



October 2017

## Providing Access for Students with Moderate Disabilities: An Evaluation of a Professional Development Program at a Catholic Elementary School

Matthew P. Cunningham  
*Loyola Marymount University*

Karen K. Huchting  
*Loyola Marymount University*

Diane Fogarty  
*Loyola Marymount University*

Victoria Graf  
*Loyola Marymount University*

Follow this and additional works at: <https://digitalcommons.lmu.edu/ce>



Part of the [Accessibility Commons](#), [Educational Leadership Commons](#), [Other Education Commons](#), and the [Teacher Education and Professional Development Commons](#)

### Recommended Citation

Cunningham, M. P., Huchting, K. K., Fogarty, D., & Graf, V. (2017). Providing Access for Students with Moderate Disabilities: An Evaluation of a Professional Development Program at a Catholic Elementary School. *Journal of Catholic Education*, 21 (1). <http://dx.doi.org/10.15365/joce.2101072017>

This Article is brought to you for free with open access by the School of Education at Digital Commons at Loyola Marymount University and Loyola Law School. It has been accepted for publication in *Journal of Catholic Education* by the journal's editorial board and has been published on the web by an authorized administrator of Digital Commons at Loyola Marymount University and Loyola Law School. For more information about Digital Commons, please contact [digitalcommons@lmu.edu](mailto:digitalcommons@lmu.edu). To contact the editorial board of *Journal of Catholic Education*, please email [JCE@nd.edu](mailto:JCE@nd.edu).

## Providing Access for Students with Moderate Disabilities: An Evaluation of a Professional Development Program at a Catholic Elementary School

Matthew P. Cunningham, Karen K. Huchting, Diane Fogarty,  
& Victoria Graf  
Loyola Marymount University

*After a significant policy change led to the admittance of students with moderate disabilities, St. Agnes School (SAS; pseudonym)—a Catholic PK-8 school in Southern California—implemented an 18-month professional development (PD) program to improve teachers' inclusive classroom practices. Grounded in the theoretical framework of Universal Design for Learning (UDL; Center for Applied Special Technology, 2015b), the PD program included cyclical, one-on-one instructional coaching sessions that were led by trained UDL coaches and consisted of lesson demonstrations and personalized feedback. While SAS teachers held state credentials, most had very little training to work with students with special needs prior to this PD; the purpose of this study was to evaluate the UDL PD program at SAS in terms of its impact on teachers' instructional practices and students' engagement in the classroom. Data from one-on-one interviews and classroom observations were analyzed using evaluation coding (Patton, 2002, 2008; Rallis & Rossman, 2003; Saldana, 2013) and findings revealed improvements in classroom instruction and student engagement for teachers who embraced the framework. Administrative and programmatic challenges that emerged over the course of the program and teachers' hope for a long term shift toward professional learning communities among faculty and staff are discussed.*

### Keywords

Professional development, Inclusion, Universal Design for Learning, Catholic education

**T**he United States Catholic K-12 education system's diocesan leaders, school principals, and classroom teachers have long tried to navigate the balancing act that is the inclusion of students with disabilities (SWD) in their schools. On one side of the beam is the moral and ethical imperative (Carlson, 2014; Scanlan, 2008, 2009a, 2009b) to accommodate any parents who wish for their children to obtain a Catholic education; on the other side, the practical

obligation to consider resource availability, or lack thereof, and school-wide capacity to effectively educate SWD. The purpose of this study was to evaluate one Catholic elementary school's effort to improve their professional capacity in order to better serve students with moderate disabilities. We begin with defining inclusion as a multi-level construct and situating inclusive education in Catholic K-12 schools within the broader context of inclusion within all sectors of the U.S. education system.

### Inclusion Defined

Generally speaking, the term *inclusion* represents the practice of integrating SWD into general education schools and classrooms. Farrell (2000) offered a broad definition of inclusion as SWD “taking a full and active part in school-life” while being “valued” and “integral” members of the school community (p. 154). However, there are varying degrees of inclusion that are categorized based primarily on the amount of time SWD spend in general education classrooms (National Center for Education Statistics, 2013c). For example, *full inclusion* is the practice of educating all SWD—even students with severe disabilities such as cognitive impairments or emotional and behavioral disorders—in general education classrooms for the entire school day (Stainback & Stainback, 1984). In a fully inclusive school, all students, “regardless of the severity of their disability” (Menziez & Falvey, 2008, p. 79), receive special education services in general education classes.

There is also *mainstreaming*, which is the term “used to describe the placement of SWD in the regular school program for any part of their day” (Menziez & Falvey, 2008, p. 76). To categorize even further, there are two types of mainstreaming. The least restrictive of the two types involves removing SWD from their primary placement—the general education classroom—and sending them to a resource room where they work either one-on-one or in a small group with a special education teacher for a small portion of the day; usually one to two hours per day (Menziez & Falvey, 2008). The more restrictive form of mainstreaming involves placing SWD “in a self-contained special education classroom” for the majority of the school day, only allowing them to partake in “activities or other events, such as art, music, or physical education, in the general education setting” (Menziez & Falvey, 2008, p. 76). For purposes of accuracy and clarity in the discussions to follow, when necessary, the terms *full inclusion*, *restrictive mainstreaming*, and *least restrictive mainstreaming*, as they are defined above, are used to appropriately categorize and describe the varying degrees of inclusion.

### **The State of Inclusion**

Schools and classrooms continue to be more and more diverse given the various backgrounds and learning needs of their students. For example, one year after the signing and initial implementation of the Education for All Handicapped Children Act (1975)—later titled the Individuals with Disabilities Education Improvement Act (IDEIA; 2004)—during the 1976-77 school year, 3.7 million students in the U.S. were afforded some degree of special education services via the new law (National Center for Education Statistics, 2013a). Over the next 35 years, that number dramatically increased to 6.4 million as of the 2011-12 school year (National Center for Education Statistics, 2013a). Of these 6.4 million students, 94.8%, which equates to approximately 6 million students, were educated in public schools with general education students (GES); and, almost two-thirds (61%) of those 6 million students spent over 80% of their school day in general education classrooms (National Center for Education Statistics, 2013c). The remaining five percent of the 6.4 million students served under IDEIA were split between schools specifically for SWD (4%, or approximately 240,000 students) and private schools with GES (1%, or approximately 60,000 students; National Center for Education Statistics, 2013c). These data show that separate schools for SWD have become a rarity and a large portion of the SWD in the U.S. are educated alongside their peers without disabilities in general education classrooms, which highlights the progress inclusion has made over the last half century.

### **Inclusion in Catholic Schools**

To a certain extent, Catholic schools have joined the nationwide transition toward inclusive education (DeFiore, 2006; Durow, 2007; Scanlan, 2008, 2009b), despite the misguided Catholic school stigma of elitism and exclusivity. As mentioned above, approximately 60,000 students with diagnosed and documented disabilities attend private schools and the Catholic school system is the largest faction of the private sector in the US, with a total enrollment of just over 1.9 million K-12 students (McDonald & Schultz, 2015). It is likely that a large portion of those 60,000 students are currently enrolled in Catholic K-12 schools; and, this estimate does not include the numerous students with undiagnosed and undocumented disabilities who are educated in Catholic schools. Another much less conservative estimate placed the percentage of students in Catholic schools with disabilities at 7% (United States Conference of Catholic Bishops, 2002), which equates to 133,000 students if based on the total count of 1.9 million. Durow (2007) found a similar 8%

estimate in a survey study of 19 dioceses across the Midwest but also stated “that Catholic schools are likely serving more students with special needs than is the common perception” (p. 486). Durow (2007) also reported that most SWD within the 19 dioceses had mild to moderate disabilities: only two of the 19 dioceses admittedly served students with severe disabilities.

In addition to raw enrollment numbers, past research shows that Catholic schools are at least trying to move beyond simply admitting SWD by focusing their attention on improving their inclusive service delivery. From a broad perspective, in the same survey study of 19 Midwest dioceses mentioned above, the overwhelming majority of superintendents reported having implemented purposive, system-wide approaches to inclusion such as general education teachers making instructional adjustments, employing special education teachers, learning consultants, and paraprofessionals, and tapping available public funds and resources (Durow, 2007). On a slightly smaller scale but with a more focused lens, Scanlan (2009b) investigated the schools in the Archdioceses of St. Louis and Milwaukee, specifically looking at their system-wide practice of using learning consultants—a model that incorporates “consultation between special and general education faculty aimed at improving pre-referral intervention strategies in the general education classroom” (p. 626). Within these two large Catholic school systems, effective inclusive service delivery using the learning consultant model depended on the level of guidance and leadership from the central offices and the strength of the relationships that formed among stakeholders (i.e., principals, teachers, and members of the community) within and across schools (Scanlan, 2009b). Further delving into the nuances of inclusion in Catholic schools, in a multiple case study of three Catholic elementary schools—one of which served students with Down syndrome, cerebral palsy, and autism—Scanlan (2008) found collective efforts to improve stakeholders’ discourse and attitudes toward inclusivity, facilitate school-family collaboration, and focus the school-wide mission and vision on welcoming and serving students with mild, moderate, and even severe disabilities. The schools’ capacity to effectively include SWD, although limited, was linked to strong leadership and the availability of relevant resources (Scanlan, 2008). Needless to say, when it comes to educating SWD, Catholic schools in the US, at the very least, are attempting to meet ideological expectations (Carlson, 2014; Scanlan, 2009a, 2009c) in order to play their part.

