Preservice Teachers' Learning Among Students With Autism Spectrum Disorder

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This article reports on a collaborative venture between Autism Spectrum Australia and the University of Western Sydney, New South Wales, Australia. The Social Club network was formed for children and adolescents to provide structured opportunities for positive peer interactions in safe, stimulating and nonjudgmental environments. The Social Clubs were run by expert facilitators with additional workers drawn from preservice teachers undertaking a service-learning unit of study within the Master of Teaching Secondary course at the University of Western Sydney. The research design included surveys and reflections. Data were drawn from 4 sources: 58 parent survey responses, 51 Social Club member survey responses, 9 facilitator survey responses and 9 preservice teachers' reflections. Data analysis was framed by Bourdieu's work, which refers to the allocation of social power. After the experience, surveyed parents confirmed that their children were relaxed when changing topics in a conversation and working in groups. Members demonstrated that they engaged with other members and with preservice teachers. Club facilitators felt that the preservice teachers developed an understanding that students with autism spectrum disorder thrive in structured environments and that they would set up their own classrooms accordingly. For the future teachers, it was authentic learning that enriched their preparation for the classroom, however multilayered its student population might be.

Keywords: autism spectrum disorder, preservice teachers, social skills training

Introduction

It is critical for preservice teachers to have a deep understanding of the learning difficulties of students with autism spectrum disorder (ASD). Internationally, there is a growing number of students with ASD (Centers for Disease Control and Prevention, 2008; Australian Advisory Board on Autism Spectrum Disorders, 2007), so it is reasonable to expect that preservice teachers will encounter students in their classrooms as they enter the teaching profession. Consequently, this is a significant issue for teacher education. This article uses Bourdieu's theory of social capital as a conceptual framework to explore learning from the perspective of preservice teachers (Bourdieu, 1986). This is a reapplication of Bourdieu's theory, moving it out of its cultural context and into the area of students with

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special learning needs. Evidence from the preservice teachers' reflections presented in this study confirms successful learning in establishing rapport with students with ASD and developing strategies for future classrooms.

Autism Spectrum Disorder

ASD is a permanent neurodevelopmental disability with three main areas of impairment: communication, behaviour and social relating. Statistics from the United States (US; Centers for Disease Control and Prevention, 2008) estimate 1 in 150 children with ASD. Current diagnosis rates in all regions of Australia suggest that around 1 in 160 of the population is diagnosed with ASD (Australian Advisory Board on Autism Spectrum Disorders, 2007). The ability of children with ASD to form and sustain peer relationships is severely impaired as a result of attention deficit disorders, thinking and learning style differences, impulse control problems and other complicating features. Children with ASD are most often excluded from the social world of their peers. They are socially and emotionally vulnerable. Although they may be aware of their differences, they may be unable to 'read' social cues or social situations. These are the issues that adults with ASD have recently reported as those that negatively impacted their schooling and continue to affect their adult lives (Autism Spectrum Australia [Aspect], 2012). It is essential for preservice teachers to have strategies to address the learning difficulties of students with ASD. Consequently, research in this area is important.

Unlike their peers, who may have a sophisticated repertoire of social skills, young people with ASD cannot quickly or flexibly match their social information processing or emotional state, or adjust their behaviour so that they respond appropriately, to all the spontaneous peer interactions in the classroom and playground (Perry, 2004). Outside of school, they similarly struggle to understand situations that may include siblings or neighbourhood playmates. The impact of this almost universal misunderstanding and isolation on the emotional state of young people with ASD cannot be overstated.

Several types of intervention have been tried with young people with ASD to teach social skills. Strategies for children have included carefully designed play spaces and adult mediation in support of peer play (Wolfberg & Schuler, 1993). A range of sociodramatic scripts (set at a carnival or a pet shop) were used to increase interactions of children during play sessions (Goldstein & Cisar, 1992). A peer network strategy (where students without ASD tutored students with ASD in vocabulary, comprehension games and conversation responses) supported previous research showing that peer networks were a viable strategy for increasing social interaction skills for students with autism (Garrison-Harrell, Kamps, & Kravits, 1997). This was an example of proximity intervention involving regular opportunities for children or adolescents with ASD to interact with a typically developing peer. However, it is evident from proximity literature that peer modelling alone is insufficient to bring about generalised and enduring social change in children with autism (Weiss & Harris, 2001).

