# INTRODUCING PROFESSIONAL DEVELOPMENT AT UNDERGRADUATE LEVEL

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The Chartered Institute of Building has recently introduced the Professional Development Programme (PDP) as the principal route to chartered status for university graduates. We are seeking to prepare students by inducting them in the processes of such a competence based programme through encouraging the 'recording of achievement' and the development of skill. Our experiences in preparing first-year undergraduate students to make use of the RAPID (Recording Achievement for Professional and Individual Development) Progress File for these purposes reveal a number of salutary lessons. A survey of students involved in the induction programme reveals both a general disinterest in these processes and difficulty in applying the activities at a basic level. This highlights the challenges of promoting the concepts of personal and professional development, competence based learning, and the skills of reflecting upon and recording achievement in a traditional learning environment. We are drawn to conclude that such processes when introduced to students must be embedded within existing academic structures and frameworks. In addition, we recommend that the higher education sector places a greater emphasis on the personal development of students, and that professional institutions need to provide greater incentives to encourage students to engage in their professional development at an early stage.

Keywords: competence based programme, induction, progress file, RAPID, recording achievement.

## INTRODUCTION

The Department of Civil and Building Engineering at Loughborough University and the Chartered Institute of Building (CIOB) are currently collaborating on a two-year project designed to encourage a lifelong perspective on personal and professional development.

The project, funded by the Department for Education and Employment, aims to promote a culture that will enable and support students and graduates to monitor, build and reflect upon their own personal development within the discipline of 'managing the construction process'. Moreover, it aims to introduce students to the professional development process at an early stage by encouraging them to build, maintain and develop a 'record of achievement' compatible with the CIOB's Professional Development Programme (PDP) (CIOB 1997).

Our experiences to date lead us to warn construction students that, if they are to enhance their employability and maximize their earning potential, they cannot avoid the demands of professional development. We argue that the process of professional

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development should begin at undergraduate level and we call for the support and commitment of the higher education establishment and professional bodies alike.

**Professional development within the Construction Industry**

The CIOB, in line with other similar professional bodies, has moved towards a competence-based route to professional membership. The CIOB's Professional Development Programme (PDP) is now the primary route to chartered status for graduates leaving university degree construction programmes.

The CIOB's PDP requires graduates to provide evidence of occupational and personal competencies across nine specified units. Each unit is divided into elements, which in turn comprise a number of performance requirements. Graduates are expected to demonstrate competency through evidence generated primarily in the work place.

**Professional development at undergraduate level**

Our survey of all UK based universities offering CIOB accredited construction degree programmes revealed that little is currently being done by students to record and monitor their progress in line with professional development requirements. Two thirds of institutions responded, and only a third of these claimed that some means of 'recording achievement' by students was actively followed within that institution.

Our own experiences at Loughborough indicate that students in general do not fully recognize or appreciate the benefits to be gained in terms of career advancement which accrue from membership of a professional body. We argue that by the time they graduate, they are not adequately prepared for the demands that are posed by a competence based professional development programme.

**The 'Recording Achievement in Construction' project**

Our project is designed to overcome this problem by introducing students to the processes required for competence based assessment. By encouraging them to record their achievements and to proactively develop skills, we are seeking to instil learning habits that will be of value to them throughout their professional careers.

A primary goal of the project is to develop a Progress File, enabling students to fulfil these tasks of recording achievement and developing skills. The RAPID (Recording Achievement for Professional and Individual Development) Progress File has been developed in both paper-based and electronic formats (Maddocks and Sher 1998). It allows students to maintain relevant personal records and enables them to assess themselves against a range of skills that complement the CIOB's PDP competencies.

The RAPID Progress File has been piloted at Loughborough, Liverpool John Moores, and South Bank universities. Prior to piloting of the Progress File students followed an induction programme designed to introduce them to the processes of recording achievement, skills audit, action planning, evaluation, and evidence gathering.