### **Embracing and Preparing for Diversity**

One of the main catalysts for the progress toward full inclusion in all education sectors is empirical evidence documenting academic and social benefits of educating students with mild, moderate, and, under certain circumstances, severe disabilities alongside their peers without disabilities in general education settings (Brock, Biggs, Carter, Cattey, & Raley, 2016; Carter et al., 2016; Dessemontet, Bless, & Morin, 2012; Gasser, Malti, & Buholzer, 2013; Johnson, D. W., & Johnson, R. T., 1981, 1982, 1984a, 1984b; Lew, Mesch, Johnson, & Johnson, 1986; Maras & Brown, 1996, 2000; Ronning & Nabuzoka, 1993; Wong 2008). In addition, though there are schools that have had success with specialized instruction for SWD in isolated environments (Kauffman, Bantz, & McCullough, 2002)—particularly for students with emotional and behavioral disorders (Landrum, Tankersley, & Kauffman, 2003)—some parents of SWD have expressed concern regarding their children’s special education classes and programs, claiming that, at times, they seem to lack academic rigor and may not provide the necessary environment for proper social development (Osgood, 2005, 2008), leaving students and their families feeling ostracized (Menzie & Falvey, 2008). As a result, some parents pull their children from their special education programs and look for schools with more inclusive policies and practices, hence the growing number of Catholic, private secular, and charter schools that serve SWD in inclusive environments of varying degrees (National Center for Education Statistics, 2013a, 2013b, 2013c). Specifically within Catholic education, many parents of SWD have advocated for inclusion because they want their children to have the same access to a Catholic education as families with children without disabilities (Dudek, 2000); and, scholars (Carlson, 2014; Scanlan, 2008, 2009a, 2009b) have posited a moral and ethical obligation that is grounded in Catholic Social Teaching and the work of St. Thomas Aquinas.

This increasing diversity calls for both school and classroom leaders to acquire new knowledge and skills to address the needs of all students because, for too long, educator preparation has been dichotomized into two very distinct and separate tracks (Allday, Neilsen-Gatti, & Hudson, 2013; Johnson, Pugach, & Devlin, 1990; Kearney & Durand, 1992)—general education and special education—which has led to general education teachers’ lack of self-efficacy when placed in inclusive classrooms (Durow, 2007; Scruggs & Mastropieri 1996; Smith & Smith 2000). In addition, Artiles (2015) cited the need for school and classroom leaders to be responsive to human variability by creating an inclusive educational system rather than focusing on “fixing” learners

from various subgroups. In particular, he identified the work of Theoharis and Scanlan (2015) who emphasized individuals' intersectional identities as being critical for the work of educational leaders. As an example, two years ago, the faculty and staff at St. Agnes School (SAS; pseudonym), a Catholic PK-8 school in Southern California, made the decision to embrace these principles and learn to harness the value of student diversity by changing their policy of denying admission to students with moderate disabilities and committing to philosophically and practically reinventing themselves. The purpose of this study was to evaluate the school-wide professional development (PD) program the faculty and staff at SAS used as their guide to their professional transformation.

### **Professional Development**

Educational leaders are faced with the responsibility of supporting all of their students. Educating SWD alongside their classmates without disabilities, rather than in settings outside of general education classrooms, has been found to promote and lead to students' engagement during class, higher academic achievement, and the development of positive intergroup relationships between students with and without disabilities (Dessemontet & Bless, 2013; Johnson R. T. & Johnson D. W., 1981; Kalyva & Agaliotis, 2009; Maggin, Wehby, Partin, Robertson, & Oliver, 2011). However, despite some progress, educational outcomes for SWD continue to suffer, often more so than any other sub-group. For example, the state of California, where the current study occurred, has the lowest achievement outcomes for students with special needs than any other state (Blume, 2014). In 2012, only 27% of third graders with disabilities scored proficient or advanced on the California Modified Assessment; 60% of SWD graduated high school (compared to 78% of students without Individualized Education Programs); the dropout rate for SWD was close to 15% (it was 11% for all students); and, approximately 32.8% of SWD were enrolled in higher education programs—the goal was 50% (California Task Force on Special Education, 2015). These statistics indicate a clear need for improving educational outcomes for students with special needs in the state of California.

One possible mechanism to improve educational outcomes for students with special needs is to train general education teachers to work with diverse populations of students. It is well documented that teaching preparedness is linked to student achievement (Borko, 2004; Cheng, 1996; Guskey, 1994; Visser, Coenders, Terlouw, & Pieters, 2010). Far too often, however, despite

recent efforts to blend general and special education teacher preparation in hopes of better preparing pre-service teachers to enter inclusive classrooms (Harvey, Yssel, Bauserman, & Merbler, 2010), general education teachers still find themselves underprepared to effectively meet the needs of all learners (Durow, 2007). And rightfully so. According to Allday, Neilsen-Gatti, and Hudson (2013), most educator preparation programs at colleges and universities around the country “are not offering extensive coursework on working in inclusive environments” (p. 308).

To respond to this need, PD programs aimed at improving in-service teacher preparedness have become common and have been found to affect teachers positively (Birman, Desimone, Porter, & Garet, 2000; Boydak & Dikici, 2001; Hirsh, 2001). These PD activities, however, must be effective to generate positive changes in teachers’ practices. Some research has solicited feedback from teachers to identify the qualities of effective PD. For example, teachers have suggested that effective PD activities consist of an appropriate alignment to their needs and the school context, teacher involvement in the design and planning of the PD, active participation, long-term engagement, and highly qualified instructors (Bayar, 2014). Dunst, Bruder, and Hamby (2015), Dunst and Hamby (2015), and Dunst, Trivette, and Hamby (2010) found that teacher PD was most effective when districts and schools hired instructional coaches, the PD was job-imbedded, teachers were actively engaged and able to reflect on their learning with their coaches, and the PD exceeded 20 hours of support.

PD for in-service teachers, however, is only a limited solution in promoting the needs of diverse learners. As the California Task Force on Special Education (2015) suggested, a vision for improvement includes “all teachers and administrators, both general and special education, know[ing] how to work together in a seamless and coordinated instructional system” (pp. 7-8). In this way, both teachers and administrators must work together to offer a coordinated instructional system within the school. Similarly, DuFour and Marzano (2011) highlighted that effective PD involves the school leader who must work to create a culture of a professional learning community throughout the school. The Task Force (2015) mirrored this call for an integrated system where general education and special education work together so that “students with disabilities receive effective services, learn in classrooms that are guided by rigorous standards alongside their general education peers when appropriate, and are equipped to make their own way as adults” (p. 7). As such, the current PD sought to improve in-service general educa-

tion teachers' practices related to educating students with mild to moderate disabilities in a general education classroom setting by encouraging rigorous standards. Finally, the report (2015) stated that "universal design for learning establishes both the philosophical and practical foundation for this unified approach that serves all students" (p. 21). To respond to this vision, the PD offered in the current study applied the Universal Design for Learning (UDL; Center for Applied Special Technology, 2015b) framework (described below) as both a school-wide philosophy and a practical foundation for training in-service general education teachers.

### Context

This evaluation study occurred at SAS, a Catholic PK-8 school located in a middle- to high-income area of Southern California. The school site had one class per grade level and served approximately 250 students, the overwhelming majority of whom were White and raised in middle-class and affluent families. The population of faculty and staff consisted of 11 grade-level teachers (10 female), 16 administrators and support staff (15 female)—including the principal and assistant principal—and nine classroom aides (all female). Teachers relied on the aides and support staff to work with individual students when necessary.

Responding to the needs of the community, SAS changed its admissions policy to allow for students with moderate disabilities (i.e., Down Syndrome) into their Catholic elementary school. SAS teachers, having recognized the increased learner variability within the school and the necessity to alter and improve their practices as a result of this policy change, received support from the principal and decided to invite experts from a local university to their campus to design and lead a school-wide, 18-month PD program that focused on increasing access to the curriculum for students with moderate disabilities.

