

Exceptional educators: a collaborative training partnership for the inclusion of students with Down's syndrome

MICHELLE VAUGHAN
and ANNE HENDERSON

This article discusses the results of a teacher training initiative in the United States. *Exceptional Educators* is the result of an inter-organisational collaboration between a community-based organisation (Gold Coast Down Syndrome Organization), the local public school system and a university professor. The training focuses on three distinct objectives; understanding the physical and emotional needs of the disability, creating modified curriculum units based on individual learning goals and recognising common behavioral problems that arise in school settings. Overall, the results showed positive outcomes, with gains in knowledge of curriculum modification, behavioural strategies and overall understanding of Down's syndrome, as well as an increase in confidence level. A six-week follow-up survey indicated that the majority of the participants used the information presented back in their teaching environments. This study also investigated the added value of this collaboration, finding that the community connection often continues past the training and has provided teachers additional avenues for support.

Key words: professional development, inclusion, Down's syndrome, teacher training.

Introduction

Inclusion of students with intellectual disabilities, such as Down's syndrome (DS), can be defined differently dependent on the role of the individual. For many parents, inclusion is a goal, giving their child exposure to typically developing peers, grade-level curriculum and social interactions that may result in authentic friendships and life experiences they can take with them beyond school (Johnson, 2006; Lindsey *et al.*, 2013). For teachers, inclusion may be a skill set, navigating multiple levels of curriculum, standards and behavioural goals for the children in their class while still building a thriving classroom community. This skill set may be acquired over years of experience, may have been taught in their teacher preparation curriculum or may be lacking. Lastly, there are outside supporting roles for inclusion, which may include parents, administration at the school site, district personnel or community-based organisations. The goal of this article is to discuss the results of a unique training initiative that brought these various stakeholders together to support the inclusion process and those teachers working directly with mainstreamed students with DS. This study will seek to further research in professional development in inclusion education by studying the effects of a one-day training programme that trained over 300 teachers in inclusion practices, curriculum modifications and behavioural modification strategies (specifically geared toward students with DS included in the general classroom) over the course of three years. This study will also investigate the added value of this collaboration in order to determine if it could serve as a model for future partnerships.

Background

The concept of inclusion education has evolved over the past few decades in the United States, starting with the passing of P.L.94-142 in 1975, which guaranteed students with disabilities the right to 'a free appropriate public education' in a 'least restrictive environment' (Project IDEAL, 2015). Inclusion has been defined as

‘providing all students, including those with significant disabilities, equitable opportunities to receive effective educational services with needed supplementary aids and support systems in age-appropriate classrooms in their schools, in order to prepare these students to lead productive lives in society.’ (Royster *et al.*, 2014, p. 1)

As a result, many special needs students have been integrated into regular classrooms, presenting new challenges for teachers and requiring skills for which they may not be adequately trained (Feng, 2012). According to Boscadrin (2005), the success of an inclusion programme hinges on the knowledge and attitude of the teacher, and negative perspectives about inclusion education have a direct impact on lack of success.

A review of the literature revealed a number of studies that correlate professional development with successful inclusion practices. Effective teacher professional development can, for example, result in a more positive teacher attitude (Bahn, 2009; Boutte, 2005; Dean and Behne, 2002; Lindsey, 2003; Mastropieri and Scruggs, 2000; Weisel and Tur-Kaspa, 2002). Teachers must be well trained in the practices and premises of inclusion education, and be able to adapt and accept the disabled student (Bahn, 2009). According to Bahn, ‘if a student is working with a classroom teacher who is more skilled and flexible, the teacher will help all students in the room understand and accept disabilities as part of the normal range of human abilities’ (Bahn, 2009, p. 12). Many pre-service programmes do not specifically train students in inclusion strategies, or courses are offered as optional (Feng, 2012). Mainstream teachers often have to seek out professional development opportunities on their own. The question is: what makes effective professional development for the inclusion teacher? Professional development should be aligned with the individual needs of the teacher in order to be successful (Bull *et al.*, 2000; Hang and Rabren, 2009). A study by Lindsey *et al.* (2013) looked at the challenges teachers face in managing a successful inclusion classroom. The highest number of challenges reported by the teachers interviewed included understanding and managing the behaviour of their special needs students, lack of training and lack of support from the school community (such as administration, other teachers, other students and parents) in creating an inclusive environment. The researchers concluded that more support and training are needed in the form of workshops and awareness resources that specifically address their issues. However, according to McLesky and Weldon (2002), ‘the traditional sit and get professional development is not effective ... as they fail to take in the complexity of the classroom and the culture of the school’

