Personal Learning Plan Usage in NSW Schools

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Abstract: Personal Learning Plans (PLPs) are important teaching-learning tools to assist in effective learning of students with some individual, special needs, whether these be remedial or to promote extension learning for average ability students or the gifted and talented. The research reported in this paper was funded and conducted as part of the Australian Government Quality Teaching Program. The research set out to describe how and where PLPs are being used in NSW schools, and to assess the current effectiveness of their use. Telephone interviews were conducted with 31 teachers and administrators in DET primary and secondary schools, independent schools and Catholic Education Office (CEO) administrative positions. The sample included 10 DET high school, 9 DET primary, 7 CEO and 5 independent school respondents. Schools selected as part of the sample ranged widely over NSW and many schools selected were situated in rural areas and isolated regions with numbers of students who might have special needs. It was estimated that in excess of 150 CEO primary, central and secondary schools were covered by interviews with personnel from the CEO regions selected. Results indicated that PLPs are being used reasonably appropriately for students with special needs and disabilities, and ATSI students, but generally are not being used widely to stimulate learning with typical students or gifted and talented students. The low rates of confidence revealed in teachers' ability to use PLPs effectively, both in terms of actual classroom use of PLPs and effective record keeping, especially in government schools, indicate that much more needs to be done via professional development programs and other avenues to increase teachers' levels of knowledge and skills for effective use of PLPs. Recommendations are made regarding professional development programs for teachers and also policy development.

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Introduction: The Importance of Individualized Instruction in Effective Learning

The importance of individual differences in effective teaching and learning has been long recognized (Gage & Berliner, 1992), with differentiation/adaptive instruction or individualized instruction emerging consistently from meta-analyses of research into

factors that are very important in effective teaching and learning (Fraser, Walberg, Welch & Hattie, 1987; Scheerens & Bosker, 1997; Seidel & Shavelson, 2007). Intensive and sophisticated research into genetic endowment over the past two decades has simply confirmed that there are large numbers of individual differences that are influenced by genes. Earlier information processing models (Gage & Berliner, 1992, pp.272-289), more recent cognitive load theory (see Paas, Renkl & Sweller, 2003; Van Merrienboer & Sweller, 2005), and skill learning models (see Cornford, 2008) explicitly recognize that the individual is involved in creating knowledge structures in long term memory that are developed uniquely by the individual. The constructivist perspective to learning emphasizes that it is individuals who interprets the world around them and construct meaning from their unique viewing of their environment, with diverse theorists and theorists classified under this general philosophy including Bruner, Dewey, Piaget, von Glaserfeld and Vygotsky.

Expert or proficient teachers recognize and cater for individual differences in their classrooms (Hattie, 2003). However, one of the more challenging aspects of teaching is to possess skills to cater for individual learning needs, with this applying both to teachers and teacher educators (Brockie, 2010). Currently there are serious challenges concerning the quality of Australian education that can only be met by teachers adapting their teaching to address individual differences in learning and learning deficits. For example, improved learning outcomes from NAPLAN testing, currently a great Federal government concern, can only be attained by recognizing individual differences in knowledge and skill levels, and using teaching strategies directed at remedying individual deficiencies to achieve at least minimal standards of achievement, if not mastery.

The Nature and Potential Use of Personal Learning Plans

Personal Learning Plans (PLPs) are a very valuable teaching/learning strategy in individualizing instruction and fostering effective learning (Anderson, Boud & Sampson, 1996). Such a plan may be conveniently defined as an educational strategy developed specifically for the individual around his/her specific educational, social and emotional needs, and involving teachers, administrators and possible experts such as counsellors, with written goals that meet the individual's needs and interests. It involves some kind of formal statement so that goal(s) and the processes to achieve the agreed upon goal(s) are explicit and clear to the individual and others, such as teachers, parents or carers, who will be involved in the learning and guidance processes (see Anderson, et al 1996). Explicit statement of the goals and processes is important for enabling the individual, for whom the plan has been developed, to focus clearly upon specific tasks or activities, and also for those who will assist in the learning processes involved in achieving the desired outcomes. Explicit statement is also important to permit assessment of the success, or otherwise, of the personal learning plan in achieving educationally desirable outcomes.

PLPs have featured in the educational literature over much of the twentieth century and into the current century. They appear under various names and can be traced back to Kilpatrick (1918) and to John Dewey (1938), leaders of the progressive education movement in the early twentieth century. Terms frequently used, to cover basically the same concepts, have included 'project', 'individualized project', 'learning contract', 'problem-based learning' and 'individual education plan'. An important feature of PLPs, regardless of the terminology used, is the development of goals uniquely meeting the needs and educational requirements of the individual, taking into account both strengths

and weaknesses of the individual. There is also a strong emphasis upon the importance of experience in learning and the individual gaining insight, knowledge and skills from engagement with the processes that have been agreed upon (Anderson et al, 1996). Important also are the cooperation and understanding of the individual in the agreed processes, since it is the individual who must engage with meaningful commitment to the learning activities and processes, if effective outcomes are to be achieved.