### Program Design

To create an effective PD program for the specific context at SAS, university personnel grounded the content of the program in the principles of UDL and borrowed from the literature on effective PD to structure the delivery of the program. Regarding the content of the program, the architectural concept of Universal Design encourages builders to think about ways in which physical spaces are accessible to all people (e.g., not using knob door handles); UDL applies this concept of universal accessibility by design to curriculum

and instruction (Center for Applied Special Technology, 2015b). According to Rose and Meyer (2002), initially, “legislators and architects were working very hard to ensure that education buildings were universally accessible, but no such movement pursued universal accessibility for the methods and materials used to teach inside the buildings” (p. 72). In the way that Universal Design removes barriers to physical access, UDL helps to remove barriers from learning by utilizing three principles: (a) multiple means of representation of content; (b) multiple ways for students to represent their knowledge; and, (c) multiple ways of engaging students. UDL has been linked to cognitive functions and the principles align with three brain networks. The recognition network represents the “what” of learning; the strategic network denotes the “how” of learning; and, the affective network indicates the “why” of learning. For example, to activate the recognition network, curriculum must be presented in multiple ways. To activate the strategic network, UDL would advocate for students to be able to express what they know in differentiated ways. Finally, to activate the affective network, students must be stimulated and motivated to learn through engaging curriculum. In each of these areas, barriers can exist for students (Center for Applied Special Technology, 2015b). If, for example, a student is not interested and engaged in the learning process (the affective network) then an obstacle to accessing the curriculum exists rather than a deficit in the child. The principles of UDL apply to all learners, not just students with special needs. Based on the principles of UDL, the PD program modeled examples of what, how, and why general education teachers might change their teaching practices to work with all students in their classrooms.

The main purpose of the PD program at SAS was to provide quality professional learning for the general education teachers by engaging their participation and assisting in their immediate task of providing access to the curriculum for the students with moderate disabilities, GES, and gifted students who enter their classrooms every day. In order to achieve this goal, university UDL experts used a hybrid PD delivery model. This hybrid model contained a combination of the External Expert Model (EEM) and the Job-Embedded Professional Development (JEPD; Strieker, Logan, & Kuhel, 2012) model. The EEM relies on content experts from off campus to deliver PD at a school site or throughout a district. In the case of the PD program at SAS, the content experts from off campus were the UDL instructional coaches provided by a local university. In slight contrast, JEPD focuses more on educators’ ongoing learning and program implementation and evaluation

while on the job (Strieker et al., 2012). For example, during the PD at SAS, the UDL instructional coaches and teachers participated in collaborative activities such as lesson observations and demonstrations, debriefing sessions, and workshops. This way, teachers were able to benefit from the coaches' extensive knowledge of and experience with UDL as well as the feedback and learning that typically accompanies on-the-job PD.

In preparation for the PD program, the school administration and two teams of university personnel—(a) UDL experts who led the PD activities and (b) a separate team of researchers—conducted a needs assessment based on teachers' feedback to the principal regarding the challenges they were experiencing in the classroom. Once the university teams and the principal were in agreement as to the structure and timeline of the PD program and the evaluation, the UDL experts presented the concepts of UDL over the course of four weekly faculty meetings. These two-hour-long meetings contained training modules on learner variability, collecting assessment data, sensory techniques, and UDL principles and guidelines.

Shortly thereafter, the entire school community was invited to a town hall-style meeting where the administration and university teams presented information on UDL, the PD program, and the evaluation while addressing teachers' and parents' questions and/or concerns. Over the course of the next 18 months, the PD unfolded in three phases, which together were considered the coaching portion of the program. During the first coaching phase, the third- and fifth-grade teachers received the coaching; the kindergarten, first-, and second-grade teachers participated in the next phase; and, the remaining teachers—grades six and seven and the middle school math and technology teacher—participated in the last phase of coaching. Sequencing and selection of the participating teachers were planned and implemented purposefully—in consultation with school administration and based on the grade level of expected students with special needs enrolled in the school.

Activities during the three phases of the PD included ongoing and personal coaching in an on-the-job format. First, each teacher had their own personal certified UDL coach who conducted pre-observations of the teacher giving a typical lesson in the classroom. Next, the coaches demonstrated a UDL lesson with the students in the teacher's classroom while the teacher observed. Lastly, teachers were instructed to create and implement a UDL lesson in their classroom while being observed by their coaches. After each phase, the teachers debriefed and analyzed lessons with their coaches and ongoing communication between the teachers and coaches was encouraged.

Over the course of the program, the principal played a vital role in bringing the coaches and teachers together, facilitating the scheduling of lesson observations, coaches' demonstrations, and debriefing periods, and observing and evaluating changes in classroom instruction and student learning.

### Method

For decades, methodologists have debated their stances on what constitutes the most appropriate and effective methodology for program evaluations. On one side of the aisle are those who believe that the randomized control trial is the best way to accurately gauge the magnitude and nature of the effect a program has on a target population (Lipsey 2001; Shadish, Cook, & Campbell, 2002). On the other side are those who believe programs should be investigated in their natural environments, devoid of any attempts to manipulate the context in order to control for confounding variables (Goodyear, Jewiss, Usinger, & Barela, 2014). There is a myriad of valid and impactful research from both paradigms. However, evidence of recent evaluation practices in education (Galport & Galport, 2015) suggests a trend toward a more diversified approach that places practical utilization atop the list of project goals. Such evaluations incorporate participants' input and expertise into the planning and the implementation. For example, instead of supporting one method above others, Patton's (2008) utilization-focused approach calls for evaluators to take all methods of inquiry into consideration and customize their study designs to fit each individual project. Stakeholders (i.e., participants, school community) are involved in the process of creating a customized design, so that they can effectively apply the findings and initiate change in their organization. Methods should be selected together based on what will address program goals, what will produce findings that can be implemented efficiently, and what resources are available (Patton, 2008). While in some situations a randomized experiment would be the method of choice, in others, an experiment may not be appropriate because there is no access to a control group, randomization may be unethical, quantitative measures may not completely capture the full spectrum of what is being investigated, and the nuances of the specific context may be important details that need to be a part of the evaluation. In the latter case, a more in-depth, qualitative approach would be the wise choice.

For the UDL program evaluation, taken into consideration were the stakeholders' main goals: to create an inclusive school environment and provide all SAS students—those with and without disabilities—equal access to

the curriculum. Additional aspects of the context were also taken into consideration: (a) there was no access to a feasible control group, (b) randomization would have severely disrupted the flow of the school day at SAS, (c) SAS was a one-class-per-grade school so our sample size was small, (d) quantitative measures such as student achievement scores would not have captured the trends in classroom instruction that the principal and teachers were interested in analyzing, (e) according to all stakeholders, there was more to the school's transition to a fully inclusive environment than just student achievement, and (f) details of this particular context seemed relevant to the evaluation of the program. As a result, a case study-type approach to evaluation, as originally suggested by Stake (1995), was deemed the most appropriate fit for the design of this study. The research questions guiding this evaluation were: (a) How did the UDL program impact teachers' instruction in the classroom? and (b) What were the teachers' perceptions of the program and its impact on their students? Patton's (2002, 2008) suggested qualitative methods specific to utilization-focused evaluation were ideal for addressing these questions and uncovering nuanced data and findings that SAS administrators and teachers could use in their future decision-making.

### Participants

The principal and eight classroom teachers participated in one-on-one interviews. The principal at SAS during the PD program was a first-year principal who previously taught middle school English for nine years. The pre-kindergarten teacher did not participate in the training because she left the school partway through the program and the fourth grade teacher did not participate because she started at SAS after the program was underway. The eighth grade teacher also did not participate because she retired at the end of the school year and the principal thought it would not be a valuable use of her or the coaches' time. Instead, the principal requested that the middle school math and technology specialist participate in the program because she taught several sections throughout the week. All interview participants were female, held state teaching credentials—the principal held a state administrative license—and their mean number of years of teaching experience was 10.57 ( $SD = 7.61$ ).

There were four UDL coaches involved in this study—three female and one male. Three of the coaches were former public school teachers who were working at the university as fieldwork coordinators. To become fieldwork coordinators they needed to have extensive experience as public school teachers

and their job at the university entailed supervising and mentoring student-teachers working toward their state teaching credentials. The fourth UDL coach was the Director of Fieldwork at the university.