(p. 160). The authors suggest that effective professional development should include collaboration with outside professionals that can assist the teacher with their individual needs and those of their inclusion students.

Unique to this programme is the inter-organisational collaboration between a community-based organisation committed to serving children with Down's syndrome and their families (Gold Coast DS Organization), the local public school system and a university professor from a southeastern, public research university. A study by Bailey and Koney (1996) found that inter-organisational collaborations 'increase potential for resource exchange, and create greater efficiency for product and service delivery' (p. 604). Jones *et al.* (2007) found that collaborations with university-trained researchers can greatly enhance the effectiveness of the collaborative process. Collaboratives should, they found, 'be built around a socially desirable, agreed-upon goal or mission' (p. 56). Collaborations between organisations generally increase the effectiveness of shared missions because they provide increased access to resources, either through pooled staff time or through access to additional finances (Jones *et al.*, 2007). They can also improve information sharing and enhance access to resources for teachers, students and their families.

Programme description

In 2011, the acting president of the Gold Coast DS Organization (GCDSO) partnered with a university professor and former public school inclusion teacher to create a training programme entitled *Exceptional Educators*. The purpose of this programme was to fill an existing gap in training that focused on supporting the general education teachers of fully included students with DS. GCDSO is a community-based organisation with a mission 'to be a proactive, dynamic support group to all people who have DS and their families' and a goal to 'pursue inclusion of individuals who have DS in all areas of life so they embrace opportunities to contribute and be valued members of society' (Gold Coast Down Syndrome Organization, 2015). With a focus on full inclusion and advocacy for students with DS, the numbers of fully included students grew steadily in the school district over the past 15 years. However, training for general education teachers was not consistent, leading to a number of difficult or failed inclusion placements. *Exceptional Educators* was designed to assist general educators and the teams they worked with (paraprofessionals, administration, special education teachers) to understand the needs of the DS population, modify curriculum to

address the educational goals of an Individual Education Plan (IEP), understand and overcome behavioural challenges that may exist through inclusion and build relationships throughout the school district with other inclusion teachers. Lastly, the local school district was brought in, in a supporting role in this programme. The school district paid for substitute teachers while teams of teachers attended 1–2 day workshops (paid for by GCDSO funds or supporting grants). The school district also supports the efforts of the *Exceptional Educators* programme by offering continuing education credits toward state re-certification for attending teachers.

Method

Data collection

Data were collected using two sets of surveys: a pre-survey given at the start of the training and a post-survey emailed to participants six weeks following the training. The pre-survey asked participants to self-report their level of knowledge on the three topic areas covered at the training (DS 101, Curriculum, Behavior) as well as their confidence in meeting the needs of their students with diverse learning needs, such as their students with DS. In 2012 only, an additional post-survey was distributed immediately following the training to measure the impact on participants' level of knowledge and confidence. In 2013 and 2014, only the six-week post-survey was administered. The six-week post-survey asked participants to self-report how often they used the knowledge gained from the training in each of the three areas. The post-survey also asked for feedback on the training itself and whether they would recommend this training to others. For those involved in the development and execution of this project, it was essential to focus on if and how often the knowledge delivered was actually used by those who attended. Through the inclusion of active learning, real-life scenarios and question-and-answer periods that could focus on the needs of specific students, trainers aimed to overcome some of the traditional obstacles that exist in one-day workshop deliveries.