This paper examines the lessons learned from our experiences in delivering this induction programme at Loughborough. It considers the context within which the programme was delivered, describes the content and comments upon an evaluation of the programme. Furthermore, we offer our interpretation of these outcomes and provide details of how we intend to provide solutions to the difficulties that we have encountered. The paper concludes by calling on the higher education community and professional bodies to endorse more enthusiastically the processes of professional development at undergraduate level.

# THE INDUCTION PROGRAMME

### Logistics and constraints

The target group for the induction programme was the first year cohort on the BSc. Construction Engineering Management degree programme. The group size was relatively small involving eighteen students in total. The vast majority of students had entered through the traditional A-level route, and were for the most part straight from school or college.

The induction programme involved four sessions spread out across the first academic semester. Due to circumstances beyond the control of the project team, we worked under a number of constraints.

Firstly, given the timetable demanded from an externally funded project, it was necessary to embark upon the induction programme before the RAPID Progress File had itself been fully developed. This limited the range of media available to introduce students to the concepts involved. Moreover, we could not offer students the hands-on, interactive experience to support the delivery of the content covered, that the Web-based tool would have offered. We recognized that "a sufficiently attractive mode of delivery and built-in opportunities to access a variety of relevant but lateral sources of information"[2] were important ingredients in fostering and maintaining the motivation towards recording achievement.

Secondly, we had no pre-arranged timetable for the induction programme. We had to take time from an existing module. This had the effect of limiting the contact time with students to four one-hour sessions. Furthermore, it was difficult to avoid giving the students the impression that this was a bolt-on activity rather than a natural part of the degree programme. This was partly offset by the support of the students' personal tutors, but at this early stage it was difficult to integrate the recording achievement process into the existing personal tutorial system.

Thirdly, the students involved in the induction process were first year students. In retrospect, it became clear that these students were experiencing a number of new and challenging demands. At the time that we were introducing this novel concept most students were already burdened with the demands of the course, and had limited interest in a topic which did not appear to have immediate relevance.

### Content

The induction programme involved four one-hour sessions. The first introduced the CIOB's PDP and the purpose of the RAC project. Students were introduced to the aims, methods and benefits of 'recording achievement' and set the task of beginning their own 'record of achievement' by updating and upgrading their existing records. Half the students had compiled a 'National Record of Achievement' prior to entering the course.

The second session concentrated on the recording achievement process with emphasis on skill self-assessment and development. The critical nature of gathering appropriate evidence to support claims of competence was stressed. Students were tasked with conducting a 'skills audit' on a limited range of specified skills.

The third session involved the processes of identifying personal strengths and weaknesses through a form of SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis. The students were taken through the processes of identifying skill development needs and opportunities, and methods of planning appropriate activity.