Adolescents. There are fewer studies of adolescents and the challenges for adolescents with ASD are of a different magnitude to those of younger children. The challenges adolescents experience may be exacerbated, as social difficulties are the most defining feature of ASD. Impairments in social referencing, comprehension and expression of emotions result in a different learning trajectory, with social understanding and competencies acquired cognitively rather than intuitively (Mundy & Burnette, 2005). Due to their social challenges, adolescents with ASD need help to develop social awareness, social-emotional

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understandings and social skills (Wing, 1993). Adolescent students with learning disabilities may see education as a pathway to future employment and socially valued roles (Bowman & Weinkauf, 2004; Rojewski, 1996, as cited in Camarena & Sarigiani, 2009). However, these adolescents may be 'derailed . . . from successfully meeting [their] aspirations' (Camarena & Sarigiani, 2009, p. 116). Camarena and Sarigiani (2009) investigated students who were successful in navigating the university world. They found that students with ASD who received educational services at primary and secondary level have entered universities and colleges. Consequently, some US colleges have offered students with ASD guidance on interpersonal skills, such as interpreting body language and understanding social norms (Camarena & Sarigiani, 2009). This initiative for US college students, having been developed for young adults, did not inform the Aspect Social Clubs but is similar in intent. The Social Clubs are designed for school-age adolescents and engage preservice teachers in service learning as they work alongside professionals in Western Sydney.

The growing number of students means increasing demand for services and a strong imperative for teachers to be prepared to meet the challenges of working with adolescents with special needs. Mehring and Dow (2001) wrote that 'teachers of students with autism must be particularly knowledgeable about effective instruction strategies . . . [and preservice teachers can learn from] expert teachers [who] use knowledge about students and their learning to fashion lessons that connect ideas to students' experiences' (pp. 71–72). In effect, they advocate for 'an increasing supply of well trained professionals to serve the needs of students with autism' (Mehring & Dow, 2001, p. 86). One of the ways for preservice teachers to learn is to work alongside professionals in the field. The Autism Society of America declared autism 'the new human rights frontier' (Grossman & Barozzo, 2007, p. 8). Furthermore, they stated that fundamental human rights for people with autism include 'the right to independence and a meaningful life; the right to decision-making; access to resources; and freedom from threat, discrimination, social exclusion and abuse' (Grossman & Barozzo, 2007, p. 11).

Australian Adolescents. The Australian approach to inclusion in schools is similar to that in the US. For example, students with high-functioning autism are included in the general classroom with age-level peers (Mehring & Dow, 2001). However, during the last 20 years, research and reviews into inclusion in Australian schools have revealed that the inclusion of students with disabilities in schools has proved challenging (Australian Government Department of Education, Science and Training [DEST], 2002; Australian Parliament, Senate Employment, Education and Training References Committee, 1998; Chadbourne, 1997; Department of Education of Western Australia, 2001; Department of Education Tasmania, 2000; Ford, 2007; Forlin, 2001; Hay & Winn, 2005; Ministerial Taskforce, 2004; Nitschke & McColl, 2001; Vinson, 2002). There is mandatory study in inclusive education for students with special needs in all states. Nevertheless, official reviews and research suggested inclusion in secondary schools has proved to be more challenging than in the primary school context (DEST, 2002; Vinson, 2002).

Positive effects have been reported from an Australian study using role-play and direct skills teaching to facilitate emotional understanding and social communication (Keane, 2007). Moreover, peer interactions using special interests and shared experiences have also been found to be significant in international contexts (Sainsbury, 2000). A number of studies have reported successful outcomes through using social groups for children and adolescents with ASD (Barnhill, Cook, Tebbenkamp, & Tappscott, 2002; Plimley & Bowen, 2006; Williams, 1989).

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Conceptual Framework

Research design is founded on constructs of a conceptual framework that explains 'the presumed relationships among them' (Miles & Huberman, 1984, p. 18). For this research, the conceptual framework is based on the work of Bourdieu, referring to his analysis of the allocation of social power (1977, 1986). Using this analysis enables a focus on the preservice teachers' reflections on groups of students with ASD being disempowered within the educational process. Bourdieu (1997) suggests that when schools take no account of the discourses and practices of marginalised groups they enact a form of institutionalised *symbolic violence*. Bourdieu describes symbolic violence as social power that imposes limitations on those who do not have the social capital required to combat challenges, in this case, imposed by the mainstream system (Bourdieu & Passeron, 1977). The concept of symbolic violence is significant not only in its connection to schooling, but also because it makes individuals become aware of their social limits in a field and their limited amounts of social capital.

Bourdieu (1997) described social capital as the aggregate of resources that are linked to a network and are available to its members. A person gains social capital through participation in a social network that 'provides each of its members with the backing of the collectively-owned capital', a *credential* that entitles them to credit, in the various senses of the word (Bourdieu, 1986, p. 249). One's social capital depends on 'the size of the network of connections' an individual can rely on for social benefit (Bourdieu, 1986, p. 249). As a school functions as a social network, social capital is a factor in the institution of schooling. So, too, does a club function as a social network.

