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The Context of Professional Learning for Inclusion: A 4-ply model

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Abstract

This paper outlines the findings from one dimension of a large-scale research project which addressed the PL requirements of specialist inclusion/SEN teachers in Ireland. Two aspects relating to the context of professional learning are explored here: the professional learning opportunities preferred by teachers and the professional learning opportunities which, in principals' and teachers' estimations have been found to be most beneficial in enhancing teachers' expertise. In the light of the research findings and current literature pertaining to the area, opportunities for PL for inclusion are reviewed and a '4-ply' model proposed which draws on four complementary layers: system supports, tertiary level input, school development and teacher self-enhancement.

Introduction

Inclusive education espouses educational values of diversity, equity and social justice; it is about the entitlement of all children to a quality education irrespective of their differences. (Booth, Ainscow, Black-Hawkins, Vaughan, & Shaw, 2000; Thomas & Vaughan, 2004; Florian, 2007; Moran, 2007). Ireland has recently adopted a policy of inclusion in the pursuit of equal educational opportunities for all children. As noted in other jurisdictions, legislation alone is an insufficient condition for reform (Thomas & Loxley, 2007; Slee, 2006) and the current practices in schools are more reflective of traditional segregationist thinking than inclusive thinking (O'Gorman & Drudy, 2009). The operationalisation of a policy of inclusion in Ireland has been to focus on student deficits and to provide resources to overcome the barriers posed by an unchanged, unaccommodating education system. Following the increase in the numbers of students identified as having SEN in mainstream Irish schools, additional teachers were provided to specifically assist these students. There has been a concurrent expansion in teacher professional learning (PL) programs in the area of inclusion/SEN. The context of where and how this PL is provided, is the subject of this paper with a specific focus on a 4-ply model of PL which evolved in Ireland as a response to efforts to promote inclusion. The four layers of the model are the government/system layer; the tertiary institute layer; the school community layer; and the individual teacher layer. The analysis of the teacher's role in inadvertently reinforcing exclusionary practices is discussed elsewhere (O'Gorman, Drudy, Winter, Smith, & Barry, 2009).

Rationale for Teacher Professional Learning

Many variables contribute to positive educational outcomes for students. The most influential are non-school variables such as family and community background, ability and attitude (Organisation for Economic Co-operation and Development [OECD], 2005). Of the in-school factors which impact on student learning, however, teachers are the single most significant source of variation and students benefit from a well educated teaching force (Barber & Mourshed, 2007; OECD, 2005). The importance of a highly skilled teaching profession is also noted by the EU in the document "*Education and Training 2010*". Thus, the expertise and proficiency of teachers is crucial to the educational experience of students not benefitting from the existing education system. To date major concerns of the inclusive movement have been lobbying for changes in policy to legislate for inclusion; promoting organizational changes at regional and school level to enable inclusion; and developing research on appropriate curricular content and teaching strategies that promote positive educational outcomes for all students. If the quality of learning for students' with SEN is to be enhanced then the quality of teacher education must be continuously upgraded. Systematic research, therefore, is necessary to ensure that PL for inclusion is grounded in research based evidence.

Aspects of Professional Learning

The need for specific PL in SEN may be debated given recent research findings which maintain that there is no significant difference between pedagogy for students with and without SEN but merely a difference in the degree of its intensity and appropriateness of the application (Davies & Florian, 2004; Lewis & Norwich, 2001, 2004). A logical progression of this argument is to propose that if there is no specialist SEN pedagogy there is no need for specific PL in SEN/Inclusion. The response to this dilemma is the acknowledgement that the current education system is exclusionary and that a change towards a more inclusive system will require a change in the regular class teacher's unitary strategy where all students, irrespective of individual difference, are given the same educational experience. Teachers tend to work in isolation and experience alone is insufficient to develop awareness of either emerging pedagogical alternatives (Schumm & Vaughn, 1995) or of the implications of policy changes (O'Gorman et al., 2009). In responding to the rapidly changing scenarios of present day education systems, there is a need both to adapt and improve instruction and also to keep abreast of policy change. There is a requirement for PL for all teachers in the pursuit of inclusion and an urgent need for specific PL for the key promoters of inclusion within the school.

