in execution or performance. It is the learned power to do something competently: a

developed ability or aptitude. Competence, according to Kirschner (in Roakes and Norris-Tirrell, 2000:10), is "the whole of knowledge and skills which people have at their disposal and which they can use effectively to reach certain goals in a wide variety of contexts and situations". In practice, concepts have been used more loosely in the literature.

A very wide array of skills and competencies are found to be desirable in international studies of perceptions of practitioners. Zehner's (1999) study on skills required in practice in New South Wales, Australia, indicates that the number of skills used most widely by planners have increased from 19 in 1979 to 33 in 1996. Skills and subject matter of continuing importance include: planning law, statutory planning, administration, and negotiation/conflict resolution. Skills that have increased in importance include participation techniques/community liaison, communication techniques and neighbourhood/community/urban design. Skills usage was different between the sectors, reflecting the varying orientations of the public and private sectors, state and local government. These findings of course reflect the Australian context, and contrast quite sharply with Hamza and Zetter's (2000) emphasis on the skills associated with the planner as 'urban manager' in developing countries, viz. skills in development promotion and partnership, rather than regulation and control. In both cases, however, communicative aspects are critical.

Ozawa and Selzer's (1999) important study of planning employers in Oregon, USA, suggested that the communicative aspects of planning were far more significant than several more technical skills such as competency in GIS. In addition, practitioners valued writing skills, application of theoretical knowledge (more than theoretical knowledge itself) and critical thinking skills. Further, personal 'skills' such as ability to complete tasks on time, being a self-starter, initiative, creativity, leadership, problem-solving ability, ability to think on one's feet, to see multiple perspectives, and synthetic abilities were all valued. While Alexander (2001) criticises their use of the term 'skill' to cover these attributes, and argues that the study focuses on a limited range of

planning fields, primarily in the physical design realm, Ozawa and Selzer's (1999) study remains significant.

Sandercock (1998) is critical of the emphasis on the development of particular skills and competencies in planning education. She argues that it leads to a focus on imparting information, method and technique, rather than raising basic questions of value. Further, shopping lists of skills and competencies need continual updating. Knowledge is segmented in this process, and the personal qualities of planners are under-emphasised. Rather, she argues for the development of five 'literacies' that planners should have: technical, analytical, multi-cultural, ecological and design (TAMED). Within these areas, Sandercock emphasises the importance of critical thinking and self-reflection. For instance, she argues for looking at the assumptions underlying technical skills as well as the techniques themselves; understanding socio-spatial processes historically, culturally and institutionally; training in theories that help planners to understand themselves as actors in the world; in ethics; and in communicative skills that enable planners to listen with openness and empathy – to respect difference.

Poxon's (2001) study of planning practitioners (both graduates and employers) who are linked to the University of Sheffield in the United Kingdom similarly emphasises the importance of planning education in enabling critical thinking, creativity, and ability to respond to complex and changing environments. She argues that "the role of the planner is so ill-defined now that it is difficult to claim that a planning course is providing training for a particular job. Instead, it should be exposing students to the complexity and intricacy of a planner's role, ... and equipping them with the knowledge, skills and attitudes upon which further training can be built" (Poxon, 2001:573).

The effect of research methods on findings is worth noting. Poxon used focus groups rather than surveys, and found that perceptions shifted through discussion. Graduates were initially critical of planning education for its overly theoretical focus, and its failure to equip graduates with skills required when first entering the workforce. As the discussion

progressed, however, they reviewed their perspectives, and came to the conclusion that the emphasis on critical thinking and evaluation in their education had been of most value to them in their working lives. Employers valued planning education for its ability to nurture planners who could "think creatively and plan positively for a sustainable future" (Poxon, 2001:572), as well as for the "portfolio of competencies and skills" graduates might be expected to have. These included, "flexible and transferable skills in management, analysis, communication, self-development, information technology, spatial awareness, information gathering and evaluation, and policy formulation" (Ibid.)

The emphasis on developing reflective and critical thinkers, and the focus on values, rather than a large set of skills seems to have been influential in the Royal Town Planning Institute's recent statement (2003) on planning education in the UK. It has also been influential in the suggestion to embrace a broad range of undergraduate disciplines as a basis for a single year post-graduate course in planning (in addition to current undergraduate education), as opposed to the present two year post-graduate requirement. These approaches recognise the constant flux in planning practice, and the need to promote movement into the field from a variety of other disciplines. They go along with a greater emphasis on continuing professional development (CPD), which has become a common theme in the literature (Antonakakis et al., 2000).

2.2 Contextuality and Planning Education

The contextuality of planning and thus of planning education and the competencies required also needs consideration. For example, compared to the UK, where a large proportion of planners are involved in development control, South African planning is highly diverse. The contextuality of planning is highlighted by literature on planning education in developing countries. Diaw et al. (2001) argue that planning education in many African countries continues to be based on the social, economic and ideological framework of a bygone colonial era. Students are taught to draw up plans that assume a

predictable and controllable future and steadily increasing levels of income. However, the challenge is to produce graduates who can function effectively within a volatile, short-lived and extremely complex environment.

