OUTDOOR SCHOOL FOR ALL: A PILOT STUDY OF A NOVEL TRAINING FOR OUTDOOR SCHOOL EDUCATORS ON INCLUSIVE PRACTICES

by

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DISSERTATION ABSTRACT

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Outdoor School (ODS) in Oregon is a regular educational experience for Oregon's fifth and sixth graders. ODS programs and providers have identified training opportunities related to ensuring ODS is accessible and inclusive for all students, particularly students with disabilities. The current study explored the unique educational context of ODS and explored the perspectives of ODS partners on the training needs of ODS educators related to inclusive practices. Using a multiple methods design, guided by an implementation science framework, the feasibility and acceptability of a pilot inclusive practices professional development program that included coaching as a follow up support for ODS educators was examined. The program was rated as both acceptable and feasible by participants. Additionally, participants who received coaching, demonstrated maintenance and gains in their fidelity and reported benefits for students.

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CHAPTER I

INTRODUCTION

Statement of Purpose

Participation in outdoor programs (e.g. outdoor school or outdoor learning) is a popular tradition and form of education, recreation, and leisure for many U.S. citizens, and has been an established part of our culture since the early 1900s (Brannan et al., 2003). In Oregon, outdoor learning has been part of education for over 60 years, and in 2016, Oregon voters approved Ballot Measure 99, which designated funding and adoption of Senate Bill 439 and directed the Oregon State University (OSU) Extension Services to assist Education Service Districts and school districts to provide a statewide outdoor education program (Outdoor School) for all of Oregon's 5th and 6th graders. In June 2019, the Oregon Legislature approved $46.8 million for outdoor school programs statewide over the next biennium. This increase in funding has allowed more students than ever to attend Outdoor School (ODS) by reducing the cost barrier to participation. In the 2018-2019 school year, 37,965 students from 504 schools across the state of Oregon attended ODS. Most of these experiences were multi day, and overnight, programs.

"For many children, ODS is their first experience hiking in the forest, getting their feet wet in a stream or exploring sea life along the sandy beach," (Friends of Outdoor School, 2018). In addition to learning in and about Oregon's natural landscape, students also learn about themselves, their peers, and leave with new skills to prepare them for the future (Oregon State University Extension Service Outdoor School, 2020). In a 2017 international systematic review of the effects of curriculum-based outdoor education programs on students' learning, social skills and health, Becker and colleagues discovered that students who attended outdoor education programs demonstrated growth in social dimensions (e.g., self-esteem, self-confidence, sense of

belonging, and trusting relationships) and learning dimensions (e.g., academic performance across subjects, generalization of knowledge and learning motivation). The recent findings of Becker et al. (2017) are consistent with earlier work by Brannan et al. (1997; 2000) that specifically examined the benefits of outdoor education and camp experiences for students with and without disabilities. The National Camp Evaluation Project (NCEP; Brannan et al., 1997), sought to explore the effects of specialized camps for children with disabilities, and found that students demonstrated high levels of enjoyment and participation, and positive gains in various areas of development (e.g., communication, independence, and self-esteem). A later study, titled the National Inclusive Camp Practices (NICP; Brannan et al., 2000) expanded the work of Brannan and colleagues (1997) and sought to identify inclusive practices and outcomes for youth with and without disabilities who attended outdoor programs that operated using an inclusive model (education of students with and without disabilities together). Results from the NICP project revealed that across the country, youth with and without disabilities demonstrated significant growth in their outdoor skills and personal development (e.g., self-reliance, social interactions, communication, and self-esteem). Notably, the inclusive programming represented in this study appeared to yield social benefits for all students that may not be possible in segregated programs. After attending an inclusive program, all students demonstrated increased social interactions. Additionally, students with disabilities increased their active participation in program activities, and students without disabilities developed a greater understanding and respect for persons different from themselves. Taken together, this evidence suggests that there are clear benefits to attending inclusive outdoor education experiences for all students.

Outdoor School in Oregon is a regular educational experience for more than 35,000 of Oregon's 5th and 6th graders. As part of the general education experience, students with

disabilities who receive educational supports through individualized education plans (IEPs) and the Individuals with Disabilities Education Act (IDEA; 2004) have an equal right to that of their non-disabled peers to attend ODS with appropriate modifications and accommodations in place so they may experience the potential benefits of ODS as discussed above. Broader measures of inclusion of students with disabilities in general education experiences nationwide suggest that 36% of students with disabilities are still being educated for most of their day in non-inclusive and segregated classrooms (NCES, 2020). In Oregon, approximately 30% of students with disabilities are educated for most of their day in segregated settings (Oregon Department of Education, 2019). These statistics fail to shed light on the degree to which true inclusion, as opposed to basic physical access or integration, is being experienced by students with disabilities in the classroom and during other school activities (e.g., assemblies, field trips, sports, extra-curriculars) such as ODS(Pellicano et al., 2018).

In a recent ODS evaluation report of diverse programming and outcomes (Braun, 2020), teachers expressed concerns about barriers to inclusion of students with disabilities. It was highlighted that most outdoor education facilities are not fully accessible and some programs are not prepared to support students with emotional, behavioral, or cognitive needs. When interviewed about including youth with disabilities at ODS, a school administrator shared, “I feel like folks at the school level either keep kids back without solid knowledge [about Outdoor School programs, facilities and supports], or plan for kids who have significant support needs [to attend Outdoor School] and then it’s not successful in a very public way” (Jones et al., 2020, slide 6). Research on educator beliefs about inclusion outside of ODS also highlights potential barriers to implementation of inclusive practices. Popular opinions expressed by non-special educators include: (a) the belief that inclusion of students with disabilities detracts from

instructional time and quality of education for students without disabilities, (b) that teaching students with disabilities requires a special set of skills; and (c) non-special educators are not trained to deliver the specialized instruction that students with disabilities require and benefit from (Jordan et al., 2009). Furthermore, although there is extensive research about the benefits of participating in outdoor recreation and education experiences for students, much less is known about the outdoor school and camp staff/educators and those who supervise them (Thurber et al., 2007).

The following chapter provides a literature review of the history, theory, and current practices and research surrounding inclusive education. Additionally, it provides a discussion of the importance and need for effective training on inclusive practices for educators, and how that can be used as a starting point to advance the current state of inclusion in education, and more specifically, ODS programs in Oregon. The theoretical framework from which this study operates is multifaceted and involves examining the definition of inclusion from a disability studies in education lens, considering how training impacts self-efficacy and intentions of adults, and using an implementation science framework to promote feasibility, fit and sustainment of inclusive practices at ODS.

CHAPTER II

REVIEW OF THE LITERATURE

Disability Studies in Education

The aim of Disability Studies in Education (DSE) is to deepen and expand understandings of the unique lived experiences of people with disabilities in schools and universities, throughout modern society, and within various historical contexts (Connor et al., 2008). An important foundation of DSE is the theory that disability is a social construct and not something that should be viewed as a condition or problem to be fixed, as viewed by the traditional medical model (Rodriguez & Garro-Gil, 2015). The formal establishment of DSE occurred at the 1999 US conference of The Association for Severely Handicapped (TASH) when a panel named the Coalition for Open Inquiry in Special Education (COISE) discussed the social and political value of current trends and developments in disability research and scholarship (Connor et al., 2008). Central to this group's discussion and the DSE framework is the valuation and inclusion of persons with disabilities.

According to Connor and colleagues (2008), most DSE scholars define inclusive education as, "full participation in general education classrooms and programs with minimal or no segregation into special education classrooms or services." This view is also aligned with the Salamanca Statement of 1994 (UNESCO and Ministry of Education and Science Spain) that outlines five principles that should be considered when structuring special education policies and practices to be inclusive:

1. Every child has a fundamental right to education and must be given the opportunity to achieve and maintain an acceptable level of learning.
2. Every child has unique characteristics, interests, abilities, and learning needs.

3. Education systems should be designed and educational programs implemented to take into account the wide diversity of these characteristics and needs.

4. Those with special educational needs must have access to regular schools which should accommodate them within a child-centered pedagogy capable of meeting these needs.

5. Regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building inclusive societies, and achieving education for all; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire educational system.

Although progress has been made here in the United States over the past 46 years since the declaration of the Education for all Handicapped Children Act (1975), which lead schools to move away from an exclusion model where people with disabilities were excluded from all social contexts, the degree to which actual implementation is aligned with inclusion as defined through a DSE framework is far from ideal (Hunt, 2011).

Inclusive Education

The concept of inclusion aligns with educational efforts to welcome and value diversity in today's schools (Amor et al., 2019). Different conceptualizations of inclusion and approaches to promoting inclusive education are present among research and practice. One common conceptualization views inclusion as a matter of placement of students with disabilities in the same space as their non-disabled peers (Rodriguez & Garro-Gil, 2015). Often used synonymously with the word 'integration' (Amor et al., 2019), this conceptualization operates from the medical model of disability, as do many mainstream special education practices that require students be diagnosed and treatment be prescribed by professionals with the goal of the

individual demonstrating mastery of so-called normalcy (Gabel, 2005; Ware, 2001). From the DSE perspective, the view of inclusion as the placement of persons with disabilities with their non-disabled peers is necessary but not sufficient to demonstrate comprehensive inclusive theory and practice.

