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Reflective Writing, Higher Education and Professional Practice

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Abstract

This article considers the application of reflection via reflective writing in education for built environment professional disciplines such as spatial planning and surveying, and how this is linked to subsequent application in professional practice. It stems from the experience of the author as a teacher in higher education for spatial planning at undergraduate and postgraduate levels, and as an assessor for the Royal Town Planning Institute's Assessment of Professional Competence, which has reflective practice involving reflective writing as an essential component. The article is based on documentary review and action research, and it identifies and explores a potential gap (in both higher education and practice) between the potential for reflection to form the basis for transformation and lifelong learning, and the frequent reality of a more limited, instrumental approach and attitude. This gap, it is asserted, implies the need to prepare students more effectively in higher education for reflective writing, learning and practice.

Keywords: Reflection, Reflective Learning, Reflective Practice, Reflective Writing, Spatial Planning, Student Perceptions

Introduction: the Notion of Reflection and Professional Practice

Notions of reflection and reflective writing are well covered in theoretical and practical literature, but it is important to note that terms such as reflection are socially constructed and subject to varying interpretations, with no clear consensus on a 'correct' meaning (or indeed on a clear set of benefits arising from reflective learning and writing, as indicated below). However, in general terms, reflection may be seen for example as a process of problem-solving underpinned by evidence (Dewey, 1933), and applied to relatively complicated ideas with no obvious solution (Moon, 1999). Furthermore, reflective learning may be seen for instance as a exploration of an issue, triggered by experience, which alters perspective (Boyd and Fales, 1983), with critical reflection enabling things to be seen as other than they first appear (Brockbank and McGill, 2007), by putting events in a broader context (Gillett *et al.*, 2009). There are links here to notions of experiential and action learning: as Gibbs (1988) suggests:

It is not sufficient simply to have an experience in order to learn. Without reflecting upon this experience it may quickly be forgotten, or its learning potential lost. It is from the feelings and thoughts emerging from this reflection that generalisations or concepts can be generated. And it is generalisations that allow new situations to be tackled effectively.

(Gibbs, 1988, p.9)

This is underlined by Higgins *et al.* (2009), who note that experiential learning requires reflection so as to integrate experience into future action.

Reflection is increasingly applied in built environment professional disciplines because of the need to link 'knowing what' and 'knowing how' (McDrury and Alterio, 2002) and to bridge a gap in professional practice between 'espoused theories' (those that practitioners say they use) and 'theories-in-use' (those that practitioners actually use) (Argyris and Schön, 1974, pp.6-7). Moreover, Kemmis (1985, pp.141-142) suggests that 'technical' and 'practical' reasoning, as well as 'theoretical' reasoning, are particularly important in professional practice which involves complex and diverse situations for which straightforward rational approaches are insufficient. Hence reflective practice can provide a means of accessing what built environment practitioners know intuitively but cannot easily share (Schön, 1983), namely knowledge which is tacit (Polanyi, 1967). This is illustrated in general terms by Flyvbjerg (2001) who shows how high performance involves spontaneous judgement which is 'rapid, intuitive, holistic, interpretive...and which has no immediate similarity to the slow, analytical reasoning which characterises rational problem-solving' (p.14). He adds that deliberate reflection on experience is necessary for this process, enabling practical knowledge to complement theoretical knowledge.

However, the value added by reflection, including for built environment professionals and students, is contested. For instance, while many argue it can engender 'deep learning' (see for instance McDrury and Alterio, 2002), Betts (2004) suggests its benefits are largely limited to therapy. Moreover, Harvey and Knight (1996) assert that the promotion of the reflective

practitioner (Schön, 1983; 1987) often involves reflection that is self-confirming and limited in its capacity to provide critical transformation. In addition, Moon (2004) suggests that reflection may be narrow and limited in scope, and Webster (2002) sees its use in higher education as sometimes flawed and simplistic, providing essentially just a metaphor for thinking.