In considering the options contributing to the provision of PL opportunities for teachers a continua of choices exist for each element of course provision; duration, location, source of information and evaluation. The choices range between short one hour sessions and year long programs, between on-site and off site locations, between collegial-based inquiry and externally delivered input, between no required outcomes and assessed outcomes. A host of other criteria also contribute to course design, particularly pertaining to content, but the focus of this paper is the context for PL and the presentation of a model that evolved in Ireland as a response to an urgent requirement for PL for teachers in the pursuit of inclusive education.

Impetus for Professional Learning in Ireland

In general, continuous PL can be system-led, school-led or in response to individual PL needs. Continuing PL that is system-led may perpetuate dependency among teachers (Sugrue, Morgan, Devine, & Raftery, 2001). Such activities are initiated, implemented and evaluated by external agencies and teachers are passive participants. Much of previous PL in Ireland has adopted this model – the inservice provided to support new curriculum and programs are a case in point. Continuing PL that is school-led tends to develop closed school systems with tightly defined boundaries (Edwards, 2007). PL that occurs in this context may simply replicate existing practices and fail to develop partnerships with outside agencies that can better promote distributed expertise. Continuing PL that is individually-led reflects the differing PL needs at the various stages of a teacher's career (Coolahan, 2003) and it serves to promote teacher resilience (Day & Gu, 2007). However, such PL may be limited in impact on student learning (Cordingley & Temperley, 2006). The need to balance these individual, local and national PL needs has been recognised since the publication of the White Paper on Education (Ireland, 1995).

Research Focus

In Ireland all teachers, with the exception of a small proportion of specialised teachers in the vocational sector and a very small proportion of primary teachers with restricted recognition (e.g., Montessori trained teachers), are degree holders and all are initially qualified as regular class teachers. There is no undergraduate, preservice program specifically geared towards special education. However, all regular, initial teacher education programs include modules on inclusion/SEN. Additionally, a year-long tertiary-based government funded program is offered to teachers engaged in teaching students with SEN in mainstream or special schools. This enables a yearly cohort of circa 5% of the teaching force to obtain a professional post-graduate diploma in SEN/inclusion through a program of university-based

lectures and workshops, advisory and supervisory visits to teachers in their schools with formal written assessment and assessed observation of practice.

Internationally and in Ireland, research in the area of inclusive education continues to expand. Much of the research focuses on school and curriculum adaptations as a perusal of journals in the area will testify. In Ireland, the area of continuing PL for teachers to acquire the knowledge, skills and expertise to teach students with SEN effectively has been under-researched. The research evidence that is available from Ireland indicates that the success or otherwise of creating inclusive schools will lie on designing appropriate support structures within schools and in developing knowledgeable staff capable of supporting learning in their own classrooms and in engaging in collaborative relationships (Griffin & Shevlin, 2007). Thus, the PL of teachers makes a significant contribution to increasing access to inclusive education since it helps to transform current practices and expands the research base so that the characteristics of the most effective PL provision can be identified.

Methodology

The research reported here is part of a large-scale investigation exploring issues relating to the roles and PL requirements of Learning Support/Resource/Special Education Needs (LS/R/SEN) teachers in Ireland and the provision and organisation of education for student with SEN in mainstream schools. A mixed methods approach to data gathering was utilized comprising a survey questionnaire, focus groups and semi-structured interviews. The project as a whole covered a wide range of areas but the focus for this paper is on examining the questionnaire data on the context for the provision of SEN related courses. The overarching issue was how best to organise programs for in-career post-graduate PL.

Both qualitative and quantitative data were gathered through a questionnaire. In the teachers' postal survey two questions related to the PL context: a ranking question on their preferred context for professional learning and an open question on which context they found to be the most effective method of developing teaching skills. In the principals' postal survey two similar questions were asked. Again, one was a ranking question on the preferred context for teachers' PL and the second an open question on which PL context they perceived as being the most effective in developing teachers' teaching skills.

