SUMMARY

Background

Personal Development Planning (PDP) is a process by which individuals reflect upon and plan their own learning. The introduction of PDP and similar approaches with names such as Records of Achievement and Profiling have been major policy initiatives in secondary education in the UK over the last two decades and more recently in further education and higher education (HE).

In 1997 the National Committee of Inquiry in Higher Education recommended that students should have a Progress File to help make the outcomes of learning more explicit, identify the achievements of learning and support the concept that learning is a lifetime activity (NCIHE 1997). Such innovations in educational policy have been based on beliefs and assumptions that PDP is a good thing.

The purpose of this systematic review is to examine the research literature relevant to such policies on PDP. Despite a large literature on PDP and its analogues, there is a lack of clarity about the extent of empirical research and evidence for the effects of PDP on student learning. The review focuses on the PDP element of the HE Progress File: 'a process that is undertaken by an individual to reflect upon their own learning and achievement and to plan for their own educational, academic and career development' (http://www.qaa.ac.uk/crntwork/ progfileHE/contents.htm 25th November 2002).

This systematic review is the first of its kind in UK higher education (HE). It was commissioned by the Learning and Teaching Support Network (LTSN) Generic Centre as part of its programme of collaborative work with the Progress File Implementation Group (PFIG) aimed at supporting the introduction of the HE Progress File and demonstrating a commitment to a research-informed approach to policy and practice. The PFIG was formed by representatives of Universities UK (UUK), the Standing Conference of Principals Ltd (ScoP), the Quality Assurance Agency (QAA) and the Learning and Teaching Support Network (LTSN). Its purpose is to help institutions interpret and implement policy for PDP and monitor progress towards achieving the policy goals.

PDP construct

PDP is proxy for a number of constructs that attempt to connect and draw benefit from reflection, recording, action-planning and actually doing things that are aligned to the action plan. The actions and experiences of doing are connected to and draw upon concrete learning experiences in a wide range of formal curricula and extra curricula contexts. In North American literature, the term 'self-regulation' or 'portfolio building' embraces a similar range of actions, processes, support mechanisms and purposes.

PDP processes can be facilitated or self-directed. Both place responsibility on learners to plan their own learning, to act on the plans and to generate evidence of learning. When expressed as a set of actions and processes, PDP contains:

- planning (how to achieve objectives or general change)

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- doing (learning through the experience of doing with greater awareness)
- recording (thoughts, ideas, experiences, evidence of learning through writing, audio, video, visual or other means)
- reviewing (reflections on what has happened, making sense of it all)
- evaluating (making judgements about self and own work and determining what needs to be done to develop/improve/move on)

Aims

The purposes of the review are as follows:

- to create a map of the empirical research that has been undertaken on PDP processes in higher and related education to inform discussions on what future research might usefully address

- to synthesize the known evidence for the effects of PDP on student learning in higher and related education, for the benefit of policy-makers and users of policy including students

Review questions

In the context of the introduction of policy on personal development planning the review questions are as follows:

- *Systematic map:* What empirical research has been undertaken on the use of PDP in higher and related education?

- *In-depth review (systematic synthesis):* What evidence is there that processes that connect reflection, recording, planning and action improve student learning?

Methods

The systematic map and synthesis review were undertaken using EPPI-Centre methods, procedures and tools. The methods are based upon a research question specified by users of research and formal methods for:

- determining the scope of the review
- identifying potentially relevant studies through searching and screening
- describing studies through keywording to produce a 'map' of research activity
- determining the studies to be included in the in-depth review
- in-depth scrutiny through a process of data-extraction of each study that includes judgements of research quality and weight of evidence that the findings of individual studies contributed to the review question
- synthesis of such studies identified as relevant
- quality assurance procedures for the methodology

Results of systematic map and in-depth review

1. Identification of studies

The systematic review developed a search strategy and detailed inclusion and exclusion criteria to identify the English language empirical literature on PDP-type processes. This literature was not easily identifiable by agreed key terms in the literature. Most of the studies identified were from outside the UK and were identified by electronic databases with only 8% identified through contacts with workers in the field; 15% of the studies were not published. No one single source identified more than 41% of the relevant literature.

2. Mapped studies

The identified literature was described in a map of research activity on PDP. The findings of the map included the following:

- **Approaches to PDP in the literature**: Most of the research has been undertaken on learning logs and journals and diaries and studies of reflective practice. Most studies adopted a prescriptive approach to PDP implementation in order to achieve course-specific outcomes, but there were also many studies that adopted a negotiated approach to implementation for course-specific outcomes and for broader self-development. A significant proportion of studies used a prescriptive approach to implementation to achieve broader self-development. Studies of learning logs and journals, reflective practice, self-assessment and self-regulation were particularly associated with course-specific outcomes. Studies of Records of Achievement and self-direction were slightly more likely to be associated with broader self-development aims. There is considerable international overlap in the frequency that the different terms for PDP are used, but it is clear that records of achievement and profiling are particularly UK phenomena, and that self-direction and self-regulation are particularly common in North American studies.