The concept of symbolic violence is significant for this study on service learning, because as students with ASD become aware of their limited amounts of social capital, their identities are affected by this developing 'sense of their social limits' (Bourdieu, 1986, p. 115). Underlying this study is the capacity building of preservice teachers through their involvement with a group of students with ASD who have been marginalised by their learning disability. It is critical for preservice teachers to be aware of negative impacts on the developing identities of their students, including those who are marginalised by their learning disability. Through positively engaging with explicit teaching practices, schools and service providers may remove symbolic violence through *pedagogic action*, as adolescents internalise positive messages through official discourse and the daily practices of the classroom.

Need for a Social Network

This research reports on a collaborative venture between Autism Spectrum Australia (Aspect) and the University of Western Sydney (UWS). Aspect is Australia's largest not-for-profit autism-specific service provider. They rely on donations, community support and grants to enable them to provide services for people with ASD and their families. Through a grant, they have initiated a Social Club network for children and adolescents (8–18 years) with the aim of providing structured opportunities for positive peer interactions and social skills development in safe, stimulating and nonjudgmental environments. Each of the Social Clubs is run by two expert facilitators. Additional workers are drawn from preservice teachers undertaking a service learning unit of study within the Master of Teaching Secondary course at UWS.

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Service Learning Unit

UWS is situated on six campuses serving the community of Western Sydney. The Master of Teaching Secondary program is located at Penrith, below the Blue Mountains in New South Wales (NSW), Australia. As Sydney has sprawled westward, Greater Western Sydney (GWS) has become one of its most diverse regions, with a patchwork of poor and prosperous places (Morgan, 2006) including government-funded social housing, where the most disadvantaged, including new immigrants and Indigenous families, may take up residence. Access to employment opportunities is constrained by transport. In close proximity to affluence, there are large community sectors with low socioeconomic status. Such status of the residents is in stark contrast with the fact that 150 of the nation's top 500 companies are located within GWS. Over a period of 15 years, reports (Fagan & Dowling, 2005; Mee, 2002; Murphy & Watson, 1997) consistently show that low household income and employment levels characterise the lives of a significant number of people living in GWS.

The program Professional Experience 3 (known as PE3 in the Master of Teaching Secondary course) at UWS requires preservice teachers to complete 60 hours of work in a service learning context that directly addresses social disadvantage. Multiple strands have evolved with community partners enabling the program to be responsive to community needs; as such, the program is well regarded in the community. Each year up to 500 students complete a PE3 placement, many of them in disadvantaged schools or settings. The UWS PE3 program is distinguished by the complexity of its multiple strands, its involvement of every preservice teacher in the Master of Teaching Secondary course and its emphasis on turning around success for learners in disadvantaged circumstances. Those undertaking PE3 complete a reflection about their learning and the learning of those with whom they have engaged. In 2009, three students chose the option of the Social Clubs and a further six in 2010. In its partnership with Aspect, preservice teachers have the chance to engage more profoundly with young people with special needs in the development of their social functioning, which is a prerequisite for academic success.

The Social Clubs Intervention

The Social Clubs for students with ASD meet every fortnight and provide a social outing for children and adolescents of both genders aged between 8 and 18 years. The clubs have been funded as part of the Peer Support Network through the NSW Government Department of Family and Community Services, specifically Ageing, Disability and Home Care (ADHC). Commencing in 2009, the clubs catered for 75 children and adolescents in the first year and for 137 in 2010. In 2010, there were nine facilitators involved in the suburbs of Western and inner Western Sydney. The number of children and adolescents attending varied each fortnight, but there were usually about 20 members at a time in any one club. Some of the activities offered have included tenpin bowling, rock climbing, horse riding, putt-putt golf and swimming. The social events allow children and adolescents to mingle with like-minded young people, enhance social skills and make friends. These events also allow parents attending to share stories with other parents and form a support network. If the parents have problems they are unable to share with parents of children in a mainstream high school, it is a good opportunity for them to spend time with the parents of other adolescents with ASD. These opportunities also reduce the sense of isolation as parents see their child as one of the group.

Preservice teachers built a rapport with the students, encouraged social behaviours and provided general supervision and guidance. The future teachers organised talent showcases, exhibitions and project-based learning. At the same time, they learned how

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to quickly defuse disagreements between adolescents, how to react when Social Club participants became dysregulated (Prizant, 2010), how to praise and discipline, and how to guide a student to do the right thing. Most important, they experienced how children and adolescents with ASD understand and interpret instructions differently from children and adolescents without ASD.

Methodological Link to Conceptual Framework

The research questions for this qualitative study were:

1. How can preservice teachers use their expertise to support the development of social skills among students with ASD?
2. How can the work of the Social Clubs, including the service learning of preservice teachers, demonstrate the clubs making a difference for students with ASD?

