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Enhancing teacher education: The School-Community Integrated Learning (SCIL) pathway

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Abstract

National Australian reviews advocate exploring new models for preservice teacher education. This study investigates the outcomes of the School-Community Integrated Learning (SCIL) pathway as a model for advancing preservice teachers' understandings of teaching. Thirty-two final-year preservice teachers were surveyed with extended written responses on how the SCIL pathway advanced their understandings of teaching. Results indicated 100% agreement on 6 of the 27 survey items. Indeed, 78% or more preservice teachers agreed that they had a range of experiences across the five categories (i.e., personal-professional skill development, understandings of system requirements, teaching practices, student behaviour and reflective practices). Extended responses suggested they had developed understandings around setting up classrooms, whole school planning processes with professional development, the allocation of teacher responsibilities (e.g., playground duties), parent-teacher interviews, diagnostic testing for literacy and numeracy, commencing running records of students' assessment results, and the development of relationships (students, teachers and parents). Although a longitudinal study is required to determine long-term effects, the SCIL pathway may be viewed as a positive step towards preparing final-year preservice teachers for their first year as fully-fledged teachers.

Keywords: preservice teachers, university-school partnerships, mentoring

Reviews on preservice teacher education continue with calls for more practical connections to school practices, particularly with today's classroom challenges (e.g., Masters, 2009). There are claims of persistent "problems in teacher education" requiring partnerships to "bridge the gap between theory and practice, particularly for practicum" (House of Representatives Standing Committee on Educational and Vocational Training [HRSCEVT], 2007, p. xxi). Despite well reported "inadequate funding of teacher education" (p. xxi), there are expectations for universities and schools to deliver on review recommendations, including rethinking practicum. For decades it has been recognised that school experiences assist preservice teachers to gain necessary pedagogical experiences with opportunities to apply university theory to practice (Little, 1990); however reviews and evidence suggests theory-

practice connections become a challenge (e.g., Lunenberg & Korthagen, 2009; Moore, 2003), particularly within existing teacher education models (Putnam & Borko, 2000). To advance practices in alignment with reform recommendations, preservice teachers need “diverse experiences in a range of school contexts and with a variety of students” (HRSCEVT, 2007, p. 74). As a result of multiple issues surrounding the implementation of reform measures (e.g., funding, school and classroom issues such as behaviour management, political national testing programs, and timing of practicum), other models of teacher education need to be investigated. One study (Hudson & Hudson, 2013) proposed a model of School-Community Integrated Learning (SCIL) that aimed to enhance preservice teachers’ understandings about teachers’ roles and responsibilities, and suggested that cost-effective programs may lead to positive preservice teacher learning outcomes. However it also recommended more research to advance this study. Hence, this current paper investigates the SCIL pathway model for broadening preservice teacher school experiences in cost-effective ways. More specifically, this paper analyses the SCIL pathway for engaging final-year preservice teachers in understanding about teachers’ roles and responsibilities.

Context

This study was part of *Teacher Education Done Differently* (TEDD) project that aimed to provide additional school experiences for preservice teachers. In 2009, as a result of ongoing university-school partnership discussions (Hudson & Hudson, 2006; Hudson & Hudson, 2008), the School Community Integrated Learning (SCIL) pathway was developed to extend the existing teaching experiences. The SCIL pathway involved final-year preservice teachers being placed in schools at the very beginning of the school year as volunteers for three days per week until university commenced; at which time they visited their schools one day per week leading into two final-year practicum experiences and a four-week internship at the same school. It was recommended that preservice teachers change their grade level and teacher for the second practicum experience to ensure a variety of classroom experiences. The SCIL pathway was a voluntary option for final-year preservice teachers and not a compulsory part of the BEd primary program. Mentor teachers could volunteer to have SCIL pathway preservice teachers without assessment pressures; yet roles and responsibilities were outlined for the preservice teachers and mentors.