The meaning of reflection is also contested. For instance, while it is seen by some as an (individual) internal dialogue (Harvey and Knight, 1996), others suggest it must be social and interactive so as to avoid self-confirmation (Brockbank and McGill, 2007); as McDrury and Alterio (2002, p.115) assert, 'Merely reporting on events ... is not likely to lead to new insights. It is through *dialogue* that we make meaning from experience, come to understand our roles within these experiences and construct new appreciations of practice realities' [emphasis added]. There would also seem to be limited understanding of how reflection links to theories of learning (Moon, 1999; McDrury and Alterio, 2002), and while Kolb's (1984) experiential learning cycle shows how learning links to action, Kolb acknowledges its limitations as a universal explanatory mechanism.

The article is structured as follows. First, the role of reflective writing is considered; second, the role of reflective practice as a necessary condition for professional membership in the case of the spatial planning discipline is set out; third, the role of higher education in preparing students for lifelong learning is discussed; fourth, the methodology for the primary research on which the article is based is set out, together with its findings; fifth, these findings are analysed in the context of the issues considered earlier; and finally, broad conclusions are proposed.

Reflective Writing

In the context of reflection and experiential learning (in both higher education and practice), a written reflective account derives its value from articulation, or converting the experience into language, to crystallise thoughts and feelings (Walker, 1985), and distantiation, namely allowing distance and objectivity, to provide insights not recognised during the experience (McGill and Beaty, 2001). While the process often starts with pure description, this can lead to reflection, for instance, on the feelings linked to the experience (possibly assisted by dialogue), and subsequent re-evaluation of the experience (McGill and Beaty, 2001). This is supported by broader literature on reflection which shows how the writing down of a record of an event followed by conscious analysis assists learning from the event (Strivens, 2009).

An increasing encouragement and application of reflective writing is evident within higher education. For instance, there is increasing use of 'learning journals', which contain an element of relatively unstructured writing reflecting on experience (for instance of project work), which can enable students to relate such experience to active learning (Stapleford *et al.*, 2009). They can encompass many types of document, including for instance personal development plans, all of which accumulate over a period reflective material, as distinct for instance from a descriptive diary (Moon, 2006). Reflective writing can apply a narrative approach via storytelling (McDrury and Alterio, 2002), possibly guided by the use of a template to focus attention on specific key elements such as events, players and outcomes,

to assist in analysis and interpretation (Brockbank and McGill, 2007). McDrury and Alterio (2002) emphasise the importance of dialogue or feedback within this approach, to enable the possibility of progress through Kolb's (1984) experiential learning cycle.

An important issue arises from the role of description in this context, since some suggest that this is insufficient for reflection. However, as Ward (2008) highlights, Schön (1983) shows how descriptive accounts can enable problem-reframing, and others show how description is a required part of a progression through a hierarchy of different levels of reflection (Moon, 2006; Gillett *et al.*, 2009), for instance involving descriptive writing, descriptive reflection, dialogic reflection and critical reflection (Hatton and Smith, 1995).

However, Ward (2008) suggests that critical reflection, as part of such a hierarchy, may only be realistically expected after higher education, when the relationship to the work context, for instance in terms of politics and power, can be fully appreciated. Furthermore, reflective writing in higher education may suffer from lack of enthusiasm from students and/or staff in the context of an increasingly congested curriculum, particularly where the relevant assessment weighting is relatively low. It may even be argued that one motive for the use of reflective writing-based assignments such as learning journals may be their relative cost-effectiveness, for instance, by minimising contact time. In addition, the fact of assessment (involving disclosure) can distort the writing process, encouraging relatively conservative, descriptive and minimalist approaches (Moon, 2006). These factors suggest that if the maximum benefit is to be derived from reflective writing in higher education, the rationale for this should be clearly explained, with such writing embedded from the start of students' learning experience, so as to enable greater engagement with the spirit of such activity and greater capacity to engage with later lifelong learning.