Questionnaires were directed to the head LS/R/SEN teacher and the principal of all of the 732 post-primary schools in the Republic of Ireland and to a random sample of 760 of the 3,290 primary schools. (In order to obtain a probability sample with a 95% confidence level and 5% confidence interval, the random sample size for 3,290 schools was calculated as 344 and the 760 schools were selected through applying a computer generated random number selection process to the national database of primary schools). Responses were received from 399 (55.2%) post-primary Learning Support/Resource teachers and 417 (54.8%) primary Learning Support/Resource teachers, yielding information on 816 schools. These schools represented almost a quarter of a million pupils. A shorter principal's questionnaire was received from 212 post-primary principals (29.3% response rate) and 196 primary principals (25.9% response rate).

Those participating in the research were motivated by interest in the area and thus may not be representative of the full range of opinion. As there was a 55% teacher response rate which included responses from schools in every county and from the different types of schools, inferential statistics suggest that the teacher questionnaire sample is representative of the whole population (Cohen, Manion, & Morrison, 2007). EXCEL and SPSS were used for analysis of the quantitative data while Word, EXCEL and MAXQDA were used for the qualitative data in addition to group discussion and recursive analysis to develop and validate the categories and themes which emerged (Miles & Huberman, 1994).

Findings

The findings of the research are discussed under headings relating to the two research questions guiding the analysis of the data for this section. The first identifies the PL contexts are preferred by teachers and by principals. The second investigates the PL contexts perceived as being most effective by teachers and principals.

Teachers' Preferred Context for Professional Development

Teachers were offered a range of PL contexts – from block release to attend college/university courses to online distance education that were available at the time in Ireland and asked to rank their top four preferences. Respondents indicated a wide range of first preferences (See Table 1).

These top three first preferences for PL account for 57.5% of all choices. The availability of these modes of provision maybe the cause of their high preferential ranking. Teachers may well choose that which they know over that which they are unfamiliar with.

When the results were analysed by sector, there proved to be very little difference between the primary and post-primary teachers' rankings. Neither did a teachers' location, whether rural or urban, and consequent distance from block release programs affect their choice of first preference. Moreover, there were no statistically significant differences between the rankings of teachers who had a previous qualification in SEN and those who had no previous qualification in SEN.

Table 1

Preferred Context for Professional Development Top Three Choices

Preference Ranked Number 1	Professional Learning Context	Teachers n = 608	Principals n = 386
Most frequently ranked number 1	Block release to attend a college/university program	34.4%	25.4%
2nd most frequently ranked number 1	Network meetings with other teachers	13.2%.	20.5%.
3rd most frequently ranked number 1	SESS (external single input school based session)	9.9%.	19.9%

*A large range of other context options accounted for the remaining percentage.

Online Access of Professional Development

A major strand of government funded support for PL is for online access. Hence, teachers' lack of preference in this respect is of interest (Only 4.3% of teachers gave on-line learning their first preference). Surprisingly, accessing PL online was not a highly preferred option even among teachers working in rural areas nor amongst those who had previously used online PL. The potential for using the internet to access further PL is gaining credence, but is still in the initial stages of acceptance in Ireland. Overall, 41.5% of the respondents indicated that they had used the internet to access PL. This figure was higher for primary teachers (50.6%) than for post-primary teachers (29.8%) which was mirrored in the percentage of teachers giving on-line learning their number one preference (6.5% and 1.8% respectively). It would appear from this research that teachers do not value online learning. Another contributory factor may be the lack of broadband infrastructure outside the capital. Given the current government policy of funded support for online learning this finding indicates a need for research to evaluate teachers' engagement with the medium. Blended learning, where the dual benefits of online and face-to-face interaction are interwoven may be a stepping stone towards teachers accessing a wider range of PL opportunities. Despite

this evidence of current underusage, online PL has the potential for expanding the range of PL contexts into the future.

Principals' Views on Preferred Context

Principals were asked to rank the same series of contexts for PL as given to teachers. The purpose of this question was to elicit principals' views on the most beneficial ways for teachers to develop their knowledge and skills in SEN. Although the top three contexts given a ranking of one tallied with the findings from the teachers' responses, interesting differences emerged from an analysis of responses by sector. Overall, in both primary and post-primary sectors principals indicated the same top three modes for PL:

- Block release to attend a college/university program,
- Network meeting with other teachers, and
- Special Education Support Service (SESS) school based support.