Stakeholders from the university and schools decided the SCIL pathway would be a non-teaching experience with preservice teachers participating in suggested activities that were outlined to the mentor teachers through university documents. The types of activities included preservice teacher observations of their allocated mentor teacher and other teachers in the school, getting to know the students and daily routines, assisting in small group activities, visiting special education units and specialist teachers, participating in playground duty and staff meetings, assisting with sports and swimming carnivals, and becoming familiar with school policies and procedures. However, the preservice teachers could negotiate teaching experiences with the mentor teacher. When the SCIL visits commenced, the faculty of education university coordinator stayed in regular contact with the school site coordinators to ensure the preservice teachers were fulfilling their requirements and attending their allocated schools. Each school site coordinator stayed in regular contact with their mentor

teachers. The university coordinator visited each school to oversee the working of the SCIL pathway and discuss the progress of the preservice teachers.

Participant demographics

The study involved 32 final-year preservice teachers (7 males, 25 females) from two campuses (18 from the larger campus and 14 from the smaller campus) involved in the SCIL pathway. The teaching classes varied from Preparation (around 5 years of age) through to Year 7 (about 12 years old), which included 60% who indicated they were on composite classes. Twenty-five percent of participants surveyed identified themselves as mature-aged students. The SCIL pathway was not another practicum or internship design. These final-year preservice teachers were not expected to teach whole lessons mainly because of the time required to plan for lessons that may conflict with university workloads. Nevertheless, 22 preservice teachers had volunteered to teach whole lessons (12 taught between 1-5 lessons, 8 taught between 6-10 lessons and 2 taught 11 or more lessons).

Data Collection Methods and Analysis

This study used a survey with extended written responses to understand the impact of the School-Community Integrated Learning (SCIL) pathway for final-year preservice teachers. The survey drew from other works (e.g., Hudson & Hudson, 2011; Hudson & Hudson, 2012) as a basis for survey item construction. The survey items were collated under broad categories (i.e., personal-professional skill development, understandings of system requirements, teaching practices, student behaviour and reflective practices). For instance, under the category “personal-professional skill development” there were six items constructed around: enthusiasm for teaching, communication with students, confidence as a teacher, professional relationships with colleagues, understanding of teacher’s relationships with parents, and understanding the teacher’s role. Respondents used a five part Likert scale ranging from strongly disagree to strongly agree (uncertain in the middle) to respond to each item. Descriptive statistics (percentages, means, and standard deviations) were collated for analytical purposes (see Creswell, 2012).

The extended written responses focused on the following broad areas: new experiences, developing knowledge and skills, relationship with the mentor, and program implementation. Example questions for the preservice teachers included: (1) Which aspects of schooling and teaching were you able to observe, or be part of, as a result of commencing the school year? and (2) What specific skills do you think you developed or enhanced as a result of this SCIL pathway? Data were collated into themes (also known as categories), that is, “similar codes aggregated together to form a major idea”, and analysed through descriptions provided by the participants (see Creswell, 2012, p. 245).

Results and Discussion

Final-year preservice teachers ($n=32$) were surveyed across the five categories (personal-professional skill development, understandings of system requirements, teaching practices, student behaviour and reflective practices) to understand the degree the SCIL pathway had contributed to their understandings of teaching and associated practices. All participants ($n=32$) agreed that the SCIL pathway helped them to understand the teacher's role, facilitate communication with students, and develop professional relationships with colleagues (Table 1). All but one participant claimed that it increased their confidence towards becoming a teacher and for understanding parent-teacher relationships. Reviews highlight beginning teachers' abilities "to communicate with parents" as a consistent concern for teacher education (HRSCEVT, 2007, p. 8). Parents are encouraged to take active involvement in their children's education for which schools are "aware of the importance of building relationships with parents and the community" (Masters, 2009, p. 55). Data indicated that the SCIL presented as an opportunity for these preservice teachers to develop understandings about parent-teacher relationships, particularly in their final year before entering into the profession as a beginning teacher.

Table 1: *Personal-professional skill development*

Practice or attribute	%*	<i>M</i>	<i>SD</i>
Understanding the teacher's role	100	4.75	0.44
Communication with students	100	4.66	0.48
Professional relationships with colleagues	100	4.66	0.48
Confidence as a teacher	97	4.59	0.56
Understanding parent-teacher relationships	97	4.50	0.67
Enthusiasm for teaching	94	4.72	0.58

* Percentage of participants who agreed or strongly agreed.