- **Context of the studies**: Most of the studies were undertaken in the USA or the UK; most concerned HE and focused on learners. Studies in HE compared with other educational settings focused slightly more on course-specific than on broad developmental outcomes. Studies in HE were more likely to have used learning logs, journals and reflective practice and less likely to have used action planning and Records of Achievement than other educational settings. Studies in secondary schools were more likely to have used PDP styles of self-regulation, learning style and attitudes to learning. Knowledge gains were common outcome measures in studies in all educational settings but particularly in HE.

- **Study outcome measures**: Most of the research outcome variables were on approaches to learning and learning styles. Next most common was knowledge gains, skills and identity; career or employment outcomes were rare. The most common method of measuring outcomes was through participants' views. There was little variation across work or course contexts in the type of outcomes measures; the use of learning logs and journals and reflective practice were relatively more common in studies with course-specific outcomes.

- **Research design**: The most common designs were the exploration of relationships between variables followed by evaluations of naturally occurring policies and practices, then evaluations of researcher-manipulated interventions. Relatively more of the studies from the USA and Australia were

evaluations of researcher-manipulated interventions compared with other countries. Very few of the studies from the USA were descriptive. UK studies were more likely to be descriptive and emphasise exploration of relationships compared with other countries. Very few of the UK studies were evaluations of researcher-manipulated interventions.

3. In-depth review and synthesis

A sub-set of the studies in the map of research activity was selected for synthesis of research findings in the in-depth review. The basis for inclusion in the in-depth review was that the study type was an evaluation of a researcher-manipulated intervention and included objective external outcome measures. The findings of the in-depth review included the following:

- **Characteristics of the subset of studies included in the in-depth review (data extracted) compared to all studies included in the map**: The studies in the in-depth review did not differ in obvious ways from the rest of the mapping keyworded studies. This applies equally to the evaluation studies not included in the in-depth review on sub-concepts of PDP; the context of PDP; reasons for learners using PDP; focus on course-specific or broader self-development aims; population focus; sex of learners; age of learners; and educational setting. The studies in the in-depth review were more likely to be concerned with both self-regulation and prescribed approaches to implementation and less likely to be concerned with independent learning, logs and journals, and cooperative learning; they were also slightly less likely to be concerned with self-assessment. Studies in the in-depth review were more likely to have been undertaken in the USA with few evaluations of researcher-manipulated interventions undertaken in the UK. Studies in the in-depth review were relatively over-represented in terms of outcomes of knowledge attainment and less represented in terms of identity and attitudes to learning outcomes compared with all mapped studies and the evaluation studies not included in the in-depth review.

- **Weight of evidence of studies in the in-depth review**: All of the studies in the in-depth review were assessed on (A) the quality of the study in terms of accepted practice within the research design employed; (B) the appropriateness of that research design for addressing the systematic review question; (C) the relevance of the focus of the study in relation to the systematic review question; (D) an overall judgement about the weight of evidence that the results of the study provide towards answering the review question based on judgements A, B and C. Four of the 25 studies were rated as contributing a high, 15 a medium, and six a low weight of evidence to answering the review question.

- **Weight of evidence and direction of results**: Most studies reported a positive effect of PDP on learning. Some studies did not find any evidence of an effect but only one study reported a negative effect of PDP on learning compared with controls. Most of the evidence showing positive effects was reported from studies rated as medium in terms of weight of evidence. The results do not suggest that weaker evidence is more positive about the effects of the PDP interventions. The conclusion is that PDP can have a positive effect on student learning.

- **Results of studies on outcomes of student attainment**: Fourteen out of the 25 studies measured 'attainment', ten of which were rated as having high or medium weight of evidence for the review. All the ten studies reported positive effects on student learning in terms of 'attainment'. This suggests that PDP can have a positive effect on student attainment.

- **Results of studies on outcomes of student 'learning styles'**: Fourteen out of the 25 studies measured approaches to learning outcomes and 13 of these were rated as providing high or medium weight of evidence. Of these 13 studies, nine reported positive effects on learning styles, one reported mixed effects and three reported no evidence of effect. This suggests a positive effect of PDP on students' approaches to learning.