Hamza and Zetter (2000) suggest that planning education in developing countries lags behind practice in three crucial areas: land-market processes, the informal economy and shelter provision. For them, the inability of the formal physical planning system to respond to informality, and the weakness of the state means that the core objective of planning education must be to impart an understanding of the relationship between the radically changing nature of cities and the role of government. Rather than a state-driven process of regulating urban growth, they see planning as a set of interventions to address the impact of global economic processes. The challenge in developing cities is to promote urban governance in areas where the majority of activities are informal, illegal or statistically uncertain. An understanding of rapid social transformation in cities, of competing interest groups, and the role of urban social movements is crucial. Some examples of specific areas of skills needed include: easing supply-side constraints to small-scale enterprise; developing partnerships; negotiating development gains; improving land supply for low-income groups; co-ordinating infrastructure development; designing finance programmes for small-scale industry; contracting and charging for services; negotiating community gains from development opportunities; innovative ways to manage land.

While Hamza and Zetter's (2000) perspective is important, and arguably has not been considered sufficiently in South Africa, it is also somewhat generalised. In the South African context, the practice of planning is more broadly defined, including not only urban development, but also integrated development planning, and aspects of rural and regional planning (Todes et al., 2003).

2.3 The role of practice within Planning Education

An important area of debate within planning education has been the role of planning practice within the curriculum. While the divide between academics and practitioners has come to the fore in the USA context where demands on planning academics has often meant a sharp divide from practice, these concerns are of more general import. There seems to be considerable agreement on the importance of the use of educational methods that was emphasise learning from doing or from critical reflection on case studies (Baum, 1997; Poxon, 2001). Baum (1997) argues that planners need to develop competencies in responding to real world conditions of politics, power, changing conditions and unexpected events. They also need to be able to devise and revise solutions. Both Baum (1997) and Poxon (2001) emphasise the need to bring together theory and practice, not only to develop skills, but also to enable critical reflection and evaluation on practice. While Poxon's (2001) study suggested that full-time studies were preferred to part-time by planning practitioners, since it allows more time for reading, reflection and the development of ideas, others emphasise the use of internships either structured as part of a year, or in the form of 'sandwich' courses, enabling a year in practice. Baum (1997), Niebanck (1998) and Baker (2000) argue that internships offer various benefits, including providing students an opportunity to test and observe themselves in practice, to reflect critically on planning, and to experience varied planning contexts. This experience also increases their marketability. Practical experience can provide opportunities to link theory and practice, but it will also depend on the quality of the internship that can be organised, and on mentoring processes within practice.

2.4 Competencies for planning in South Africa

Directions for planning education have been a source of debate in South Africa in the past (Muller, 1993; Africa, 1993; Harrison, 1995; Oranje, 1997) and still are at present. Many planning schools have in their own right critically reflected on what they see as an appropriate vision, philosophy and sets of knowledge

for planners, particularly in the light of changes in planning practice in the past decade (see Faling, 2002 for a discussion of four planning schools). The establishment of the South African Qualifications Framework (SAQA), and the mounting of a set of Standards Generating Bodies (SGBs) to determine the core competencies and critical outcomes for particular disciplines have, however, forced planning educators to define common core competencies and critical outcomes for planning. An initial set of competencies was drawn up at a meeting of planning schools in Bloemfontein in 2000. These definitions will then form the basis for the discussion of the planning SGB when it is set up, and for its negotiations with other SGBs.

SAQA defines a core competency as "contextually demonstrated knowledge, skills and values which support one or more critical outcomes", and critical outcomes as "those generic outcomes which inform all teaching and leaning" (School of Public Management and Planning, 2001). The Bloemfontein competencies were quite broadly defined, reflecting both a desire to embrace the varying perspectives and approaches of different schools, and sensitivity to the limitations of narrow definitions, especially ones that focused too closely on specific areas of skills. The definitions that emerged also attempted to capture the breadth of the field (Todes et al., 2003), moving beyond physical planning. The generic competencies are listed in Box 1 below, while the more detailed competencies and sub-outcomes leading to these are contained in Appendix 1.

The Bloemfontein competencies

attempt to capture six outcomes that planning education should strive to provide. The first includes a set of moral and ethical orientations, and is consistent with international emphases in this regard. Current international emphases on social justice, appreciating diversity, a human centred approach, an orientation to sustainable development, and an ethical stance are captured. The second group focuses on theoretical and contextual knowledge and its application. Specific theories are not mentioned, but reference is made to theory relating to planning, development, design, human settlements, and to understanding the complexity of diverse urban, rural and regional contexts. A third group focuses on linking knowledge to spatial plans at various scales, including aesthetic and environmental dimensions, and political and institutional influences and processes. The fourth group centres on the integrative dimensions of planning, attempting to capture the notion of integrated and synoptic thinking that has long been at the core of planning, as well as of competencies linked to achieving integrated development in practice, and in relation to currently dominant forms of integrated planning in South Africa. The fifth group is concerned with research, critical thinking and problem-solving. The emphasis here is in part on academic research, but also attempts to capture creativity and critical reflection, that emerges as important in the international literature. The final group of competencies brings together communicative aspects, and managerial and organisational elements. This is another area that

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Box 1: The Bloemfontein competencies

- A knowledge and understanding of the moral and ethical issues in the public domain.

