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Collaborative Teaching and Data Collection in the Inclusive Classroom: Utilizing the Activity Matrix

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SPED 696 - Capstone - Impact on Student Learning Project

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Abstract.....	2
Inclusion.....	4
Collaboration.....	5
The Activity Matrix and Naturally Occuring Routines.....	7
Assessment and Data Collection.....	8
Conclusion.....	9
References.....	12

Abstract

Educators first began to focus on the impact of inclusive teaching practices with the passing of the Education for All Handicap Children Act 1975 law (Public Law 94-142), now known as the Individuals with Disabilities Act (IDEA). Inclusive practices have come a long way, but can still vary from district to district. It is easy to claim to have an inclusive classroom, but it takes collaboration, communication, shared responsibility and shared data collection to truly include students of all learning abilities in the classroom. The focus of this project is to show how teams can work together to support an inclusive classroom. Staff should share a common goal of supporting all learners by utilizing the activity matrix and daily data collection. The activity matrix ensures learning objectives are targeted with fidelity throughout natural routines in the day. A universal data collection sheet is paired with the activity matrix for quick and easy data collection. All results should be communicated between staff members at the weekly team meeting to adjust levels of support. This model will help teams move from functioning as a multidisciplinary team and independent units to functioning as a transdisciplinary team, a cohesive unit.

Transdisciplinary approaches are considered a best practice in the field of early childhood. King et al. (2009) defines transdisciplinary services as, “the sharing of roles across disciplinary boundaries so that communication, interactions, and cooperation are maximized among team members (Davies, 2007; Johnson et al., 1994).” The activity matrix integrates Individualized Education Plan (IEP) objectives into the child’s natural routine and allows all adults in the classroom to have a role in helping the child become successful in the classroom. The shared data collection encourages all staff to share information and track progress. Both the

activity matrix and shared data collection encourage inclusive education and transdisciplinary teams.

Inclusion

Inclusion is “when students with disabilities receive their entire academic curriculum in the general education program (Idol, 2006).” Inclusion is one way to educate students using the least restrictive environment (LRE). According to the Individuals with Disabilities Education Act (IDEA) Section 300.114 LRE requirements state that, “To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are nondisabled.” Inclusion can look different from classroom to classroom depending on the service delivery model educators chose to implement. Hunt et al (2004) defines features of an inclusive classroom model:

Inclusive education occurs when young children with disabilities are members of the same classrooms....and receiving necessary services to accomplish the goals established for them by an education team that includes their parents and professionals. These necessary services are provided through a collaboration involving all team members. Outcome measures are collected periodically to assess whether the goals established are being met.

Examples of service delivery models include: consulting teacher model, cooperative teacher model, supportive resource programs, and instructional assistants. Collaborative teaching and data collection utilizing the activity matrix depends on a cooperative teaching model within the classroom. Idol (2006) defines the cooperative teaching models as, “special education and classroom teachers working together with a variety of co-teaching arrangements in the same classroom to provide educational programs for all students.”

The success of quality inclusion programs and cooperative teaching models depends on the staff and their attitudes and philosophies on inclusion. Akalin et al. (2014) mentioned, “Teacher training, experience, attitudes, and knowledge are key indicators of the quality of inclusion. Teachers need to be knowledgeable about and experienced in inclusion practices as they work with children with special needs and attempt to meet the diverse needs of all the children in their class (Crane-Mitchell & Hedge, 2007).” The early interventionist can help promote inclusive practices by working collaboratively with general education staff and specialists. The early interventionist can do this by supporting students within the classroom utilizing the activity matrix which embeds learning objectives and supports into the natural routine of the child’s day.