Whereas more secondary principals indicated that SESS school-based support was the most preferred context for PL; primary principals indicated that block release was the preferred context. For secondary principals, the difficulties associated with providing substitute cover for teachers who are on block release for off-site courses in tertiary institutions may have had an impact on their rankings albeit the wording was altered to 'rank the most valuable opportunities for LS/R/SEN teachers to develop knowledge and skills' to emphasise the pedagogical benefits rather than the administratively convenient aspects (Table 1). The implications of these findings for the context of PL programs are considered in the discussion section.

Most Effective Professional Development

In an open question, both teachers and school principals were asked to give their opinions on the most effective way to develop teaching skills. The responses confirmed the findings from the results of the ranking question on preferred PL options (See Table 2). Aside from the top choice of attending extended duration courses, both teachers and principals emphasised the benefits of networking, collegial discussions and practical experience.

Table 2

Top Three Most Frequent Responses to Open Question on Most Effective Way to Develop Teaching Skills

Most effective way to develop teaching skills	Teachers' responses n = 679	Principals' responses n = 349
Most cited	19.6% Block release to attend a college/university program	33.8% Block release to attend a college/university program
2nd most cited	17.3% Network meetings with other teachers	18.4% external single input school based session
3 rd most cited	12.5% external single input school based session	10% Network meetings with others/ On the job experience

*A large range of other context options accounted for the remaining percentage.

The high percentage of these options which emphasize the benefits of collegial collaboration is somewhat of an anomaly as it contrasts strongly with findings from another section of this research reported elsewhere (O'Gorman & Drudy, 2009) in which teachers

gave low ranking to such elements in identifying their current and desired roles. The same research also indicated that insufficient teacher time was given to collaboration and to planning and organization. It is within principals' powers to timetable teachers for collaboration, yet, despite principals' recognition of its value and published policy highlighting collaboration as a critical feature, it is not a feature of teachers' workload in Ireland. International research has also emphasized the use of communities of practice, where teachers within a school or network of schools engage in discussions of issues surrounding pedagogy and related topics, to promote professional learning (Shulman & Sherin, 2004, Boyle, While, & Boyle, 2004).

Discussion

The findings of this research on the context for PL are discussed in relation to a 4-ply model of PL that evolved in Ireland. The four layers of the 4-ply model are outlined and referenced to findings from the international literature and this research. Support is offered for each of the four layers; the government/system layer; the tertiary institute layer; the school community layer; and the individual teacher layer. In arguing for acceptance of the 4-ply model, three different lines of discourse relating to inclusion are garnered from the international literature: the ideological political; the research focus; and the practice (Persson, 2003). Each of these elements is included in the 4-ply model with the addition of the teacher as the core element. Research on improving educational experiences for students indicates that the key to improving outcomes for students is to improve the quality of instruction (Barber & Mourshed, 2007). This firmly places the teacher at the core of progressing towards inclusion and this emphasis is replicated in the 4-ply model of PL.

Characteristics of a 4-ply Model of Professional Development

An approach to PL for Inclusion/SEN evolved in Ireland as a state-funded program for qualified teachers working in the area. This model engages four key stakeholders in realising the program. These strands are the teacher, the university/tertiary institution, the broad school community and the Irish Government Department of Education. The interweaving of the support from these four strands offers the potential for a strong partnership for progressing inclusion.

Qualified teachers, working in the area of Inclusion/SEN at primary (4–12 years) and post-primary (12–18 years) levels, receive government funding (which includes their course fee, a period of paid leave with substitute cover) to participate in a year-long post-graduate program of PL. Access is through an open competition supported by the school's recommendation. While the precise components of the programs vary with the host institution, they share common elements. During their paid leave, teachers are based in a university or college of education. There they participate in an intensive series of lectures, workshops, seminars and tutorials relating to a range of topics on inclusive education. Teachers also visit or take up placements in other education settings. These vary from observation to conducting assessments to individual or group teaching. As part of the coursework assessment, teachers write academic literature reviews and undertake school-based research projects in their own schools on diverse areas such as diagnostic teaching, developing and implementing education plans, collegial collaborative practices and parent-professional partnerships. These assignments are in addition to their normal teaching and special education related duties. They are supported in these endeavours by college/university staff that visit the schools, assess teaching practice and offer individual, team and whole-school-community inservice. Teachers who successfully complete all modules are awarded a university accredited Graduate Diploma in SEN and are entitled to an additional allowance from the government if they remain working as inclusion specialists. Since 2003, this 4-ply model of PL has been available each year to teachers who work in this area in mainstream schools in Ireland.