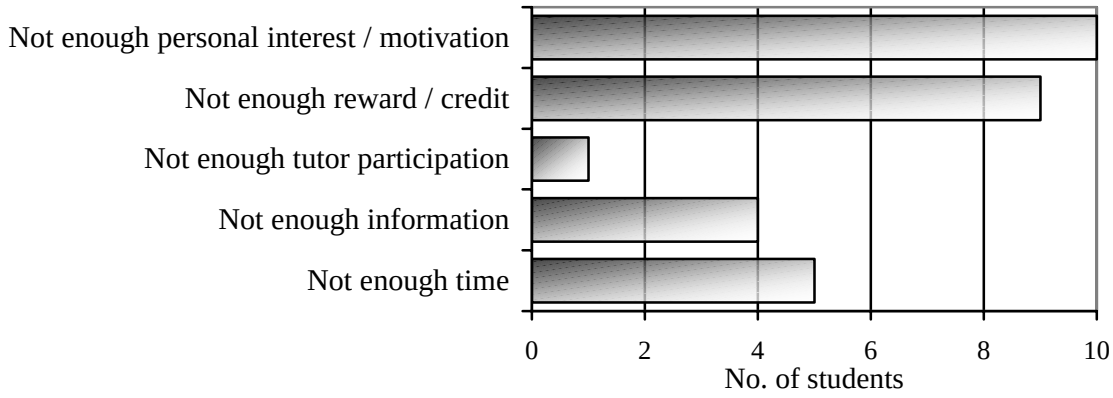


**Figure 1**: Reasons for limited participation

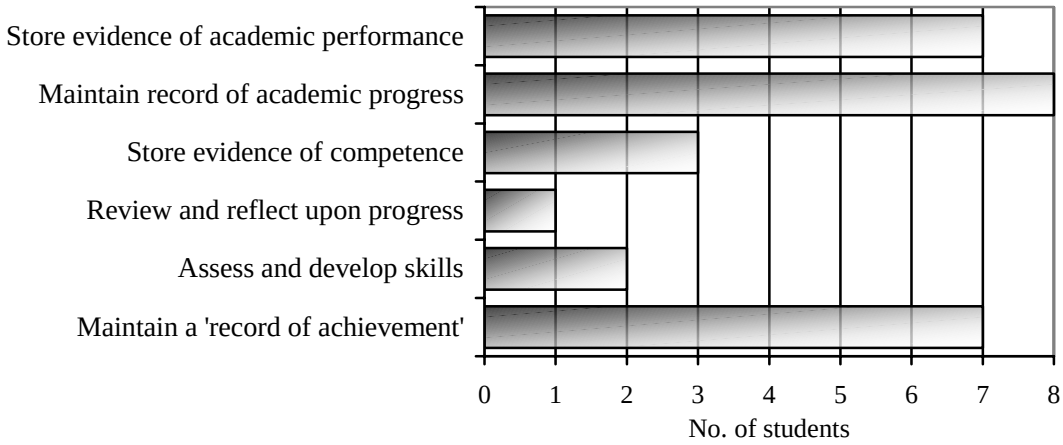


**Figure 2**: Students' intended activities

Each student was asked to execute an 'action plan' to improve performance in one skill or to gather further evidence of competence in one skill.

The final session considered the remaining stages of the skill development process. The importance of evaluating the skills development process they had been engaged in was emphasized. Moreover, students were asked to consider the advantages to be gained from reviewing and reflecting upon the skills development experience. The critical importance of documenting evidence arising from such activity and recording accomplishments was highlighted.

**Evaluation**

On completion of the programme students were issued with a questionnaire to evaluate the induction programme. The questionnaire was completed by fourteen of the eighteen students. The data resulting from this survey are presented below.

**Survey results**

The questionnaire involved a mixture of closed and open questions and was designed to measure students' attitudes and motivation, understanding, and experience of the induction programme and process.

**Attitudes and motivation**

It had become clear from discussions with students that they were not motivated by the prospect of 'recording achievement'. Many had fairly negative experiences of recording achievement through the 'National Records of Achievement' that they had been asked to complete at school or college. This disenchantment with the whole process was evident in the data that emerged from the survey.

In response to the question: "How motivated do you feel about Recording Achievement?" only one student (7%) claimed to be "motivated", eight students (57%) claimed to be "a little motivated", whilst five students (36%) claimed to be "not motivated". There was no recognizable difference in attitude between those students who had previous experience of 'recording achievement' and those who had not.

To ascertain reasons that might account for the level of participation in the induction programme, students were asked: "Which of the following, if any, have limited your participation in the induction programme for Recording Achievement in Construction". Students could specify more than one category. In response, ten students (71%) cited "not enough personal interest / motivation", nine students (64%) cited "not enough reward / credit", and five students (36%) cited "not enough time".