- Demonstrating a sound theoretical and contextual knowledge, and the ability to apply this in action.

- The ability to link knowledge to spatial plans and policies.

- Linking and synthesising programmes and projects from various sectors and institutions within a framework of integrative development.

- Conducting academic research in order to develop critical thinking and problem-solving abilities.

- The application of managerial and communicative skills necessary for managing planing ad development processes in the public and private sectors.

emerges very strongly in the international literature. Thus, the Bloemfontein competencies are consistent with current international thinking, but also reflect and embrace the local context.

The rest of this article examines employer perceptions of the relevance of planning education in South Africa, and the appropriateness of the 'Bloemfontein competencies'.

3. METHODOLOGY

Interviews were conducted with some 40 employers within planning in Johannesburg, Pretoria, the Western Cape (Cape Town and Stellenbosch), and KwaZulu-Natal (Durban and Pietermaritzburg). This set of interviews was conducted as part of a broader study on the relevance of planning education, which also examined planning education in four planning schools in these areas: the Universities of the Witwatersrand, Pretoria, Natal, and Stellenbosch in 2001 and 2002 (see Faling, 2002). Employers were chosen with the assistance of planning schools in the area, but their comments do not reflect on those specific schools, as respondents employ graduates from several planning schools.

The selection attempted to achieve a balance between employers in the private and public sectors (*Table 1*). In all cases, respondents were senior members of departments or firms. Respondents in the public sector in the Western Cape and KwaZulu-Natal were employed in planning departments in provincial and local government, while the Gauteng sample also includes planning sections of national departments. Planners within the private sector were most often involved in the following areas of work, although a much wider field was mentioned: integrated development planning, strategic and policy planning, urban design, urban development, housing, and social and economic development. The survey included two main components. In addition to basic information on the department/firm, a set of questions probing respondent perceptions of planning education (as experienced through graduates employed) was asked. These questions were relatively open-ended, and reasons for responses were explored. The second component was a competency matrix in which

Table 1: Number of public and private sector respondents per area

Area	Private sector	Public sector	Total
Johannesburg	5	5	10
Kwa Zulu Natal	4	6	10
Pretoria	6	4	10
Western Cape	6	4	10
Total	21	19	40

employers were asked to comment on the perceived importance of particular competencies, and also on the extent to which graduates have them. The competency matrix was based on the Bloemfontein competencies, but with some modification: some areas were 'unpacked' into greater detail, and areas of importance suggested by the international literature were added. This aspect of the survey therefore provides a reasonable test of the Bloemfontein competencies, but is not confined to it. Unfortunately, not all respondents completed this component, with the total on this section dropping to 25. The profile of respondents on this section is similar to those who completed the first part of the survey, but with a somewhat greater representation of the public sector, and the Pretoria area (*Table 2*).

Due to the small size of the sample, results are treated in aggregate, but with regional and public/private sector differences noted where necessary. The following section discusses some of the results of the survey. A full analysis of all questions can be found in Faling (2002).

4. EMPLOYER PERCEPTIONS OF PLANNING EDUCATION

4.1 Perceptions on the relevance of Planning Education

Respondents were generally positive about the preparedness of graduates, the relevance of planning education for the planning profession, and planning education's ability to educate planners for the future. Three open-ended questions were used to probe these overlapping issues. Findings are presented in *Tables 3, 4, and 5*.

Some 60% of respondents were positive about the preparedness of graduates. As *Table 3* shows, there was no differentiation between the public and private sector on the preparedness of graduates, but Afrikaans speaking planners were more negative than English speaking planners, who mostly responded positively. Some 70% of planners in KwaZulu-Natal and the Western Cape felt that graduates were adequately prepared, compared to 60% in Johannesburg, and 40% in Pretoria.

Planners who were positive about the preparedness of graduates felt that they had a solid theoretical

Table 2: Profile of respondents to the competence matrix

Area	Private sector	Public sector	Total
Johannesburg	3	3	6
Kwa Zulu Natal	1	4	5
Pretoria	5	3	8
Western Cape	2	4	6
Total	11	14	25

Table 3: Preparedness of graduates for the profession

Area	Yes		No		Total
	Private sector	Public sector	Private sector	Public sector	
Johannesburg	3	3	2	2	10
KwaZulu Natal	4	3	0	3	10
Pretoria	1	3	5	1	10
Western Cape	4	3	2	1	10
Total	24		16		40

Table 4: The relevance of the planning curriculum

Area	Yes		No		Total
	Private sector	Public sector	Private sector	Public sector	
Johannesburg	5	3	0	2	10
KwaZulu Natal	4	4	0	1	9
Pretoria	5	2	1	2	10
Western Cape	6	3	0	1	10
Total	32		7		39

Table 5: Educating planners for the future

Area	Yes		No		Total
	Private sector	Public sector	Private sector	Public sector	
Johannesburg	5	3	0	2	10
KwaZulu Natal	3	4	1	1	9
Pretoria	3	2	2	2	9
Western Cape	6	3	0	1	10
Total	29		9		38

foundation, and that their education is broad enough to give them basic skills and to contribute to the profession. These planners view university education as equipping graduates with lifelong skills, and with the ability to think independently, rather than fully equipping them for the day to day functioning of planning practice. They argued that graduates had a reasonable knowledge of various political, social and development issues; that they are able to view problems within a broader context; and that they are able to function in a multi-disciplinary environment. They are positive about the breadth of planning education, graduates' ability to think analytically, and to an

extent, to write reports. They felt that the curriculum has adapted to changes in planning practice, and that relevant education is being taught. Respondents have noticed, however, a growing inability among graduates to apply the knowledge they have acquired to practical situations, and a declining ability to write reports and communicate their recommendations. They are concerned that standards might be reducing and about graduates' own disillusionment when first entering the planning profession.