These research questions focus primarily on the preservice teachers but required the perspectives of all four stakeholders to inform the study. The perspectives of the preservice teachers alone will not demonstrate the development of social skills. Consequently, the research design was based on surveys of three stakeholders and reflections of preservice teachers. Moreover, generation of data from multiple sources adds to the validity of the research because it provides internal triangulation (Stake, 1995; Yin, 2002). Data were drawn from parent and Social Club member sources: 58 parent responses (42% response rate from 137 families) and 51 Social Club member responses (37% response rate) to the survey. (Tourangeau and Yan, 2007, suggested that asking sensitive questions lowers responses rates.) There were also nine facilitator survey responses (100%) and nine preservice teachers' reflections (100%). Four instruments were used: Preservice Teacher Self-Evaluation (the principal source of data, triangulated with the other sources, shown with reflection prompts as Appendix A), Social Club Facilitator Survey (Appendix B), Parent/Carer Questionnaire (the preprogram questionnaire appearing as Appendix C and the postprogram questionnaire as Appendix D), and Social Club Member Questionnaire (the preprogram questionnaire appearing as Appendix E and the postprogram questionnaire as Appendix F).

All ethical processes were completed in this study and formal approval granted, both at UWS (H6126 approval) and at Aspect, to enable the inclusion of the data.

The Research Instruments

The preservice teacher reflections included prompts about memorable experiences, perceptions of learning by the students with ASD, preparation for teaching of students with learning disabilities, skills and strategies developed, and experiences of families of students with ASD (see Appendix A). These prompts became codes for the analysis of the reflections. The facilitator reflections (see Appendix B) had questions about benefits or disadvantages of the Social Clubs for the young club members, for their families and for the preservice teachers. The questions included a specific question about the Social Clubs' potential impact on the future careers of the preservice teachers. For any additional comments, the research followed the coding strategies used with grounded theory research (Charmaz, 2002), with the end result aimed at producing a report of the "experiences, meanings and the reality of participants" (Braun & Clarke, 2006, p. 81) rather than producing an encompassing theory. The parent survey (preprogram and postprogram questionnaires; see Appendices C and D) specifically asked about behaviours such as making eye contact, changing topics in a conversation and working in groups. These behaviours were also

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treated as codes but were not emergent. In a similar way, the Social Club member survey (preprogram and postprogram questionnaires; see Appendices E and F) asked about skills in social interaction. Responses that commented on specific behaviours, like those in Appendix C, were grouped with those codes for the Social Club members. Percentage increases referred to later were a comparison of the pre- and postsurvey responses.

Qualitative research is a methodology that aims to understand the socially constructed reality that people derive from their interactions with the world (Merriam, 1998). Data gained about such socially constructed reality are coloured 'with the meanings and purposes of those people who are their source' (Cohen & Manion, 1994, p. 37). This research was conducted within these socially constructed worlds with the researcher endeavouring to understand the subjective meanings that participants construct from their experiences. Data interpretation involved the use of Bourdieu's social theory as a lens. In particular, Bourdieu's concepts of social capital and symbolic violence (Bourdieu, 1997) illuminated the data relating to preservice teachers working with students with ASD as they learn through the Social Clubs. The Social Clubs are a unique social space. The setting of the Social Club allows adolescents with ASD an opportunity to interact with other students like themselves and build friendships with them and preservice teachers. This is an identifiable affirmation of collective identity. In Bourdieu's terms, the social field of the club is similar to the social field of family, allowing familiarity and recognised structure.

Outcomes for the Preservice Teachers

The benefits for the preservice teachers were both personal and professional. Throughout the following stories, pseudonyms have been given to participant preservice teachers and the students with whom they worked. The preservice teachers' exposure to the Social Club members enriched their lives and significantly developed their pedagogical repertoire. They could see where mainstream schools did and did not address the needs of students with autism. The story of one preservice teacher, Steve, demonstrates this. He was inspired to take on this work because he was living with both a parent and a brother with ASD. He actively set out to broaden his understanding of ways students with ASD are reaching out to make links with their world. His story describes his bonding with three of the adolescents he met: Dave, Jacqui and Helen. Dave, a 15-year-old with Asperger's disorder, had difficulties interacting at school. However, he was very good at football and he maintained that the sport helped him 'stay out of trouble' there. Steve wrote:

> *Dave has a great sense of humour and we spent a lot of time laughing. He has some 'OK' relationships with teachers at school but he knows they don't understand the condition he has. He gets extra tutoring outside of school because he 'doesn't want to waste people's time with them going over things for him'.*

It was only through sport, as Steve recorded, that Dave felt as if he negotiated his place in society at the school. In class, he needed explicit instruction, repetition and structure, but, more often than not, he encountered symbolic violence when his needs were not met. In terms of the Bourdieu framework, Dave encountered the school as a place that challenged him in ways he found he could not manage. His difficulty in understanding what the teacher was saying and the pace of the lesson prevented him from attaining a measure of success without taking on extra tutoring.