Because of the multiplicity of educational goals that may be set, as a result of a huge range of individual differences in learning and diverse stages in human development, there remain considerable challenges for teachers and educational administrators in establishing potentially effective PLPs, monitoring the processes, and evaluating and reporting on outcomes. These challenges were recognized by Kirkpatrick (1921), soon after he had popularized this educational approach.

The New South Wales Department of Education and Training (NSW DET, nd) on its website has provided one of the most recent comprehensive, practical and recent accounts and guides for educators in the use of personal learning plans in transition. This site covers important aspects including Preparation, Transfer, Induction and Consolidation. It clearly identifies the areas where PLPs can be used, including ordinary learning, gifted and talented students, indigenous students and remedial activities. This site, as well as indicating the appropriate use of PLPs for individual students with special needs, ranging from the gifted to those needing remedial education, also highlights the importance of preparation for more independent and analytical forms of learning encountered at secondary school level and beyond for ordinary students. The forms of PLPs, that have become widely used in adult education over the past thirty years (see Anderson et al, 1996), can be seen in part as attempts to strengthen learning skills centred around independent learning and critical analysis, skills that should have been more fully developed in the secondary schooling years.

Background to the Research: Purpose and Focus

This research originated from a grant under the Australian Government Quality Teaching Program (AGQTP) project to examine continuity of learning and enhancement of retention rates in transition K-8 in NSW schools through use of PLPs. Extensive searches of web and specialty education databases (eg Google, Google Scholar, A+Education, AustEdOnline, etc) revealed no reliable empirical research findings on usage of PLPs and outcomes in NSW on which to base the current research. Review of the relevant literature also revealed multiple meanings for the concept of transition, and that the original proposal, that had been submitted before the current researchers commenced work on the project, needed to be modified to produce reliable and useful data. The term 'transition' has been used commonly to describe the movement from primary to a separate high school, and also movement between separate primary or secondary schools part of the way through a school year (NSW DET, nd). Other common usage indicates movement between junior and senior years within high school (Department of Education, Employment and Workplace Relations, 2008), the process of movement from school to work (House of Representatives Standing Committee on Education and Training, 2009), as well as movement from pre-school education to formal infant school classes. While it does not appear to appear to be explicitly recognized in the literature (eg NSW DET), an implicit generic meaning of transition across learning content and situations is that any movement from one level of

learning/skill to another, higher level may be defined as transition, with PLPs instrumental in assisting in this process.

This last meaning of transition, as a process of moving to a higher level of knowledge and skill, has been central to the conduct of this research project. Success for any individual in any transition depends upon the particular needs of the individual being recognized by teachers or educational authorities, and identification of learning processes needed to provide guidance to bridge the initial level of achievement and the higher, more desirable stage. Unless this occurs, there is little likelihood of successful, desired learning occurring with minimal frustration and in optimal time.

Given that the data gathered was to cover both primary and secondary schools in the public, CEO and private sectors with 32 interviewees nominated for data gathering, it soon became apparent that interviewee numbers for subcategories and grades/years of usage would be so small that generalization of the findings would be highly problematic, if not impossible. For these reasons, it was decided to modify the research focus to collect data to establish basic facts of PLP usage in NSW, with the research focused upon four objectives:

- 1 Gathering of data on usage of PLPs, areas/subjects where they are generally used, and students with whom they are used in NSW
- 2 Assessment of the effectiveness of PLP usage as perceived by teachers and administrators
- 3 Identification of issues teachers and administrators believe are contributing to less than optimal usage of PLPs
- 4 Implications for pre-service and professional teacher development.

Research Methods

The identification of a number of questions about usage of PLPs, and areas of appropriate use, resulted from extensive literature reviews, consultation with practising teachers, experts in educational research and other specialist educational areas, and PTC NSW management, in line with the initial research proposal. The issues that emerged of considerable importance were: where and when are PLPs used, what types of students are they used with, what is the perceived effectiveness of PLPs, what are the problems in usage, and what might be needed to improve effectiveness of PLP usage. A trial questionnaire was developed focused on these specific issues, with clear, unambiguous, closed and open questions, in line with best practice questionnaire design (see Cohen & Marion, 1994; Gay, 1992; Merriam & Simpson, 1995). Feedback obtained from a limited sample of respondents led to very minor modification of the questionnaire that was planned and used as a basis for phone interviews. (See Appendix A of Tsolakis & Cornford, 2009, for full questionnaire.) To facilitate data gathering on PLPs with different ability/needs groupings, the three groupings for the purposes of this research were identified as: (1) gifted and talented; (2) typical, average students; and (3) remedial/less able students. While the researchers recognized that this terminology may not be politically correct and appropriate nomenclature is highly contested, it allowed teachers/administrators to easily identify and understand ability and special needs