A more modern conceptualization of inclusive education extends beyond integration. The multi-faceted framework of inclusion (Mitchell, 2015) attends to numerous factors including:

- Vision: Inclusive school culture demonstrated by consensus in the school community around values of respect for difference and a commitment to offering all students high quality learning opportunities (Ainscow & Miles, 2008).
- Placement: The participation of all students in general education settings including peers with and without disabilities (Nilholm & Göransson, 2017) and opportunities to participate in the general education curriculum with appropriate supports (Nilholm & Göransson, 2017; Walker et al., 2014).
- Curriculum: The standard curriculum is differentiated so as to be age appropriate and developmentally appropriate for all learners.
- Assessment: Assessment reflects adaptations made to curriculum and is based on individualized strengths and support needs.
- Teaching: Teachers provide all students with instruction that is well-paced and grounded in theory and research that reflects the diverse settings and needs of students in today's schools (Brownell et al., 2012).
- Acceptance: The education system and school recognize the right of learners with disabilities to be educated in general education settings. The school community (e.g.,

teachers, students, school leaders etc.) are accepting of human diversity at a philosophical level and accepting of individuals with disabilities needs socially and emotionally.

- Access: Adequate physical space to and within the classroom is provided and design and arrangement of furniture, acoustics, lighting, temperature, and ventilation take account of individual learners' needs.
- Support: A team of professionals (varied according to individual learner needs) provides adequate and appropriate support and the team is provided appropriate training to carry out their responsibilities.
- Resources: Adequate and appropriate equipment and levels of staffing are provided.
- Leadership: District and school leaders demonstrate a strong commitment to valuing and celebrating diversity and set high, but realistic, standards.

This multi-faceted framework extends to both academic and social content, including participation in extra-curricular and other school and community activities (Amor et al., 2019). A multi-faceted over a placement based definition of inclusion highlights interactions between students' capabilities and the environment, subsequently placing the responsibility of the larger systems to adapt to and reach all students, instead of expecting students to adapt to and meet the demands of the system (Nilholm & Göransson, 2017; Walker et al., 2014).

Social Inclusion

One of the most widely recognized benefits of inclusive education are the increased opportunities for social interaction and peer connections for students with disabilities (McLeskey et al., 2014). Increased opportunities for peer interaction during shared learning activities provide a natural context for children with disabilities to practice communication skills and develop relationships (Biggs et al., 2017). Intentional efforts and planning, beyond physical placement in

the same space are required to facilitate interactions between children with and without disabilities as research suggests that even in classrooms defined as inclusive, social interactions take place infrequently between children with and without disabilities (Biggs et al., 2017; Rotheram-Fuller et al., 2010). Other studies have shown placement of students with disabilities in classrooms with their non-disabled peers to be insufficient at promoting reciprocal social relationships (Orsmond et al., 2004). These are important considerations as children who struggle with social interactions, and particularly students with disabilities, are more vulnerable to feelings of loneliness and depression (Bauminger & Kasari, 2000). The good news is that research also indicates that when adults are intentional about their planning and facilitation of interactions between students with and without disabilities in inclusive settings, benefits can be realized for all children (Biggs et al., 2017, 2018).

Defining Inclusion in Research

Literature reviews on the conceptualization of inclusion within research have demonstrated a discrepancy between theory and practice and shed light on the lack of clarity concerning what inclusion means and how it should be realized in educational settings (Nilhom & Goransson, 2017). In their 2017 review of the definition of inclusion in empirical (e.g., intervention) and positional/theoretical research published in European and North American high impact journals, Nilholm and Goransson found that 60% of the studies defined inclusion based on placement of students with disabilities in settings with non-disabled peers. Moreover, 84% of these studies used placement to define inclusion, while comprehensive and multifaceted definitions of inclusion were more common in positional/theoretical publications, a finding echoed by Amor et al (2019). Results from both these reviews demonstrate a clear discrepancy between theory and practice in how inclusion is operationalized. Thus, it is important for

inclusive education researchers and practitioners to work toward consensus to create uniformity and allow for more accurate assessment of the impact inclusive and integrative settings and programs have on students and educators.

To align with the DSE framework, this study defines inclusion as a multidimensional and continuous process of identifying and removing barriers to learning for all children (Ballard, 1999; Maxwell 2005), and is demonstrated by (a) the redistribution of quality opportunities to learn and participate in education programs and (b) the recognition and value of differences as reflected in content, pedagogy, and assessment tool (Waitoller & Kozleski, 2013).

Benefits of Inclusive Education

Research suggests that there are benefits for all learners, across multiple contexts when students attend truly inclusive educational experiences (Kefallinou et al., 2020; Oh-Young & Filler, 2015; Szumski et al., 2017) with both short, and long-term benefits for students with and without disabilities. For students without disabilities, benefits of inclusion include less prejudicial views and increased acceptance of others who are different from themselves (Hehir & Pascucci, 2021). Furthermore, a review of 26 studies, focused on the impact of inclusion on students without disabilities, found that positive effects on academic development were associated with being educated alongside students with disabilities (Kalambouka et al., 2007). For students with disabilities, benefits include stronger skills in reading and mathematics, higher rates of attendance, fewer behavioral challenges, increased completion of secondary school, and greater independence in post-secondary and employment experiences than students who were not educated in inclusive settings (Hehir & Pascucci, 2021).

Inclusive Outdoor Education

To date, peer reviewed research on inclusive education has primarily examined inclusion within traditional school (e.g., brick and mortar) settings and investigation of inclusive outdoor education programs is lacking. Participation in outdoor programs is a popular form of leisure and education in our country for both children and adults. Historically, participation of people with disabilities in outdoor recreation and education experiences was limited to segregated activities where people participated based on disability instead of interest or social reasons (Anderson & Kress, 2003; Watcher & McGowan, 2002). Since the enactment of the Americans with Disabilities Act (ADA; 1990), inclusive outdoor opportunities for persons with disabilities have expanded. Inclusive outdoor leisure and education programs offer all participants an opportunity to participate in outdoor experiences, and research on these inclusive experiences indicate a variety of benefits for participants with and without disabilities (McAvoy et al., 2006).

Local Context – Outdoor School

Organized camp and educational programs designed for children in the outdoors have been an established part of our culture since the early 1900's and have served to provide away-from-home learning experiences (Brannan et al., 2003) that children may not otherwise be exposed to. In Oregon, an organized educational camping experience called Outdoor School (ODS) is provided for every fifth or sixth grade student in the state, if their school or district opts to provide one as part of their curriculum. Although not explicitly stated in the law, ODS is part of the general education experience for Oregon students and consideration of the LRE for students who receive special education services should be considered when planning for ODS. In other words, students with disabilities, have the right to attend ODS alongside their peers to the maximum extent appropriate, and their needs for support should not automatically exclude them

from being meaningfully included at ODS. Although not experimentally evaluated yet, there is preliminary and anecdotal data to suggest that inclusive practices and programing provided to students at ODS, may be an area that requires more training and support.

The Oregon State University Extension Outdoor School program that houses the grant for ODS recently collaborated with researchers and community stakeholders to create a mission and vision related to equity, diversity, and inclusion (EDI) that supports truly meaningful inclusion of students with disabilities at outdoor school (Oregon State University Extension Outdoor School, 2021). The mission and vision acknowledge and addresses histories and structured systems that keep underrepresented populations from necessary resources and access by allocating resources accordingly to reduce these inequities. ODS celebrates the intersectionality of all ODS participants and strives to assist development of ODS experiences where all participants can feel welcome, safe, respected, and free to participate in powerful experiences as their authentic and whole selves. Examination and implementation of inclusive educational experiences also aligns with the Oregon Department of Education's equity stance that communicates a commitment to restructuring and dismantling systems and institutions that create a dichotomy of beneficiaries and oppressed and marginalized populations (Oregon Department of Education, n.d.).

Although sparse, research specific to ODS has shown that across the country, youth with and without disabilities make significant growth in their outdoor skills and personal development (e.g., self-reliance, social interactions, communication, and self-esteem) when they attend inclusive ODS programs (Brannan et al., 2000). In another study, these gains were reported to carry over to home environments as judged by caregivers (Brannan et al., 1997). In a recent evaluation report on diverse programming in Oregon's outdoor schools, teachers expressed concerns about barriers to inclusion at ODS (Braun, 2020). Barriers such as non-inclusive

facilities or lack of supports and knowledge (general and pedagogical) related to educating students with medical, physical, cognitive, social, and behavioral needs have been expressed as concerns related to including youths with disabilities at ODS. These data highlight an opportunity for training and support that has the potential to increase the extent to which ODS programs are inclusive for all students.

Need for Effective Training Programs

Although not specific to ODS, research on camp programs suggest that to be successful, leadership teams need to induct camp staff successfully into program beliefs and objectives (Wahl-Alexander et al., 2017). Studies conducted with camp counselors in other settings have shown training that is aligned with camp mission statements and counselor duties to be effective at increasing counselor knowledge (Baldwin et al., 2010) and perceived competence (Wahl-Alexander et al., 2018). To date, there has been limited research that specifically examines the effectiveness of camp and outdoor school counselor training programs (Wahl-Alexander et al., 2017). Further research is necessary to evaluate how staff perceive their own abilities prior to and following training opportunities, as well as their observed performance, and adherence to the objectives of those trainings.