Those who are negative about the preparedness of graduates feel that training is too theoretical, with too little practical experience gained

while studying. They also feel that graduates lack skills in lateral and integrative thinking, the ability to negotiate with the community and other interesting parties, technical application skills, policy writing skills and multi-tasking abilities. In addition, they lack contextual understanding and have limited knowledge about development planning.

Some 82% of respondents felt that planning education is relevant, with the few negative responses coming from the public sector. Reasons for positive responses overlap with those discussed above. Respondents are positive about the breadth of planning education, and the various

areas taught, but all respondents were concerned that planning education is too theoretical and does not teach sufficient practical skills including: technical skills; quantitative analytical skills; and business, financial and project management skills. Private sector planners in Pretoria feel that students should have better knowledge of various applications when beginning practice. There are thus similarities to debates on planning education internationally, and something of a tension over expectations of planning education as providing immediately usable skills versus a basis for lifelong learning.

Some 76% of respondents felt that planning education is training planners for the future in that the broad, diverse education offered, and the emphasis on critical reasoning allows graduates to respond to change over time. Those who were negative felt that planning education is not sufficiently located in the South African context, nor does it respond to change or to the emerging and future challenges. For some critics, the profession needs a new generation of people who may not be planners, but urban development managers.

Thus employer perceptions are largely positive, and the current emphasis on a broad ranging education, with a focus on critical reasoning is appreciated. There are concerns, however, about the current quality of graduates, the lack of practical education and the extent to which practical skills are being developed. These emerge more fully in the following sections.

4.2 Practical education during study and Continual Professional Development

Employers were asked if they thought that practical experience, gained through the study period, would enhance planning students competencies and skills. Some 95% responded positively, arguing that it would help them to understand and relate to the theory they are learning, and to assess it critically. It would also help them to develop practical skills, to develop an understanding of the field and the main participants, and it would enable them to co-operate with other disciplines. In addition, it would build their *curriculum vitae*, give them contacts, and enable them to gain employment more easily later

on. Planners in the public sector expressed the wish to see new planners hit the ground – if not running, then at least walking – as councils and departments have huge capacity constraints. Considerable time and cost have to be expended to get a new planner up to speed. Reservations about practical training during study are mostly logistical, such as the capacity required to accommodate all planning students in planning practice, and allowing sufficient time for this exposure to planning practice to ensure it adds value for the student and, hopefully, the planning organisation.

All interviewees responded positively to questions on the need for continued professional development. There is a recognition that education is ongoing, and that continual learning enables improvement in services ordered. The following broad areas were listed as important:

• Emerging areas of concern

• General refresher courses

• International and national planning trends

• Specialised courses.

A range of specific areas were mentioned by respondents: business management skills; communication skills; environmental issues and impact assessments; financial management; IDP training; information technologies; new planning legislation and policies; new technologies such as GIS and CAD; project management; rural planning and development; social housing; strategic planning; urban design; and urban development.

There is clearly an interest in a closer linking of planning education and planning practice through both greater opportunity for planning practice in planning education, and through continued professional development around a range of subject areas, linked mainly to emerging areas of practice, and particular areas of skill.

4.3. Competencies matrix

Table 6 provides a listing of the responses to the competencies' matrix. Employers were asked to state whether particular competencies are 'very important', 'important', 'needed' or 'not needed', and also whether graduates have

these competencies. In order to facilitate analysis, employer responses on importance have been weighted and put into a common index.

Several points emerge from employer responses to this table. First, the survey suggests that the 'Bloemfontein competencies' are consistent with employer perceptions. All competencies were seen as at least 'needed' by almost all respondents. There were only three responses of 'not needed' – and two of these, on competency in GIS – were in areas that were not included in the Bloemfontein competencies.

Secondly, taken as groupings, all areas of competence are valued, but competencies linked to 'working in a framework of integrative development planning' emerge most strongly, followed by 'research, critical thinking and problem-solving abilities'; and 'managerial and communicative' elements. Least valued as groupings are 'linking technology to planning', and then 'theoretical and contextual knowledge'. The emphasis on integrative, synoptic and creative ways of thinking; on critical analysis; and communicative and organisational aspects thus emerges very strongly in the survey, mirroring international findings. Less value is placed on theory and technique in its own terms, with a greater emphasis on application. These points emerge more strongly in relation to the weighting given to individual competencies.