These final-year preservice teachers will more than likely graduate to enter the profession the following year for which understanding the education system requirements will be essential to their induction into a school. Their survey responses indicated 100% agreement that the SCIL pathway assisted them to understand staff roles and responsibilities along with school practices and policies (with minimal variation in most responses, see standard deviations, Table 2). Although understanding whole school planning was signalled by 78% of participants, this also infers around a quarter were uncertain or disagreed that the SCIL pathway lead them to understand this practice.

Table 2: *Understanding system requirements*

Practice	%	<i>M</i>	<i>SD</i>
School staff roles and responsibilities	100	4.66	0.48
School practices and policies	100	4.63	0.49
Creating a safe and supportive learning environment	97	4.59	0.56
School aims	88	4.34	0.79
Whole school planning	78	4.06	0.98

The majority of participants agreed that the SCIL pathway presented experiences to build their teaching practices. In line with research concerns that beginning teachers have with testing pressures (Certo, 2006), participants indicated that 78% agreed the SCIL pathway provided more understanding about strategies for assessing students' learning. Reviews indicate consistent concerns for teacher education around dealing "adequately with classroom management issues, [and] to perform assessment and reporting tasks" (HRSCEVT, 2007, p. 8). Importantly, beginning teachers report that they need to understand how to set up a classroom from day one of the school year, for which 97% of final-year preservice teachers in this study suggested they have gained such understandings. As teaching has its own discourse, 97% also agreed that the SCIL pathway provided more experiences for understanding the educational language for teaching. Indeed, 78% or more participants claimed the SCIL pathway assisted in understanding teaching practices (Table 3).

Table 3: *Understanding teaching practices*

Practice	%	<i>M</i>	<i>SD</i>
Educational language for teaching	97	4.53	0.67
Setting up a classroom for the future	97	4.44	0.80
Content knowledge	94	4.28	0.58
Appropriate educational challenges	91	4.34	0.75
Monitoring of students' activities	91	4.19	0.69
Planning in teams for teaching	88	4.41	0.95
Well-designed activities	84	4.19	0.69
Strategies for solving teaching problems	84	4.13	0.75
Ideas for effective hands-on activities	81	4.16	0.81
Strategies for assessing students' learning	78	3.84	0.88

Ninety-one percent or more preservice teachers indicated that the SCIL pathway assisted in their understanding of student behaviour and reflective practices (Table 4). Beginning teachers can have "struggles with classroom management" (Blair, 2008, p. 99). Indeed, all but a few agreed or strongly agreed that the SCIL pathway assisted their understandings around classroom rules and routines (97%) and developing a positive emotional climate (94%). According to the participants, this pathway developed their reflective practices and viewpoints for teaching with all agreeing that they understood ways to improve teaching practices (Table 4).

Table 4: *Understanding student behaviour and reflection on practice*

Item number and practice	%	<i>M</i>	<i>SD</i>
Establishing class rules and routines	97	4.56	0.56
Effective classroom management	94	4.44	0.62
Developing a positive emotional climate	94	4.44	0.72
Ways to improve teaching	100	4.56	0.50
Reflective practices for improving teaching	91	4.25	0.62
New viewpoints for teaching	91	4.28	0.73

Extended written responses provided further insights into the preservice teachers' activities undertaken during the SCIL pathway. Indeed, these participants listed a full range of learning experiences as a result of the SCIL pathway. For instance:

- Everything that they [mentor teachers] did, marking work, observing students, helping students etc (Participant 1)
- Reading groups, maths groups, IEP [Individual Education Plan] meetings, classroom setup, buddy class, sight word activities (Participant 3)
- So far I have observed, (and participated in) individual assessment, small group, whole class science unit (Participant 4)
- Classroom management, spelling activities, roll marking, art lessons (Participant 5)
- Roll call, rotational activities, maths and science lessons, classroom management, spelling assessments (Participant 6)

Their written responses were collated into the following themes: professional development with teachers, working with students in literacy and numeracy groups, observations of classroom practices, development of classroom management techniques, planning and implementing differentiated learning lessons, devising assessment on learning, planning for teaching, and undertaking the breadth of teachers' duties.