Participants

To date, over 300 educators have been trained in inclusion practices through the *Exceptional Educators* programme. While exact demographics on participants are not collected, those attending training fall into three general categories:

general education teachers with a fully included student with DS in their classroom; special education teachers responsible for assisting in the inclusion of a student with DS or working individually with them throughout the day; or para-professionals working one-on-one with a student with DS. All those attending have been employed by the local district and work full-time for a school. The local school district is one of the 15 largest school districts in the United States.

Training content

The *Exceptional Educators* training programme was designed as a two-day training programme (later condensed to one day for scheduling needs) that focuses on three distinct objectives: understanding the physical and emotional needs of the disability and how it may impact the school day; creating modified curriculum units based on the learning goals of individual students; and recognising common behavioural problems and solutions that arise in school settings. There are two versions of the programme: one focused on elementary educators (grades preK-5) and one focused on secondary educators (grades 6–12). Adjustments in the types of curriculum being modified as well as trends in behavioural challenges are made between the two sessions to tailor information to the grade levels attending the training. Moreover, when the sessions begin, teachers are asked to sit with other participants who teach the same grade level so they can share ideas and build community with other inclusion teachers. For many attendees, there may only be one student with DS at their school site, so finding a support community can be a positive outcome of attending the training.

Exceptional Educators focuses on an active learning approach in professional development with information broken down into meaningful sections, thus modelling instructional strategies that have proven to be successful in inclusion classrooms. Each section (DS 101, Curriculum Modifications, Behavior Modifications) is taught by an individual with expertise and knowledge to share with teachers. ‘Down Syndrome 101’ is taught by a parent of a child with DS and the acting president of GCDSO. ‘Curriculum Modifications’ is taught by a university professor who specialises in curriculum design and has a background as an inclusion teacher. The section on behaviour modifications has been taught both by the acting president of GCDSO and by a local behaviour expert who specialises in behaviour modification for students with severe cognitive disabilities (see Table 1 for more information about the content covered in each section of the programme). Each section includes active learning experiences for the

Table 1. *Content topics in Exceptional Educator training*

<i>DS 101 content</i>	<i>Curriculum modifications content</i>	<i>Behavior modifications content</i>
-Myths about students with DS	-State-created standards for students with disabilities	-Role of the parent in supporting inclusion
-Medical issues (hearing, hypotonia, memory)	-Overview of backwards design method of curriculum planning	-Role of the paraprofessional and decreasing dependence
-Communication issues	-Discussion of sample objectives for DS students	-Role of peers in supporting inclusion
-Communication strategies	-Examination of teacher-created assessments aligned to objectives	-Avoiding learned helplessness
-Learning styles (specific focus on visual learning)	-Sample five-day planning schedule for modifications	-Promoting independence
-Social issues and promoting authentic friendships	-Group work to practice modifying sample standards/assessments	
-Reading strategies		
-Uneven skill acquisition		

teachers attending the training as well as ample time for specific questions and answers.

While this training in no way covers all the research and instructional strategies in the field, it represents a form of grassroots professional development that answers questions most frequently asked by the teachers and parents in the local inclusion community. Many of the students with DS who are fully mainstreamed in this school district are also members of GCDSO as they provide school advocacy services and school-readiness resources. Having access to the students and parents through GCDSO is another layer of support for the training initiative, as parents of mainstreamed students are contacted every year through GCDSO and given flyers to distribute to their child’s teachers at the beginning of the year to attend the training. This connection creates a circle of support around the student and connects teachers to the community-based resources available to the student, parent and teacher.