### **Instruments**

All interview protocols were semi-structured so as to allow for impromptu elaboration and the freedom to expand upon topics that unexpectedly emerged and were relevant to the study. The pre-program interview protocols for the teachers included questions about their prior knowledge of and experience with UDL and their expectations of the PD program. Their post-program interviews included questions geared toward capturing their opinions of the effectiveness of both UDL as a framework and the coaching element of the PD program, their impressions of how their teaching practices changed over the course of the program, their intentions for future lessons, and their perceptions of how students reacted to the UDL lessons. The coaches' interview protocol included questions about their perceptions of how the teachers reacted to and changed over the course of the PD program. The principal interview protocol included questions regarding the transition into her new position as leader of SAS at the beginning of the school year, the experience of entering a new school while a school-wide PD program was already underway, her thoughts and opinions of the program, and her observations of how the program impacted teachers and students.

During lesson observations, the coaches used a checklist (Center for Applied Special Technology, 2015a) made from the tenets of the UDL framework. The broad categories on the checklist were: the teacher provides or uses multiple means of (a) representation, (b) engagement, (c) action and expression, and (d) assessment of student understanding. Each broad category contained sub-standards such as "provides options for perception" and "provides options for language and symbols"; and, these sub-standards listed specific items for the coaches to observe during lessons. In addition to observing teachers' implementation of UDL in their lessons, coaches observed and noted student engagement on the checklist. The coaches simply checked "yes" if they saw the item in the lesson, "no" if they did not, and then added additional comments if necessary. The checklist could provide a summative, quantitative score for each observation—by summing the "yes" scores—but due to the qualitative nature of this study we chose to analyze each checklist item individually.

## Procedures

After receiving Institutional Review Board approval from the affiliated university and support from the central office (Department of Catholic Schools), the evaluation unfolded over the course of 18-months. The fall semester of the academic year was spent in consultation with stakeholders to design a customized PD program and corresponding evaluation, and to develop relationships between the UDL coaches and the teachers. The PD coaching activities began in the spring semester with the first set of teachers (grades 3 and 5). Due to timing issues, and as expected when implementing an evaluation in a school setting where schedules often change for varying events, these teachers were not interviewed prior to the start of the PD program. They did, however, participate in post-interviews. All remaining teachers from the second and third phases of the program participated in both pre- and post-interviews and all UDL coaches participated in post-interviews, which included a review of their observation checklists. Some of the post-program interviews from the third phase occurred in the fall of the following school year, along with the last step of data collection, which was to interview the principal. This interview was intentionally conducted after the completion of the program so as to capture her perceptions of the program in its entirety.

## Data Analysis

All interviews were transcribed and coded using evaluation coding (Patton, 2002, 2008; Rallis & Rossman, 2003; Saldana, 2013). The objective was to identify patterns in the data that pertained to participants' judgements about the effectiveness of the PD program and then analyze the significance of those judgements, paying particular attention to (a) any changes in the teachers' attitudes toward the UDL framework from pre- to post-interviews, (b) the coaches' and the principal's reports of observable changes to teachers' UDL knowledge and skill set, (c) and changes in students' level of engagement during classroom observations (Patton 2002, 2008). The coaches' observation checklists were used to cross-check the coded data from the interviews in an effort to emphasize findings that were represented across both data sources.

## Findings

Broadly speaking, the data show that (a) the impact on teachers' instruction and student engagement depended on teachers' willingness to buy into the coaching and the UDL framework, (b) some teachers had concerns about

the feasibility of using UDL on a regular basis, (c) participants thought the PD program needed to be extended in order to have more observations and debriefing sessions with the coaches, and (d) most teachers at SAS saw the UDL program as PD for improving their inclusive teaching practices so that all students in their classes, especially those with moderate disabilities who were recently admitted to the school, could access the curriculum. Below is a detailed description of the findings that pertain to each research question.

### **Perceptions of the UDL Program**

According to the coaches and the principal, there was variability in buy-in of the UDL program among the teachers at SAS. Even though this was a teacher-led initiative, the coaches observed a direct link between teachers' level of buy-in and their progress over the course of the program: "The [teachers] who put the most into it, got the most out of it". One coach said that teachers reacted "in different ways". Five of the eight teachers were open-minded from the beginning, excited about learning new pedagogical strategies, willing to be observed and critiqued, and anxious to implement what they learned from the program in their classrooms. With this group of teachers, the coaches witnessed tremendous growth and development:

Teachers who bought into it, I think, were given an opportunity to see their students in a different way because...maybe the kid that was struggling before is now completely engaged. If there is buy-in then teachers can see their kids differently.

In contrast, the remaining three teachers were not as enthusiastic and responsive and, according to the principal, were "slightly resistant, thinking that they already knew how to do everything". These teachers reported not being comfortable with observations and critique; they did not see how such a framework could be effectively implemented on a daily basis in their classrooms; and, they failed to see the difference between UDL and what they used in the past. The coaches did not see significant progress in the latter group. Nevertheless, even though the general consensus was that these more resistant teachers did not show observable signs of growth by the end of the program, the principal saw a few instances when they briefly embraced the framework and effectively implemented it in their classrooms. Unfortunately, it was not enough to catch the attention of the coaches and their fellow teachers.

During the initial meet-and-greet with the coaches, the teachers ex-

pressed concerns about the amount of time planning and implementing UDL appeared to take, which, according to the coaches, was a legitimate concern. Taking this into consideration, the coaches purposefully demonstrated and suggested UDL techniques that typically take very little preparation time and involve readily available classroom resources. Even after having observed the coaches conduct a lesson in the classroom and then finishing the program all together, some teachers remained skeptical about the feasibility of implementing UDL on a regular basis:

I thought the practice of the philosophy was a little bit of a stretch... the example lesson that [the coaches] gave required a whole lot more planning than I typically have time to devote...I can't go to the grocery store every single day and get boxes of candy so we can do surface area...I don't think that there is many of us teachers who would be able to pull that off three to seven times a day, every day.

Another teacher expressed the same concern about the difficulties of implementing UDL in the classroom on a regular basis:

I think the biggest challenge with UDL is to feel the pressure to do it all the time in every lesson. Some lessons are just memorization, some lessons are just boring, especially being self-contained, it would be very difficult to do that for six hours. It would be very difficult to UDL-ize a spelling lesson where you just...it's just spelling...just maintenance-types of subjects.

During their interviews, many teachers suggested that, in the future, UDL coaches should explicitly explain and demonstrate how the framework is applied in a classroom setting on a daily basis over an extended period of time.

Furthermore, according to many of the teachers and coaches, there was not enough time at the onset of the program for teachers and coaches to build relationships with one another. The coaches were cognizant of the possibility that teachers were nervous and uncomfortable with the idea of university personnel entering their school from off campus and evaluating their teaching practices. One teacher expressed that they "were a little scared to be critiqued." With that in mind, the coaches were mindful of the importance of developing a level of trust with the teachers and purposeful during the meet-and-greet phase of the program. Unfortunately, the introductory phase of the

program was short-lived and by the time the coaches were in the classrooms conducting their initial observations with the first group of teachers, trusting relationships did not exist between all coaches and teachers.

Both the teachers and coaches expressed the need to extend the PD so that teachers could have more time to learn and implement the framework and coaches could have further opportunities to conduct additional observations and provide quality, targeted feedback for the teachers. One teacher stated the following:

...the timing was tough because it was rushed. I would have liked more feedback so that I could know where to go from where I was. So, they saw a start and then saw an end and didn't leave us a road map for the future.

In addition, most teachers mentioned the tremendous benefit of the debriefing sessions with the coaches and wished they could continue that collaboration in the future. The following teacher's statement about the collaboration with her UDL coach demonstrates these sentiments:

I liked the collaboration with Jennifer (pseudonym). I liked that coaching component. It was really nice to have someone to collaborate with me...here [at SAS], I am the only teacher for my grade so I am lacking in grade-level collaboration, so Jennifer filled that need—void actually...Sharing ideas with her, having the checklist feedback, knowing that what I have been doing is very similar to the program...Working with Jennifer has brought me back to how collaborating is really important.

The coaches confirmed this finding, stating that many teachers approached them and expressed their appreciation for the opportunity to collaborate about classroom practices and curriculum and that they did not get that opportunity at the school, outside of the UDL program:

I think some interesting things came out of the debriefing sessions that nobody was necessarily looking for but were very valuable. Like, across the board, [the teachers] all said we don't ever get to collaborate, so the debriefing was kind of serving as that.

This finding was further confirmed when talking to the middle school-level teachers who, unfortunately, received the last, rushed round of training at the end of the school year. For example, one middle school teacher said she was looking forward to receiving detailed feedback about her UDL lesson from her coach; but, because of the timing of the program, her debriefing was minimal.

Teachers also valued the coaches' lesson demonstrations in the classroom. Too often, according to the teachers, professional development does not involve modeling from which teachers can learn. Most of the time, unfortunately, PD consists of someone talking at the teachers and telling them what to do and is devoid of any real time application. With the coaches' demonstrations, teachers were able to see exactly what a UDL lesson looks like in a live classroom before they were asked to apply the framework themselves:

I think it was nice that [the coaches] actually did a sample lesson. That was nice to see because you can talk about what you want but it is easier to see what they want...before we were asked to do it ourselves. It was nice to see what they had in mind.