Support for System/Government Component of 4-ply

In advancing a policy of inclusive education, the Irish Government Department of Education has introduced relevant policy and supplied additional funding. This systemic support is a crucial element of the 4-ply model.

Underscoring the transformation from exclusionary to inclusionary practices in schools are two main changes, firstly a change in the school and education system's culture, ethos and organisation, and secondly, a change in the knowledge, skills and dispositions of teachers. The measures required to achieve this transformation require a coherent, long-term approach targeting both system and school level change (Dyson & Millward, 2000). In implementing systemic support for inclusion, Slee (2006) notes that it is the "inside work of budget operations that shapes and limits the scope of activity" (p. 117) rather than the quality and persuasiveness of the discourse. In demonstrating a positive attitude to inclusion, there have been increases in provision for PL in "special education" in order to build capacity in the Irish education system (DES, 2006). Given the previously low base of resources allocated to special education, this was a long awaited, much needed move (Griffin & Shevlin, 2007).

The funding of the post-graduate diploma in inclusion is one of a range of the Department's measures to build system capacity for inclusion is a case in point. The funding support covers several areas. In addition to the teachers' course fees paid and a substitute teacher provided to cover the teacher's absence from school, seconded posts are provided to the host university/institution to increase their capacity to provide personnel for lecturing, school visits and research. Furthermore, finance is available for materials and other course related costs. Indeed, this evidence of supporting policy with funding emphasizes the degree of Department of Education commitment to inclusion. In addition to the funded diploma, other state funded professional learning opportunities exist. A short course, from a half-day's length upwards, in special needs teacher education is provided by a number of teacher support agencies. Most are government funded and free to participants. Some are certified or attract credits towards certification and some are school-based and others provided at external locations. A significant provider of courses is the Special Education Support Service (SESS) established by the Department of Education and Science (DES) in 2003. These organisations offer a range of support services to teachers, some school based and some based in regional centres. Courses are mainly one day events with some linked series. In certain instances they may be linked to accreditation. Among other activities, this initiative assists teachers and schools through individual teacher/school inservice and regional inservice. Further assistance, in the area of whole school planning for SEN, is available through the DES primary and post-primary school development planning initiatives. Additional professional learning opportunities are available through curriculum and classroom practice oriented support programs provided by the Second Level Support Service (SLSS) and Primary Support Programme (PSP) both of which are funded by the DES. The teacher education centres and teacher unions also provide short and term-long courses in the area of special needs.

Another source of teacher information on SEN teachers is the commercially produced SEN online courses that are part funded by the DES. Numerous other distance education options are available from Universities and Institutes of Education within and outside of Ireland. On occasion the DES may part fund these courses if deemed appropriate. Overall, a diversity of providers and a range of certified and non-certified options characterize the provision of PL in the area of SEN. However, the general scenario is of systemic support for progressing inclusion through PL and thus, one layer of the 4-ply base is established.

Support for Tertiary Level Component of 4-ply Model

There is a consensus on the importance of higher education institutions in programs of initial and continuing teacher education in that tertiary level programs are perceived to have a

role in presenting research based evidence for learning and teaching thus expanding the teachers' knowledge, understanding and repertoire of skills to enhance their teaching. (Villegas–Reimers, 2003; Sahlberg, 2007; Sugrue et al., 2001). The research–practice gap that is perceived to exist is of particular concern in inclusive education where, although information is available within the research community, students in need of the most effective mechanisms to support their learning are not benefitting from advances in knowledge (Fitzpatrick & Knowlton, 2009). As a consequence, in addition to the importance of tertiary institutions, teacher's clinical practice is perceived as a further key element of PL (Alton–Lee, 2006; Brophy, 2006). This combination gives rise to an academically based clinical program for PL which promotes tight coherence and integration among courses and between course work and clinical work in schools, (Darling–Hammond, 2006). Similarly, the Teachers for a New Era project (TNE) envisions education as an academically taught clinical practice profession and, among other initiatives, seeks to promote closer cooperation between teacher preparation institutions and schools and further, exhorts residencies for teachers in the induction phase (TNE, 2004).