Implementation Science

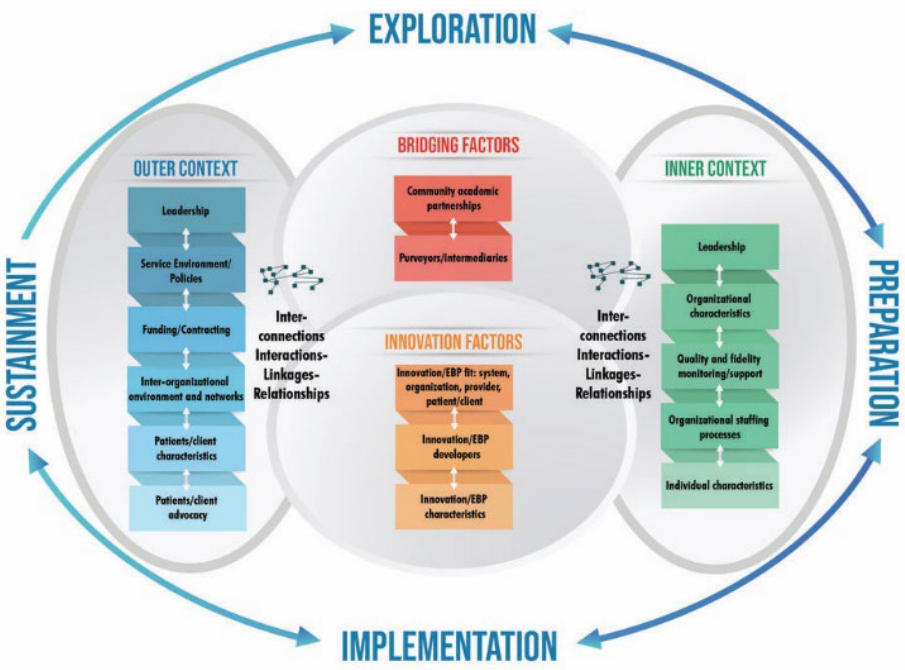
The field of implementation science acknowledges challenges faced when attempting to implement evidence-based practice in real world settings and is the study of what happens before and after adoption of an evidence-based program or strategy has occurred (Dearing & Singhal, 2020). One widely used determinant framework that has been applied to support translation of evidence-based practices into educational settings is the Exploration, Preparation, Implementation, Sustainment (EPIS) framework (Aarons et al., 2011). See figure 1. EPIS

includes four explicit phases that outline the implementation process, identification of outer system and inner organizational contexts, and innovation factors that relate to characteristics of the innovation/evidence-based practice (EBP) being used. The EPIS framework recognizes the interconnectedness of both inner and out contexts and the variable influence these may have on implementation throughout the four phases. During the exploration phase of EPIS, both the outer context (i.e. socio political, funding, interorganizational networks, and client advocacy) as well as the inner context (i.e. organizational characteristics and individual adopter characteristics) are examined to gain a more refined understanding of specific issues that need attention, or of an improved approach to an organizational challenge (Grol et al., 2007). During the preparation phase, potential barriers and facilitators that may influence implementation are identified, adaptation needs discussed and a detailed implementation plan, complete with necessary supports, is developed. In the third phase, the plan that was developed during preparation is used to guide the use of the identified practice. It is crucial during this phase that ongoing monitoring of the process is incorporated to assess implementation and adjust strategies according to support success (Moullin et al., 2019). During sustainment (the final phase), supports continue and adaptations are made as necessary to support continued use of the EBP. In a 2019 review of EPIS use in implementation science research, Moullin and colleagues found that the framework has been used across a variety of settings including school settings. The goal of implementation frameworks such as EPIS, is to have adopters (e.g., educators, clinicians, caregivers etc.) use evidence-based innovations effectively (Fixsen et al., 2009). To accomplish this, adopter fidelity to the innovation is created and supported by implementation drivers (Fixsen et al., 2005). Implementation driver, also referred to as *core implementation components,* include (a) staff selection, (b) preservice and in-service training, (c) ongoing coaching and consultation, (d) staff

evaluation, (e) decision support data systems, (f) facilitative administrative support, and (g) systems interventions. As organizations are dynamic and innovation targets and components vary, researchers recognize that differentiated levels of attention may be necessary across drivers given the unique components of an individual practice or program (Baker et al., 2000; Embry, 2004). The importance of both training and coaching in educational settings has been highlighted by researchers (Joyce & Showers, 2002) who found a significant impact of coaching on the transfer of knowledge to practice, when it was added to training.

Figure 1

Exploration, Preparation, Implementation, Sustainment (EPIS) framework



Implementation of Inclusive Education

Research suggests that large gaps continue to exist in the understanding of the potential benefits of and effective implementation strategies to support inclusion (Kefallinou et al., 2020). Research has described several implementation challenges (Srivastava et al., 2015) faced by

educators including: (a) the role of special coordinators and educators (Cole, 2005), (b) inclusive pedagogy (Florian & Linklater, 2010), (c) teacher self-efficacy beliefs and attitudes toward inclusion (Avramidis et al., 2000, 2019; Hellmich et al., 2019; Wilson et al., 2016), and (d) teacher training and education (Billingsley et al., 2018; Norwich & Nash, 2011). Although policy and system level changes are needed for sustaining long term implementation of inclusion in schools, an important first step that can be used to initiate advancement of inclusion immediately, involves changing education practices in the school and classroom (Ainscow & Miles, 2008). As teachers are the leaders and designers of their classroom environment, instructional design, and routines, one way to improve inclusive practices within schools is to provide training for educators. Training should focus on how they can create an inclusive classroom through the implementation of evidence-based practices known to support all students.

Self-Efficacy and Intentions. Perceived self-efficacy has been shown to influence adult learning and implementation of instructional strategies (Tschannen-Moran et al., 1998; Tschannen-Moran & Hoy, 2001). Self-efficacy is a construct derived from social cognitive theory that refers to a person's belief in their capability to "organize and execute the course of action required to manage prospective situations" (Bandura, 1997, p.2). Self-efficacy impacts the choices individuals make, how much effort they will expend, and how long they will persist when faced with a challenge or aversive experience (Bandura & Adams, 1977). Individuals with high self-efficacy are more likely to view failure experiences as a chance to learn or make and seek new information next time (Hattie, 2012). Conversely, those with low self-efficacy are more likely to avoid tasks they perceive as challenging and dwell on personal deficiencies when they experience failure, which can lead to slower rates of confidence recovery and lower commitment to persisting through perceived challenges (Hattie, 2012). Research on self-efficacy suggests that

people's beliefs in their capabilities vary across domains and are contextual and fluid rather than static and are theorized to develop through (a) mastery experiences; (b) social modeling; (c) social persuasion; and (d) individual physical and emotional states (Bandura, 2012).

In education, teacher's individual self-efficacy has been shown to impact their teaching behaviors and actions, as well as the consequences of those actions (e.g. student outcomes and behaviors: Tschannen-Moran et al., 1998). Furthermore, collective teacher efficacy (CTE), or educators combined belief about their ability to influence student outcomes, has been shown to be "strongly and positively associated" with student achievement across subject areas and environments (Eells, 2011). More recently, CTE has been identified as the top predictor of student achievement with an effect size of 1.57 through meta-analytic techniques (Hattie, 2016). Specifically, within inclusive education research, teacher self-efficacy has been shown to be a significant predictor of intentions to implement inclusive education practices (MacFarlane & Woolfson, 2013; Malak et al., 2018; Sharma & Jacobs, 2016). Further, self-efficacy has been found to be malleable where high quality training programs for teachers have the potential to enhance self-efficacy (Klassen et al., 2011; Tschannen-Moran & McMaster, 2009).

The theory of planned behavior is known as one of the most influential and popular conceptual frameworks for the study of human action and posits that a person's actual behavior can be predicted by their intentions to perform that behavior (Ajzen, 1991; Ajzen, 2002). Research using the theory of planned behavior has shown that teacher self-efficacy is a significant predictor of their intentions, and that teacher performance and use of inclusive practices can be predicted by evaluating their self-reported behavioral intentions (Hellmich et al., 2019). Results from two meta analyses (Armitage & Conner, 2001; Webb & Sheeran, 2006) have found intentions to be significant predictors of observed behavior. Taken together,

measures of self-efficacy and behavioral intentions may be useful tools to consider in educator professional development planning and evaluation, to determine if training practices are effective at influencing constructs known to improve teacher practice and whether or not training participants actually intend to implement training targets.

Inclusive Practice Training and Professional Development

Professional development programs that target inclusive practices have been shown to be effective at increasing teachers' use of inclusive practices as well as their attitudes and perceived self-efficacy as discussed above (Alquraini, 2012; Male, 2011; Navarro et al., 2016) and have also been identified by professionals and school partners as supportive of inclusive education (Shogren et al., 2015). Providing effective preparation and training for educators on evidence-based inclusive practices has also been identified as one of the barriers school and district teams face as they work to move toward a more inclusive model (Billingsley et al., 2018). Examining the effectiveness of inclusive practice training programs for teachers is important as new teachers report feeling unprepared to work in inclusive classrooms (Forlin et al., 2010) and many have not experienced designing and utilizing inclusive practices (Florian, 2012). As schools and districts work toward more inclusive communities, it is important to take a closer look at the process and components of teacher training on inclusive practices. Researchers have identified a lack of research that examines teacher training on inclusive practices as well as significant voids in the reporting of training practice and components (Amor et al., 2019; Tristani & Bassett-Gunter, 2020).