groupings without lengthy definition and discussion during interviews, as was shown in the trialing of the questions. Also, in the reporting of findings below, where teachers and administrators spoke specifically of disabilities, this terminology is used. It should be noted that serious assessment of special needs of cognitive, emotional, physical and social kinds, upon which additional, special government funding may be dependent, is often taken against formally established disability standards. (While well beyond the scope of this research, future research might usefully address whether euphemistic terminology for special needs and disabilities has led to increased burdens upon teachers of integrated classes who are not adequately trained for specialist remedial work, and the opportunity for politicians and bureaucrats to under-fund and under-staff special needs provision.)

The phone interview method was chosen because of the wide location of schools across the state, and the high rate of successful responses that can be obtained via phone interviews. Current rates of return of completed, written questionnaires are problematic for effective research, with best response rates typically now well below 30% even in large, well-funded, government sponsored projects (see Krause et al, 2004).

After agreement to participate by the principal of a school, or high ranking administrator within the independent and Catholic systems was secured, phone contact was made with the nominated teacher/administrator, and a phone interview conducted using the structured questionnaire. Participants were assured of anonymity and had the major purposes of the research explained to them, along with an indication of the general format of the questionnaire with generally closed questions initially and then opportunity for more personal judgments and responses with later open questions.

General length of the interviews conducted by an experienced researcher was between 20-30 minutes, although some interviews extended to over 60 minutes. Results were recorded immediately during the interview for each individual respondent, with additional comments added, if necessary, immediately after the conclusion of the interview. Data were then collated, and analyzed separately for primary and secondary, Department of Education and Training (DET public schools), Catholic Education Office (CEO) and independent schools.

Sampling and Respondents

The original research proposal suggested inclusion of as many regional schools as possible and this was largely adhered to. While schools were not selected on a random basis, and in effect a sample of convenience was used, every effort was made to obtain as representative a sample as possible. This meant that, as well as regional schools, some metropolitan schools/schools located in cities in NSW were also included. The location of schools ranged from the Queensland to the Victorian borders, and from Sydney to the far west of NSW. Included in the DET part of the sample were a number of small towns in remote areas, while the types of schools included central schools, primary schools, specialist behavioural remedial units, and high schools. Many of the schools represented in the sample in both the Department of Education and Training (DET) and Catholic system categories had a high indigenous or possibly disadvantaged student population.

The original research proposal suggested that 32 teachers be involved in data gathering. but data were gathered from 31 individuals because a few schools did not respond to requests for cooperation within the necessary time frame. On account of access requirements by the management of the schools or Catholic Education Offices (CEOs) contacted, not just classroom teachers were included. Specifically in CEOs managers of specialist functions were interviewed and, because the organizational structures covered both primary and secondary, it made little sense to attempt to divide these into specifically primary or secondary areas. In a number of cases in DET schools as well, managers, including principals and deputy principals, and not just classroom teachers, were nominated by the organizations contacted. Information obtained from all individuals by the experienced, phone interview researcher was judged almost universally as detailed, knowledgeable and frank about issues and problems in the use of PLPs, and about the concerns of classroom teachers in their use. From the richness of data gathered, it is considered that the management perspectives added very valuable additional depth of insight into issues and problems associated with PLP usage, beyond that of interviewing solely classroom teachers.

Ten individuals from DET high schools were interviewed and are included in the results analyzed, meeting the initial research sample number suggestion. On account of some problems in gaining cooperation from some DET primary schools, 9 individuals were interviewed from this area, one fewer than the 10 desired. Both larger and smaller DET schools were included in this number. Seven CEO areas were included, one less that the original plan for 8 teachers from this sector, of 4 each from primary and secondary. However inclusion of CEO specialist managers meant that typically in one CEO interview information gathered covered the practices and issues affecting somewhere between 25 to 35 primary, central and secondary schools. An estimate is that at least, as a minimum, 150 CEO schools were thus covered by the approach adopted. Personnel from five private schools were interviewed, one more than the original target of 4, of 2 each from primary and secondary. The independent school sample used represented both single sex boys and girls schools, and co-educational schools in the country and city. All independent schools included in the sample had primary and secondary components.