Support for School–community Based Practice Component of 4–ply Model

The research reported here emphasised teachers' requests for networking opportunities. This suggests a wish for collaborative engagement with colleagues, albeit with a preference for working with colleagues in other schools–perhaps a recognition of a lack of expertise in the area of inclusion within the school. The positive benefits of collaborative enquiry have been posited internationally (Loughran, Mitchell, & Mitchell, 2002) and such PL opportunities could be explored further in an Irish context.

The need to move from single, expert–led presentations as the prime source of course input, towards structured, collaborative inquiry into common concerns with opportunities to access expertise has been a concern internationally. In both USA and U.K. studies on teacher PL, researchers noted that the most effective programs are usually longer in duration, allow teachers the opportunity to practise and reflect upon their teaching and are embedded in ongoing teaching activities (Garet, Porter, Desimone, Birman, & Yoon, 2001; Boyle et al., 2004). The conclusion from the USA study was that a choice had to be made between greater overall investment in teacher PL or fewer higher quality programs as the current regime of short inputs for a large number of teachers was ineffective. In the U.K., the conclusion was that longer programs impacted more on teachers' teaching.

Bales and Mueller (2008) refer to the discord that can arise from different settings for aspects of teacher preparation and their potentially negative impact on the transfer of knowledge from one setting to another. This core objective, the transfer of new knowledge and skills to school–based practice is a key criteria of successful professional learning, and even more crucial, is the positive student outcomes stemming from the implementation of the said knowledge and skills. Unfortunately, it would appear that in the main, PL in teacher education has not been characterised by a holistic approach comprising the full cycle of target intervention area, relevant professional learning, implementation, evaluation PL, on arising from a lack of collaboration. It is in counteracting these negative tendencies, that a more integrated vision of professional learning is proposed through the adoption of the 4–ply model. It is through such a fusion that the needs of all students including the most vulnerable members of society will be met with integrity.

Support for Teacher Focus Component of 4–ply Model

The teacher layer is the core element of the 4–ply model. The Barber and Mourshed report *How the World's Best Performing School Systems Come out on Top* (McKinsey & Company, 2007) identified that the best way to improve student outcomes is to educate teachers. They proposed that governments should seek to:

- Select the best for teachers,

- Teach them how to be best educators, and
- Give supports that allow all students to benefit

It is clear that the PL of the individual teacher is at the heart of this policy. The structure of the 4-ply model exhibits this teacher focus.

In a Canadian research project, (Showers, Joyce, & Bennett, 1987), nearly two hundred studies from over twenty years of PL research were reviewed and the key elements for effective teacher education to transfer to practice were distilled. These were the five essential components of theory, demonstration, practice, feedback supported implementation through twenty-five trials. A large-scale study on PL in the science area similarly found that intensive PL was necessary to improve practice as teachers' own learning had been predominantly based on memorization (Garet et al., 2001). The finding here was that fewer high quality professional learning experiences were necessary or an overall higher level of investment in PL to provide high-quality intensive PL for a large number of teachers. The 4-ply model is an example of such a high-quality intensive PL program.

The extent of the supported practice deemed necessary is beyond what is traditionally available to teachers. Schumm and Vaughn (1995) also found that extended in-school support was necessary to implement changes in practice. From their analysis of inclusion related pedagogy they noted three key findings for implementing inclusive strategies: that sharing teacher personal knowledge was insufficient; that externally provided knowledge was insufficient and that intensive support through the provision of clear examples of strategy implementation and orchestration was necessary. They noted that while "traditional workshops may provide teachers with a comfort level, they are not likely to provide the intensive professional training teachers need to work in inclusion classrooms" (p. 216). Although they acknowledged that practitioners have personal knowledge that needed to be interwoven with new knowledge, if there is an overemphasis on affirming teachers' perspectives it can override attention to accessing a larger knowledge base. Conversely, albeit teachers need to be informed of, "an emphasis on external knowledge can overshadow, disempower, and disengage the practitioner" (Schumm & Vaughn, 1995, p. 218-219). A balance must be maintained between the two elements of practitioner knowledge and expert knowledge. In the 4-ply model of PL, the teacher learning required to obtain the post-graduate qualification in special education attests to the teacher focus of the model.