To align with recent implementation science recommendations (Pinnock et al., 2017[a], 2017[b]) and address the gap in reporting identified above, studies focused on implementation should provide a sufficiently detailed description of implementation strategies, training program

components, and the intervention being implemented. This will allow researchers and educators to have a better understanding of barriers and facilitators that may influence training programs, thus increasing the likelihood of positive impact (Tristani & Bassett-Gunter, 2020).

The Present Study

A significant body of research exists on the benefits of inclusive educational programming for students with and without disabilities. Further, targeted professional development on inclusive practices has been shown to positively impact educators' self-efficacy, implementation intentions, and use of inclusive teaching practices (Alquraini, 2012; Male, 2011; Navarro et al., 2016). The present study focuses on the unique educational context of ODS and explores the perspectives of ODS partners on the training needs of ODS practitioners related to inclusive practices. The development and delivery of a professional development package designed to increase ODS practitioners' perceived competence and performance using inclusive strategies to promote students' social inclusion will be described.

This work was completed through a series of two studies and used a multiple methods approach to explore the needs of ODS providers in Oregon. The researcher engaged in formative work to develop a pilot inclusive practices professional development program for ODS staff. The study followed the stages of implementation identified by Aarons and colleagues (2011) in the EPIS framework. The use of frameworks to inform implementation and development of practice related and research questions and hypotheses can optimize implementation efforts and outcomes (Nilsen, 2015).

The purpose of study I was to engage in the exploration process of the EPIS framework which involved gaining an understanding and awareness of different organizational values and characteristics related to a current issue that needs attention, or, of an improved approach to a

current challenge (Grol et al., 2007). During this phase, the inner context was examined, which involved seeking to understand the characteristics within the participating organization such as leadership, policies, staffing, practices and values, and characteristics of individual adopters. The information gathered in this study was used to design a professional development package that was aligned with current organizational values, practices, and identified needs.

Study I included the following aims:

1. Explore the experiences and recommendations for change in ODS programs as shared by ODS partners (ODS providers, students, teachers, administrators).
2. Design a professional development program about inclusive practices for ODS program staff using an implementation science framework.

Study I was guided by the following research questions:

Research Question 1: What are the training needs of ODS staff related to inclusive practices as expressed by ODS partners (ODS staff, school staff and students)?

Study II expanded on the exploration work completed in study I. It was guided by the preparation and implementation phases of EPIS and explored the acceptability and feasibility of a novel adapted training program for ODS educators.

Study II included the following aim:

1. Test the acceptability and feasibility of a professional development program on inclusive practices for ODS educators.

Study II was guided by the following research questions:

Research Question 1: How will ODS staff rate the acceptability and feasibility of a professional development program on inclusive strategies?

Research question 2: How do ODS staff rate their self-efficacy, attitudes, intentions, and knowledge of inclusive practices for students with disabilities prior to and after receiving professional development on inclusive strategies?

Research Question 3: Does the implementation of coaching support after initial training impact the level, trend, and variability of ODS staff fidelity?

Research Question 4: What are ODS staff perceptions of the benefits to students with and without disabilities who participate in inclusive ODS programs?

CHAPTER III

METHODS

A description of the methodology used in study I and study II (respectively) are provided in this chapter. First, inclusion criteria and recruitment procedures are discussed. Next participants, settings and researcher information are described. The procedures for each study are discussed in detail including data collection procedures and measurement tools. Finally, a description of the data analysis methods is provided.

Study I

Inclusion Criteria and Recruitment Procedures

After receiving IRB approval, ODS staff, school staff (e.g., administrators, teachers, and paraprofessionals), and students with a disability (ages 11-18) were invited to participate in one-to-one interviews about their experiences and perceptions of inclusive ODS programming. Recruitment flyers and emails were sent out to ODS programs and ODS school district partners and posted on social media. The Oregon State University Extension Service Outdoor School disseminated an email with the study information to the Outdoor School list serv.

Participants interested in the study contacted the primary investigator (PI) via email or phone. After initial contact, the PI emailed the participant with more detailed study information and a consent form. If they were interested in participating, they were asked to return the consent form to the PI via e-mail.

Participants

Ten adult participants expressed interest and participated the study. Participants included ODS staff (e.g., program directors, grant writers, and supervisors), school staff (teachers) and

individuals who fulfilled multiple roles as school staff and ODS program directors within their district/school. See table 1 for participant demographics.

Table 1

Participant demographics

Role	Race	Gender	Education
ODS program director/supervisor	White	female, non-binary, girl flux/questioning, agender	Master's: Environmental Arts & Humanities
ODS program director/supervisor	White	female	Master's: Leadership & Education
ODS program director/supervisor	White	female	Bachelor's: Geography
ODS program administrative staff	White	male	Bachelor's: Physics-Astronomy
6th grade teacher & ODS program director	White	female	Bachelor's
6th grade teacher & ODS program director	White	male	Master's: Elementary Education
ODS program administrative staff	White	female	Bachelor's: Psychology
School district administrator & parent to adult with a disability	White	female	Master's: Creative writing and education
Special education teacher	White	female	Bachelor's: Elementary and special education
ODS program director/supervisor	White	female	Doctorate: Educational leadership/curriculum and instruction

Setting

Interviews occurred remotely via Zoom. The PI was in Eugene, Oregon and participants were in Northwestern, Western and Southwestern Oregon. The mean distance between the PI and interview participants was 106.94 miles (range: 4.3-140.5 miles).

Researcher

The PI, a fourth-year doctoral candidate in special education, conducted all the interviews. She is a licensed special education teacher and school administrator with over 10 years' experience working in schools. The PI has a history of involvement with Outdoor School programs in Washington state where she attended a weeklong ODS program as s sixth grader, returned four times as a high school leader and volunteered weekends to train high school leaders after she graduated from college. Furthermore, she spent the last two years collaborating with a team of researchers at Oregon State University Extension Program Outdoor School to develop and disseminate the Special Education and Accessibility Self Evaluation Tool (SEASET; Brooks et al., 2021). Through collaborative reflection and discussion, the SEASET is designed to support ODS programs in becoming more inclusive and accessible, specifically for students with disabilities.

Data Collection

Interviews were used as the primary data source. Interviews are considered an effective method for conducting an educational needs assessment for a target group or individual to determine the structure of a program in terms of objectives, content, and activities (DeSilets, 2007). Interviews were chosen over surveys as they can provide in-depth insight into a participant's perspective and allow for clarification of information (Crandall, 1998; DeSilets, 2007; Shernoff et al., 2017).

Interviews were completed using a semi-structured interview protocol that included open-ended questions formulated to elicit unstructured responses and generate discussion (McIntosh & Morse, 2015). Unscheduled probes, arising from the dialogue were used to elaborate beyond participant's initial responses. All interviews were conducted via Zoom video meeting software

and transcribed using the Zoom transcription feature which were later reviewed for accuracy by the PI and a research assistant. Interviews (n=10) were conducted in Winter 2022 (January-March). The mean length of interviews was 37.7 minutes (range: 27-55minutes). The semi-structured protocol included seven questions aligned with the EPIS framework and sought to identify facilitators and barriers to including students with disabilities at ODS. The interview began by asking participants to describe what came to mind when they thought about *including students with disabilities at ODS.* Probes such as "What does that look like?" or "Tell me more about…" were included to gather more in-depth stories and examples of the ideas they shared. Follow-up questions included asking participants what their program's greatest strengths were related to inclusion as well as perceived barriers. At the end of the interview, participants were asked what recommendations they would have for training ODS staff related to including students with disabilities. Interview questions can be found in APPENDIX A.

Data Analysis

Open coding, an emergent coding technique drawn from grounded theory methodology (Glaser & Strauss, 1967) was used to allow for participant generated themes. Rich quotes are presented in the results section to demonstrate how findings were derived directly from participant responses and less likely to be a result of researcher bias (Polit & Beck, 2012). Themes derived from the interviews were used to inform the design of the group training delivered in study II.

Member checking. To further analyze the qualitive data, rule out the possibility of misinterpretation, and identify researcher bias that may have been introduced during the coding process, a member checking process was applied (Maxwell, 2005). The process enhances rigor in qualitative research on the basis that credibility is inherent in the accurate description and

interpretation of phenomena (Lincoln and Guba, 1985). Synthesized member checking (SMC; Birt et al., 2016) was used in this study. SMC differs from many other methods of member checking in that both interview data and interpreted data are returned to participants. SMC also enables participants to add comments and provides an opportunity for them to add further data in recognition that the meaning of their experience may change over time (Birt et al., 2016). SMC in this study included four steps: (a) prepared synthesized summary from emerging themes along with interview data quotes, (b) sent the SMC report with cover letter to participants who were asked to read, comment, and return, (c) gathered responses and added data (e.g., participant comments), and (d) integrated findings by cross referencing added data with existing codes.

Study II

Inclusion Criteria and Recruitment Procedures

After receiving IRB approval, ODS staff currently working in Oregon were invited to participate. Recruitment flyers and emails were sent out to ODS programs and posted on social media. The Oregon State University Extension Service Outdoor School disseminated an email with the study information to the Outdoor School list serv. The recruitment flyer included two prescheduled remote training dates as well as a statement encouraging supervisors to contact the PI to schedule personalized training dates for groups of staff.

Participants

Group training. Four ODS program directors expressed interest and requested to schedule group trainings for their staff and nine individuals attended the pre-scheduled remote sessions. Consenting to participate in the study was not required for staff to attend the training. Across all training sessions (n=6), approximately 90 people received the training with 54

consenting to research and taking the pre-training measures. Demographics of participants can be found in table 2.