Research Findings and Discussion

(i) Extent of usage of PLPs and where they are used

From the 31 individuals interviewed, it was found that 2 of the schools did not use PLPs in any form. These two schools were co-educational, one an independent school and the other a DET high school. Justification of non-use of PLPs was the demanding academic culture of the schools. Assistance was provided for those students needing help, but it was typically in the form of tutorial assistance to maintain achievement with the conventional academic curriculum. As was explained, parental choice in the selection of the school was also a factor involved in the form of assistance offered.

Of the other 29 respondents, data obtained indicated that PLPs were used in a variety of ways. Four of the 9 DET high schools using PLPs indicated that PLPs were used regularly/frequently while in 5 they were only used sometimes. In DET primary schools, 4 used them regularly/frequently, whereas 5 used them sometimes/occasionally. All 7 CEO respondents indicates that PLPs were used regularly/frequently while 3 of the 4

independent schools, where they were used, also used them regularly/frequently with only 1 using them sometimes/occasionally.

The years in which PLPs were used varied from school to school and system to system. Within the CEO system, PLPs tended to be used, where needed by individual students, across the K-12 spectrum. As was indicated by one CEO respondent, this depended upon whether funding was available for a student with a special need of some type. In the independent school sample usage of PLPs varied from K-11, K-12 and K-8. In DET high schools, in some schools PLPs were used from 7-12, in others 7-10, and one pattern was 7-8 and 11-12 but no usage in 9 and 10. DET primary schools used PLPs K-6. The particular culture of the school and availability of resources seemed to play a considerable part in PLP usage, particularly in DET high schools.

The next question specifically asked about the types of students with which PLPs were used. The results reveal overall that there is considerable variation in use of PLPs with the different categories of students that might benefit from their use. In the 9 DET high schools that used PLPs, 2 schools used them with typical, average students whereas 7 did not. Of the 9 DET primary schools, 5 used them with typical, average students while 3 did not and one respondent didn't know. In the CEO system 7 of the 7 respondents used them with typical, average students although a typical, average student could be defined as one that had an area of specific need or disability. In the independent school sample, of those 4 schools using PLPs, 1 used them with typical, average students, but 3 did not.

When asked about use of PLPs with the gifted and talented, of the 9 DET high schools, 4 used them, 4 did not and 1 indicated that there were no students in the school identified in that category. Regarding DET primary schools, of the 9 using PLPs, 5 used them with this category of students, 3 didn't, and for 1 it was not applicable. The 7 CEO respondents indicated that, in 4 CEO areas, PLPs were used with the gifted and talented, but not in 3 other CEO areas. Of the 4 independent schools using PLPs, 3 indicated usage with these students, with 1 only not using them.

Regarding use of PLPs with indigenous students of aboriginal or Torres Strait Islander heritage, all DET high, DET primary and CEO respondents indicated their use with these students. Of the 4 independent schools surveyed that used PLPs, 2 used them, 1 didn't because the indigenous students at that school performed at highly satisfactory levels, while in the other school there were no indigenous students, and hence it was not applicable.

Use of PLPs with English as second language (ESL) students was also explored. Of the 9 DET high schools using PLPs, 6 considered this not applicable because their student intake did not encompass this student category, while 2 used them and 1 didn't. In the 9 DET primary schools, 3 used them, 3 did not, and 3 considered it not applicable. Of the 7 CEO respondents, 6 indicated use in this area, while 1 did not know. Regarding the independent school sample, of those using PLPs, 3 used them and 1 did not with ESL students.

Data revealed that the most consistent use of PLPs occurred with remedial students/less able students. All respondents in all school sectors where PLPs were used, DET high school, DET primary school, CEO and independent, indicated that PLPs were used for these students. When asked specifically about areas and subjects for PLP usage,

respondents indicated that they could be used across literacy and numeracy and Key Learning Areas (KLA) in conventional curriculum, if there was a need, however the specific uses to which PLPs were put centred upon specifically behaviour modification, social skill development, health and hygiene issues, and physical, cognitive and emotional disabilities. Some remote regional schools also indicated that PLPs were used very effectively in career selection/guidance.

As recent research (Australian Department of Education, Employment & Workplace Relations, 2008) raised questions about extent of use of PLPs in science, maths and technology areas, a question was asked specifically about use in maths and science. All 9 DET high schools and 7 CEO areas used them for maths (including numeracy). Of the DET primary schools, 8 of 9 indicated that they were used, while 3 of the 4 independents schools also used them in this subject area. Regarding science, 5 of the 9 DET high schools used them here, while 4 did not. Three of the 9 DET primary schools used them, but 6 did not. Of the 7 CEO areas, 6 used them with science if needed, but 1 did not. Two of the 4 independent schools using PLPs used them with science subjects, but 2 did not. These results would suggest wider use in maths, particularly because of numeracy issues, but less consistent use with science subject areas.