The ability to think creatively and synoptically emerges as the most highly valued individual competency, seen as 'very important' by some 91,7% of respondents, and important by all others (weighted at 97). Other highly valued areas include: some ethical dimensions, aspects of spatial and contextual understanding, basic skills and communicative abilities:

• Ability to work in teams and individually (96)

• An orientation to sustainable development (94)

• Critical thinking (94)

• Understanding what the client wants (94)

• Writing abilities (93)

• Creative application of knowledge (93)

Table 6: Responses to the Competencies Matrix

Knowledge of moral and ethical dimensions	Weighting	% Very important	% Important	% Needed	% Not needed	% Possess
a) Orientation to social justice and equal opportunity	64	33,3	25	41,7	0	70
b) An appreciation of the diversity of cultures and views	80	50	41,7	8,3	0	72,7
c) A people-centred approach	77	52	28	20	0	81,8
d) Promotion of efficiency in resource use	87	68	24	8	0	72,7
e) An orientation towards sustainable development	95	87,5	8,3	4,2	0	63,6
f) Respect for professional ethics	93	79,2	20,8	0	0	27,3
Theoretical and contextual knowledge	**Weighting**	**% Very Important**	**% Important**	**% Needed**	**% Not needed**	**% Possess**
a) Understanding of histories, philosophies and theories of planning and development	59	20	40	36	4	85,7
b) Understanding of the nature, purpose and methods of planning	81	52	40	8	0	85,7
c) Understanding of the South African context and its particular challenges	92	75	25	0	0	57,1
d) Understanding of the theories and principles relating to the design of urban environments	67	25	50	25	0	57,1
e) Understanding of the theories relating to the natural, social, economic, developmental and political environments	80	52	36	12	0	64,3
f) Understanding of the theories relating to urban, metropolitan, rural and regional development, and to these contexts and processes	79	41,7	50	8,3	0	71,4
g) An application of these theories to the design, management and implementation of planning interventions to bring about a positive change and societal benefits within human settlements	80	58,3	25	16,7	0	14,3
h) Understanding of law, legal institutions, ordinances, etc.	79	54,2	25	20,8	0	28,6
Linking knowledge to spatial plans and politics	**Weighting**	**% Very important**	**% Important**	**% Needed**	**% Not needed**	**% Possess**
a) Apply knowledge of political, policy and institutional context, and of planning legislation and procedures	85	65,2	26,1	8,7	0	28,6
b) Apply knowledge to the implemention of plans and to land management, development process and physical planning activities	89	66,7	33,3	0	0	42,9
c) Interpret and apply plans to ongoing decision-making and problem-solving	90	70,8	29,2	0	0	50
d) Prepare plans and formulate policies with spatial orientation at different scales	89	70,8	25	4,2	0	64,3
e) Undertake planning with an appreciatiion of urban structure and spatial dynamics	93	80	20	0	0	71,4
f) Undertake planning with an appreciation of aesthetic dimensions and sensitivity to the cultural heritage	85	56	44	0	0	42,9
g) Undertake planning with an appreciation of the natural environment	88	68	28	4	0	57,1
h) Broad understanding of the uses and limitations of planning forecasts and models	71	41,7	29,2	29,2	0	35,7
Linking technology to planning	**Weighting**	**% Very important**	**% Important**	**% Needed**	**% Not needed**	**% Possess**
a) An ability to use technology e.g. computers, scanners in daily work	91	76	20	4	0	78,6
b) Competency in basic computer programmes e.g. MS Word, Excel and PowerPoint or similar	88	72	20	8	0	78,6
c) Competency in specialised computer programmes e.g. CAD, SPSS, etc.	67	41,7	16,7	41,7	0	21,4
d) Basic understanding of GIS	72	45,8	25	29,2	0	57,1
e) Competency in GIS	55	21,7	30,4	39,1	8,7	35,7
f) Competency in Internet applications	73	41,7	37,5	20,8	0	69,2