Conclusion

In viewing these research outcomes and related international literature a useful framework for PL emerges. This includes opportunities for accessing external expertise and in-school intensive scaffolded support to enrich teachers' learning beyond that which is possible through isolated, individual learning. Invoking the support of Vygotsky (Vygotsky & Cole 1978) and Bruner's (Bruner, 1973) work in the area of the socio-cultural development of higher mental functioning for this framework offers a theoretical understanding of this model. The 4-ply model's core elements of external expertise and in-school support can be positioned within this theoretical base which predicts greater understanding of complex operations when practitioners are guided by more expert collaborators and when carefully scaffolded supports are introduced and are subsequently gradually withdrawn. Although experience of teaching and reflection on that experience are recognised as valuable tools for developing skills (Schön, 1983), Vygotsky and Bruner's work predict that experiential learning alone will not attain the excellence achievable through collaboration with more expert others. Teachers' PL which is embedded in expanding personal knowledge, practically situated in a school community environment and supported by external tertiary-level expertise will result in beneficial outcomes beyond those attainable without those dimensions. Grounding this teacher professional learning model in a strong pro-inclusion policy, accompanied by appropriate funding, offers a strong, base for

contributing positively to improving teacher practice with the goal of enhancing the education opportunities provided for diverse student populations.

The content of PL programs within this 4-ply model is considered in detail elsewhere (see O’Gorman & Drudy, 2009; O’Gorman et al., 2009). In relation to the context for PL, the research findings presented in this paper offer support for a model of PL that incorporates block release from school to attend courses, teacher-networking opportunities, and school based support.

It would appear that the PL needed to implement and sustain the change from an exclusionary to an inclusionary education system, requires significantly more intensive PL than has been hitherto afforded. The choice for policy makers is whether to invest significantly more money to provide effective programs to a broad range of teachers or to concentrate available resources on fewer personnel; a dilemma in times of scarce resources.

References

- Alton-Lee, A. (2006). How teaching influences learning: Implications for educational researchers, teachers, teacher educators and policy makers. *Teaching and Teacher Education*, 22(5), 612–626.
- Bales, B., & Mueller, J. (2008). Preparing teachers for a new era: Building bridges in the learning-to-teach professional sequence. *The New Educator*, 4(2), 133–151.
- Barber, M., & Mourshed, M. (2007). *How the world's best performing school systems come out on top*. London: McKinsey Company.
- Booth, T., Ainscow, M., Black-Hawkins, K., Vaughan, M., & Shaw, L. (2000). *The index for inclusion*. Bristol: Centre for Studies on Inclusive Education CSIE.
- Boyle, B., While, D., & Boyle, T. (2004). A longitudinal study of teacher change: What makes professional development effective? *The Curriculum Journal*, 15(1), 45–68.
- Brophy, J. (2006). Graham Nuthall and social constructivist teaching: Research-based cautions and qualifications. *Teaching and Teacher Education*, 22(5), 529–537.
- Bruner, J. (1973). *Going beyond the information given*. New York: Norton.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). London; New York: Routledge.
- Coolahan, J. (2003). *Attracting developing and retaining effective teachers—Country background report for Ireland*. Paris: OECD.
- Cordingley, P., & Temperley, J. (2006). *Leading continuing professional development in school networks: adding value, securing impact*. Nottingham, UK: National College for School Leadership.
- Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education*, 57(3), 300–314.
- Davis, P., & Florian, L. (2004). *Teaching strategies and approaches for pupils with special educational needs: A scoping study*. HMSO: Department for Education and Skills.
- Day, C., & Gu, Q. (2007). Variations in the conditions for teachers' professional learning and development: Sustaining commitment and effectiveness over a career. *Oxford Review of Education*, 33(4), 423–443.
- DES(Irl). (2006). *Department of education and science annual report 2006*. Dublin: Department of Education and Science.
- Dyson, A., & Millward, A. (2000). *Schools and special needs: Issues of innovation and inclusion*. London: Paul Chapman.
- Edwards, A. (2007). *Collaborative approaches to preparing and developing effective teachers: Implications from and for research*. Paper presented at the UCET.