Results obtained overall suggest that for a variety of good educational reasons, involving meeting individual learning needs and challenging the gifted and talented, there is an unmet potential for wider use of PLPs. These results indicate that PLPs are being used appropriately for students with particular special needs and disabilities, but they are not being used as widely as desirable to stimulate learning with typical/average students or gifted and talented students.

(ii) Perceived benefits and mechanisms of use of PLPs

Respondents were asked to make judgments about the benefits that they saw emerging from PLP use and the frequency with which these benefits were attained. Three generic areas of potential benefit were chosen from the DET website; these were improvement in leaning skills/learning, improvement in self-esteem, and assistance in pastoral care. These judgments are indicative of how successfully PLPs are perceived as being used, allowing for the complexity involved in many of the areas of learning need or disability.

Of the 9 DET high school respondents where PLPs were used, 5 indicated that benefits in learning skills/learning improvement were obtained very frequently, 3 indicated that they were obtained sometimes, while 1 indicated that they were obtained rarely. Of the 9 DET primary respondents, 3 considered benefits in learning skills/ improvement were obtained very frequently and 6 sometimes. All 7 respondents from the CEO areas saw benefits occurring in terms of learning skills/improvement very frequently, while all 4 independent respondents, where PLPs were used, also indicated that the benefits were obtained very frequently.

Regarding improvements in self-esteem with PLP use, 3 DET high school respondents indicated this occurred very frequently, 4 sometimes and 2 rarely. Of the 9 DET primary people, 2 indicated that benefits in improving self esteem occurred very frequently, and 7 sometimes. For the 7 CEO respondents, 2 saw benefits in self-esteem occurring very frequently, 4 sometimes and 1 rarely. The 4 independent schools respondents all saw benefits occurring very frequently.

Regarding assistance in pastoral care, of the 9 DET high school respondents, 3 judged benefits as occurring very frequently and 6 as sometimes. For the 9 DET primary interviewees, 3 saw benefits in pastoral care occurring very frequently and 6 sometimes. Of the 7 CEO respondents, 4 considered benefits in this area occurring very frequently, while 3 saw it occurring sometimes. The 4 independent school interviewees all considered that benefits occurred very frequently.

A considerable variety of other benefits were suggested by those interviewed. These ranged from improvement in sense of self-confidence for learning as students discovered that they could achieve over the longer term, in accountability of teachers and schools in meeting individual student needs through use of PLPs, to improvement in communication with parents and students when they were drawn into the consultation process. The rating of benefits in these other areas were realistic: respondents saw that communication with parents could involve considerable challenges for teachers, and also with students where language and conceptual difficulties hindered understanding of what the PLPs required them to do.

Information on the use of proformas or models used for PLPs was sought, as there are considerable practical problems in modifying any proforma to adjust it to the individual needs of students that may cover an extremely wide range of levels of performance, and disability or special need areas. All DET primary and secondary school respondents indicated that proformas were used, with additional information elicited that indicated frequently there was a school model that had been developed from DET proformas. However results obtained from subsequent questions raised considerable concern about the ability of teachers to adapt proformas, especially where they have less support via counsellors, psychologists and support teams to help with making appropriate judgments across a wide range of specific disabilities and needs.

(iii) Record keeping

All effective learning is built upon past learning and any effective schooling system must take this into account. An important aspect of using PLPs effectively involves keeping adequate records, and ensuring that they are passed on through a record keeping system to assist administrators and other teachers make judgments about students and their past learning. Interviewees were asked whether they considered adequate records were kept and, if not, to identify the source(s) of the problem. Of the 9 DET high school people, 4 considered that adequate records were kept, while 5 did not. Regarding the 9 DET primary respondents, 3 considered that adequate records were kept, but 6 did not consider this was the case. Of the 7 CEO personnel, 5 considered that adequate records were kept but 2 did not judge this to be the case. With the 4 independent school people who used PLPs, 3 considered that adequate records were kept while 1 did not consider this to be the case. Overall, 11 of 19 DET respondents (57.9%) did not consider that adequate records were kept, and 3 of 11 CEO and independent school respondents (27.3%) did not consider that adequate records were kept.

Overall the results to this question (and the next two questions) revealed that the issue of adequate record keeping is of serious concern. The reasons given regarding the judgment of inadequate record keeping fell into two distinct categories. The first was regarding the effectiveness of the system that operated within the school, its ease of use, and its usefulness in meeting the needs of those accessing those records. A number of respondents expressed concern with the system within which they had to

operate. One respondent, who was very positive about their DET school's record system, indicated that it had been custom-designed for the needs of their school. In this school, from this initial Year 7 intake, PLPs were to be introduced for all students, with the system designed to allow ready, easy access over several years in the future. Others in remote areas expressed frustration about the system that they had to use, and the lack of training that had gone with its introduction.