Nine participants (8, 10, 11, 14, 16, 19, 24, 29 & 27) highlighted, as a response to one question, working with teachers through professional development opportunities as a way to understand and engage with teachers' work, for instance: "work with other teachers (e.g. meetings), small group work" (Participant 11) and "professional development meeting on pupil-free days" (Participant 16). Further questioning revealed an understanding on why teachers have professional development days: "The purpose of creating whole school goals during the three student-free days" (Participant 20). Also, there were nine participants (1, 5, 6, 17, 18, 20, 22, 23, 25) who claimed their activities included working with students in literacy and numeracy groups such as: "supporting writers and numeracy support and record gathering" (Participant 20) and "working with ESL [English as a second language] students, student language and maths rotations" (Participant 22).

In addition, nine preservice teachers (3, 7, 9, 14, 15, 18, 19, 21, 22) emphasised working with specific students for learning how to differentiate learning: "student-needs meeting, in class assistance with small group work, inclusive education – working with Year 3 II [Intellectual Impairment] student" (Participant 14) and "helping kids with learning difficulties, behaviour difficult students, intense content area teaching to small groups" (Participant 15). On another

written response item, Participant 15 expanded her view about managing students: “It was helpful to see how teachers set up inclusive classroom environments and set up a standard of social interaction. It was also great to observe directly how ‘troubled’ students learn and learn what they want from their schooling”. Participant 9 also explained further about the relationship between expectations and behaviour management, “How the teacher sets up the room and how she groups the students, one thing that I did like was that she told the students her expectations in relation to behaviour”. They noted that teacher expectations and class rules were presented at commencement of the school year so students were aware of their parameters for engaging in classroom activities.

Seven participants (4, 10, 11, 13, 23, 24, 32) specifically highlighted the value of observing the classroom teacher for understanding the teacher’s roles and responsibilities, and a further six (3, 5, 6, 8, 15, 19) wrote about involvement with classroom and behaviour management. For example, Participant 19 wrote: “I have had the opportunity to visit Year 1 and 3 classes where I have worked with students with ASD [Autism Spectrum Disorder]”. Indeed, Participant 19 became involved with the learning support unit and, consequently, gained significant experience in working with students diagnosed with ASD: “I have had lots of experience working with students with ASD and have observed how different classroom teachers adapt lessons to support students with ASD” (Participant 19).

Importantly, these preservice teachers began to recognise the breadth of teachers’ roles and responsibilities, including playground duties, swimming schemes and cross country running involvement, school camps, teachers’ meetings, parent-teacher nights, and interschool sports. It also allowed the participants opportunities to investigate other roles and responsibilities within the school for which teachers have close interactions: “Learning support (program, roles of teachers and teacher aides and school officers), library – role of librarians and purpose of library lessons” (Participant 21). Furthermore, to understand teachers’ roles and communicate effectively with teachers requires knowledge about the education discourse, which can be confusing for those entering the profession. These SCIL opportunities provided ways for the preservice teachers to develop educational discourse: “I was able to be a part of the planning process and understand all the educational jargon that gets thrown around” (Participant 17).

On one survey question, planning for teaching was noted by four participants (8, 9, 12, 28) as was assessment on learning (23, 24, 28, 31) such as “DMT (maths testing grades 1-2), English testing (grades 1-2)... running records (grades 1-2)” (Participant 23, parenthesis in original) with many others reporting on very specific programs operating within the school and/or classroom (e.g., “chess club” Participant 22 and “Year five smart moves” Participant 31). Yet further questioning on the survey revealed three others also highlighted assessments, including diagnostic tests, running records and standardised testing. To illustrate: “I was able to see the diagnostic process of teachers determining students’ levels” (Participant 22); “assessing students’ literacy and numeracy proficiency” (Participant 10); and “running records for each student, PAT-M and PAT-R testing” (Participant 8).