Collaboration

Research has shown the importance of collaboration between professionals in early childhood special education. Collaboration is considered a High-Leverage Practice (HLP). The Council Of Exceptional Children (CEC) identifies HLP1 as, “Collaborating with professionals to increase student success (McLeskey et al., 2017).” Early childhood special education teachers work with a variety of stakeholders. Anderson (2012), defines interdisciplinary collaboration as “the integration of the knowledge and expertise of professionals to reach a common goal through shared decision making and practice.” Lees & Kennedy (2017) go on to say that to make these relationships sustainable a partnership defined as, “social practice achieved through and characterized by trust, mutuality and reciprocity among preservice and practicing teachers, other colleagues, and teacher educators” should be established. Ultimately, the team should work uniformly to define and practice goals and objectives that meet the needs of families and children. This can be accomplished through collaborative relationships where all members are

involved in teaching the identified skills and collecting data to adjust goals, adaptations, and modifications as needed.

Teachers noted that one of the benefits to collaboration was that it “increased awareness of the need to develop adaptations and supports to meet the individual needs of all the children (Hunt et al, 2004).” Researchers found that when team members implemented the identified supports with fidelity that preschoolers benefited by increased educational progress and social participation.

Quality early childhood education programs are highly collaborative. DEC Recommended Practices (2014) says, “Teaming and collaboration practices are those that promote and sustain collaborative adult partnerships, relationships, and ongoing interactions to ensure that programs and services achieve desired child and family outcomes and goals.” EIs need to be able to work effectively with and communicate information to a variety of people including: families, specialists, general education teachers, paraprofessionals and aids, medical providers, social workers, community service providers, and mental health practitioners.

Spence et al. (2021) outlines elements of effective communication and collaboration critical to successful partnerships in early intervention:

- 1.) Defining roles and responsibilities.
- 2.) Constant exchange of information
- 3.) Using communication logs.
- 4.) Scheduling regular meetings with all team members.
- 5.) Gathering and using data.
- 6.) All team members have a voice.

Collaborate teaching and shared data collection utilizing the activity matrix meets the requirements for Spences’ six elements of effective communication and collaboration.

A transdisciplinary model for early intervention services can be accomplished through collaboration. Gillian et al. (2009) says, “A key outcome of transdisciplinary approach (TA) is

the development of a mutual vision or ‘shared meaning’ among the team (Davies, 2007; McGonigel, Woodruff, & Roszmann-Millican, 1994).” Gillian et al (2009) goes on to describe defining features of TA as,

Intensive, ongoing interaction among team members from different disciplines, enabling them to pool and exchange information, knowledge, and skills, and work together cooperatively. The features of TA operate together, influencing all aspects of service delivery, including planning, the organizational context of practice, and implementation.

TA prepares all staff to be equipped to help diverse learners in an inclusive classroom. Ted Bovy, MA from the University of Denver, said in a professional development workshop called Tools for High Quality inclusion that when you look in a truly inclusive classroom utilizing a transdisciplinary approach you should not be able to pick out the general education teacher, special education teacher, or support staff. All staff are there working together to support their shared vision as a cohesive unit and roles should not be apparent.

The Activity Matrix and Naturally Occuring Routines

Using the transdisciplinary approach, staff are able to work together to support the evidence based practice of embedded learning opportunities throughout the natural course of the day. According to Schepis et al. (2001), “Embedded teaching incorporates or embeds instruction within regularly occurring routines during the preschool day without breaking the flow of the routine or the ongoing activity (McDonnell, 1998; Venn et al., 1993).” Embedded instruction can be incorporated by utilizing the activity matrix. Cook et al (2020) calls the activity matrix an “objective within routine matrix” and describes it as, “a simple method for embedding interventions. It is a list of the child’s objectives that identifies when and how to provide learning opportunities during routine activities. This one-page document also guides classroom staff

during their interactions with a child.” The activity matrix helps staff support meaningful interactions while incorporating identified learning objectives naturally.

Natural routines have become identified as an ideal time for caregivers and teachers to provide opportunities to practice a variety of skills across developmental domains. Cook et al. (2020) says, “(Predictable daily routines) provide useful contexts for teaching across all developmental domains and classroom management (Lester, Allanson, Bolton, & Notar, 2017). Familiar, predictable routines provide ideal opportunities in which young children can learn self-help skills.” Consistency and repetition are key when teaching young children new skills.