Findings

While the primary focus of these findings is on the results of the six-week post-survey from 2012 to 2014, it is important to also share a smaller set of data that was captured in 2012 by an additional post-survey given immediately after the training. More data was collected in the first year of this programme until a more streamlined focus on implementation was decided on by the group. Figure

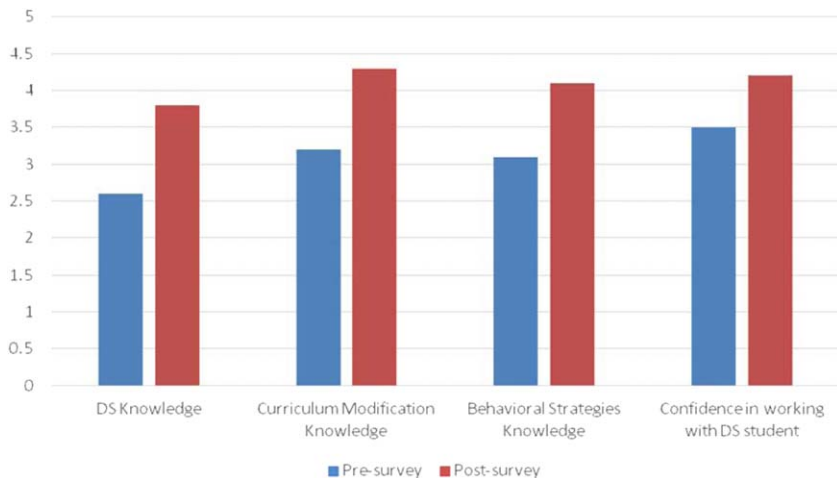


Figure 1. Pre- and post-survey results for 2012 surveys

1 shows a significant increase in knowledge about all three topic areas from the *Exceptional Educator* training in addition to a 20% increase in teacher confidence level when working with students with DS. Participants showed the greatest amount of growth in the area of knowledge about DS (this was also the area they reported knowing the least about). This is important to note, as the tendency to focus on instructional strategies in professional development may be overshadowing the need for teachers to have a working knowledge of the disability itself in order to best meet student needs.

Table 2 shows the results from the six-week follow-up survey that was sent out to participants in order to determine (1) to what extent they applied the information learned in the workshop and (2) their perceived value of the workshop (determined by whether or not they would recommend this workshop to others and whether they would attend another workshop given by the same presenters). The data shows results for three years of the *Exceptional Educators* workshops. Over 60% of the Secondary Educator Attendees and Elementary School Educator attendees reported that they had used the information presented in the workshop, with the highest average percentages (81% and 73% respectively) reporting that they used the DS 101 information (information on hearing, vision, muscle tone, memory and learning style issues) often or daily. Interestingly, as discussed above, this is the area that received the highest gains in the pre and

Table 2. Results from six-week follow-up survey, 2012–2014

	<i>Secondary Educator School Attendees 2012/2013/2014</i>	<i>Elementary School Educator Attendees 2012/2013/2014</i>
<i>Reported using behavioral modification information often or daily</i>	100%/60%/45% Average 68%	62.5%/44.4%/89% Average 65%
<i>Reported using curriculum modification information often or daily</i>	75%/100%/45% Average 73%	87.5%/88.8%/67% Average 81%
<i>Reported using DS 101 information often or daily six weeks following training</i>	100%/80%/64% Average 81%	75%/77.7%/67% Average 73%
<i>Responded that they would recommend this training to others</i>	100%/100%/100% Average 100%	87.5%/77.7%/100% Average 88%
<i>Responded that they would attend follow-up training by the same presenters</i>	100%/100%/91% Average 97%	75%/55.5%/78% Average 70%

post tests. The least reported information that was used was on behavioural modifications (averages of 68% and 65% respectively). Both secondary and elementary school educator participants reported perceived value, as indicated by the high percentage that reported that they would recommend the workshop to others and would attend follow-up training by the same presenters. It is also interesting to note the dip in reported use of curriculum modification in 2014 for both secondary and elementary school teachers. This will be further discussed later in this article.