When probed further about their learning, most participants claimed developing relationships with students, teachers and parents as a highlight. Various participants observed how the teacher interacted with parents during informal and formal meetings. Indeed, all participants claimed the SCIL pathway was of value except for participant 10 who stated it was valuable: “only in some ways, the teacher knew what she was doing but did not explain unless I specifically asked for clarification, as lots of the teacher’s work and planning is done at home”. Yet nearly all responses claimed emphatically the SCIL pathway was valuable with comments such as: “an amazing opportunity that I am very pleased I was involved in. The most valuable aspect of this experience was seeing how a classroom is setup, so seeing year level planning, setting up behaviour management and developing relationships” (Participant 24). Other responses presented very similar values with particular emphasis on developing relationships, as indicated in the following:

- Yes. This program was valuable as it allowed me to experience the teaching conducted in the beginning weeks of school. Also, gaining experience with the learning support unit was extremely valuable (Participant 19)
- Yes. The community of the school, allowing time to create and build on networks before commencing prac is invaluable (Participant 22)
- Yes. Getting to know the school environment was the biggest advantage I took out of this, usually it takes 1-2 weeks during normal prac but now I feel as though I’m already part of the staff (Participant 23)

Some noted the value of the SCIL experience as a theory-practice connective: “Yes, as I am able to put into practice theory and see results immediately” (Participant 28) and “Yes, this program should be compulsory for all fourth year students. It is the best prac of uni so far. It is so hands-on that it makes all the theory worthwhile” (Participant 32). Surprisingly, all participants except 12, 19 and 22 commented they did not need any other support to be involved in the SCIL pathway. The exceptions brought forward possible improvements to the pathway, to illustrate: “Site coordinator to ensure SCIL learning guidelines are being met (to ensure against work overload)” (Participant 12); “I did need support from the ULA [university liaison adviser] to prompt the site coordinator to become more organised” (Participant 19); and “A guide – what is our purpose? What are some recommended roles and responsibilities?” (Participant 22). Indeed, there was a section that prompted for advice to enhance the SCIL pathway, which was mainly focused on “making it compulsory” (Participant 1) as a “standard part of the course and not an option” (Participant 9), up-skilling some of the teachers (e.g., “teachers need to be mentoring the students” Participant 3), and “more communication between the school supervisor and uni liaison to allow for smoother process... make clearer expectations” (Participant 27). Although it was noted as important to “impress on other students how beneficial the experience is to their job prospects” (Participant 20), “Make sure students are assigned a mentor at their school, a booklet perhaps on suggested roles for the SCIL student, a certificate of participation” (Participant 22) would advance the appeal and productivity in the program. One participant (23), despite advocating learning during the SCIL pathway, had stated, “everything seemed full on for the entire staff and at some stages I felt as though I was ‘in the way’”.

There were other unanticipated advantages to the SCIL pathway such as organising and allocating teacher aide time, altering timetables, everyday duties (e.g., roll marking), involvement in specialist lessons, dealing with multi-aged settings and managing stressful situations, some of which can be noted in the following:

- How teachers create a community of learners to make students feel part of the classroom (Participant 25)
- How teachers cater for a multi-aged setting – how this differs from a more traditional model (Participant 25)
- I loved having the opportunity to jump from class to class, seeing how different grades implemented their planning and what different methods they used. I also spent time teaching or assisting in specialist lessons with different grade levels. An experience we are not able to do with one select class on prac (Participant 31)
- It was really great to see how teachers dealt with the start-of-the-year stress and tasks and how they managed it all. It was great to see them organising their classroom and meet students for the first time. Put me more at ease for my first time next year! (Participant 18)

Conclusion

The final-year preservice teachers involved in the SCIL pathway indicated that from the beginning of the school year they were able to observe the setting up of classrooms, whole school planning processes with professional development, the allocation of teacher responsibilities (e.g., playground duties), parent-teacher interviews, diagnostic testing for literacy and numeracy, commencing running records of students' assessment results, and the development of relationships, particularly for behaviour management. The development of collaborative parent-teacher relationships was emphasised as a learning opportunity for these preservice teachers. As a model for advancing teacher education, the SCIL pathway appeared to offer a supportive learning environment for the preservice teachers to engage in practices that may not be available during practicum experiences. A variable contributing to predicting beginner teacher burnout is the "lack of collaborative and supportive ambience" (Gavish & Friedman, 2010) for which SCIL may commence forming ideas for greater collaboration. Fostering positive relationships early in the school year may also assist in facilitating professional commitment, as a way to retain teachers in schools (Waddell, 2010). These preservice teachers indicated a sense of purpose around teachers' activities within the school, whether teachers' professional development sessions as insights into professional learning, teachers' multiple school roles or how teachers manage multi-grade levels.