Steve found that Jacqui, a 14-year-old with severe ASD, also was not comfortable asking for help in class time as she didn't like people looking at her thinking she was 'dumb'. In his reflection, Steve wrote:

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> *As a teacher I found this very sad. All students should feel comfortable to ask for help in class and it is our job as teachers to make sure our students understand what we are trying to teach them.*

Students with ASD may avoid engaging in class from a fear that it will expose their lack of understanding. At the Social Club, Jacqui did not feel 'dumb' because she had gained enough confidence to engage with other members with ASD and with the preservice teachers like Steve. In Bourdieu's terms, she had gained social capital through a social network.

Steve's encounter with Helen was especially enriching. Helen, a 17-year-old, was home-schooled. She communicated by web link with her business studies teacher once a week but struggled with the workload. She had two important assignments to do, and, as Steve was business studies trained, her mother asked for his assistance. Steve agreed and found this experience particularly rewarding:

> *I spent six hours assisting Helen with assignments and helping her to understand the content and why the assignments were relevant to the course and the Higher School Certificate* [the external examination in NSW schools that provides a tertiary entrance score]. *It was an amazing experience to teach one-on-one with an adolescent with Aspergers in one of my methods. I could see on her face when she understood and when she didn't, which was a real benefit from a teacher's point of view. By the end of the session she had notes on how to complete her assignment and caught up on three weeks' worth of work as she then understood what she had to do.*

Contrary to the teaching Helen had previously received, Steve took time to broaden Helen's perception of what she could achieve. In this instance, not only did the student gain social capital but also the means to progress in her academic work. This aligns with the 'can do' philosophy advocated by Plimley and Bowen (2007). Furthermore, Steve interpreted the signs of puzzlement or understanding on Helen's face as a bonus for a teacher, trying to evaluate his success in communicating goals, content, concepts and ideas clearly to students, as required by the NSW Professional Teaching Standards (NSW Institute of Teachers, 2005).

In taking part in this program, the nine preservice teachers learned at first hand about ASD and gained insights into the realities of life for families with teenagers with ASD. In a survey, the Social Club facilitators felt that the preservice teachers would be less likely to be daunted by the negative-speak about adolescent students with ASD. Instead, these future teachers would have a good understanding about the importance of building rapport in establishing positive relationships with students with ASD. They would also understand that students with ASD thrive in structured but relaxed, socially safe and inclusive environments, and they would understand the benefits of setting up and running their own classrooms accordingly.

Preservice teachers commented on the skills they learned about approaching and addressing students, collaborating with parents, handling humour sensitively, allocating time effectively for tasks, improving social skills in ways they could apply in the classroom, keeping structure in lessons and conveying meaning clearly. Their reflections demonstrate their rapport-building with students, their confidence in communicating and adapting activities, and their developing understanding.

Terry chose the Social Club because he encountered a student, John, with special needs in his first professional experience block in high school. Terry wrote:

> *John, who had ASD was a likeable young man with a talent for drawing. He would regularly ask me for my opinion on his drawings and for assistance with drawing and colouring techniques. I found working with John to be a useful experience in furthering my potential as a teacher. Patience and understanding were required as well as an acute anticipation of the unexpected*

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> *but there was much to gain from being exposed to the different way in which teenagers with disorders see the world.*

In helping with techniques, Terry introduced John to ways of enhancing his talent that valued him as an artist. This, too, aligns with Bourdieu's idea of drawing upon 'collectively owned capital' (Bourdieu, 1986, p. 249), in this case, from a fellow artist.

The story of a third preservice teacher Cate reveals the extent to which she committed to the Social Club's experience. She wrote:

> *Although it was not required or expected, I chose to organise a fundraiser event for the Social Club. The student that motivated the idea was a 12-year old boy who travelled with his carer for three hours on a train to be at a rock climbing event. The carer explained that he couldn't bring the boy to all events as his mother couldn't afford the train fares and was, herself, in a wheel chair. The carer also said that the Social Club was one of the few things the boy looked forward to and one of the only times he would speak.*

This story is, at one level, about fundraising in response to an observed need. On another level, it is about a boy who is rarely moved to speak. The possibilities of forming or participating in a network, as described by Bourdieu, and the concomitant social capital in such conditions are limited. However, the preservice teacher learned that students with impairments in communication could still access the collectively owned capital of the network in the club. She learned to carefully observe and record the members' social and academic behaviours and encountered the value of nonverbal communication techniques. Cate also said:

> *I have built a rapport with the families and children involved with the Club and they have all touched and inspired me on a personal as well as a professional level. I was not expecting that. This experience has made me more equipped and confident in my ability to adapt my lessons for a student with autism. Connecting with parents has also helped me to better understand how they manage and the expectations they have that teachers will take on the practices that assist their children.*

The student whose experience moved Cate brings the communication issue to the fore in students who have ASD. Classrooms may be stressful places for students when the motivation to speak is absent. At the Social Clubs, the students inhabited a safe space in which they could effectively engage with learning.