Table 2

Participant demographics

Individual-level variables	*N*	Percent
Age		
15-19	1	1.9%
20-29	25	48%
30-39	10	19.2%
40-49	11	21.2%
50-59	3	5.8%
60-69	2	3.8%
Gender		
Female	38	62.3%
Male	14	23%
Transgender	8	13.1%
Cisgender	7	11.5%
Genderqueer	8	13.1%
Non-binary	6	9.8%
Agender	1	1.6%
Gender not listed	1	1.6%
ODS Role		
Field Instructor	20	42.6%
Program Leader	14	29.8%
Administrative Staff	2	4.3%
Program Director, Supervisor, or Coordinator	9	19.1%
Other	2	4.3%
Years in Current Position		
0-1	34	55.7%
1-5	13	21.4%
5-10	9	14.8%
10+	5	8.2%
Highest Level of Education		
High School Diploma or Equivalent	4	6.7%
Some College	11	18.3%
Associate degree	6	10.0%
Bachelor's Degree	26	43.3%
Master's Degree	11	18.3%
Other not listed	2	3.3%
Race		
White/Caucasian	52	85.2%
Mexican or Chicano/a	4	6.6%

Table 2 (continued)

Individual-level variables	*N*	Percent
Filipino	3	4.9%
Asian Indian	2	3.3%
Chinese	2	3.3%
Native American or Alaskan Native	2	3.3%
Vietnamese	2	3.3%
African American	1	1.6%
Guamanian or Chamorro	1	1.6%
Japanese	1	1..6%
Korean	1	1.6%
Puerto Rican	1	1.6%
Previous Training in Special Education		
Yes	16	26.2%
No	38	62.3%
Unsure	7	11.5%
Previous Training in Inclusive Practices		
Yes	30	49.2%
No	18	29.5%
Unsure	13	21.3%

***Attrition*.** Thirty-five percent (*n*=19) of participants took the pre-training surveys, attended the training, but did not take the post-training surveys.

Coaching. Seven participants from a single site expressed interest and consented to participate. Demographic information for participants can be found in table 3. All seven participants participated in the group training and three of them also completed the pretraining and post training surveys. Each participant was observed at least three times (in all), received at least one coaching letter, completed post intervention surveys, and participated in the post-intervention interviews. To protect their privacy, pseudonyms are used to refer to participants.

Table 3

Participant demographics

Participant	Race	Education	Role	Years' Experience
Jenn	White	Bachelor's	Field instructor	<1
Chad	White	Some College	Field instructor	4

Table 3 (continued)

Participant	Race	Education	Role	Years' Experience
Stephen	Jewish	Master's	Field instructor	8
Liz	White	Master's	Curriculum design & instructor trainer	4
Sara	White	Master's	Education director	5
Kyle	White	Bachelor's	Field instructor	2
Carter	White	Masters	Field instructor	1

Student video consent. Although no official data was collected about students, they could potentially be included in a video recording. For this reason, a letter was sent to all participating schools to disseminate to caregivers explaining the study and the purpose of the video recordings. Caregivers were asked to sign the form if they did not want their student to be video recorded at ODS.

Attrition. No participants formally dropped out of the study. However, due to multiple factors outside of the PI's control (e.g., schedules, timing, and resources) complete observational data was only taken for three participants. More contextual information can be found in the settings section below.

Settings

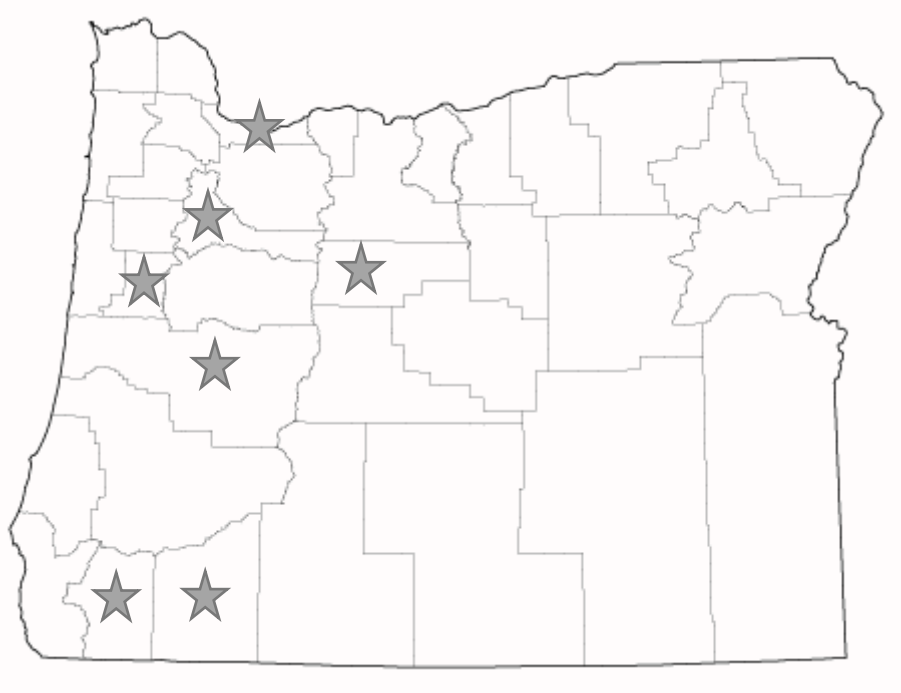
The study took place within the context of Outdoor School programs across the state of Oregon. It is important to note that ODS programs range across the state with some programs being developed and operated within schools and by school district staff, while other programs are operated by programs and staff external to school districts.

Group training. Group trainings occurred remotely via Zoom (n=3) and in-person (n=3) for sites that requested live training. Seven ODS programs, including 11 separate sites in seven counties were represented across training participants. See figure 2. Zoom trainings ranged from four to forty-five participants while in-person trainings ranged from five to twenty participants. The PI delivered two Zoom trainings from the University of Oregon HEDCO Education building

and one training from an office at an ODS site in Northwestern Oregon. Two in-person trainings occurred at ODS sites and one occurred at a school building. During the in-person trainings, the PI arrived early for set up and had the chance to interact with and converse with participants. At one site, the PI was invited to spend the night on site the night before and after the training where she also shared mealtimes and attended a training on disability awareness and accessibility with staff.

Figure 2

Participating program counties



Coaching. Observational data collection for participants who received coaching was gathered in person at one site in Southern Oregon. The Southern Oregon sight sits on over 400 acres of land, at least half of which is forested, with multiple ponds, streams, and hiking trails. Children attend ODS for three days and 2 nights with their 5th or 6th grade classmates and teachers. They sleep on cots in canvas wall tents set upon wooden decks. In-person ODS activities include cooperative living experiences (e.g., daily living, dining, and sleeping),

participation in performing arts, outdoor recreation activities, leadership activities, and field study. The participating site runs six weeks of ODS in the Spring, each week hosting a different school. Observations occurred during staff identified group learning times including field studies (e.g., pond studies, stream studies, nature art, and hiking) and recreation activities (e.g., wood working and outdoor games).

Researcher Roles

Trainer. The PI fulfilled the role of lead trainer for the group training and communicated with participants and program directors to schedule training sessions and disseminate study information. Specifically, PI roles included: (a) recruitment, (b) scheduling, (c) consent form dissemination and collection, (d) survey dissemination, (e) training delivery, (f) traveling to in-person training sites, (g) tracking survey completion and disseminating compensation, and (e) relationship and communication development and maintenance with participants.

Coach. The PI also fulfilled the role of coach for participants who received coaching after the group training. The PI conducted all in-person observations and provided individualized coaching letters to each participant. Specifically, PI roles included: (a) recruitment, (b) scheduling, (c) consent form dissemination and collection, (d) traveling to and from site for data collection, (e) recording and observing participant implementation, (f) reviewing recordings and scoring participant fidelity to inform individualized coaching letters, and (g) tracking participant completion of study activities and disseminating compensation.

Research assistants. Trained graduate research assistants (n=4) from the Special Education program assisted with technical support during remote trainings and data collection procedures including coding procedural fidelity for the group training, coding for reliability on participant fidelity videos, conducting follow-up interviews, and transcription. Research

assistants were trained by the PI on methods of procedural fidelity and participant implementation fidelity. The first three participant fidelity videos were used for training. The training session took 3 hours (across three sessions) and was conducted via Zoom. Training took place during active study implementation. The training session involved the PI reviewing the fidelity form with the research assistants and discussing each item. When an item was not clear to the group, descriptors were added to further clarify the item scoring. After the form was discussed, the PI and research assistants reviewed the first video and scored each item together through discussion. Research assistants were asked to score the second and third video on their own prior to meeting as a group. The last two hours were spent discussing scores and reviewing discrepancies among the group. When a there was a score discrepancy, discussion was had and the group came to consensus on a final score.