This approach to PD was new for the teachers and they saw great value in it. One teacher said that she would love to see more UDL demonstrations in the future and that one was not enough. It is worth mentioning that though the coaches' demonstrations were appreciated and valued, some teachers saw these extravagant, well-planned, highly detailed lessons as nearly impossible to plan and implement every day, multiple times a day.

### **Developing an Inclusive Environment**

When asked what they liked most about the UDL framework, teachers mentioned, among other things, its focus on reaching all students in the classroom, especially those with special needs. The teachers stated that they are often overwhelmed with having to finish all of the content standards by the end of the academic year and, as a result, creating time and ways to ensure that every student retains enough of the material is frequently overlooked. The UDL training provided teachers with efficient and creative methods of lesson planning and implementation that helped teachers address standards, deliver content using multiple means of representation (e.g., color-coded notes), and assess students in creative and valid ways. One teacher mentioned that, because of the UDL training, all of her students are at the forefront of

her mind as she plans her lessons as opposed to the past when she thought mostly of just the students in the class who were at grade level: “planning for the individual kid and not planning for the middle...when I am searching for resources...I keep the individual students in mind more than I did before”. She is now cognizant of the students who are either well above or well below grade level when preparing her curriculum.

However, toward the end of the program, coaches expressed a concern that was also confirmed by a few of the teachers. During and even after the UDL program, some of the teachers believed in and remained dependent on the pullout model—where their resource teacher would remove students with special needs from their general education classrooms in order to provide them with necessary additional support. Based on the definitions presented in the introduction of this paper, this would be referred to as least restrictive mainstreaming. A main tenet of the UDL framework, however, is full inclusion of all learners, also as defined in the introduction, meaning that all instruction, even that which is typically administered by resource teachers in isolated environments, could and should happen in the general education classroom (Center for Applied Special Technology, 2015b). And, one of the goals of the UDL PD program at SAS was to assist general education teachers in a fully inclusive classroom setting. One of the teachers who expressed this concern stated that this particular inclusion tenet of UDL was not clearly discussed in the workshops prior to the program, which may have led to some teachers’ reliance on the least restrictive mainstreaming model.

### **Impact in the Classroom**

During and after the UDL program, teachers noticed that their students were more engaged during class, spent far less time off task, and were more motivated to finish their work and start something new. In her observations of the students during and after the program, the principal saw students who typically struggled academically and socially gain confidence; she shared that the UDL approach helped these particular students “shine in different ways”. Teachers also noticed improvements in their students’ critical thinking, which teachers attributed to the shift from teacher-centered lectures to student-centered lessons; specifically, teachers indicated that students had space and time to troubleshoot and problem solve as opposed to being provided material for memorization.

The student-centeredness that UDL promoted, according to the teachers, actually made classroom instruction easier and less taxing. One teacher stated

that, when applying UDL to her teaching practice, most of her work was frontloaded in the preparation and once the lesson began in the classroom she was able to sit back, facilitate, and watch her students think through the problems and experiments from start to finish. In slight contrast, it is worth noting that one teacher reported that her students seemed more confused during the new UDL lessons than past lessons in her class when the instruction was mainly teacher-centered. This could be attributed to a combination of her students' preference for lectures and their transition into something different and unfamiliar.

A common response to the question of what teachers liked about UDL was its promotion of hands-on student work during class. One teacher said that she was both happy and relieved when she learned of UDL's promotion of active student engagement with the material as well as fellow classmates:

I really appreciate that it is hands-on. And, I have always liked teaching that way myself and I feel like [the students] get a lot out of it that way...but, I always felt constrained about doing it. [UDL] makes it more acceptable. I was always known for 'Why is your classroom so loud?'

As a science teacher, she often had students work on projects or experiments in groups and, because of the nature of that type of learning environment, the classroom liveliness would reach a sizeable crescendo. As a result, at times, she was self-conscious about whether this would be looked down upon by her colleagues and supervisors. She was happy and relieved that her intuition and teaching practices up to that point were part of the UDL framework. In addition to validating her pre-existing practices, she reported that the program taught her new ways to engage the students in hands-on science activities that address the standards and multiple learning modalities.

Most of the teachers also liked the idea of having common pedagogical practices across all grade levels at the school, taking into consideration students' stages of development. One teacher said, "I hope that there is a consistency among our staff with philosophy...more consistent philosophy...and, maybe more consistent expectations and teaching styles". When asked why, many teachers said that consistency would allow students to internalize one set of classroom procedures as opposed to learning a new set every year—a process that takes teachers a significant amount of time at the beginning of

each school year. Furthermore, common pedagogical practices, according to the teachers, could potentially be a catalyst for future collaboration among the teachers—something that, according to many of the teachers, was nonexistent at the school prior to the PD program. If they use the same strategies, the same terms, and the same resources, then teachers could easily help one another with lesson planning and implementation.

The ways in which UDL differed from previous teaching strategies emerged as a topic of reflection. Many of the teachers stated that they had similar training in their teacher preparation programs and prior professional development; according to them, it simply had a different name. When the teachers were asked to describe UDL, many of them equated it to differentiated instruction—a pedagogy they knew well, with which they had experience, and they implemented often in their classrooms. For example:

I didn't think the [UDL] philosophy was that much different from differentiation, or from what you are supposed to do anyways. I felt like you were supposed to include all of your learners; you were supposed to try to customize your lessons for the kids in your room...I didn't think the philosophy was that much of a stretch.

However, during their initial observations of the teachers, the coaches witnessed something slightly different. With some teachers, the coaches saw what is often referred to as the typical classroom—students seated at their desks listening to the teacher deliver a lesson—and a very basic understanding of the UDL framework. With others, the coaches saw attempts at UDL-type strategies, such as students using technology and moving about the classroom, and a deeper understanding of UDL principles, particularly with regard to planning and designing a lesson with access for all students in mind, rather than adjusting a lesson through differentiated instruction for the few students in need.

When asked about the most challenging aspects of the UDL framework, some teachers mentioned the difficulties of transferring UDL assignments and assessments to the school's standardized grading system. As an example, in almost every classroom there is variance in students' prior knowledge, learning preferences, and content interests. The UDL framework, therefore, requires teachers to utilize multiple methods of representing content and assessing students, meaning that, at times, students in the same class, learning the same content standard, will have slightly different tasks and will be asked

to express their learning in slightly different ways—ways that utilize their strengths instead of targeting their deficiencies. This sometimes results in a variety of finished products as opposed to the same essay/test/project with uniform requirements and criteria. These challenges are described in the following teacher's response:

[The biggest challenge is] probably assessment. Being able to equate how the students have learned with a very standardized report card... for example, when a child gets a report card and it says 'B' and it is a fifth grade report card, a parent would assume that is slightly above average. However, it doesn't necessarily equate to what the student may be doing. They may have shown 'B' in effort or 'B' in growth compared to where they have been; but, it isn't necessarily a standardized 'B' as one would claim it to be, because how they showed me they have learned was different.

According to some of the teachers, the different assessments of learning were beneficial for the students but difficult to portray on a standardized report card within a homogenous grading system; and, these progressive assessment practices contrasted with parents' typical expectations of standardized grades, textbooks, and paper-and-pencil exams.

### Discussion

In their research on PD efforts that help schools and classrooms shift to a more inclusive environment, Stricker, Logan, and Kuhel (2012) offered three essential factors that are typically present in successful teacher PD programs: (a) "on-going emotional and technical support at the classroom level," (b) "a forum through which to articulate and understand their beliefs, and how those beliefs influence daily practice," and (c) "professional learning that is student-focused" (p. 1049). Based on the findings of the current study, the 18-month UDL program partially satisfied these three essential criteria. First, the UDL program, by design, provided teachers with on-going technical support in the form of classroom observations and demonstrations, which, according to most teachers and coaches, was beneficial and one of the strengths of the program. However, some teachers—not all—expressed and demonstrated their hesitancy to move away from the least restrictive mainstreaming model to which they grew accustomed over their teaching careers. This could be interpreted as the program's lack of attention to providing teachers

the necessary emotional support as they transitioned away from what was familiar to and comfortable for them. There also was the unresolved issue of grading and assessment while implementing the differentiation-type UDL framework within a standardized grading system. For future UDL program implementations, principals, teachers, and instructional coaches may need to consider constructing a plan that will effectively integrate the differentiated nature of UDL assessment practices into their existing grading systems. So as to avoid conflict and bridge the gap of understanding, this transition may need to involve parents within the school community.