Moreover, Cate's connections with the families of students draw attention to family expectations. In Bourdieu's terms, the 'embodied capital within the family' functions as a sort of credit that enables the child or adolescent with ASD to try to acquire the basic elements of the legitimate culture, in this case, of schooling (Bourdieu, 1986, p. 70–71). Cate found that parents rightly expected that teaching strategies that assist students with special needs would be more widely known and practised in schools. This aligns with the US study by Camarena and Sarigiani (2009) in which parents had mixed interactions with high schools. Their study reported parents having a history of 'having to fight the system' or working as a 'constant advocate' to ensure that their children would receive adequate services and appropriate treatment from both teachers and peers at school (p. 120).

The preservice teachers understood that the club activities allowed the students to interact without pressure. Samantha commented: 'Kids with autism are pretty isolated and it's really hard to get them to interact with their peers. The bowling and putt-putt golf, where they're having fun at the same time, is not as confronting as sitting down and making conversation.' This comment acknowledges the removal of marginalising expectations, one of the signs of symbolic violence. Another preservice teacher, Adam, said: 'When we played basketball together it was so good to see how much these kids

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enjoyed adults playing with them. I saw kids who were normally reluctant join in the excitement, get up and throw the ball and catch it.' Adam's observation highlights the importance for the students of their social worlds including nonjudgmental adults who interact with them and foster their interests and abilities. Lisa recalled: 'One time I saw two club members swapped phone numbers. They told me later they were going to text about how their weekend went. That's something that couldn't have happened outside the Club.' This captures the Social Club members' sense of being able to safely engage in their own networking practices without imposed expectations about interactions with others.

The final story is that of Subashni. She enrolled in the Social Club's strand of PE3 in the first year it ran and found the experience life changing. It led her to become a teacher of students with ASD. Confirming Sainsbury's (2000) research on working with the special interests of adolescents with ASD, Subashni reflected:

> *At the Social Club, I met a boy (he was about 11 at the time) who was preoccupied in looking for a yellow camera. I found out later that he really likes taking photos so the staff members keep a disposable camera there for him. The incident prompted me to do research and find out more about autism and I immediately asked if I could do more hours and gain more experience.*

Subashni also talked about how she felt the service learning unit prepared her to teach students with disabilities. She explained:

> *I didn't know how to talk to these students, nor did I know what kind of response I'd get. Through Social Clubs I was able to see how two experienced educators interacted with them and I learned by watching how to talk with the children. So Social Clubs helped prepare me for social interaction and language in my classroom. I learned to use a lot of visuals to communicate. In my practicums in mainstream schools, there were students who were not from an English-speaking background. That's my story too, so I could definitely relate to them. But it was through Social Clubs I learned that, whether verbal or non-verbal, there is always a way of communicating.*

Her reflection links with Mehring and Dow's (2001) advocacy of preparation for future teachers of adolescents with ASD working with expert teachers and being able to demonstrate competence in the knowledge, skills and dispositions to provide effective instruction (p. 82). This capacity building is another outcome of the Social Clubs. Subashni talked of her decision to seek permanent employment with Aspect schools. She completed her second professional experience block in a mainstream school as required, but felt resolute in her decision to teach students with ASD as soon as she had finished her degree. She explained that she received outstanding reports for her professional experience teaching. Her choice to work with Aspect did not arise because she could not handle or did not enjoy the mainstream setting. For Subashni:

> *The satisfaction I got from mainstream teaching was nothing compared to the satisfaction I get from teaching students with ASD. I did my interview with the Department of Education and Training and later received an offer. I thought about it and then turned it down. I knew the moment I completed my final mainstream practicum, I needed to be with students with ASD.*

Of her experience during her year of teaching at the Aspect school, Subashni had much to say about learning how to deal with challenges, modifying programs for students and reflecting on their progress:

> *I've worked in my first year of teaching in a class of six children that encompass Years 3, 4 and 5. Four of them are non-verbal. Two are verbal, with a lot of prompting for them to ask for what they want. I have one high-functioning student. The challenge is to modify everything to the needs of each child. They have come such a long way this year with so many beautiful experiences. One boy who would not sing during morning session actually started singing. That blew us away (me and the teacher's aide I work with).*

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> *It's giving me such skills that I wouldn't have gained anywhere else. I will take that with me in my work next year. The students that I will be teaching will be integrated amongst mainstream adolescents. I will be working with many higher-functioning students and facing the challenge of their integration into the mainstream. Once or twice a week I will come back to the Aspect school to liaise with the co-ordinator and principal. It is a journey I am so glad I commenced.*

Subashni's first year of teaching has shown her the growth of social capital as children learn to express their needs. Her students have not been constrained by a sense of their social limits; within the safety of their classroom, they feel included in the educational process. Social capital conveys legitimacy. Subashni's forthcoming high-school experience will return her to the adolescent age group she encountered in the Social Clubs.