Discussion

Each of the three areas of focus in the *Exceptional Educator* programme offer different points for consideration and discussion on effective methods for training inclusion teachers. These are potentially applicable in educational settings beyond the United States. The first item to consider is how much teachers actually know about the disability their students have. This is often overlooked in professional development because the nature of the training may make it impossible to cover specific details of a wide range of disabilities; even when it is possible, the spectrum of abilities within a given label vary so greatly that it can be quite challenging to provide accurate information without knowing the individual child. However, this programme consistently found that participants reported knowing least about this topic before the training, and reported the use

of their new knowledge at a high level six weeks following the training (see Table 2). As trainers, researchers and/or parents heavily embedded in an organisation that works within the DS community, it is easy to forget that participants in this programme may have little or no experience with DS before meeting their mainstreamed student. Providing those working to fully include a student with DS accurate information about the physical, emotional and intellectual differences their student may be dealing with is an important first step toward working on a successful inclusion strategy.

As mentioned previously, in 2014 there was a marked dip in the reported use of curriculum modifications. Although this is just speculation on the part of the researcher, it is interesting to note that in 2014 the local school district fully unveiled a new curriculum model based on Common Core standards, which necessitated the use of new curriculum and assessments in the classroom. The rollout of new standards did not include Access Points, a subset of standards that represent the core intent of the standard but with reduced complexity for students working with modified curriculum. Their absence, coupled with the increased rigour of the new standards, seemed to leave participants in 2014 more frustrated with modifying curriculum which they did not yet fully grasp. Although this would require further study, it leads this researcher to wonder how changes to educational policy and practice affect the time and effort available for inclusion teachers to respond to their student needs.

Lastly, deep knowledge on behaviour modification strategies is and will continue to be a necessity for successful inclusion teachers. There was significant fluctuation in years and type of participant (elementary or secondary) on the level of use of the behavioral modification information following the training. While the information in the training has mostly stayed the same over the years, the children being served by the participants in this large school district can change year to year. Basic behavioural strategies make up the core of this section of the training, but this is where participants often have the most questions about specific behaviours of their student with DS. As discussed in the literature, the success in an inclusion programme hinges on the teacher's ability to meet the individual needs of the student (Royster *et al.*, 2014) and on a positive attitude on the part of the teacher (Bahn, 2009; Boscadrin, 2005). In the past, GCDSO would follow up with incidents of severe behaviours to support both the teacher and the child; however, this is an area where all stakeholders involved in an inclusion placement can and should support those who are working daily with the student on individual needs.

Conclusion

Overall, the results of this inter-organisational collaborative partnership between a local advocacy group for Down's syndrome, the public school system and a university professor to create a one-day professional development training for general education teachers of fully included students with DS showed positive outcomes, with the majority of the attendees consistently reporting that they had used the information presented in the workshops. The high usage of the information presented in the workshop indicates that it was relevant to the participants' teaching practices. The survey also revealed an increase in knowledge about DS. Having a greater understanding of DS and the challenges that students with DS face may help teachers empathise and accept their students positively. This, in turn, helps the teacher serve as a model for the other students in the class, creating a culture of acceptance (Bahn, 2009). Also significant is the increase in confidence that the participants reported. Teacher efficacy is an important component in the implementation of new teaching skills and practices (Rimm-Kaufman and Sawyer, 2004), and has also been found to be tied to influencing student motivation, achievement and even their own self-efficacy (Leyser, 2011). Interestingly, this can be an important positive feedback loop for success. Increasing teachers' confidence in their abilities to manage an inclusion classroom influences the implementation of successful strategies, which leads to success that can contribute to further teacher confidence.

The added value of this workshop model is not only in knowledge and confidence gains of the attendees, but also in the partnership formed by the collaborative organisations, using shared resources to support teachers, students with DS and their families. Budget constraints in school districts can leave little resources for professional development opportunities for inclusion teachers (Feng, 2011). The collaboration provides access to experts from the university and non-profit in both effective instructional practices and information about DS that otherwise might be difficult to obtain through GCDSO. In addition, the community connection often continues past the training, and has provided teachers additional avenues for support.

References

BAHN, K. (2009) Classroom teacher attitudes toward inclusion (Order No. 3368746). Available from ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global.