An additional issue for reflective writing in higher education arises from the suggestion that reflective writing favours those who are adept specifically at this task, rather than at more generally applying reflection within the learning process. Consequently, critical skills might arguably be better developed for instance, through dialogue or some other form of reflection, rather than reflective writing. Nevertheless, in the context of preparing built environment students for professional practice, the necessity for them of future reflective writing via for instance the compulsory Assessment of Professional Competence (APC) mechanism (as set out below) would seem in itself to provide a rationale for higher education practice in such writing. The requirement for personal development planning which continues throughout built environment professionals' careers – and which also involves reflective writing – would seem to reinforce this rationale.

Reflective Practice: the Case of Spatial Planning and the APC

The case of spatial planning may be seen to illustrate the specific potential for, and problems of, reflective practice in built environment professions. Spatial planning in this context may be seen as the management of competing uses for space, and the making of distinct and valued spaces with a clear identity. It is concerned with the spatial requirements for, and impacts of, policies even when these do not involve a land use plan, and can provide a strategic framework to guide physical development and related policy areas. It is therefore significantly

wider in scope that traditional land use planning. These aspects of spatial planning are reflected in the Royal Town Planning Institute (RTPI)'s *New Vision for Planning* (RTPI, 2001), which shows how planning knowledge is as a consequence increasingly diverse and complex rather than clear and codified.

Ward (2008) therefore argues that planning has shifted from being 'systematised, rigid and unimaginative' (p.6) to being 'more creative... concerned with plan-making and frameworks for the future, mediating the claims of politics, economics, society and the environment ...' (p.6). Hence planners, she suggests, have become interpreters rather than legislators, with a more proactive and complex role requiring integrative and mediatory skills. While the extent of such a shift in reality may be contested, there would seem to be a consensus on the fact of a shift to some degree, and Ward shows how the changed interpretation of planning has impacted on the RTPI's policy on attainment of Chartered Membership. Specifically, the RTPI's 2003 Education Commission led to the introduction of the APC to demonstrate explicit reflective learning and practice, as a requirement for membership (RTPI, 2005). This replaced the previous system which relied essentially on length and breadth of experience. The APC incorporates personal development planning, and provides feedback for applicants from assessors, which assists with ongoing reflective learning. While an important part of the rationale for the introduction of the APC has been that lifelong learning in spatial planning is increasingly required because of the shift mentioned above, it has been noted for some time that initial training may provide only the most basic background for practice across professions more generally (McGill and Beaty, 2001).

In addition, modernisation of procedures and associated legislative change in the UK, coupled with the recent shortening of UK postgraduate spatial planning courses from two years to one year, has increasingly led employers to recognise that lifelong learning is essential if planners are to be equipped with relevant knowledge, principles and skills. Furthermore, as argued above, the 'tacit knowledge' arising from practice is arguably necessary but not sufficient to allow effective learning (via reflection), since 'more and more experience does not guarantee more and more learning...' (McGill and Beaty, 2001, p.186); moreover, we may avoid confronting precisely those painful experiences and processes which are most valuable for effective reflection and learning. Consequently, a process of deliberate reflection (with feedback), such as the RTPI's APC affords, would seem to be valuable in enabling (and testing) effective professional development.

Nevertheless, Ward (2008) argues that the APC mechanism may be rather unambitious in its interpretation of reflective practice as essentially professional development. She focuses on the use of the 'log book', which provides a written record of the (two year) period of the candidate's practical experience, using a basic template including the work/task undertaken, skills or competencies developed, knowledge gained, and further skills needed. While the log book is not itself assessed, it is a required component of the APC. Ward indicates that the log books typically illustrate a descriptive or formulaic approach, which would seem to fail to demonstrate Dewey's (1933) critical reflection, Mezirow's (1990) premise reflection, or Morrison's (1995) emancipatory reflection, all of which involve a questioning of the principles which guide practice. However, she acknowledges that the factual description in the log

books may be seen as the initial stage of a cumulative and developmental process possibly leading to critical reflection in the main APC document.