- Fitzpatrick, M., & Knowlton, E. (2009). Bringing evidence-based self-directed intervention practices to the trenches for students with emotional and behavioral disorders. *Preventing School Failure*, 53(4), 253–266.
- Florian, L. (2007). *The Sage Handbook of Special Education*. London: Sage.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 30.
- Griffin, S., & Shevlin, M. (2007). *Responding to special educational needs: An Irish perspective*. Dublin: Gill & McMillan.
- Ireland. (1995). *Charting our education future: White paper on education*. Dublin: The Stationery Office.
- Lewis, A., & Norwich, B. (2001). A critical review of systematic evidence concerning distinctive pedagogies with pupils with difficulties in learning. *Journal of Research in Special Educational Needs*, 1(1).
- Lewis, A., & Norwich, B. (2004). *Special teaching for special children?: Pedagogies for inclusion*. Maidenhead, UK: Open University Press.
- Loughran, J., Mitchell, I., & Mitchell, J. (2002). *Learning from teacher research*. New York: Teacher College Press.
- McKinsey & Company. (2007). *How the world's best performing school systems come out on top*. Ireland, UK: McKinsey & Company.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, California/London: Sage.
- Moran, A. (2007). Embracing inclusive teacher education. *European Journal of Teacher Education*, 30(2), 119–134.
- O'Gorman, E., & Drudy, S. (2009). *Professional development for teachers working in the area of special education/inclusion in mainstream schools*. Dublin, Ireland: UCD/NCSE.
- O'Gorman, E., Drudy, S., Winter, E., Smith, R., & Barry, M. (2009). *Professional development for post-primary SEN teachers in Northern Ireland and the Republic of Ireland*. Armagh: Standing Conference on Teacher Education North and South (SCoTENS).
- Organisation for Economic Co-operation and Development. (2005). *Teachers matter: Attracting, developing and retaining effective teachers*. Paris: OECD Publication.
- Persson, B. (2003). Exclusive and inclusive discourses in special education research and policy in Sweden. *International Journal of Inclusive Education*, 7(3), 271–280.
- Sahlberg, P. (2007). Education policies for raising student learning: The Finnish approach. *Journal of Education Policy*, 22(2), 147–171.
- Schön, D. A. (1983). *The reflective practitioner*. New York: Basic Books.
- Schumm, J., & Vaughn, S. (1995). Meaningful professional development in accommodating students with disabilities: Lessons learned. *Remedial and Special Education*, 16(6), 344–353.
- Showers, B., Joyce, B., & Bennett, B. (1987). Synthesis of research on staff development: A framework for future study and a state-of-the-art analysis. *Educational Leadership*, 45(3), 77–87.
- Shulman, L., & Sherin, M. G. (2004). Fostering communities of teachers as learners: disciplinary perspectives. *Journal of Curriculum Studies*, 36(2), 135–141.
- Slee, R. (2006). Limits to and possibilities for educational reform. *International Journal of Inclusive Education*, 10(2/3), 109–119.

- Sugrue, C., Morgan, M., Devine, D., & Raftery, D. (2001). *The quality of Irish teachers' professional learning: A critical analysis*. Dublin, Ireland: Department of Education & Science.
- Thomas, G., & Loxley, A. (2007). *Deconstructing special education and constructing inclusion* (2nd ed.). Maidenhead: McGraw-Hill/Open University Press.
- Thomas, G., & Vaughan, M. (2004). *Inclusive education: Readings and reflections*. Maidenhead: Open University Press.
- TNE. (2004). *Teachers for a new era*. Washington: Carnegie Institute.
- Villegas-Reimers, E. (2003). *Teacher professional development: An international review of the literature*. Paris: UNESCO, International Institute for Educational Planning.
- Vygotsky, L. S., & Cole, M. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, Mass, London: Harvard University Press.