Governments and universities seek cost-effective measures to address reviews into teaching and teacher education. Connecting theory with practice, understanding how classrooms are set up from the beginning of the school year, establishing literacy and numeracy programs, and forming collaborative relationships with teachers and parents are noted in review recommendations (e.g., HRSCEVT, 2007; Masters, 2009). The SCIL pathway provides cost-effective measures to address these issues, where preservice teachers and mentor teachers volunteer to be involved. One aim of the pathway is benefits for all in which the preservice teacher learns about the diverse functions of a school, and the school benefits through the active contribution of the preservice teacher to the school community. The pressures of assessment are replaced by preservice teachers' learning about teachers' roles and responsibilities, and the school and classroom environments while providing voluntary

classroom assistance. A further study is needed to determine how mentor teachers and school students directly benefit from this SCIL arrangement. Although a longitudinal study is required to determine long-term effects on preservice teachers entering the profession, the SCIL pathway may be viewed as a positive step towards preparing final-year preservice teachers for their first year as fully-fledged teachers.

References

- Blair, D. V. (2008). Mentoring novice teachers: Developing a community of practice. *Research Studies in Music Education*, 30(2), 99-117.
- Brady, L. (2000). Directions and priorities in teacher education. *Australian Journal of Teacher Education*, 25(1), 1-9.
- Certo, J. L. (2006). Beginning teacher concerns in an accountability-based testing environment. *Journal of Research in Childhood Education*, 20(4), 331-349.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th Edn.). Upper Saddle River, NJ: Pearson Education Inc.
- Deng, Z. (2004). The role of theory in teacher preparation: An analysis of the concept of theory application. *Asia-Pacific Journal of Teacher Education*, 32(2), 143-157.
- Gavish, B., & Friedman, I. A. (2010). Novice teachers' experience of teaching: a dynamic aspect of burnout. *Social Psychology of Education*, 13(2), 141-167.
- House of Representatives Standing Committee on Educational and Vocational Training [HRSCEVT]. (2007). *Top of the class: Report on the inquiry into teacher education*. Canberra: The Parliament of the Commonwealth of Australia.
- Hudson, P., & Hudson, S. (2006, November). Initiating community engagement for enhancing preservice teacher education. In *Proceedings of the EDU-COM 2006 International Conference, Engagement and empowerment: New opportunities for growth in higher education*. [CD ROM]: Edith Cowan University; Khon Kaen University; Bansomdejchaopraya Rajabhat University, Bangkok, Thailand.
- Hudson, S., & Hudson, P. (2008, July). *Devising university-based programs for the wider educational community*. Paper presented at the Paris International Conference on Education, Economy & Society, Paris, France.
- Hudson, P., & Hudson, S. (2011, July). *Partners in education: The Teacher Education Done Differently (TEDD) project*. Paper presented at the Australian Teacher Educators Association (ATEA), Melbourne.
- Hudson, P., & Hudson, S. (2012). Examining preservice teachers' applied learning experiences in the Teacher Education Done Differently (TEDD) project. *Teacher Education and Practice*, 25(3), 421-440.
- Hudson, S., & Hudson, P. (2013). The School-Community Integrated Learning (SCIL) pathway: Towards addressing theory-practice connections. *Journal of Education and Learning*, 2(1), 9-19.
- Little, J. W. (1990). The mentor phenomenon and the social organisation of teaching. *Review of Educational Research*, 16, 297-351.

- Lunenberg, M., & Korthagen, F. (2009). Experience, theory, and practical wisdom in teaching and teacher education. *Teachers and Teaching: Theory and Practice*, 15(2), 225–240.
- Masters, G. N. (2009). *A shared challenge: Improving literacy, numeracy and science learning in Queensland primary school*. Camberwell, Victoria: Australian Council for Educational Research.
- Moore, R. (2003). Reexamining the field experiences of preservice teachers. *Journal of Teacher Education*, 54(1), 31-42.
- Putman, S. M. (2009). Grappling with classroom management: The orientations of preservice teachers and impact of student teaching. *The Teacher Educator*, 44(4), 232-247.
- Waddell, J. H. (2010). Fostering relationships to increase teacher retention in urban schools. *Journal of Curriculum and Instruction*, 4(1), 70-85.