- (305162971). [Online at <http://ezproxy.fau.edu/login?url=http://search.proquest.com/docview/305162971?accountid=10902>] Accessed 09/08/15.
- BAILEY, D. and KONEY, K. (1996) Interorganizational community-based collaboratives: a strategic response to shape the social work agenda. *Social Work*, 41, 6, 602–611.
- BOSCADRIN, M. (2005) The administrative role in transforming secondary schools to support inclusive evidence-based practices. *American Secondary Education*, 33, 3, 21–32.
- BOUTTE, G. (2005) Believing in possibilities: making culture central to teaching and learning. *AACTE Briefs*, 26, 10, 5.
- BULL, K., OVERTON, R. and MONTGOMERY, D. (2000) *Strategies for Instructional Effectiveness Applicable to Training Regular Teachers for Inclusion (ED439885)*. Princeton: Eric Clearing House.
- DEAN, C. and BEHNE, J. (2002) *Meeting the Needs of Culturally and Linguistically Diverse and Special Needs Students in Rural Communities*. Washington, DC: Institute of Educational Sciences, US Department of Education.
- FENG, Y. (2012) Teacher career motivation and professional development in special and inclusive education: perspectives from Chinese teachers. *International Journal of Inclusive Education*, 16, 3, 331–351.
- Gold Coast Down Syndrome Organization (2015) Homepage. [Online at <http://www.goldcoastdownsyndrome.org/homepage>]. Accessed 09/08/15.
- HANG, Q. and RABREN, K. (2009) An examination of co-teaching: perspectives and efficacy indicators. *Remedial and Special Education*, 30, 5, 259–268.
- JONES, J., CROOK, W. and WEBB, J. (2007) Collaboration for the provision of services: a review of the literature. *Journal of Community Practice*, 15, 4, 41–71.
- JOHNSON, D. (2006) Listening to the voices of those involved in the mainstreaming of pupils with Down's syndrome into mainstream schools. *Support for Learning*, 1, 21, 24–29.
- LEYSER, Y. (2011) Changes in self-efficacy of prospective special and general education teachers: implication for inclusive education. *International Journal of Disability, Development, and Education*, 58, 3, 241–255.
- LINDSEY, G. (2003). Inclusive education: a critical perspective. *British Journal of Special Education*, 30, 1, 3–12.
- LINDSEY, S., PROULX, N., THOMPSON, N. and SCOTT, H. (2013) Educators' challenges of including children with autism spectrum disorder in mainstream classrooms. *International Journal of Disability*, 60, 4, 347–362.
- MASTROPIERI, M. and SCRUGGS, T. (2000) *The Inclusive Classroom: Strategies for Effective Instruction*. Upper Saddle River, New Jersey: Merrill.
- McLESKLEY, J. and WELDON, N. (2000) *Inclusive Education in Action: Making Differences Ordinary*. Alexandria, VA: Association for Supervision and Curriculum Development.
- RIMM-KAUFMAN, S. and SAWYER, B. (2004). Primary-grade teachers' self-efficacy beliefs, attitudes toward teaching, and discipline and teaching practice priorities in relation to the responsive classroom approach. *Elementary School Journal*, 104, 4, 322–341.
- ROYSTER, O., REGLIN, G. and LOISIKE-SEDIMO, N. (2014) Inclusion professional development model and regular middle school educators. *The Journal of At-Risk Issues*, 18, 1, 1–10.
- SPECIAL EDUCATION PUBLIC POLICY –PROJECT IDEAL. (n.d.). Special Education Public Policy. [Online at <http://www.projectidealonline.org/v/special-education-public-policy/>] Accessed 09/08/15.

WEISEL, A. and TUR-KASPA H. (2002) Effects of labels and personal contact on teachers' attitudes toward students with special needs. *Exceptionality*, 10, 1, 1–10.

Correspondence

Michelle Vaughan

Department of Curriculum, Culture and Educational Inquiry

Education Building, Room 353

Florida Atlantic University

777 Glades Road

Boca Raton, FL 33431-0991

USA

Email: mvaugh3@fau.edu