Ward (2008) also illustrates a polarisation in attitude on the part of APC candidates, whereby some see the relevant reflective writing within the APC as transformational, while others see it as simply an obstacle to be overcome, an attitude sometimes compounded by employers who focus on narrow process issues rather than on a wider vision of spatial planning. Interestingly, a similar polarisation may also be seen in students in higher education (as explored below) since some see reflective writing as useful and even life-changing, while others (perhaps the majority) apply a more instrumental approach, often seeing little long-term benefit. Overall, therefore, Ward suggests that the APC may be seen to some extent as a technicisation of the reflective process. This, she suggests, may be seen to equate to Schön's (1983) concept of technical rationality, based on problem-solving rather than problem-setting, which would not seem to meet the fundamental aims of lifelong and experiential learning set out for instance by Boud *et al.* (1985).

However, Ward (2008) acknowledges the influence of external factors in this context. For instance, she concurs with Morrison (1995), who observes that critical reflection via the questioning of basic assumptions can be frustrating where the practitioner cannot control the circumstances causing the problem (likely to be the case for APC candidates who are usually at the start of the career). Moreover, she acknowledges that (ever-) increasing workplace pressures may not allow time for more measured reflection, and even a 'technicist' approach to reflection presents a valuable advance in many professional contexts.

Furthermore, Ward suggests that some of the log book's limitations may stem from its form. For instance, an over-generalisation in the log books may be linked to a rather rigid compartmentalisation between elements such as work done and skills learned, deriving largely from the set template. Consequently, she argues, a more open-form narrative, focusing on a small number of detailed, discursive, holistic, context-rich 'case studies' of critical events, might be more effective in demonstrating the thought processes behind the candidates' actions, and enabling more engagement with the spirit of reflection. This concurs with Gillett et al.'s (2009) endorsement for a focus in reflective writing on relatively few events explored in depth, rather than a more abstracted and decontextualised (but comprehensive) approach. While this implies the avoidance of a rigid template, guiding questions (Moon, 1999) could be used to assist candidates, for instance to highlight critical aspects such as how they will work differently as a result of their practice. These arguments have implications for the application of reflective writing more widely, as discussed below. A further issue arises from the need for disclosure of the log book, since, as in higher education (as indicated above), this limits the role of such documents, but this issue is difficult to reconcile with the formalities required as part of the APC process.

Reflective Writing and Higher Education

A reflective paradigm in higher education, particularly within vocational courses, has been evident for many years, and many professional disciplines (including those in the built environment field) have sought to embed experiential learning within the curriculum (Peel,

2009; Webster, 2002; Moon, 2004, 2005). This reflects the views of many that skills of reflective learning need to be addressed within initial training for such disciplines (Brockbank and McGill, 2007). However, Moon (1999) indicates that higher education is sometimes unsympathetic to the process of reflection because of the perceived need to focus on 'core' skills necessary for professional activity, and Higgins *et al.* (2009) illustrate tensions between a classic academic orientation and vocational disciplines (such as spatial planning) which require more resource-intensive methods including reflective and experiential learning.

These factors have implications for the potential for higher education to prepare such students for reflective writing and practice as required for instance in the RTPI's APC (as well as for subsequent lifelong learning). As indicated above, Ward (2008) asserts the case for a more ambitious role for reflection in the practice context, and it may therefore be argued that higher education could usefully embed reflective learning mechanisms to a greater degree which could assist in this respect.