Outcomes for Social Club Members

Not only are there benefits for the preservice teachers. From all perspectives, including those of the facilitators, preservice teachers, club members themselves and their parents, the growth of social capital was a significant outcome for this intervention. The surveyed club facilitators felt there were many benefits for the young members, including regular opportunities for forming and maintaining friendships with like-minded peers in relaxed recreational settings, and having a place of their own to go to, just like their siblings. They saw the Social Clubs as boosting self-esteem and confidence in individuals who have limited access to a supportive social network. This aligns with Bourdieu's perspective on acquiring social capital through access to a network. The club facilitators viewed the activities as age-appropriate and fun without overt adult supervision. Consequently, there was a liberating sense of choice and control for the club members (but with adult 'coaching' and in safe environments). The club facilitators also felt that it increased the social network of members outside of school. This is especially important if a particular individual has a limited social network within school. One of the high-functioning club members wrote:

> *The Social Club has been a great opportunity for me to improve on my skills in social interaction and it has improved my social life a lot more. It has also given me a great opportunity to spend time with people and do fun things.*

From parent survey data, it is clear that, after experience in the Social Club, participants felt confident and successful with making eye contact (an increase of 20% on a 10-point scale), changing topics in a conversation (an increase of 40% on a 10-point scale) and working in groups (an increase of 30% on a 10-point scale). A parent wrote:

> *My daughter has been much happier since participating in the Social Club. She has made friends and generally is relaxed in the Social Club setting. She seems to feel more accepted by this group than she is at school. She enjoys the opportunity to socialise and is able to talk about these social events with school peers, chatting about what she did on the weekend instead of only listening to what they have done.*

Parents reported in the survey that their children were included more in peers' activities at school and were more frequently able to begin a conversation.

Benefits to Social Clubs From the Preservice Teachers

The two Social Club facilitators who had been responsible for supervising the UWS preservice teachers also reflected on what the preservice teachers brought to the clubs. They commented on enthusiasm and fresh perspectives to the program, providing additional younger adult support and interaction opportunities for participants. They also acknowledged that the preservice teachers had helped ease some of the supervision pressures on

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Aspect facilitators, through engaging actively with the participants and with their parents and families. They felt the preservice teachers added to the positive atmosphere that all Social Clubs tried to create each session. Furthermore, the presence of the preservice teachers allowed the facilitators to concentrate on students with high support needs, who required one-to-one support. The experience of working with young people with ASD has demonstrated the potential to increase the numbers of teachers working within the special needs sector.

Conclusion

Bourdieu (1997) described social capital as the cumulative resources that derive from and are available to a social network. In this study of the Social Clubs, preservice teachers, through the personal stories of students with ASD, developed an understanding of the students' social reality in helping them to develop social skills. This study's small sample is, however, a limitation. A total of 58 families responded to survey questions about social skills. A total of nine preservice teachers completed their service learning and reflected on their experience, one of them providing additional data a year after commencing teaching with students with autism. Although it is not possible to generalise about the concerns of the adolescents or the preservice teachers, this study's strength comes from the multiple perspectives of the preservice teachers in richly detailed reflections. In Aspect's surveys of members, parents and facilitators, there is evidence that the Social Clubs have had some impact in the lives of young people with ASD. Data gathered by Aspect and by UWS confirm that the participants learned to enjoy social activity and that the clubs improved their social life. The clubs provide much needed space for students with ASD to make friends. Further research will build on these findings.

However, the focus of this article was on the preservice teachers and for them the experience was a significant service learning opportunity. With current diagnosis rates in Australia being 1:160, the likelihood of beginning teachers having a student with ASD in their classroom is high. For the preservice teachers, the service learning experience provided a valuable way to discover how to talk to and establish rapport with students with ASD. They learned about the importance of structure in creating socially safe and inclusive environments, how to allocate time effectively for tasks, and how to convey meaning clearly in instructions. In working with students, preservice teachers learned about adolescents' frustrations with being seen as taking the teacher's time in the classroom and the mechanisms the students employed for dealing with that. They also witnessed the satisfaction that came when students understood the nature of the task and how to go about it. In addition, beginning teachers observed the determination of adolescents to be a member of the club despite difficulties associated with travel and financial support. For the future teachers, the Social Clubs provided hands-on experience that countered the effect of the negative 'reputations' that adolescent students with ASD may acquire. For the preservice teachers, it was a different and authentic learning experience that enriched their preparation for the classroom, however diverse its student population might be.