The other reason for judging that inadequate record keeping existed centred upon the serious concern about the quality of records that teachers were keeping and passing on. A number of interviewees considered that the records that teachers kept, based on the PLPs used, were of very poor quality. Several expressed very strong views that teachers did not always appreciate the fact that the records could become legal documents in subsequent years, especially if a school was sued for failing in regard to students' disabilities. The need to provide sufficient detail to assist a teacher in recalling what had been done possibly many years after the event in a court of law, without cluttering records with minutiae or trivia, was expressed graphically.

The subsequent guestion, regarding whether records were passed on to help future teachers, also produced evidence to support the position that there were problems with record keeping systems. Of the 9 DET high school respondents, 5 said that records were passed on, while 4 said they were not. Of the 9 primary respondents, 7 indicated that records were passed on, 1 said that they were not, while 1 was not certain. Regarding the CEO respondents, 6 of the 7 said records were passed on, but 1 indicated that this was not the case. All the 4 independent school respondents, where PLPs were used, indicated that records were passed on, with this possibly being explained by movement within a school, rather than involving transition to other schools. The value of the records transferred was called into question by answers to the next question that asked respondents whether they personally had found the records passed on to be helpful in dealing with individual students. All 9 DET high school interviewees indicated that they had found benefit as did all 7 CEO people. Of the 9 DET primary interviewees, 5 indicated benefit and 4 indicated no benefit, Of the 4 independent school respondents, 3 of the 4 indicated benefit with the other indicating no benefit. When giving explanations, there were two divergent reasons. The first was that as experienced teachers they made their own judgments. The other set of reasons revolved around the fact that the records were inadequate as a basis for advancement of the students' learning.

In terms of considering the overall effectiveness of PLPs, respondents were asked to rate PLPs along the continuum of very effective, effective, not effective and not at all effective. Of the 9 DET high school respondents, 2 rated them as very effective, 6 as effective and 1 as not effective. Among the 9 DET primary teachers, 8 rated them as effective and 1 not effective. Of the 7 CEO respondents, 3 rated them as very effective, 3 as effective and 1 as not effective. Among the independent school respondents 1 of the 4 saw them as very effective while the other 3 judged them to be effective.

A subsequent question, asking respondents to consider how well teachers used PLPs, produced results that indicate a need for additional skills and knowledge to be developed in teachers. Respondents were asked to make judgments about teacher usage involving a choice from 'very well', 'moderately well' and 'not effectively'. Of the 9 DET high school interviewees, 1 indicates that they were use moderately well, while 8 said not effectively. Of the 9 primary respondents, 2 indicated very well, 3 moderately well and 4 not

effectively. In contrast to these responses within the DET system, of the 7 CEO respondents 6 indicated moderately well, with 1 indicating a position between moderately well and not effectively. All 4 independent school interviewees considered that teachers used PLPs moderately well. Overall, 12 of the 19 DET school respondents (63.2%) considered that teachers did not use PLPs well, indicating a strong need for professional development specifically in the DET sector.

Results to these last questions would indicate that more in the way of effective training is needed to assist teachers achieve the kinds of results that can be achieved through PLP usage where the needs of individual students are directly addressed.

(iv) Challenges posed by PLPs

PLPs, like any teaching strategy or approach, create a number of challenges for teachers, not least on account of the range of individual differences that may be encountered, and the differing levels of need or past learning achievement that must serve as the basis for future learning. Any school that implements PLPs needs to be aware of the challenges, and consider both physical and human resources to help support desired learning outcomes. These challenges also need to be taken into account in considering, among other things, professional development courses for teachers.

All respondents were asked to indicate whether they perceived challenges to be posed in the use of PLPs in terms of preparation of PLPs for individual students, induction of students to the use of PLPs, extra work for the teacher with individual students, and liaison with counsellors and other teachers (yes/no). All 7 CEO and all 4 independent respondents considered that there were challenges for teachers in preparation of PLPs for individual students. Of the DET schools, 8 of 10 high school and 7 of 9 primary school respondents judged there to be challenges. The other 2 high school and 2 primary school respondents did not see challenges on account to the systems that operated in these schools. Regarding the question of induction of students in use of PLPs, all 7 CEO and 3 of 4 independent school personnel saw challenges in this area. Eight of 10 DET high school and 8 of 9 DET primary school interviewees also perceived challenges here.