Remaking Recess Group Training

Each group training included one session. Sessions lasted between three hours and four and a half hours. The target audience of the training was ODS staff who work directly with students at ODS. All six trainings were completed between March and April 2022 and prior to the Spring ODS season. Trainings scheduled by ODS directors occurred during regularly scheduled training days for each program. Training targets and objectives were designed based on information gathered from the interviews conducted in study I. The training focused on social inclusion and peer engagement and included strategies adapted from a previously developed program called Remaking Recess (RR; Kretzmann et al., 2012). RR is an intervention developed for use by educators in school settings and was designed to transfer skills from a research team to educators, so that educators will be equipped to support children after external support has been withdrawn (Locke et al., 2020). The goal of RR in schools is to improve social experiences

during primarily social and unstructured times of the school day (e.g., recess, lunch time), so that all children strengthen their feelings of belongingness and connection to peers at school. RR combines the use of both adult-facilitated and peer-mediated strategies to restructure environmental factors that create barriers to accessing peer interactions for children with disabilities. RR has been tested in several pilot development studies and randomized controlled trials that indicate effectiveness on playgrounds in public elementary schools (Kretzmann et al., 2015; Locke et al., 2017; Locke, Shih, et al., 2019; Shih et al., 2019). Implementation of RR strategies by school staff has been associated with increased engagement with peers for children with autism (Kretzmann et al., 2015). Furthermore, implementation support (e.g., identifying and preparing champions within the school and tailoring strategies to address barriers and leverage facilitators) for RR in schools has been associated with greater improvements in social network inclusion and friendship nominations for children than the RR training alone (Locke et al., 2019).

The eight intervention strategies (typically taught across multiple weeks), teach adults to become positive change agents by reducing barriers to social interactions for all children and helping children to connect with their peers. In research conducted on RR, most training activities have occurred with participating children and school staff present (Locke et al., 2017). The RR manual along with other supporting materials and video gallery are publicly available at www.remakingrecess.org. After reviewing the training manual, the PI chose RR strategies she believed to be a good fit for ODS settings and included them in the training content. Decisions about adaptations were made based on study I interview data and the PI's personal experience as an ODS educator. See table 4 for a detailed list of RR core components and adaptations made for this study. The choice to adapt RR was made based on the recognition that ODS is unique and different from a traditional school context and that assuming an intervention (like RR) with a

history of success elsewhere and without adaptation, can guarantee future success in a different time and place is problematic (Evans et al., 2019; Moore et al., 2021). Equally, intervention adaptation experts also agree that presuming that previously developed approaches cannot be transferred across contexts may prevent researchers and community organizations from realizing potential positive benefits of innovations (Evans et al., 2019), as well as the opportunity to save resources associated with developing new innovations (Movsisyan et al., 2019).

Training Structure and Development. The training session that was provided in this study was segmented into six sections: (a) inclusion, (b) Remaking Recess overview, (c) engagement, (d) RR strategies, (e) planning, (f) wrap up. All sections were delivered in a single group didactic session that lasted between three and four and a half hours. Duration varied by session and site based on group preferences for built in breaks, extra discussion, and availability of staff. For example, the remote trainings were scheduled for three hours with two prescheduled breaks. At one of the sites who received in-person training, when discussing scheduling, the director requested a longer duration (four hours) to allow for more flexibility around breaks and discussion. Effective adult learning practices (Trivette et al., 2009) such as preview and overview of information, demonstration of use (through video), learner practice and participation, learner reflection and discussion, and learner self-assessment were embedded into the training. Material was presented using a PowerPoint presentation that included written, pictorial, and video content. Prior to the first training, the PI practiced the training with a group of 10 colleagues, friends, and family (external to the project) to gather feedback about timing, clarity, structure, flow, and engagement strategies. The practice sessions occurred remotely via Zoom across two two-hour blocks. Each session included 1.5-hours of training content and 30-minutes of discussion and feedback from the group.

Inclusion. The inclusion section was designed to help create a common language and understanding of the research base among the group related to disability inclusion, disability terminology, and the intersectionality of disability and social connections. This section also included illustrative quotes from study I interviews as additive information for the "why" behind the development of this specific training. The inclusion section ended with a short film viewing and discussion of "Ian", a short, animated film inspired by the real-life experience of Ian, a boy with a disability determined to get to the playground with his peers, despite encountering social and physical barriers. Participants were shown the film and then provided time (in small groups) to discuss their interpretations of the film's message and how it connected to their inclusive work at ODS.

Remaking Recess Overview. Learners were presented with an overview and background of the RR program. Overview included a brief history of the development of RR including its name's sake, program objectives and an activity where participants had a chance to discuss and present their personal characteristics and traits that allowed them to positively relate to and influence children at ODS.

Engagement. The third section focused on defining and understanding the importance peer engagement states, a foundation of the RR program. The six different engagement states used in RR are: (a) solitary, (b) onlooker, (c) parallel, (d) parallel aware, (e) jointly engaged, and (f) participating in game with rules. Additionally, participants were presented with research about engagement states (jointly engaged and participating in games with rules) that have been shown to provide increased access to peer connections for children with disabilities.

Remaking Recess Strategies. RR strategies were taught in four blocks: (a) identifying and monitoring peer engagement (e.g., scanning to environment to monitor engagement states,

identify students in need of support, and boosting engagement), (b) using games to facilitate peer engagement (e.g., leading structured games with rules), (c) facilitating peer conversations (e.g., prompting and supporting conversations between children) , and (d) developing in-vivo social skills (e.g., using direct instruction to support social skills during naturally occurring opportunities). During each block, a definition of the strategy, along with examples and opportunities for participants to practice and discuss were provided. To complete the strategy section, a video demonstration (from the RR website) was used to model the use of strategies just taught and participants were given a chance to reflect and discuss the benefits they noticed for students in the video when RR strategies were used.

Planning. The planning section was designed to allow participants time to reflect and discuss how they planned to implement RR strategies in their setting. They were provided with a structured reflection form that included four questions about their current knowledge, ideas, and potential continued need for support to successfully implement RR at their ODS site. Due to time limitations, participants did not have time during the session to complete this form and discuss with colleague or the PI (as was planned). Instead, they were provided with the form to complete outside of the training.

Wrap-up. The wrap up section was used to close the training by reviewing the research steps for those who consented to participate in the study (e.g., post-training surveys) and continued opportunities to participate (e.g., coaching). Participants were thanked for their time and engagement.

Table 4

Remaking Recess adaptations

RR component	Manual goals	Training adaptation
1. Raising your social power	1. Be aware of your social power at recess. 2. Discuss strategies to improve your social power at recess.	The idea of social power was introduced and briefly described. Participants were asked to identify characteristics and traits that they and their colleagues possessed that allowed them to use their social power to build relationships with kids at ODS.
2. Identifying and monitoring peer engagement	1. Identify engagement states at recess. 2. Learn techniques to successfully notice students during recess who need and want support to engage with peers.	Engagement states were introduced and participants had opportunities to practice identifying different engagement states using video. Discussion was initiated by the trainer about how engagement states may present during ODS specific activities. Participants observed the identification and monitoring process be implemented in a video. Explicit strategies (e.g., recruiting a peer to invite the target child to play, prompting the target child to join a game, modeling peer engagement interactions) for "boosting" peer engagement were included.
3. Supporting transitions	1. Identify challenges that arise when students transition from one activity to another 2. Learn strategies to successfully transition students during recess, including to and from the classroom, cafeteria, and recess	Examples of transitions between traditional ODS activities (cabin time, mealtime, hiking, field studies, games etc.) were used to replace school-based activities. Supporting transitions was not taught as a stand along strategy but was introduced as an opportunity to facilitate peer interactions during naturally occurring opportunities.
4. Identifying peer models	1. Discuss common characteristics that make an ideal peer model. 2. Discuss logistical constraints for peer models to participate in RR implementation. 3. Outline steps to help identify and engage a peer model.	This strategy was not incorporated into the ODS training. Instead, discussion of how to identify individual strengths and needs of all students and use those to guide strategy planning was embedded across strategy instruction.

Table 4 (continued)

RR component	Manual goals	Training adaptation
5. Games for peer engaged inclusion	1. Outline steps to identify and implement common games/activities that are inclusive to all students. 2. Outline steps to ensure peer engagement within these games/activities.	A focus was placed on using games specifically to facilitate peer engagement. Participants were asked to share games they already play at ODS and how to think about opportunities for peer-to-peer engagement within those games.
6. Developing in vivo social skills	1. Learn steps of in-vivo social skills instruction. 2. Learn specific strategies for providing direct social skills instruction and feedback. 3. Learn what level of support to provide based on students' needs.	The three steps along with examples of each step to developing in vivo social skills were presented. Participants observed the step being implemented in a video example.
7. Facilitating peer conversations	1. Identify strategies to help students initiate back-and-forth conversations with one another. 2. Provide helpful tips to support students when initiating or engaging in conversations.	The four-step process for facilitating conversation was introduced as well as tips to aid in the initiation and maintenance of peer-to-peer conversations were provided. Participants were asked to share different strategies they've used at ODS to facilitate conversations between students.
8. Fostering flexibility	1. Identify situations where students are inflexible. 2. Identify strategies to support students to be more flexible.	This component was not included in the ODS training.
9. Managing behaviors	1. Discuss functions of behaviors. 2. Understand how to select behavior management strategies to address functions of behavior.	A brief intro to functions of behavior along with helpful tips in preventing and responding to student behaviors that may be perceived as disruptive were introduced toward the end of the training.

Data Collection

Group training. Pre and post group training measures were developed by the PI and adapted from previously created measures. Surveys were completed by participants using Qualtrics (2020). Pre-training survey links were e-mailed to participants who consented to participate upon their registration for the training. A reminder e-mail was sent one day before the

training was scheduled to occur. Post-training survey links were e-mailed to participants who completed the pre-training surveys 24 to 48 hours after the training was complete and they were given two weeks to complete the surveys. A reminder e-mail was sent to all participants 48 hours before the survey closing date. Program directors also sent out reminder emails to staff who participated in the training.