Regarding the second factor, the debriefing sessions after each observation and demonstration were opportunities for teachers to discuss their beliefs about UDL and how they apply to their classroom practices. According to most of the teachers at SAS and the UDL coaches, the debriefing sessions were extremely beneficial. However, all participants—the principal, teachers, and coaches—thought the program was not long enough and the teachers would have preferred more demonstrations, observations, and debriefing sessions with the coaches. This could be interpreted as either the program not completely meeting the needs of the faculty and staff at SAS or teachers thinking the program was so worthwhile that they hope the professional learning community-type, collaborative relationships they developed with the UDL coaches will continue among the teachers at SAS, well after the coaches leave the campus. The fact that a number of the teachers stated that they appreciated and learned a great deal from the coaches' demonstrations and their debriefing sessions supports the latter.

In addition, the group of teachers who were involved in the last rotation of coaching stated that the final round was rushed and that they needed more time to familiarize themselves and become comfortable with applying the framework in their classrooms. The coaches agreed. The fact that the principal, teachers, and coaches all reported the need for a time extension on the program demonstrates support for a more in-depth, focused, and purposeful approach to teacher PD as opposed to a quantity/breadth approach that attempts to touch upon as many issues as possible over the span of a school year. And, in order to create, implement, and benefit from a more focused and long-term approach, administrators and teachers must be diligent and thorough in their ongoing, school-wide needs assessments (looking at teachers and students) so that what they choose as an area of focus will bring about impactful and lasting change.

Like the previous two factors, the third factor—student-focused professional learning—was partially fulfilled. The UDL program focused on improving teachers' lesson planning and classroom instruction to promote student engagement; and, for the teachers who bought into the benefit of UDL as a framework, the program was a success. For these teachers, either the program validated and fine-tuned the student-centered, project-based approach they already used in their classrooms or it ignited a complete shift away from a teacher-centered pedagogy—a shift in practice that seemed to benefit students. However, the positive influence of the UDL program was not universal among all SAS teachers. Teachers who appeared to be close-minded about the program from the outset did not demonstrate and/or report the same benefits. These teachers saw the UDL framework as no different from prior learning in their teacher preparation programs and past PD; they did not see any of the lesson and curriculum ideas as feasible; and, either they were not comfortable being evaluated or they did not think the feedback was valuable. The variability in the findings highlight the importance of administrators taking the time to thoughtfully and purposefully plan and prepare for large-scale PD efforts. They also emphasize the importance of school leaders earmarking a significant amount of time at the beginning of any PD program that contains evaluative processes for all participants—evaluators and those being evaluated—to develop trusting relationships with one another.

### **Implications**

The purpose of this study was to evaluate the UDL PD program at SAS and, according to the findings, the program appeared to help guide the faculty and staff at SAS through the tumultuous beginning stages of a significant change to their admissions policy. The program seemed to provide a platform on which faculty and staff can begin conversations that could lead to the school-wide ideological transformation that is necessary for shifting to, creating, and maintaining an inclusive school climate; and, it gave teachers the tools they need to serve and reach students with moderate disabilities in fully inclusive schools and classrooms. Speaking to a broader context, if other Catholic school administrators and teachers wish to follow in the footsteps of SAS—or are already in the process—and heed the call for a shift in ideology, policy, and practice toward welcoming and effectively meeting the needs of SWD who wish to experience a holistic Catholic education (Carlson, 2014; Scanlan, 2009a), then UDL appears to be a framework that diocesan officials, school leaders, and classroom teachers should take into consideration.

With that said, even though this study took place in one, very unique, Catholic school context, the findings speak to larger issues related to PD, teacher preparation, and school administration. First, let this particular example act as additional evidence of leadership playing a pivotal role in managing school-wide change (Hall & Hord, 2011) and that the course of such a large-scale change as choosing to serve students with moderate disabilities in general education classrooms requires a time period that vastly exceeds 18 months, or one-and-a-half school years. In reality, the actual PD activities were condensed to a 6-month period. Therefore, it would behoove school administrators to recognize that planning the change process, which should include a long-term, post-program plan to sustain any improvements brought on by a program, is as important as the program itself.

Second, as mentioned in the introduction and literature review of this article, historically, teacher education programs have done a poor job of blending general and special education in order to properly prepare general education teachers to work in inclusive classrooms and in collaboration with special education teachers (Allday et al., 2013; Scruggs & Mastropieri, 1996; Smith & Smith, 2000). Some of the SAS teachers' comments during interviews, however, could lead one to believe that the aforementioned trend in teacher education may be shifting toward an interdisciplinary approach. For example, after receiving the UDL training, many teachers at SAS reported seeing similarities between UDL and the formal training they received in differentiated instruction during their teacher preparation programs and that they had been using UDL-like strategies prior to the program. If colleges of education are providing adequate coursework related to all degrees of inclusion (i.e., full inclusion, least restrictive mainstreaming, and restrictive mainstreaming) then maybe new teachers' frustrations and lack of self-efficacy can be alleviated to a certain extent if their teacher preparation programs provide them the opportunity to gain experience teaching in an inclusive classroom setting alongside a special education teacher. A combination of both seems like the best option.

And lastly, if current school administrators choose to follow in the footsteps of those who, since the passing of the Education for All Handicapped Children Act (1975), shifted to a more inclusive model of education, according to the findings of this study, UDL, if implemented properly, may be an appropriate framework with which to begin such a dramatic change initiative. In addition, this study shows that when implementing long-term PD programs of any kind, school leaders must evaluate and take into consider-

ation stakeholders' perceptions of what is to ensue in order to build effective professional learning communities (DuFour & Marzano, 2011) and relationships that are grounded in trust, respect, and professionalism. The design of both the UDL program and this study could potentially act as a model for school administrators who wish to conduct their own program evaluation.

### Limitations

Like all single case, qualitative evaluations, this study had its limitations. Due to the nature of the context within which this study took place, a utilization-focused evaluation (Patton 2002, 2008) where the design was customized to the program and made in consultation with stakeholders at SAS was the research design of choice. As such, a qualitative inquiry was implemented to examine valuable nuances and details that emerged throughout data collection and analysis. Therefore, a claim for causality would be far from appropriate in this case. However, the findings still provide evidence of the UDL program helping SAS in the beginning stages of their transition into creating a more inclusive Catholic elementary school.

In addition, the qualitative methods selected for this evaluation could have been more robust, e.g., spending more time in classrooms observing lessons before, during, and after teachers received their UDL coaching. Though this is a valid point and more observations and even an additional round of interviews were taken into consideration, the decision was made to rely on the principal to provide an acceptable amount of time in the classrooms, so as to avoid disrupting the school day and administrators', teachers', and students' schedules. The principal's suggested timeline was followed as requested and in accordance with the practice of considering stakeholder input in planning and implementing a utilization-focused evaluation (Patton 2002, 2008).

Evaluations of programs often include student-level, quantitative data, which this study lacked; and, we recognize that student academic, behavioral, and social outcomes would have only improved the reliability, validity, and applicability of our evaluation of the UDL program at SAS. However, the goals of the PD at SAS were focused primarily on analyzing changes in teachers' classroom instruction; therefore, collecting teacher-level data was appropriate. Furthermore, had we collected such student-level, quantitative outcomes, the single school, one-class-per-grade research site would have almost certainly hindered our ability to accurately and appropriately attribute the results solely to the UDL program and make generalizability claims be-

yond SAS. And, measuring achievement in each class would have required, at least, pretests prior to program implementation at each phase and post-tests immediately after, which would have reached well beyond the principal's suggested parameters for disrupting their day-to-day schedule in order to conduct the evaluation. The standardized test data collected in Catholic schools in this particular diocese were not at all valid measures of program effectiveness and were therefore excluded from consideration.

It is worth noting that, while the research team suggested the collection of student data to stakeholders during the planning phase, parents disliked the idea given the recent change in the admissions policy and the newness of the UDL concept. More specifically, parents requested to review the proposed student-level measures prior to administration, which would have compromised the validity of the study. While student data would have undoubtedly added to the evidence of the program's impact on the school's transition to a more inclusive environment, in the best interest of the school and all of its stakeholders, the decision was made to focus solely on administrators, teachers, and coaches.

### **Suggestions for Future Research**

Fortunately, the limitations of this study also act as suggestions for future research on inclusivity, teacher PD, school leadership, and change initiatives in Catholic elementary and secondary schools. First, many Catholic schools across the U.S. are experiencing the same type of transition as did SAS—opening their doors to students with mild to moderate disabilities—and there is evidence of some dioceses and schools making conscious efforts to improve their inclusive service delivery (DeFiore, 2006; Durow, 2007; Scanlan, 2008, 2009b). However, because of autonomous governance and the numerous types of communities they serve, Catholic schools differ from one another, often in very substantive ways. Therefore, continued single and multiple case study research on program implementation in dioceses and schools, such as that described in this study, is vital to understanding the nuanced and delicate processes of change initiatives in Catholic K-12 schools. And, while continuing these types of studies, future researchers in this area of scholarship need to consider the option of revisiting dioceses and schools well after program implementation so as to investigate long-term impact—or lack thereof—and the specific actions and decisions of school and classroom leaders that either maintain and develop the initial positive changes or lead to their deterioration.