With regard to extra work for the teacher with individual students, all 10 DET high school and 7 CEO respondents judged there to be challenges. Eight of the 9 DET primary and 3 of the 4 independent respondents also judged there to be challenges here. When asked about the challenges for teachers in relation to liaison with counsellors, 6 of 10 DET high school, 7 of 9 DET primary school and all 7 CEO respondents judged there to be challenges. Only 1 of 4 independent school interviewees saw a challenge here, with the other 3 respondents indicating, as did the other respondents from other categories of schools, that there was not a challenge on account of the organization of the school personnel and responsibilities allocated.

Respondents were also asked what other challenges they considered to be faced by teachers in using PLPs. Challenges that were identified by a number of respondents included the issue of time demands, where 13 indicated that this was a major problem in PLP use, and communication with parents, with 9 indicating this was a particular challenge. Issues concerning communication with parents revolved around a number of issues, including making contact, bringing them into setting up PLP contracts, some

being in denial in relation to special needs, some being over enthusiastic, and some not understanding what was required of them.

Challenges raised regarding support personnel in classrooms included the need for appropriate training and role allocations, and effective in-class communication with them by the classroom teachers. Resources were indicated as challenges with some schools needing more counsellor support. Computer shortages for teachers were mentioned as problematic when records needed to be kept on-line in e-forms. The lack of knowledge and skills in teachers were identified as ranging from not knowing what PLPs were, and how they could be used, to problems with being able to interpret results, such as from NAPLAN, and work these into PLPs, the need for more knowledge about types and levels of disability and special needs, and how to translate this into effective PLP documents. Lack of IT skills and e-literacy were also identified, as well as a need for competent electronic record keeping. Assessment of PLP outcomes and lack of understanding of the need for appropriate record keeping were additional challenges specifically identified. Some challenges related to teacher attitude and the need for older teachers to be made aware of changing demands.

(v) Meeting teachers' professional needs

In terms of improving teachers' professional knowledge and skill with PLPs, interviewees were asked about the importance of initial teacher training courses, professional development, and specific mentoring in schools. Regarding initial teacher training, all but 1 DET high school respondent, and all the DET primary, CEO and independent school respondents (29 out of 30) indicated that more was required here. All respondents across DET primary, high school, CEO and independent school categories indicated that more professional development courses were required. Concerning the need for specific mentoring in schools, all respondents across all categories, except 2 from the DET primary school category (28 out of 30), indicated the need for more mentoring. Those 2 from the DET primary sector who disagreed indicated that the structures in place in their schools catered adequately in this regard.

The last question asked respondents for any additional comments that they would like to add regarding PLPs and their use, or what might be useful in considering professional development courses for teachers. Analysis of these additional comments revealed a number of important issues and themes regarding PLPs and professional development courses. These covered the need for professional development in specific content areas, the nature of the professional development model used, and the need for support structures to assist in effective employment of PLPs in line with desired NSW government educational policy outcomes.

A number of these additional comments revealed the wide variety of teacher needs that exist in terms of understanding the nature of PLPs and their effective use. At one end of the spectrum there are those who consider that basic understanding of the nature of PLPs, their potential benefits, and how to use them is lacking in numbers of teachers. Comments suggest that some older teacher are not familiar with this educational approach and need a refresher course on individualization of instruction and the use of PLPs in this approach. There also were suggestions that at least some university-based initial teacher education courses have not provided sufficient grounding for new teachers entering the profession. Ascertaining the content and adequacy of current teacher education courses was well beyond the scope of this research, and certainly some

comments indicated that the respondents believed that new teachers were better prepared than older teachers, although this was not universally the view expressed. Regardless, there would appear to be a need for a set of professional development courses on the nature and use of PLP for teachers with low levels of knowledge and skill.

Other comments indicated the need for some professional development courses that are pitched at enhancing existing PLP knowledge and skill levels for teachers who are using these, but in non-optimal ways. There would appear to be a need for developing specialist courses in PLP development and writing that cover the distinct areas of disabilities/ special learning needs and also gifted/talented. A professional development course around the adaptation of proformas to suit individually different cases across the spectrum of normal learners, disabilities/special need and the gifted/talented would appear to be relevant, given that all these different learning levels may be found in smaller schools.

Serious concerns were expressed about the ability of generally trained teachers to understand the needs of specific disability areas, such as autism, specific areas of physical disability such as sight impairment, and intellectual disabilities, for example mild brain damage, and the levels of individual differences in impairment that may be involved, as these relate to disability standards. The need for specific professional development courses that seek to develop teacher skills and knowledge about the various, different disability areas, many of which are specialist areas in their own right, was identified. The legal issues that apply to the writing of PLPs to cover disability areas is also a very important, related but a different specialist area for a separate professional development course.