	Working in a framework of integrative development planning	Weighting	% Very important	% Important	% Needed	% Not needed	% Possess
a)	Ability to think creatively and synoptically	97	91,7	8,3	0	0	42,9
b)	An integrative understanding of development issues and processes	88	72	20	8	0	42,9
c)	Understanding of key issues in relation to development in South Africa including local economic development, land reform, institutional politics and urban restructuring, and the development of integrated settlements	88	64	36	0	0	50
d)	Understanding of the key sectors around which integration needs to occur, e.g. infrastructure, services, environment and the economy	85	66,7	20,8	12,5	0	57,1
e)	Understanding of the legal, policy and institutional frameworks within which such planning and development occur	86	70,8	16,7	12,5	0	50
f)	Understanding of the management requirements of integrative development processes and issues	85	68	20	12	0	21,4
	Research, critical thinking and problem-solving	**Weighting**	**% Very important**	**% Important**	**% Needed**	**% Not needed**	**% Possess**
a)	Understanding of appropriate methodologies for different research requirements	71	40	32	28	0	92,9
b)	Ability to collect, analyse and evaluate information from many and diverse sources	86	66,7	25	8,3	0	92,9
c)	Ability to synthesise information	89	70,8	25	4,2	0	57,1
d)	Ability to perform qualitative and quantitative reasoning	87	64	32	4	0	35,7
e)	Ability to write research reports	93	83,3	12,5	4,2	0	42,9
f)	Ability to apply the knowledge generated to planning problems in a creative way	93	76	16	8	0	42,9
g)	Ability to critically analyse issues	94	83,3	16,7	0	0	50
	Managerial and communicative	**Weighting**	**% Very important**	**% Important**	**% Needed**	**% Not needed**	**% Possess**
a)	Understanding of political processes and governance	82	62,5	20,8	16,7	0	21,4
b)	Understanding of social dynamics and power relations	78	50	33,3	16,7	0	57,1
c)	Understanding multiculturalism	82	45,8	54,2	0	0	57,1
d)	Understanding what the public/client wants	94	83,3	16,7	0	0	35,7
e)	Ability to express the collective good	69	54,2	29,2	16,7	0	35,7
f)	Ability to relate to and work with diverse communities	91	76	20	4	0	35,7
g)	Negotation, facilitation and mediation skills	93	79,2	20,8	0	0	21,4
h)	Speaking formally/informallly with public /elecfed officials	93	78,3	21,7	0	0	35,7
i)	Ability to communicate effectively by electronic means	90	75	20,8	4,2	0	50
j)	Ability to communicate effectively graphically	90	83,3	8,3	4,2	4,2	57,1
k)	Ability to communicate effectively verbally	91	76	20	4	0	50
l)	Ability to think and respond on their feet	92	79,2	16,7	4,2	0	57,1
m)	Ability to work in teams and individually	96	87,5	12,5	0	0	35,7
n)	Co-ordinating a multi-disciplinary team	45	58,3	37,5	4,2	0	28,6
o)	Ability to write informative, engaging, short pieces (e.g. brochures) for the general public	89	70,8	25,0	4,2	0	28,6
p)	Decision-making skills	85	58,3	37,5	4,2	0	14,3
q)	Financial management: develop and maintain budgets	85	62,5	29,2	8,3	0	14,3
r)	Organisational management	90	75	20,8	4,2	0	21,4
s)	Project management	91	76	20	4	0	21,4
t)	Self-starter	83	58,3	33,3	8,3	0	42,9
u)	Understanding of approaches, processes & techniques associated with participatory and collaborative forms of planning	87	62,5	37,5	0	0	40

Notes. 1) Weighing: Very important = 3; Important = 2; Needed = 1. Total divided by 3 Maximum amount = 100.

2) Sub-outcome not included in the Bloemfontein competencies are shaded. Some competencies included there have been elaborated into several elements, and in some cases are moved between sections.

- A respect for professional ethics (93)

- Negotiation, mediation and facilitation skills (93)

- An appreciation of urban structure and spatial dynamics (93);

- An understanding of the South African context (92)

- Ability to think and respond on their feet (92)

- An ability to use technology in daily work (91)

- Ability to work with diverse communities (91)

- Organisational management (91)

- Project management (91)

- Ability to communicate through electronic, verbal and graphic means (90/91)

- An ability to interpret and apply plans to decision-making and problem-solving (90).

Competencies which indicated as least important include:

- Competency in GIS (55)

- Understanding of the histories, philosophies and theories of planning and development (59)

- Orientation to social justice (64)

- Understanding of the theories and principles related to the design of urban environments (67)

- Competency in specialised computer programmes (67)

- Ability to express the collective good (69).

The low weight accorded to social justice is interesting given the stress on this element internationally and in the South African context.

Thirdly, although there is considerable agreement between employers and educators on what kind of competencies are required, there is concern about whether planning schools are managing to engender these competencies in their graduates. Areas which most employers value highly and see graduates as competent include:

* An orientation to sustainable development (where 94% of employers see graduates as competent)

- An appreciation of urban structure and spatial dynamics (93%)

- Ability to use technology (91%).

Important areas where most employers feel graduates are not competent are:

- Respect for professional ethics (where only 27% of employers feel graduates are competent)

- An ability to think creatively and synoptically (42,9%)

- Ability to write reports (42,9%)

- Creative application of knowledge to planning problems (42,9%)

- Several areas within the managerial and communicative grouping.

Taken as a whole, the managerial and communicative grouping is a field where few employers feel graduates are competent, but it may be argued that many of these competencies are gained on the job.

Furthermore some of the areas where graduates are strong are not highly valued by employers. Some of the areas of greatest strength among graduates are believed to be in understanding appropriate research methods, and in understanding the histories, philosophies and theories of planning and development. These are not, however, regarded as especially important competencies by employers. Other areas of strength among graduates as perceived by employers – but not regarded as particularly important to most of them – include some of the moral and ethical elements; some areas of theoretical and contextual understanding; and understanding of theory related to urban and regional contexts.

In short, the survey gives the impression that graduates have understood theory and research methodology, and they have imbibed a strong set of values, but they are not necessarily able to apply theory to practice, nor is planning education necessarily producing creative and critical

thinkers, or people with strong organisation and communicative skills. This aspect of the survey matches with the qualitative questions in which respondents argued that planning education is too theoretical, and needs a stronger base in application. Yet it is not consistent with the high proportion of respondents who argued that graduates are adequately prepared and that planning education is relevant.