In addition to the call for continued in-depth case study research, there is a need for quantitative evaluations of system- and school-level programs and initiatives in Catholic schools, such as the one implemented at SAS. For example, if other Catholic K-12 schools that serve students with mild, moderate, or even severe disabilities choose to use UDL as a school-wide instructional framework, then it would behoove researchers and practitioners to collaboratively create ways to collect student-level academic and social outcomes so that investigators can quantitatively measure the extent to which UDL—or similar programs like it—and the inclusion of SWD affect students with and without disabilities. Of course, there are significant challenges that would accompany such efforts. Most dioceses across the country administer annual standardized tests to measure student academic achievement; however, those data are not collected, housed, and made available in a manner that is conducive to empirical investigation. Currently, if researchers wish to conduct valid quantitative evaluations in Catholic K-12 schools that involve student achievement as the target outcome variable, often times, their only option is to administer their own assessments, which requires a tremendous commitment of time and labor from school administrators, teachers, students, and parents. Moving forward, it is our recommendation that national leaders of the Catholic K-12 education system in the U.S. work in consultation with diocesan officials on systematizing data collection so as to promote and enable rigorous and generalizable research that will lead to the growth, development, and improvement of Catholic schools across the country.

### Conclusion

Above all else, this study of the UDL program at SAS highlights the complexity and delicacy of school-wide change initiatives and properly serving students with moderate disabilities in Catholic schools. The evidence from this study also shows that thriving at such tasks is understandably overwhelming for Catholic school teachers and administrators. Therefore, moving forward, efforts at preparing future Catholic school educators, whether they are at colleges and universities in formal educator preparation programs or during on-the-job PD, should embrace the reality that many Catholic schools, if they have not already, are becoming more inclusive.

## References

- Allday, R. A., Neilsen-Gatti, S., & Hudson, T. M., (2013). Preparation for inclusion in teacher education pre-service curricula. *Teacher Education and Special Education, 36*(4), 298-311.
- Artiles, A. J. (2015). Beyond responsiveness to identity badges: Future research on culture in disability and implications for RTI. *Educational Review, 67*(1), 1-22.
- Bayar, A. (2014). The components of effective professional development activities in terms of teachers' perspective. *International Online Journal of Educational Sciences, 6*(2), 319-327.
- Birman, B. F., Desimone, L., Porter, A. C., & Garet, M. S. (2000). Designing professional development that works. *Educational Leadership, 57*(8), 28-33.
- Blume, H. (2014). California ranks poorly in services to disabled students. *Los Angeles Times*. Retrieved from <http://www.latimes.com/local/lanow/la-me-ln-calif-rank-special-ed-201340624-story.html>
- Borko, H. (2004). Professional development and teacher learning: mapping the terrain. *Educational Researcher, 33*(3), 3-15.
- Boydak, O. M., & Dikici, A. (2001). Hizmet içi eğitim programlarının etkililiğinin değerlendirilmesi. [The evaluation of the effectiveness of in-service training programs]. *Firat Üniversitesi Sosyal Bilimler Dergisi, 11*(2), 225-240.
- Brock, M. E., Biggs, E. E., Carter, E. W., Cattey, G. N., & Raley, K. S. (2016). Implementation and generalization of peer support arrangements for students with severe disabilities in inclusive classrooms. *The Journal of Special Education, 49*(4), 221-232. <https://doi.org/10.1177/0022466915594368>
- California Task Force on Special Education. (2015). *One System: Reforming Education to Serve all Students. Report of California's Statewide Task Force on Special Education*. Retrieved from [http://www.smcoe.org/assets/files/about-smcoe/superintendents-office/statewide-special-education-task-force/Special\\_Ed\\_Task\\_Force\\_Report-reduced.pdf](http://www.smcoe.org/assets/files/about-smcoe/superintendents-office/statewide-special-education-task-force/Special_Ed_Task_Force_Report-reduced.pdf)
- Carlson, M. (2014). Aquinas on inclusion: Using the good doctor and Catholic social teaching to build a moral case for inclusion in Catholic schools for children with special needs. *Journal of Catholic Education, 18*(1), 62-78. <https://doi.org/10.15365/jocce.1801042014>
- Carter, E. W., Asmus, J., Moss, C. K., Biggs, E. E., Bolt, D. M., Born, T. L., ... Weir, K. (2016). Randomization evaluation of peer support arrangements to support the inclusion of high school students with disabilities. *Exceptional Children, 82*(2), 209-233. <https://doi.org/10.1177/0014402915598780>
- Center for Applied Special Technology. (2015a). Universal design for learning checklist. Wakefield, MA.
- Center for Applied Special Technology. (2015b). Universal design for learning guidelines 2.0. Wakefield, MA.
- Cheng, Y. C. (1996). Relation between teachers' professionalism and job attitudes, educational outcomes, and organizational factors. *The Journal of Educational Research, 89*(3), 163-171.
- DeFiore, L. (2006). The state of special education in Catholic schools. *Catholic Education: A Journal of Inquiry and Practice, 9*(4), 453-466.
- Dessemontet, R. S., & Bless, G. (2013). The impact of including children with intellectual disability in general education classrooms on the academic achievement of their low, average, and high-achieving peers. *Journal of Intellectual & Developmental Disability, 38*(1), 23-30.

- Dessementet, R. S., Bless, G. & Morin, D. (2012). Effects of inclusion on the academic achievement and adaptive behavior of children with intellectual disabilities. *Journal of Intellectual Disability Research*, 56(6), 579-587. doi: 10.1111/j.1365-2788.2011.01497
- Dudek, A. (2000). Making room for me: Including children with special needs. *Momentum*, 31(2), 42.
- DuFour, R., & Marzano, R. J. (2011). *Leaders of learning: How district, school, and classroom leaders improve student achievement*. Bloomington, IN: Solution Tree Press.
- Dunst, C. J., Bruder, M. B., & Hamby, D. W. (2015). Metasynthesis of in-service professional development research: Features associated with positive educator and student outcomes. *Educational Research and Reviews*, 10(12), 1731-1744.
- Dunst, C. J., & Hamby, D. W. (2015). A case study approach to secondary reanalysis of a quantitative research synthesis of adult learning practices studies. *International Journal of Learning, Teaching and Educational Research*, 13(3), 181-191.
- Dunst, C. J., Trivette, C. M., & Hamby, D. W. (2010). Meta-analysis of the effectiveness of four adult learning methods and strategies. *International Journal of Continuing Education and Lifelong Learning*, 3(1), 91-112.
- Durow, W. P. (2007). Including and serving students with special needs in Catholic schools: A report of practices. *Catholic Education: A Journal of Inquiry and Practice*, 10(4), 473-489.
- Education for All Handicapped Children Act of 1975, 20 U.S.C.A. §1401 et seq., 1975.
- Farrell, P. (2000). The impact of research on developments in inclusive education. *International Journal of Inclusive Education*, 4(2), 153-162.
- Galport, M., & Galport, N. (2015). Methodological trends in research on evaluation. In P.R. Brandon, (Ed.). *Research on evaluation. New Directions for Evaluation*, 148, 17-29.
- Gasser, L., Malti, T., & Buholzer, A. (2013). Children's moral judgments and moral emotions following exclusion of children with disabilities: Relations with inclusive education, age, and contact intensity. *Research in Developmental Disabilities*, 34, 948-958.
- Goodyear, L., Jewiss, J., Usinger, J., & Barela, E. (Eds.). (2014). *Qualitative inquiry in evaluation: From theory to practice*. San Francisco, CA: Jossey-Bass.
- Guskey, T. R. (1994). *Professional development in education: In search of the optimal mix* (Report no: ED 369181). American Educational Research Association, New Orleans, LA.
- Hall, G. E., & Hord, S. M. (2011). *Implementing change: Patterns, principles, and potholes* (3rd ed. ). Upper Saddle River, NJ: Pearson Education, Inc.
- Harvey, M. W., Yssel, N., Bauserman, A. D., & Merbler, J. B. (2010). Preservice teacher preparation for inclusion. *Remedial and Special Education*, 31(1), 24-33.
- Hirsh, S. (2001). We're growing and changing. *Journal of Staff Development*, 22(3), 255-258.
- Individuals With Disabilities Education Improvement Act, Pub. L. 94-142 as amended, 20 U.S.C. §1400 et seq., 2004.
- Johnson, D. W., & Johnson, R. T. (1981). The integration of the handicapped into the regular classroom: Effects of cooperative and individualistic instruction. *Contemporary Educational Psychology*, 6, 344-353. doi: 0361-476X/81/040344-10\$02.00/0
- Johnson, D. W., & Johnson, R. T. (1982). The effects of cooperative and individualistic instruction on handicapped and nonhandicapped students. *The Journal of Social Psychology*, 118, 257-268.