A more optimistic picture emerged from the responses to the question: "Which of the following activities did you intend to do independently, on starting your degree course?" Of the activities offered seven students (50%) indicated that they had intended to 'maintain a record of achievement', the same proportion indicated an intention to 'store evidence of academic performance', whilst eight students (57%) expressed an intention to 'maintain a record of academic progress'. Only three students (21%) had no intention of carrying out any of the activities listed. (The full results of this question are shown in Figure 2 in which the numbers relate to the number of students).

**Understanding of induction programme and process**

Another group of questions focused on the extent to which students had understood the concept and processes of 'recording achievement' following the induction programme.

In response to the question: "How well do you feel you understand the purpose of recording achievement?"more than half of the students (64%) claimed to understand the purpose of recording achievement well or very well. The remaining students stated that they did not understand the purpose well. None indicated that they did not understand it at all.

When asked if they understood the skills development process within Recording Achievement in Construction, eleven (79%) of the students indicated that they understood it "well". The remaining students indicating that they did not understand it well. A similar proportion (72%) claimed to easily understand the levels of competence stated for the various skills that the students were presented with.

**Table 1**: Student experience of induction activities

| Activity | Difficult or very difficult | Easy or very easy |
|---|---|---|
| Putting together a 'Record of Achievement' | 50% | 50% |
| Conducting a self-assessment 'Skill Audit' | 45% | 55% |
| Gathering evidence to support claims of competence | 67% | 33% |
| Forming and executing an 'Action Plan' for developing a specific skill. | 70% | 30% |

## EXPERIENCE OF INDUCTION PROGRAMME AND PROCESS

Most students completed some elements of the tasks they had been set throughout the induction process. Only two students indicated that they had not completed any of the activities requested.

When asked the question: "How easy / difficult have you found putting together a Record of Achievement?" students responded in equal measure with 50% of those who responded replying that they found this easy / very easy, and 50 % replying that they found this difficult / very difficult. Similarly equal proportions found the Skills Audit exercise easy / difficult.

More revealing figures emerged when students were asked to describe their experiences in gathering appropriate evidence to support their claims of competence. Two-thirds of respondents (66%) expressed difficulty in gathering appropriate evidence. Similar difficulties were experienced by students in forming an 'Action Plan' to develop skills. These results are summarized in Table 1.

An interesting result emerging from this analysis was that five students expressed difficulty in at least three of the above activities. This appears to indicate that for some students the activities inherent in personally recording achievement and developing skills pose certain difficulties.

Before drawing conclusions, we must stress that these results reflect the experiences of our students. Moreover, the small size of the sample dictates that we do not infer that all students would respond in a similar manner. Nevertheless, we believe that lessons have been learned, as described below.

## CONCLUSIONS

### Lessons learned

It is clear that the primary goal for anyone wishing to introduce the processes of professional development to students at undergraduate level is to gain their interest and enthusiasm. Without personal motivation it is unlikely that students will devote their time and energies willingly to recording achievement and consciously developing skills and competencies. Relying on a purely voluntary commitment from students at an early stage of this process is, based on our experience, likely at best to result in a lukewarm response and patchy involvement. This is not to say that students do not recognize the benefits of involving themselves in these processes, as witnesses by their declared intentions in the survey. It is more a case that they view more

immediate objectives as having greater priority. Therefore, to prepare students for their professional development, ways of emphasizing the benefits more effectively and of giving the process more immediate relevance need to be found.

By way of contrast, the majority of students questioned claimed to understand the purpose and processes of 'recording achievement' well. Nevertheless, a significant minority were still unclear. Thus, while the induction programme succeeded in explaining the processes of professional development, some follow-up appears necessary for those still unclear on this issue. Encouragingly most students claimed to understand the concept of competencies, but a more thorough analysis of the extent of their understanding is arguably called for.

Where most students were comfortable in their understanding of the processes of 'recording achievement' and competence based skill development, many experienced difficulty in applying these processes in practice. Although presented with limited and straightforward tasks, most found difficulty with some of the activities involved. Indeed, some found difficulty with most of these activities. This may be a reflection of students being unfamiliar with these processes. On the other hand, they could indicate skills that need to be further developed and supported.