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Appendix A

Preservice Teacher Self-Evaluation (Reflection Prompts)

1. What are some of your memorable experiences from PE3 with Aspect Social Clubs?
2. What do you think the students with autism gain from being involved in the Social Clubs?
3. How do you think this experience prepared you for teaching students with learning disabilities?
4. What are some of the skills and strategies you have developed?
5. Have you had any insights into the experiences of families who have a child or adolescent who is on the autism spectrum through the Social Clubs?

Appendix B

Social Club Facilitator Survey

1. In your view, what have been the main benefits or disadvantages of the Social Clubs for the *young people* who have attended?
2. In your view, what have been the main benefits or disadvantages to *parents, carers and families* of the young people attending Social Clubs?
3. In your view, what have been the main benefits or disadvantages *to the Social Clubs program* of involving the UWS preservice teachers?
4. In your view, what have been the main benefits or disadvantages *to the UWS preservice teachers* of their involvement in the Social Clubs program?
5. In what ways do you think the UWS preservice teachers' participation in the Social Clubs program will impact on their future teaching careers?
6. Do you have any other comments?

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Appendix C

Parent/Carer Preprogram Questionnaire (Administered by Aspect)

SOCIAL RELATING SKILLS Please rate your child on his/her use of the following social skills.				
FRIENDSHIPS	**1 No or Never**	**2 Some times**	**3 Often**	**4 Yes or Always**
1. Does your child show an interest in socialising with *peers*?				
2. Does your child interact appropriately with peers?				
3. Is your child included in activities at school (e.g., team sports)?				
4. Is your child included in classroom group work?				
5. Is your child included in peers' social activities outside school (e.g., birthday parties)?				
6. Is your child involved in organised sports outside school?				
7. Is your child a member of any social organisations (e.g., scouts)?				
NON-VERBAL SKILLS				
Does your child appropriately use:	**1 No or Never**	**2 Some times**	**3 Often**	**4 Yes or Always**
1. Eye contact?				
2. Personal space?				
3. Expressive body language (e.g., points, smiles, shrugs)?				
4. Receptive body language (e.g., turns towards/looks at speaker, nods in agreement, etc.)?				
CONVERSATIONAL SKILLS				
Is your child appropriately able to:	**1 No or Never**	**2 Some times**	**3 Often**	**4 Yes or Always**
1. Greet people?				
2. Begin a conversation?				
3. Take turns during a conversation?				
4. Change topics in a conversation?				
5. End a conversation?				
ANGER MANAGEMENT				
When angry, is your child appropriately able to:	**1 No or Never**	**2 Some times**	**3 Often**	**4 Yes or Always**
1. Mange his/her verbal aggression?				
2. Manage his/her physical aggression?				
COPING WITH TEASING AND/OR BULLYING	**1 No or Never**	**2 Some times**	**3 Often**	**4 Yes or Always**
1. Is your child teased and/or bullied at school?				
2. Is your child teased and/or bullied in other settings?				
IF TEASED AND/OR BULLIED, IS YOUR CHILD ABLE TO:	**1 No or Never**	**2 Some times**	**3 Often**	**4 Yes or Always**
1. Mange his/her verbal aggression?				
2. Manage his/her physical aggression?				
3. Seek help from an adult?				

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Appendix D

Parent/Carer Postprogram Questionnaire

All questions from Appendix C plus the following:

In your opinion, what have been the benefits for your child of his/her participation in the Social Clubs program?

In your opinion, what have been the benefits for your family as a whole of your child's

How could the Social Clubs program be improved?

Appendix E

Social Club Member Preprogram Questionnaire

How do you feel about your ability to use the following social skills?			
Please tick √ 1, 2 or 3 1. Not sure. 2. Understand, but don't always feel confident. 3. Confident and good at it.			
	1	2	3
1. Using eye contact			
2. Providing others with a personal space			
3. Beginning a conversation			
4. Changing topics in a conversation			
5. Ending a conversation			
6. Being flexible with conversation topics			
7. Recognising when you're angry			
8. Managing your anger appropriately			
9. Managing teasing or bullying appropriately			
10. Coping when things go wrong			
11. Knowing how to be a good friend			
12. Joining in with groups			
13. Working in groups			
14. Being creative			
15. Performing in front of others			

Appendix F

Social Club Member Postprogram Questionnaire
All the questions on ability to use social skills plus the following:
What did you like best about the Social Club?

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