Assessments and Data Collection

Assessment is another high leverage practice identified by the CEC. HLP4 states educators will, “Use multiple sources of information to develop a comprehensive understanding of a student’s strengths and needs (McLeskey et al., 2017).” Sandal et al (2004) adds that, “Monitoring children’s progress in a regular, frequent, and consistent manner is a cornerstone of early childhood special education (Bailey & Wolery, 1992; McLean, Wolery, & Bailey, 2004; Odom & McLean, 1996; Sandall, McLean, & Smith, 2000).” Ruble et al (2018) mentions that, “Data collection forms the basis for evaluating and informing student learning outcomes and the effectiveness of teaching practices (Brawley & Stormont, 2013).” Assessment should be a common practice in special education, but unfortunately special education teachers often feel the task isolating and daunting. Finding the right tool and getting team members on board to assist in data collection is crucial.

When teams utilize a transdisciplinary approach they are agreeing to share in the responsibility of the child’s whole education. The whole education of the child involves planning, preparation, implementation, data collection, data analysis, and

modifications/accommodations/supplementation. Schwartz and Olswang (1996), mentioned that, “a true portrait of a child can be developed only when members of the team, including the family members and professionals from many disciplines, collect information that answers the questions in which they are interested.” As well as collecting data from a variety of sources, practitioners should also collect from different data sources which include different investigators such as support staff, family, and general education staff.

Meeting students where they are at developmentally requires teachers to have appropriate data reflecting student needs. Schwartz & Olswang (1996) identify,

Documenting change in young children receiving special education services requires the appropriate use of data collection methods. Asking the right questions and matching the data collection procedures to the specific questions is at the heart of successful documentation.

A universal data collection tool is helpful as a main source of data collection. Tools such as, *TS Gold*, allow staff to enter observations and record data easily throughout the school day. This, however, should not be used as a stand alone for data collection. The activity matrix paired with a specific data collection sheet targeting the objectives on the matrix makes it easy for all staff to access and record progress. The interventionist will interpret the data and share progress with all stakeholders. The team can then make plans to either adjust, increase, or decrease support.

Conclusion

Collaboration and assessment are both considered high leverage practices in the education world. Both are needed and equally important in successful inclusive teaching models. To fully implement an inclusive model, all team members must be committed to the vision. The

early interventionist must motivate staff to buy into the shared vision by providing time to meet, share information, demonstrate the effectiveness of the activity matrix and data collection, and supporting staff in the ongoing implementation, documentation, analysis and adaptation of the activity matrix.

Moving forward with the activity matrix, all staff should be trained in Tools for High Quality Inclusion. Through the training, staff learn the why behind practices such as the activity matrix and shared data collection. The buy in was hard when the staff were not familiar with the training and its purpose. This program would be best started at the beginning of the school year, when there is time to meet and put a plan in place. Data collection would also be easier with a universal collection tool used by the entire school readiness program. Staff would not have to learn a new form for specific students. Increased familiarity with the screening tool encourages more staff to collect data making data collection richer. Staff should also work together to best define the questions they are seeking answers to help make informed instructional decisions.

The activity matrix paired with the data collection form encourages all stakeholders to be contributing members of the team. Successful implementation of the activity matrix and data collection sheet requires constant communication and collaboration. Team meetings must be held to develop, implement, assess progress, and adjust the activity matrix. The implementation of the activity matrix and data collection started with one student, but with dedication and a common belief, it is my hope that all school readiness students at Prowler Preschool and Head Start will be benefiting from this inclusive model. To do this, all staff and administration must commit to professional development (PD) towards inclusive teaching models. Staff PD should be focused on teaming, collaboration, and inclusive practices that include: the activity matrix, tiered instruction, team teaching, and shared data collection and analysis. The buy-in will be easier to

sell after the initial growing pains. The buy-in will be palpable when staff and students start to reap the benefits of an inclusive, transdisciplinary approach.

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