- **Results of studies on outcomes of student 'personal' outcomes**: Four out of the 25 studies measured 'personal' outcomes and three were medium-rated for weight of evidence. One of these medium weight of evidence studies reported a positive effect on personal variables. The other two studies reported a negative effect and no evidence of effect respectively. There is insufficient evidence from these studies to conclude that PDP effects positively or negatively the personal outcomes for learners.

- **Effects of independent variables of different PDP approaches, contextual variables and person variables on the impact of different aspects of student learning**: The relatively few studies meeting the narrower inclusion criteria and the heterogeneity in their samples, interventions and measures of outcomes makes it difficult to differentiate more specific results in terms of effects.

Conclusions

Strengths and limitations of the review
There have been few literature reviews on this topic in UK higher education. This is the first systematic review.

The current stage of development of the field, the diversity of practice that results from different policy-practice contexts and the heterogeneous research arising from this complexity limit the extent that clear conclusions can be drawn about the usefulness of PDP in enabling learning. One systematic map and in-depth review and synthesis cannot in itself overcome these complexities but can provide some clarity about the research evidence and its implications for policy, practice and further research.

The literature search required screening of over 14,000 references using three search strategies and undertaking empirical checks on the inclusiveness of the search strategy results. Only studies in the English language were included. It is not known what other relevant materials in other languages would have contributed to the review's findings.

Another issue is the decisions made about research methodology. Firstly, a decision was made to limit the synthesis findings to evaluations of researcher-manipulated interventions with independent outcome measures. Secondly, the criteria adopted for making judgements about study quality (category A in the

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weight of evidence process) were not strict so the results of the synthesis, although strong in direction, should be considered as tentative.

The study confirms the value of the approach in providing the evidence to inform the development of policy and practice in respect of teaching and students' learning.

Policy-makers and the funders of research

The findings of the map and synthesis confirm the central policy claim that PDP supports the improvement of students' academic learning and achievement.   The absence of research studies that address other claims, particularly those relating to broader self-development and improved employability outcomes, means that these claims cannot be substantiated at this stage. The implications are that the development of PDP should be encouraged but a policy steer, supported by targeted funding, may be necessary to ensure that relevant, good quality and properly described research is undertaken to extend our knowledge of the most effective strategies and contexts for PDP as well as the effects of these on different outcomes. This could be achieved by (a) requiring greater clarity on these issues before funding new research and (b) encouraging greater use of secondary research to provide focus and sustainability in the field.

Educators and learners

The systematic map and synthesis revealed many examples of interesting practice. The review provides evidence to students, teachers and institutional administrators that the processes and actions that underlie PDP do have a positive impact on student attainment and approaches to learning.

There is insufficient evidence to conclude what effects, if any, PDP has on personal factors such as identity. There is also insufficient evidence to state which balance of the many PDP approaches is more or less effective in impacting on student learning. Neither is there evidence to comment on the influence of the individual teacher in promoting and facilitating learning through PDP.

The study was focused on higher education but the findings will have implications for educators and learners in other formal learning environments (e.g. schools and further education colleges) which employ PDP congruent processes as an aid to learning.

Change agents working in institutions and national bodies

Those individuals charged to act as agents of change in supporting the development of PDP within institutions – such as staff and educational developers, or national bodies like the LTSN – have been primarily influenced by policy claims, PDP practitioner arguments for PDP, and their own beliefs and experiential learning. The synthesis provides PDP change agents with a body of research to inform their work as well as evidence to those with whom they work. Similarly, institutional managers may also seek such evidence before committing the institution to major change programmes and investment in new systems.

Researchers

The map and synthesis have shown that research on PDP and its analogues is still a young area of research with little coherence in terms used, research focus or availability of research. There is also a lack of balance, at least in the UK, between descriptive and experimental research testing the effects of the introduction of PDP. Many studies examining effects of PDP focused on participants' views while these are crucial, they are only one aspect of studying the effects of an approach to

learning. In addition, where there were independent evaluations of effect, there were often serious limitations in the research methodology applied or the clarity in reports of which methods were used in a study. The map reveals that some aspects of PDP learning (reflection, use of learning logs and journals, self-assessment, self-regulation) have been studied more than others (e.g. action planning, recording of achievement, use of portfolios, self-awareness and self-motivation).

There is also a tendency for the experimental research to focus on directed rather than self-directed approaches to learning through PDP. There also appear to be limited numbers of research studies that utilise employability or career outcomes as their focus for measurement.

The database produced through the review can inform future research to address some of the under-researched features of PDP.

The synthesis has also identified a number of empirical studies that provide methodologically sound benchmarks for future studies on the effects of PDP on learning.

The main implication of the findings is that there is a need for an increase in well-designed experimental research to add to the descriptive research of PDP in the UK. A greater focus on systematic mapping and synthesis to coordinate the research field is recommended.

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