Effective communication with parents emerged as important and a challenge in a number of sections of the interviews, that is to say in terms of perceived challenges identified by respondents, and also in terms of additional comments offered. A specialist professional development course that developed teacher's communication skills to encourage parent involvement in PLP planning, how to foster and manage realistic parental expectations, and ways of trying to assist parents to grapple with acknowledgment of the nature of the disability or special need of their child, would seem to fulfill definite needs.

The mechanics of obtaining funding to meeting special needs provisions appears as an important consideration specifically for DET schools, with the applications and general administration of these issues being handled more centrally by the CEOs. It has been suggested that there is a need for training for teachers in DET schools regarding filling out forms to attain funding/special grants for specialist need, guidance in navigating the DET bureaucratic structures, and managing the funding when it arrives in individual schools. This group of issues would appear to be important and constitute a logical grouping of related issues for a professional development program that could be targeted at middle and upper levels of DET school management.

The importance of accurate record keeping indicates the need for a specific professional development course around this set of issues. The mechanics of accurate and appropriate record keeping for PLPs would appear to be the basis for a course, but it may be most appropriate to target higher management levels, and to couple this with issues around the selection of an electronic record keeping system that meets the needs

of the individual school. In-school training in use of the record keeping system employed by individual schools may then be appropriately conducted by the schools themselves, as an outcome from the course for management personnel.

It seems of vital importance that DET consider the establishment of a specialist phone or IT video 'hot lines' to provide some assistance to regional teachers desperately in need of guidance that they cannot obtain within their local school or area. Such 'hot lines' would employ staff to provide initial assistance, and subsequent referral to specific disability need experts for more detailed examination of the learning issues involved and specialist advice. This should be considered in combination with the sophisticated use of video IT linking of schools that are likely to have similar problems, and also the establishment of virtual faculties across the state already under consideration.

Summary and Recommendations

The results in this study are derived from NSW teachers hence generalization of these findings to all Australian teachers, without additional research into the practices of teachers in other states in using PLPs, should be approached with caution. However, the evidence from this research suggests that there are problems in the effective and optimal use of PLPs, and that there needs to be additional research undertaken to explore the position regarding usage in the different school sectors in different states. Individualized instruction is a vital strategy for more effective learning in schools, without which NAPLAN and other indicators are unlikely to be improved.

The results from this research have indicated that PLPs are being used reasonably appropriately for students with special needs and disabilities, and ATSI students, but they are not being used widely to stimulate learning with average, typical students or gifted and talented students. For a variety of good educational reasons, involving meeting individual learning needs and challenging more students, including the gifted and talented, there is potential for wider use of PLPs. The fact that many schools have not been found to use PLPs with typical and gifted/ talented students tends to indicate that PLPs are not being used efficiently in transition periods to increase learning skills, particularly the ability to work and research more independently, and to increase ability to reason and think critically. These skills are vital for successful senior school learning performance outcomes, and even more important for education in the tertiary systems, now that tertiary education has become almost compulsory in our modern, technologically-based society.

The low rates of confidence revealed in teacher ability to use PLPs effectively, both in terms of actual classroom use of PLPs and effective record keeping, indicate that much needs to be done via professional development programs and other avenues, particularly initial teacher education, to increase teachers' levels of knowledge and skills for effective use of PLPs. Specifically results in this research indicated that 63.2% of DET interviewees did not consider that teachers used PLPs effectively, and that 57.9% of DET respondents did not consider that adequate records were kept. While CEO and independent schools had much higher levels of confidence in the ability of their teachers to use PLPs, some 27.3% of CEO and independent school respondents did not consider that adequate records were kept. Regarding the differences in these findings between DET and CEO systems, there is some evidence, from outcomes and satisfaction levels of the Building Educational Revolution (BER) schools building program, that the private and CEO systems have more effective management (see Patty, 2010, p.4).

With regard to professional development programs, there would appear to be three necessary aspects to initiatives for change for more effective use of PLPs. The first is to improve the use of PLPs with students with disabilities and special needs, the area in which PLPs are currently most widely used. Complex knowledge and skills are involved in identifying the needs of different special needs and disabilities groups, understanding standards in use in relation to these, and developing appropriate PLPs that can serve as legal documents should this be necessary. The second is to ensure that teachers understand the benefits that can ensue from meeting individual learning needs among typical and gifted/ talented students by using PLPs, so that these groups of students can gain wider educational benefits from schooling. The third is to use professional development in school leadership to address important issues of mentoring, accountability in leadership, and change of school cultures, to make these cultures more accepting of new approaches to learning. With regard to the first and second recommendations, there is clearly a need for pre-service teacher education providers to NSW teachers to consider how they may better prepare teachers for more effective use of PLPs.

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