**Putting solutions into practice**

On the basis of these lessons, we are implementing the following possible solutions in the coming academic year. These solutions have been formulated within the context of the institutional practices of our department and university. Other institutions with differing academic practices and procedures, and with a differing student profile, may experience different problems. As such the solutions they might wish to effect may be different from our own.

With the RAPID Progress File now developed, tested and available in both Web-based[1] and paper formats we believe that we have an effective tool on which to base a more relevant and inter-active induction programme.

To overcome the reluctance of students to participate in the processes of 'recording achievement' we have taken two major steps to embed this process within existing academic practice on the BSc Construction Engineering Management degree programme.

First and foremost, first year students in the second semester of the coming academic year will be inducted into the processes of 'professional development' within a unit of an existing academic module. The students' activities relating to this induction programme will be assessed, and performance in these will contribute to the overall mark gained within this module. This approach addresses the response within the survey where students cited lack of credit or reward as a substantive reason for non-participation in these activities. Moreover, students should be more receptive to these activities in the second semester when they have had time to settle down to the demands of an university degree programme.

Secondly, the specifications for the degree programme's work placement qualification, the 'Diploma in Industrial Studies' (DIS), have been revised to focus upon reporting in line with competence gained within units of the CIOB's Professional Development Programme (PDP). Furthermore, the specifications make

[1] http://rapid.lboro.ac.uk/

explicit reference to the RAPID Progress File within the context of planning activities, gathering evidence of competence, and recording outcomes.

Students embark on the first of two six-month work placements immediately after the second semester of the first academic year. Thus, the opportunity to begin assessing competencies and gathering appropriate evidence will immediately follow the induction programme. This should provide the immediate relevance that was not apparent within the programme as it was initially presented.

**Further Recommendations**

In addition to the proposed revision to our academic practices, we recommend that two further changes are required in the broader environment affecting undergraduates in the construction discipline.

The first concerns the emphasis placed within academia on 'skills development' and 'recording achievement'. Considerable pioneering work is currently taking place in a number of institutions. Our project is one of six development projects currently funded by DfEE (1998) under the 'recording achievement' banner. A further ten projects are funded under the 'key skills' theme. Moreover, these are but the tip of the iceberg. However, it is our view that isolated initiatives of this kind will founder unless a more consistent and coherent message is passed on to students and staff. What is required is a commitment throughout the higher education sector to place the personal development of students at the core of its agenda. If this were done students would be more likely to adopt a more holistic and less instrumental perspective upon their educational experiences. Such a commitment would inevitably involve a radical revision of attitudes towards assessment and staff development.

The second recommendation concerns the messages that professional institutions send to potential members. If such bodies wish to engender enthusiasm amongst undergraduates for their profession, and encourage a commitment to professional development and, beyond that membership, they need to provide an incentive for undergraduates to make such a commitment. This will require a more positive marketing strategy involving talking directly to students about the demands and benefits of professional development, and encouraging academic staff to support and promote the concept of 'professionalism' within the industry. In addition professional development programmes should explicitly recognize and accept evidence that students generate from work placement activities and academic experiences, whilst still on a degree programme. We feel that such a positive commitment from the institutions is more likely to be reciprocated by the commitment and enthusiasm of students to their own professional development.

We are faced with the challenge of involving undergraduates in the industry's professional development programme. We should present the processes of developing skills and competencies and recording achievements at an early stage so as to instil these as effective habits by graduation. Success in doing so will depend on a number of factors, and the encouragement and support of both the academic community and the industry itself. If the current reticence to embrace 'Continuing Professional Development' (CPD) is to be overcome, it is crucial that the 'Professional Development Programme' (PDP) experience is relevant and positive. This is far more likely to be the case when students are well prepared in the processes involved through a supportive and effective induction programme.

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41