In fact, many courses in built environment professional disciplines incorporate reflective learning via mechanisms such as project-based exercises (either 'live' or simulated), which prompt reflection by passing 'initially unstructured experience through various sets of conceptual sieves' (Brand and Rincón, 2007, p.44). In addition, personal development plans (PDPs) are increasingly applied in higher education (McGill and Beaty, 2001), since it may be considered crucial to promote reflective practice at the stage when important lifelong learning habits are formed, particularly in vocational courses (Edwards, 2005), as acknowledged by many professional bodies such as the RTPI. However, it would seem important to introduce such reflective habits at an early stage within higher education, and Higgins (2002, p.4) argues that PDPs need to be 'embedded in the [higher education] curriculum in modules throughout the course'. Moreover, in order to engage students effectively, it is desirable to avoid a mechanistic or formulaic, 'form-filling' approach and instead to focus on long-term benefits linked to self- and career-management, with PDPs for instance, seen as part of a process rather than 'one-off' products (Higgins, 2002; Edwards, 2005).

There is a link here to the potential for a more critical approach to reflective writing and practice proposed by Ward (2008). In addition, Higgins *et al.* (2009), following Cell (1984), suggest that:

Experiential learning carries with it the potential pitfall that unhelpful norms can be perpetuated through a process of socialisation. Students and teachers therefore need to be aware of the dangers of over-acceptance and retain an openness and questioning of goals and behaviour, not just slavishly follow custom and practice

(Higgins et al., 2009, p.14)

This would seem to apply to both practice and higher education, implying the need for reflective writing in both contexts to incorporate more critical elements. Moreover, Peel (2009) argues more generally for a critical perspective within the higher education built environment disciplines, including the incorporation of alternative interpretations, for instance, of notions of sustainability. This supports the need for critical reflection, particularly

in disciplines such as spatial planning, to supplement narrower, technical reflection, and further underlines the need for enhanced preparation for reflection within higher education.

Methodology and Findings

This research investigated the experience of undergraduate and postgraduate (including part-time) students at Heriot-Watt University (HWU) taking programmes in urban and regional planning, planning and property development, and real estate management. The research aim was to evaluate the experience and perceived value of reflective writing and learning on the part of built environment students. The basic research question was as follows:

To what extent does higher education at HWU develop students' ability to effectively reflect on, and learn from, experience, so as to prepare them for the reflective writing, learning and practice which is a necessary condition for membership of built environment professional bodies such as the RTPI, as well as for subsequent lifelong learning?

To address this research question, questionnaires applied a range of questions focusing on the extent to which students considered that they had grasped the aim and potential value for them of reflective writing and learning (acknowledging of course that these notions are contested with no clear and single meanings); the extent to which they felt they had the skills to reflect; and the extent to which they felt their higher education experience had contributed to the development of such skills. The questionnaires also invited qualitative comments from students on these points.

The primary data therefore comprised the student responses to a hard-copy questionnaire regarding reflective learning. Each question (in the final version) asked for the level of agreement or disagreement to a proposition using a six point Likert scale, avoiding the tendency to pick the middle (no view) position. The quantitative analysis of this data was based on five equal increments around a neutral zero, ie -2.5, -1.5, -0.5, 0.5, 1.5 and 2.5. Students were also given the opportunity to provide qualitative comments at the end of the questionnaire. It was amended after piloting, to avoid over-concentration on a central option, so the revised version involved six rather than five options. The questionnaire was completed by 30 students in their third year at undergraduate level, taking BSc programmes in Urban and Regional Planning, Planning and Property Development, and Real Estate Management; and 29 students taking a one-year postgraduate MSc programme in Urban and Regional Planning.

In terms of previous experience of reflective writing, the questionnaire involved a proposition that students had undertaken assignments involving reflective writing previously, and students generally disagreed with this, with an average response of -1.3 for third year undergraduates (standard deviation of 1.19) and -2.26 for postgraduates (standard deviation of 0.58). In qualitative comments, third year undergraduates indicated that they had undertaken only two such exercises within their courses.

Nevertheless, both cohorts indicated that they felt they generally understood the aims of reflective writing, with an average response of 0.57 for third year undergraduates (standard deviation of 1.20) and 0.87 for postgraduates (standard deviation of 1.18). In relation to the extent to which they felt they had benefited from such reflective writing, in overall terms both cohorts were relatively neutral in their response. Specifically, the average response from undergraduates was 0.29 (standard deviation of 1.08) and the average response from postgraduates was 0.25 (standard deviation of 1.50), though the deviation for the latter indicates a greater polarisation within this cohort with respect to how they felt they had benefited.