- Johnson, D. W., & Johnson, R. T. (1984a). Building acceptance of difference between handicapped and nonhandicapped students: The effects of cooperative and individualistic instruction. *The Journal of Social Psychology, 122*, 257-267.
- Johnson, D. W., & Johnson, R. T. (1984b). Mainstreaming hearing-impaired students: The effect of effort in communicating on cooperation and interpersonal attraction. *The Journal of Psychology, 119*(1), 31-44.
- Johnson, L. J., Pugach, M. C., & Devlin, S. (1990). Professional collaboration. *Teaching Exceptional Children, 22*, 9-11.
- Johnson, R. T., & Johnson, D. W. (1981). Building friendships between handicapped and nonhandicapped students: Effects of cooperative and individualistic instruction. *American Educational Research Journal, 18*(4), 415-423.
- Kalyva, E., & Agaliotis, I. (2009). Can contact affect Greek children's understanding of and attitudes towards peers with physical disabilities? *European Journal of Special Needs Education, 24*(2), 213-220. <https://doi.org/10.1080/08856250902793701>
- Kauffman, J. M., Bantz, J., & McCullough, J. (2002). Separate and better: A special public school class of students with emotional and behavioral disorders. *Exceptionality, 10*(3), 149-170.
- Kearney, C. A., & Durand, V. M. (1992). How prepared are our teachers for mainstreamed classroom settings? A survey of postsecondary schools of education in New York State. *Exceptional Children, 59*(1), 6-11.
- Landrum, T. J., Tankersley, M., & Kauffman, J. M. (2003). What is special about special education for students with emotional or behavioral disorders? *The Journal of Special Education, 37*(3), 148-156.
- Lew, M., Mesch, D., Johnson, D. W., & Johnson, R. (1986). Components of cooperative learning: Effects of collaborative skills and academic group contingencies on achievement and mainstreaming. *Contemporary Educational Psychology, 11*, 229-239.
- Lipsey, M. W. (2001). Re: Unsolved problems and unfinished business. *American Journal of Evaluation, 22*(3), 325-328.
- Maggin, D. M., Wehby, J. H., Partin, T. C. M., Robertson, R., & Oliver, R. M. (2011). A comparison of the instructional context for students with behavioral issues enrolled in self-contained and general education classrooms. *Behavioral Disorders, 36*(2), 84-99.
- Maras, P., & Brown, R. (1996). Effects of contact on children's attitudes toward disability: A longitudinal study. *Journal of Applied Social Psychology, 26*(23), 2113-2134.
- Maras, P., & Brown, R. (2000). Effects of different forms of school contact on children's attitudes toward disabled and non-disabled peers. *British Journal of Educational Psychology, 70*, 337-351.
- McDonald, D., & Schultz, M. M. (2015). *United States Catholic elementary and secondary schools 2014-2015: The annual statistical report on school, environment and staffing*. Arlington, VA: National Catholic Educational Association.
- Menzies, H., & Falvey, M. A. (2008). Inclusion of students with disabilities in general education. In T. Jimenez & V. Graf (Eds.), *Education for all: Critical issues in the education of children and youth with disabilities* (pp. 71-99). San Francisco, CA: Jossey-Bass.

- National Center for Education Statistics. (2013a). *Children 3 to 21 years old served under individuals with disabilities education act (IDEA), part b, by type of disability: Selected years, 1976-77 through 2011-12* (Table 204.30). Retrieved from: [http://nces.ed.gov/programs/digest/d13/tables/dtr3\\_204.30.asp](http://nces.ed.gov/programs/digest/d13/tables/dtr3_204.30.asp)
- National Center for Education Statistics. (2013b). *Number and enrollment of public elementary and secondary schools, by school level, type, and charter and magnet status: Selected years, 1990-91 through 2011-12* (Table 216.20). Retrieved from: [https://nces.ed.gov/programs/digest/d13/tables/dtr3\\_216.20.asp](https://nces.ed.gov/programs/digest/d13/tables/dtr3_216.20.asp)
- National Center for Education Statistics. (2013c). *Percentage distribution of students 6 to 21 years old served under individuals with disabilities education act (IDEA), part b, by educational environment and type of disability: Selected years, fall 1989 through fall 2011* (Table 204.60). Retrieved from: [http://nces.ed.gov/programs/digest/d13/tables/dtr3\\_204.60.asp](http://nces.ed.gov/programs/digest/d13/tables/dtr3_204.60.asp)
- Osgood, R. L. (2005). *The history of inclusion in the United States*. Washington, D.C.: Gallaudet University Press.
- Osgood, R. L. (2008). *The history of special education: A struggle for equality in American public schools*. Westport, CT: Praeger Publishers.
- Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Patton, M. Q. (2008). *Utilization-focused evaluation* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Rallis, S. F., & Rossman, G. B. (2003). Mixed methods in evaluation contexts: A pragmatic framework. In A. Tashakkori & C. Teddie, (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 491-512). Thousand Oaks, CA: Sage Publications.
- Ronning, J. A., & Nabuzoka, D. (1993). Promoting social interaction and status of children with intellectual disabilities in Zambia. *The Journal of Special Education*, 27(3), 277-305.
- Rose, D. H., & Meyer, A. (2002). *Teaching every student in the digital age: Universal design for learning*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Saldana, J. (2013). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage Publications.
- Scanlan, M. (2008). The grammar of Catholic schooling and radically “Catholic” schools. *Catholic Education: A Journal of Inquiry and Practice*, 12(1), 25-54.
- Scanlan, M. (2009a). *All are welcome: Inclusive service delivery in Catholic schools*. Notre Dame, IN: Alliance for Catholic Education Press.
- Scanlan, M. (2009b). Legal dynamics promoting systemic reform for inclusive service delivery. *Journal of School Leadership*, 19(6), 622-660.
- Scanlan, M. (2009c). Moral, legal, and functional dimensions of inclusive service delivery in Catholic schools. *Catholic Education: A Journal of Inquiry and Practice*, 12(4), 536-552.
- Scruggs, T. E., & Mastropieri, M. A. (1996). Teacher perceptions of mainstreaming/inclusion, 1958-1995: A research synthesis. *Exceptional Children*, 63(1), 59-74.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Belmont, CA: Wadsworth Cengage Learning.

- Smith, M. K., & Smith, K. E., (2000). "I believe in inclusion, but...": Regular education early childhood teachers' perceptions of successful inclusion. *Journal of Research in Childhood Education, 14*, 161-180.
- Stainback, W., & Stainback, S. (1984). A rationale for the merger of regular and special education. *Exceptional Children, 51*, 102-112.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publications, Inc.
- Strieker, T., Logan, K., & Kuhel, K. (2012). Effects of job-embedded professional development on inclusion of students with disabilities in content area classrooms: Results of a three-year study. *International Journal of Inclusive Education, 16*(10), 1047-1065. <https://doi.org/10.1080/13603116.2010.538868>
- Theoharis, G., & Scanlan, M. (Eds.). (2015). *Leadership for increasingly diverse schools*. New York, NY: Routledge.
- Visser, T. C., Coenders, F. G. M., Terlouw, C., & Pieters, J. M. (2010). Essential characteristics for a professional development program for promoting the implementation of a multidisciplinary science module. *Journal of Science Teacher Education, 21*, 623-642.
- Wong, D. K. P. (2008). Do contacts make a difference? The effects of mainstreaming on student attitudes toward people with disabilities. *Research in Developmental Disabilities, 29*, 70-82.

*Matt Cunningham, Ed.D. holds a doctorate in educational leadership from Loyola Marymount University and recently completed a postdoctoral fellowship at the University of Missouri, Columbia. Correspondence regarding this article can be sent to Dr. Cunningham at [mcunnin7@lion.lmu.edu](mailto:mcunnin7@lion.lmu.edu)*

*Karie Huchting, Ph.D. is an Associate Professor in the School of Education at Loyola Marymount University. She is also the Associate Director of the Doctoral Program in Educational Leadership for Social Justice at LMU.*

*Diane Fogarty, Ed.D. is Director of Clinical Partnerships and Practice at Loyola Marymount University.*

*Victoria Graf, Ph.D. is Professor of Educational Support Services at Loyola Marymount University*