Coaching. Participant fidelity observations were planned to be recorded by ODS staff and sent remotely to the PI. After discussion with the site director who expressed interest in participating, the PI learned that the program was experiencing a severe staffing shortage and allocating time for someone to record staff was not feasible. The PI arranged to travel to the site in person over the course of four separate weeks to complete fidelity observations. She was not able to attend two weeks due to previously scheduled travel for work and research conferences. During each week, the PI arrived early and participated in morning staff planning meetings to organize observation schedules collaboratively with participants. The PI spent the night on site between the first and second data collection day of each week. When the PI was not conducting observations, she participated in activities with staff and students and volunteered to support when needed. Data collection included both recorded (on an iPad) and live fidelity coding. Live fidelity coding occurred when at least one video opt out form for a student in an observed group had been returned. Due to the nature of ODS activities that involve movement from place to place for both staff and students, it was not possible to guarantee that specific students would not potentially end up in the recording.

In all, 30 observations were completed by the PI. Twenty seven percent (n=8) of observations were recorded and later scored for fidelity and 73% (n=22) were conducted live and coded in-vivo. All observations lasted 11 minutes. Eleven minutes was chosen based on the

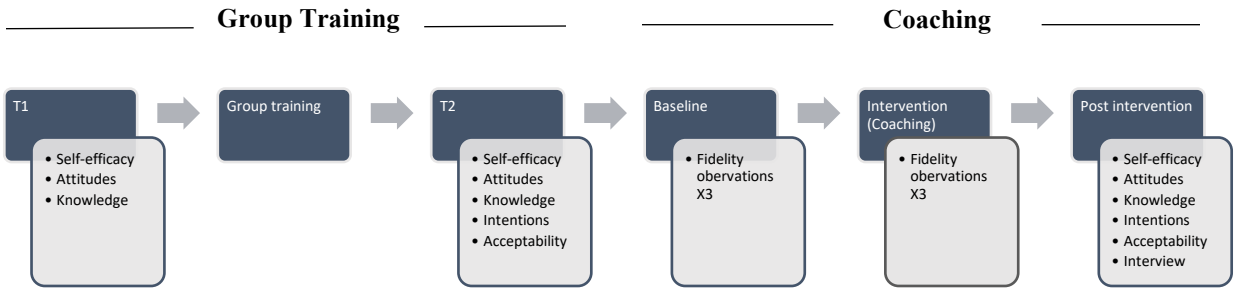
typical activity length of observed activities when social engagement was a goal, which ranged from 10-20 minutes. Video recorded observations were recorded on an iPad. Children present in the group were introduced to the PI who explained the purpose of the iPad and they were given a chance to ask questions prior to the recorded activity. Live coded observations involved the PI setting a timer for 11-minutes and taking handwritten notes about the participants use of strategies. After the 11-minutes were over, the PI immediately coded participant fidelity on a printed hard copy of the fidelity form.

Measures

Survey measures were completed for group training participants pre-training (T1), post-training (T2), and for coaching participants after coaching was complete (post intervention). Three of the seven coaching participants also completed pre-training and post-training surveys and represent a small subgroup in T1 and T2 measures. Observation data was collected for coaching participants pre-coaching (baseline) and during coaching (intervention). Additionally, coaching participants also participated in a follow-up interview. See figure 3 for measurement schedule.

Figure 3

Measurement schedule



Self-Efficacy and Attitudes. Participant self-efficacy and attitudes toward inclusive education was measured using previously developed measures, with adaptations made to one. Self-efficacy was measured using an adapted form of the Teacher Efficacy for Inclusive Practices (TEIP) scale (Sharma et al., 2012). The purpose of the TEIP is to measure self-efficacy of schoolteachers to teach in inclusive classrooms. Results of a 2012 exploratory factor analysis (EFA; Sharma et al.) and a later confirmatory factor analysis (CFA; Park et al., 2016) identified three factors underlying the data for the 18-item scale and included: efficacy to use inclusive instruction, efficacy in collaboration and efficacy in managing behavior. Seven items were removed based on relevance to current context. The adapted version included 11 items rated using a 6-point scale with anchors that ranged from *strongly disagree* to *strongly agree*. Only items included in the inclusive instruction and managing behaviors subscales were included in the adapted version. The adapted TEIP can be found in APPENDIX D.

Participant attitudes toward inclusive practices was measured using the Sentiments, Attitudes, and Concerns about Inclusive Education (SACIE) scale (Loreman et al., 2007). The purpose of the SACIE is to identify teachers' attitudes towards inclusion and their sentiments and concerns about inclusive education. An EFA and CFA of the measure (Forlin et al., 2011) identified three constructs in the final revised version of the scale (renamed the SACIE-R) including: sentiments about engaging people with disabilities (Factor 1, *Sentiments*), acceptance of learners with different support needs (Factor 2, *Attitudes*), and their concerns about inclusive education (Factor 3, *Concerns*). The SACIE included 15-items rated using a 4-point scale with anchors that ranged from *strongly disagree* to *strongly agree*. When analyzing data for the adapted SACIE, for *strongly agree* to be seen as a positive response on all items on the scale, items 1, 2, 4, 5, 7, 9-11, 13, and 14 must be reverse coded. A higher score on the SACIE

indicates that an individual has a more positive attitude, possesses lower levels of concern towards including students with disabilities, and has more positive sentiments when dealing with persons with disabilities compared to a person with a lower score. The SACIE can be found in APPENDIX C.

Knowledge. Since knowledge cannot be observed directly, it was inferred from evaluating performance on a knowledge test (Hunt, 2003). Knowledge was measured through an online questionnaire developed by the PI that included items directly related to the training content. The knowledge survey included items that are believed to measure three categories including (a) knowledge about inclusion, (b) knowledge about peer connections and students with disabilities, and (c) knowledge about RR. The knowledge survey included 12-items rated using a 5-point scale with anchors that ranged from *very poor* to *very good*. The knowledge survey can be found in APPENDIX F.

Intentions. The theory of planned behavior (Ajzen et al., 2011) posits intentions as a determinant of observed behavior (Moullin, 2018). ODS providers intentions to implement RR strategies was measured using an adapted version of the Measure of Innovation-Specific Implementation Intentions (MISII; Moullin et al., 2018). The MISII has been found to be a reliable measure of providers' intentions to use a specific evidence-based practice (e.g., RR) and can be used in applied settings to better understand the implementation process. The MISII includes three items that have been shown to represent a unidimensional latent construct and scale. The adapted version of the MISII included 3-items rated using a 5-point scale with anchors that ranged from *not at all* to *a very great extent*. The adapted MISII can be found in APPENDIX E.

Acceptability and feasibility. Subjective evaluation data on acceptability and feasibility of RR was collected using a survey adapted from the Usage Rating Profile-Intervention (URP-I; Briesch et al., 2013). The URP-I is an instrument designed to measure the multiple factors that may influence uptake and implementation of specific interventions. Results from a recent EFA and CFA support a 29 item, six-factor model of usage, which include acceptability, understanding, family-school collaboration, feasibility, system climate, and system support factors (Briesch et al., 2013). Items included from the URP-I acceptability and feasibility subscales for this study were selected based on their relevance to the current context. Twelve items from the measure were selected and rated using a 6-point scale with anchors that ranged from *strongly disagree* to *strongly agree*. Some of the phrasing on specific items was adapted to fit the context (i.e., outdoor school) and focus on RR. For example, if the original survey item used the word "intervention", it was replaced with "RR." The researcher adapted version of the URP-I seeks to evaluate the acceptability and feasibility factors related to the RR training and strategy implementation. When analyzing data for the adapted URP-I, for *strongly agree* to be seen as a positive response on all items on the scale, items 3, 6, and 10 need to be reverse coded. A higher score on the URP-I indicates that an individual perceives the intervention as more acceptable and feasible than an individual with a lower score. The adapted URP-I can be found in APPENDIX B.

Open ended interview questions as a measure of acceptability also have the potential to glean more relevant information on what the intervention means to each individual participant as compared to a structured survey (Anderson et al., 2021). A brief (15-20 minutes) semi-structured interview, using questions developed by the author was completed with participants who received coaching. Thematic analysis to identify patterns from interview transcripts was

integrated with quantitative survey data to develop generalizations about participant experiences and perceptions of the training and implementation process. Interview questions can be found in APPENDIX G.

Trainer Quality. High quality, evidence-based training is essential to ensure that trainees obtain the knowledge, strategies, and skills taught during professional development sessions (Gaumer Erickson et al., 2017). The Observation Checklist for High-Quality Professional Development (HQPD Checklist; Gaumer Erickson et al., 2017) is a 22-item checklist that was developed to support the learning of attendees at professional development training sessions by supporting professional development providers through monitoring their trainings and using the tool to coach them to improve the quality of their trainings. The checklist was adapted to remove two items (one and two) that could not be observed by a coder (e.g., provides a description of the training and provides readings, activities and/or questions to think about prior to the training). The final version included 20-items across six domains including: (a) preparation, (b) introduction, (c) demonstration, (d) engagement, (e) evaluation, and (f) mastery. To assess trainer quality and ensure delivery was consistent across all sessions, sessions were recorded and scored by two research assistants to establish interrater reliability. The adapted HQPD can be found in APPENDIX H.