Furthermore, many undergraduate students indicated in qualitative comments that more experience in reflection and reflective writing would be beneficial, with one student pointing out that "we are not asked to do this very often so don't get a lot of practice", and another suggesting that more experience was necessary to enable them to appreciate the value of reflective writing. Moreover, a further student indicated that "it [reflective writing] seems to get easier the more it is done", and two other students suggested that such experience earlier in the course (before third year) would be desirable. Another student pointed out that additional exposure to reflective writing would be particularly beneficial in view of the membership requirements of professional bodies such as the RTPI. However, one student indicated that assessment of reflective writing was subjective, asserting: "I don't understand how marks can be awarded for personal opinion on an experience".

Similarly, many postgraduate students indicated in their qualitative comments that reflective writing was valuable, again particularly in view of professional bodies' membership requirements, though one student suggested that assessment of reflective writing was subjective and inappropriate. Furthermore, while seven students indicated that some element of reflective writing had been undertaken on work placements as part their initial undergraduate course, this previous experience of reflective writing was not seen as uniformly valuable, with one student stating that it had been "a complete waste of time".

Analysis

These findings above would broadly seem to suggest a degree of polarisation in the attitude of students (albeit mitigated by experience) to reflective writing and its value, which, as indicated above, has been recognised also to a degree (albeit anecdotally) in the views of practitioners preparing for the RTPI's APC. Within the above findings, such polarisation is apparent to some extent at both undergraduate and postgraduate levels, though, in broad terms, taking into account qualitative comments, undergraduate students appeared to be somewhat more receptive as well as more open-minded to the potential value of reflection. This may be related to the more intensive and congested curriculum experienced by postgraduate students, most of whom take one year to complete their course, while most undergraduate students take four years. Moreover, particularly for postgraduate students, the membership requirements of professional bodies (in this case the RTPI) would seem to have provided a significant source of motivation and enthusiasm for reflective writing, perhaps illustrating a limited view of more long-term benefits.

In general terms, the findings would seem to illustrate the benefits of earlier introduction of reflective writing within higher education, since the undergraduate students in particular had little prior experience of such writing and suggested that it should be introduced at an earlier stage in order to allow relevant skills to be developed. As indicated above, this could also engender more positive attitudes to reflective writing, potentially leading to long-term habits which could assist lifelong learning. While some postgraduate students indicated in qualitative comments that their undergraduate experience of reflective writing had been negative, it may be assumed that this was the result in part of the potential benefits not having been made sufficiently clear; certainly, these students' comments imply that they were not completely convinced of the long-term value of reflective writing. This in turn suggests the need for clearer articulation of the rationale for, and potential benefits of, reflective writing, including the rationale for assessment where this is involved.

The above analysis would seem to be supported by the findings of Roberts and Yoell (2009, pp.86-87), who propose a typology of student attitudes to reflective writing arising from students' experience in writing learning journals as part of an architecture programme in higher education. This typology suggests that 'natural' students, who were favourably disposed to reflective writing, had usually developed such an attitude as a consequence of prior practice, and 'converts', while initially sceptical, had developed particularly strong enthusiasm and appreciation for reflective writing as a direct result of the learning journal itself. Conversely, students who were 'disengaged' or not disposed to favour reflective writing, the typology suggests, had developed such attitudes partly as a result of lack of prior experience of reflective writing. This indicates that there would seem to be little risk of a net loss of appreciation of reflective writing as a result of its (earlier) introduction, for instance by the reinforcement of prior resistance to reflective writing. While the latter effect may of course occur in some cases, the findings of Roberts and Yoell point to the likelihood of more students having their appreciation increased than the opposite. Again, net benefits can arguably be maximised by the clear articulation and emphasis of the fundamental benefits of reflective writing and learning at the outset. This links to the arguments above for the stressing of longer-term benefits of reflective writing - for instance for lifelong learning and professional development – as opposed to more short-term elements – such as the achievement of membership of professional bodies.