The Bloemfontein competencies do not delve into the levels of competence to be expected at various levels of education, nor did the questionnaire distinguish between what is expected of different types of graduates. It may well be the case that the Bloemfontein competencies create far greater expectations than can realistically be met within the short time available for planning education. Planning is becoming an increasingly diverse set of practices, and within this context, it may be important for planning education to focus on achieving key areas of competence, limiting the scope of material covered, and linking theory to practice to a greater extent.

4.4 Important areas of knowledge for planners

Beyond the Bloemfontein competencies, employers were asked to rate the importance of 22 areas of knowledge. Responses are contained in *Table 7*.

Responses to *Table 7* clearly indicate the scope and diversity of the field of planning in South Africa. All fields listed have some advocates who see it as 'needed by all', but there are few areas in which the overwhelming majority of respondents agree are 'needed by all'. These include: spatial frameworks (80%), land-use planning (84%), metropolitan planning (72%), and local economic development (84%). The emphasis on the latter is interesting, given that it is outside the traditional field of planning. Other areas that more than half of respondents see as 'needed by all' are: layout (52%), regional planning (56%), rural development (60%), urban management (64%), integrated development planning (64%), and environmental management and impact assessments (52%).

4.5 The most critical skills and competencies

Respondents were also asked to list the top three skills required of a graduate when entering the planning profession. The four skills most often mentioned were:

- Project management skills – mentioned by 60% of respondents

- Communication skills (verbal and written) (56%)

- Ability to synthesise information (48%)

- Ability to think critically (48%).

The following skills and competencies obtained relative priority:

- Ability to propose innovative solutions (22%)

- Policy formulation and interpretation of planning procedure and legislation (20%)

- Ability to think creatively (20%)

- Technical knowledge and the ability to apply it (12%)

- Ability to think analytically (12%).

Beyond this, a wide array of areas of knowledge, skills and competencies were listed. Responses to this question largely reinforce findings from the competency matrix, but also provide a further indication of the diversity of employer requirements of planning education.

4.6 Gaps in skills and competencies, and areas of knowledge

Employers were asked to identify the most important missing skills, competencies and areas of knowledge noticed in the education of graduates. The most common responses were as follows:

- Project management skills – mentioned by 32% of respondents

- Communication skills (verbal and written) (28%)

- Business management (28%)

- Financial management (24%)

- Planning policies and legislation (24%) of respondents

Table 7: Areas of knowledge important to planners

Areas of knowledge		% Needed by all	% Specialised for some	% Not important
a)	Layout	52	44	0
b)	Urban design	24	76	0
c)	Spatial frameworks	80	16	0
d)	Land-use planning	84	12	0
e)	Metropolitan planning	72	28	0
f)	Regional planning	56	40	0
g)	Rural development	60	36	4
h)	Local development	84	16	0
i)	Urban economic management	64	32	4
j)	Integrated development planning	64	32	4
k)	Informal settlement upgrading	48	48	4
l)	Housing	32	52	16
m)	Architectural design	24	56	12
n)	Environmental mangement and impact assessments	52	40	8
o)	Heritage planning	16	72	12
p)	Landscape design	44	40	8
q)	Planning law	44	52	4
r)	Real estate	28	60	12
s)	Recreational/tourist planning	48	48	4
t)	Social planning	48	52	0
u)	Traffic/transport planning	44	52	0
v)	Urban economics	40	52	8

A very wide range of skills, competencies, abilities and areas of knowledge were also noted as gaps by very small numbers of respondents (fewer than four). Even the most common responses noted above, however, are made by a minority of respondents, suggesting a diversity of concerns, rather than a few overwhelming problem areas.

The findings from sections on the most critical competencies, and gaps in competencies and skills largely reinforce findings on the competencies matrix.

5. CONCLUSION

There is considerable consistency in the findings of the research with employers, and the international literature. In both cases, greatest weight is placed on creativity, critical thinking, and problem solving. Communicative and organisational competencies are also seen to be commonly valued. South African employers do seem to recognise the impossibility of covering the field, and the need to impart core

competencies, linked to a commitment of lifelong education as a more appropriate model. At the same time, employers, particularly in the public sector, are operating under enormous pressure and with limited capacity (see Todes et al., 2003), and would like graduates to have more immediately usable technical skills in a range of areas. It is interesting to reflect on whether this finding would have been different if Poxon's (2001) focus groups method had been used. Several of these technical areas are in realms that are not the core focus on most planning education, although they are present in some form, for example, project, organisational and financial management.

The study has demonstrated that the 'Bloemfontein competencies' are appropriate as a starting point for defining outcomes for planning education, but the levels of what is expected of graduates needs consideration and specification. The breadth of responses to specific

fields of expertise required raises concerns about what can realistically be achieved within the short span of planning education. The 'domain' of planning is only implicitly outlined in the Bloemfontein competencies, and attempts to pin it down further are likely to run into problems as has been the case in the past. A variation of Sandercock's literacies might be more useful in this context.