The points raised above would seem to indicate the need to engender more appreciation and enthusiasm for, and engagement in, reflective writing and learning, as well as to develop relevant skills, particularly in the early stages of undergraduate education. While the sample investigated is narrow, it may be suggested that the issues raised are of more general relevance within vocational higher education in the built environment. This leads to the question: what might be done to address this issue? One mechanism as illustrated above which can be useful in this context is that of personal development planning. There are many links between this and other mechanisms for reflective writing, and personal development planning (via professional development plans) is required as part of the professional requirements for membership of built environment professional bodies such as the RTPI, as well as for the skills needs of employers, as highlighted by Higgins *et al.* (2009). Crucially, personal development planning would seem to provide both the short-term and instrumental

benefits necessary to engage some students (aspiring to professional membership), as well as the longer-term more transformational benefits which link to lifelong learning.

Furthermore, an opportunity here may arise from the way students are prepared more generally for professional practice and ethics. Increasingly, this may be seen as relatively limited, for instance in terms of introduction to the basic requirements of professional life including relevant codes of conduct, particularly within a congested curriculum such as that for one-year intensive postgraduate courses in spatial planning. Hence it would seem desirable to engage students at a more fundamental level with aspects of professional practice such as ethics, which, as Peel (2009) argues more generally, need clearer articulation in the curriculum. Moreover, it is the author's experience as an RTPI APC assessor that the ethical dimension is often lacking within APC submissions, and this is a common criterion which is failed within such submissions. In addition, in professional practice, it may be argued that reflective learning is particularly necessary for full understanding of ethical issues and dilemmas, in view of their complexity and linkage to professional and personal values. Consequently, embedding issues of professional ethics more effectively in the curriculum could help to address weaknesses in the substantive aspects of professional understanding as well as providing an opportunity to acquire and apply skills of reflective learning. While the experience of students in higher education of professional ethical concerns or dilemmas may be limited, the use of analogies or hypothetical cases as the basis for practical exercises and subsequent reflective learning could be used. This could build on the experience of application of learning logs used to reflect upon design-based exercises in built environment courses, as described by Roberts and Yoell (2009).

In addition, the application of mechanisms of reflective writing in higher education could benefit from wider research such as that discussed above. Specifically, such mechanisms could seek to avoid a relatively mechanistic approach by concentrating for instance on few events or experiences explored in depth rather than a more decontextualised approach, with content informed by guiding questions aimed at highlighting how students would act differently as a result of experience.

Finally, the debates and issues raised above suggest the need for further research on the use of reflective writing and learning within education for built environment professions, in order to investigate its application more widely. This could further inform practice in learning and teaching, and enhance the capacity of higher education to prepare students for the post-qualification professional learning necessary for professional bodies. This could also improve the prospects for effective lifelong learning at all career stages for both students and practitioners in built environment professions, which in turn could of course enhance the potential for more effective professional practice and outcomes.

Conclusions

The findings and discussion set out above broadly support the need for higher education to prepare built environment students more effectively for reflective writing and learning, in the light of their future long-term need for career development as well as the (more short-term)

need to apply relevant skills as a result of the membership requirements of professional bodies. While many new higher education programmes would seem to be adopting reflective writing mechanisms such as learning journals and personal development planning, it would seem that these could be more effectively embedded and extended throughout the programme (particularly at undergraduate level) so that future reflective learning is facilitated and incentivised. This could have consequent benefits in terms of more effective engagement of early-career practitioners with reflective practice and learning, as well as engendering long-term habits of effective lifelong learning. In turn, this could enhance the delivery of spatial planning and similar professional disciplines in the built environment.

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