The survey suggests that planning educators and employers are largely 'on the same track', but, as is common internationally, employers feel that planning education is perhaps overly theoretical, and lacking enough of an applied dimension. There is also some concern about the extent to which planning schools are managing to inculcate core general competencies around critical thinking, analysis, writing, and creativity. It may be important for planning schools to consider a narrower focus in terms of content (allowing schools to choose their own directions), but with greater emphasis on applied learning, the use of case studies, and the integration of theory and practice in project based learning. The arguments for enabling practical work while studying in some form are also compelling, as long as it is also used as a basis for connecting theory and practice, and if it is possible to organise quality experiences. The growing tendency towards part-time studies perhaps obviates this necessity, although it brings its own problems with students who are highly pressurised and do not have time to read and think (see also Poxon, 2001). Continued professional development as a way of dealing with ongoing change in the field also emerges as an important area, with a great deal of support from employers. An appropriate model may therefore be a basic education in some form that at its core focuses on conceptual competencies, but does not attempt to cover the field and specifically attempts to avoid the 'layer cake' problem, linked to ongoing continuing professional development.

Both the literature review and the survey highlight the importance of communicative and managerial aspects of planning. These are not, for the most part, seen as strengths among planning graduates, yet they

are noted in almost all studies, and do need more consideration within planning education, whether in the form of continued professional development, or within basic education.

Planning education in South Africa also needs to respond to the challenge of contextuality as suggested by Diaw et al. (2001). Although aspects of these concerns are contained within the Bloemfontein competencies, areas of theory and knowledge are broadly stated, and do not engage with the challenge posed by Hamza and Zetter (2000). While planning schools are not usually strongly focused on statutory control, the nettle of a changing state, declining capacities, and growing informality arguably still needs to be grasped fully.

The breadth of planning education is both a strength and a weakness, but the trend towards a diverse and somewhat diffuse field is unlikely to disappear. From this perspective, planning educators should adopt a cautious approach to demands for immediately useable skills or to defining the field in a narrow way. Rather, the focus needs to be on developing core abilities, values and literacies. This does not mean isolation from practice, rather, there is room to explore creative ways of learning from practice. There is also room to explore greater engagement with linked and related disciplines, rather than seeing planning as a bounded discipline. From this perspective, the broad way in which the Bloemfontein competencies are defined is perhaps a strength, and attempts to break it down into neatly defined skills should be resisted. Nevertheless, there is merit in further exploration of the literacies required, and a deeper sense of what these literacies might be in the changing South African context .

Acknowledgements

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Appendix 1. The 'Bloemfontein Competencies'

1. A knowledge and understanding of the moral and ethical dimensions of acting in the public domain, and applying this in planning practice. The sub-outcomes showing evidence of this include:

   • Orientation to social justice and equal opportunity

   • An appreciation of the diversity of cultures and views

   • A people-centred approach

   • Promotion of efficiency in resource use

   • An orientation towards sustainable development

   • Respect for professional ethics.

2. Demonstration of a sound theoretical and contextual knowledge, and ability to apply this in action. The sub-outcomes showing evidence of this include an understanding of:

   • The nature, purpose and methods of planning

   • The histories, philosophies and theories of planning and of development

   • The theories relating to the natural, social, economic, developmental and political environments

   • The theories and principles relating to the design of urban environments

   • The theories relating to urban, metropolitan, rural and regional development, and to these contexts and processes

   • The South African context and its particular challenges

   • An application of these theories to the design, management and implementation of planning interventions to bring about positive change and societal benefits within human settlements.

3. Linking knowledge to spatial plans and policies. The sub-outcomes showing evidence of this include an aptitude to:

   • Collect, analyse and organise information to determine planning processes

   • Use technologies to assist these processes

   • Apply appropriate knowledge pertaining to political, policy and institutional contexts, and of planning legislation and procedures

   • Prepare plans and formulate policies with spatial orientation at different scales

   • Undertake planning with due appreciation of aesthetic dimensions, and with sensitivity to the links between human settlement and the natural environment

   • Interpret and apply plans to ongoing decision-making and problem-solving

   • Apply knowledge to the implementation of plans and to land management and development processes.

4. Linking and synthesising, programmes and projects from various sectors and institutions within a framework of integrative development. The sub-outcomes showing evidence of this include:

   • An integrative understanding of development issues and processes

   • An understanding of the management requirements of integrative development processes

   • An ability to think creatively and synoptically

   • An understanding of the legal, policy and institutional frameworks within which such planning and development occurs

   • An understanding of key issues in relation to development in South Africa including local economic development, land reform, and urban restructuring and the development of integrated settlements.

5. Conducting academic research in order to develop critical thinking and problem-solving abilities. The sub-outcomes showing evidence of this include:

   • An understanding of appropriate methodologies for different research requirements

   • An ability to collect, analyse and evaluate information

   • An ability to apply generated knowledge to planning problems, in a creative way.

6. Application of the managerial and communicative skills necessary for managing planning and development processes in the public and private sectors. The sub-outcomes showing evidence of this include:

   • An understanding of social dynamics and power relations

   • An understanding of political processes and governance

   • Strategic thinking and management

   • Financial management

   • Organisational management

   • Project management

   • Decision-making skills

   • Organisational skills

   • An ability to relate to and work with people

   • An ability to work in teams as well as individually

   • An understanding of approaches, processes and techniques associated with participatory and collaborative forms of planning

   • Negotiation, facilitation and mediation skills

   • An ability to communicate effectively verbally, graphically and by electronic means.