Participant Fidelity. The primary outcome measure for this study was a staff-student interaction, which was scored using a 10-item fidelity rating scale. The outcome measured was percent total RR fidelity. The fidelity form was created by the researcher and included ten items directly related to RR strategies included in the group training. The items were segmented into three domains including (a) identifying, monitoring, and boosting peer engagement; (b) facilitating peer conversations; and (c) developing in-vivo social skills. Items were scored on a 5-

point Likert scale (0-4) designed to capture the quality of strategy implementation. A "not applicable" (NA) option was also available to mark when an item was not appropriate to use within the context or setting of the observation. A full copy of the fidelity form can be found in APPENDIX I. Fidelity was scored for video recorded observations and in-vivo during the adult-child interaction.

Interobserver Agreement

Interobserver agreement (IOA) was collected on 62.5% of the recorded observations. Recorded observations were available for four of the seven participants (Sara, Liz, Jenn, and Carter). According to What Works Clearinghouse (WWC) single case design standards, IOA must be collected on a minimum of 20% of all observations, as well as across all phases of a study (Locke et al., 2017; Kratochwill et al., 2010). Each video was coded by three coders (including the PI). IOA was calculated by taking the total number of agreements across the three coders and dividing it by the total number of ratings possible (n = 3) for each item on the fidelity form (n = 10). Videos were coded individually and then the coding teams met to discuss scores and disagreements. When a disagreement was present, the coding team discussed and reached consensus on a single score. Mean IOA across recorded observations (n = 5) was 54.6% and ranged from 30% to 73%. IOA means varied across participants and was 30% for Sara, 63% for Liz, 53.5% for Jenn, and 73% for Carter.

Study Design

This pilot study used a multimethod design. A study is considered *multimethod* when it uses a series of complementary methodologies, intentionally chosen to achieve a common research goal (Anguera et al., 2018), in this case, to explore the acceptability and feasibility of a pilot inclusive practices training with follow up support (e.g., coaching) using an implementation

science framework. The design was informed by pretest posttest group, single case, and qualitative research methodologies.

Pretest Posttest Group Method. A pretest posttest group design was used to answer research questions one and two, which address the preliminary feasibility and acceptability of the RR group training.

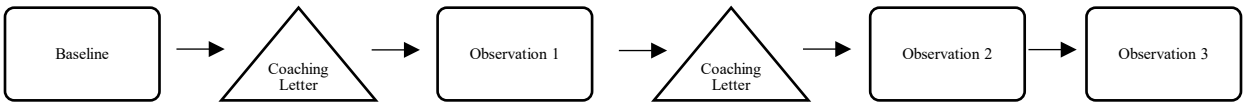
Single Case Research. The third and fourth research questions were addressed through a series of A-B single case research designs across seven participants along with self-report surveys and a brief interview. A case series design was chosen over an experimental single case design due to the brief duration of ODS Spring schedule (e.g., 18 days) and limited number of days that each participant was available for data collection (R = 6-18 days). Each case series included three phases including: (a) baseline, (b) intervention, and (c) post intervention. See figure 4 for procedure.

Baseline. The baseline phase occurred after the didactic training during in-person ODS programming with 5th and 6th graders, which began in late April (approximately three weeks after the training). Baseline data was collected during a regularly scheduled ODS routine or activity where staff planned to support peer to peer engagement. During baseline, participants were instructed to teach as they normally would and to consider the training content. They received no further instruction or feedback from the researcher. Baseline data was collected for three 11-minute observations during ODS instruction. Time between baseline data points were taken at varying time points with some baseline observations taking place on the same day during different activities, and others being taken on a different day ranging from one to five days apart (e.g., separate weeks).

Intervention. The independent variable in this part of the study was coaching in the form of individualized performance feedback for participants. Coaching was delivered via e-mail and followed the format used in Hemmeter et al. (2011) which included (a) a general positive opening statement with acknowledgement of efforts related to training strategies; (b) positive descriptive praise about usage of at least 1 strategy; (c) 1-2 suggestions for continued growth; and (d) a reminder to keep using demonstrated strategies and positive closing statement. E-mail coaching was chosen over in-person coaching as it has been shown to be effective at supporting educator implementation of strategies (Ascetta et al., 2019; Gage et al., 2017; Hemmeter et al., 2011) and is less costly and time intensive than in-person coaching supports. A sample e-mail can be found in APPEDNIX J. Participants received one e-mail after their baseline data observations were complete and a second e-mail after their first intervention observation was complete. After the second e-mail, two more observations were completed. See figure 4. Coaching letters were sent to staff within 24 hours of the previous observation and timing between coaching letters and the subsequent observations ranged depending on the next scheduled observation. If a coaching letter was sent during the evening after an observation had occurred that day, the next observation either occurred the next day or the following week. Staff and researcher availability were both considered when scheduling observations.

Figure 4

Single case research design procedure



Post Intervention. Post intervention involved examination of the acceptability and feasibility of training and implementation as perceived by participants who received coaching.

Participants completed all surveys completed pre and post group training and participated in a brief follow up interview with research staff. Interview questions can be found in APPENDIX G.

Data Analysis

Research questions one and two (acceptability, feasibility, and training impact). Pre-training and post-training survey responses were used to explore how participants rated the acceptability and feasibility of the group training and how the training impacted staff self-efficacy, attitudes, intentions, and knowledge. Participants each completed five surveys including (a) the SACIE, (b) the TEIP, (c) the URP-I, (d) the MISII, and (e) knowledge survey. Descriptive statistics including item and subscale means and standard deviations are reported.

Research question three (coaching). Visual analysis of single-case research design data (Kratochwill et al., 2010) was completed for graphed data which assessed within and between phase data patterns: (a) level, (b) trend, (c) variability, (d) immediacy of effect, (e) overlap, and (f) consistency of data patterns across similar phases (Kratochwill, 2010; Kratochwill et al., 2013). Visual analysis occurred in in four steps: (a) assessing stability of baseline; (b) assessing within-phase data patterns (level, trend, and variability); (c) comparing level, trend, and variability of adjacent phases (within participant); and (d) comparing level, trend, and variability across subjects to determine replication of effect.

Research question four (student benefits). Post intervention interview transcripts were used to examine participant perceptions of benefits to students who participated in groups where RR strategies were being used. Open coding, an emergent coding technique drawn from grounded theory methodology (Glaser & Strauss, 1967) was used to allow for participant generated themes. Rich quotes are presented in the results section to demonstrate how findings

were derived directly from participant responses and less likely to be a result of researcher bias (Polit & Beck, 2012).

CHAPTER IV

RESULTS

This chapter describes the results of study I and study II. First, results from study I are presented which includes the themes that were identified in the content of the interviews conducted with ODS staff and school partners. Next, detailed results from study II are presented including (a) results from the group training surveys (e.g., URP-I , SACIE, TEIP, knowledge, and MISII), (c) results of staff fidelity, and (d) post intervention survey and interview data.

Study I

Research question one was addressed through thematic analysis of interviews. Interviews conducted with participants revealed five themes including: (a) relationships and connections; (b) student engagement and behavior; (c) accessibility; (d) collaboration; and (e) disability acceptance and awareness. Theme (a) relationships and connection was a primary theme across all interviews and represented a major strength of ODS as well as a core value of programming.

Theme 1: Relationships and Connections

Relationships and connections among children, as well as children and adults were mentioned frequently across all interviews. The term "hard to quantify or qualify" was used to describe these important social aspects of the ODS experience. This is illustrated by a program director who stated,

> There's this thing that happens at outdoor school that is so hard to quantify or qualify that's like, a kid connects with either their peers or nature or with themselves in ways that they haven't been able to before.

The opportunity to connect with others in new ways was also mentioned by another director who stated, "I find that students often get to see each other in a light that they haven't before." She went on to describe how new experiences such as performing arts and shared living

experiences at ODS, allow students to express different parts of themselves that they may not have been able to tap into during their classroom experiences with peers.

Although ODS is a field science program and curricular standards are rooted in math and science education, there also appeared to be an intentional focus on embedding social emotional learning into the experience for students. Friendship, connection, kindness, acceptance, value, honor, conversation, and caring were words that came up frequently during interviews. One participant share that "building really solid relationships with students and helping them feel valued" is what she believes leads to students finding success at ODS. "Connection" was described as the heart of one program when a participant shared their program theme and went on to describe how influential the focus on connection to self and others is for student at ODS. They stated,

> Our whole program theme is, we are all connected through the land, so connection is at the heart of what we are trying to do. I think having a change in space and location, a change in environment and a change in who's supporting [students] offers an opportunity to connect with each other in ways that maybe they're not able to in a structured classroom environment where they have like very specific things they have to meet. I mean, there's so much pressure on teachers to follow these standards and I think some of that community connection and empathy development and gratitude is lost. So, what are the practices we can do at outdoor school that help them build those social skills?

Others echoed this sentiment when they spoke about the "real" measure of success at ODS not being student mastery of STEM objectives, but rather more profound internal and external transformations of self-identity through new experiences and social connections. One ODS program director with several years of experience noted,

> I've had a lot of moments like that, with kids where those first couple of days are really tough, but like something kind of changes in them and it's usually a high school student or the other kids in their cabin [that is responsible for that change.]

A memory about student connections was shared by a 5th grade teacher who also serves as the ODS program director for his school. While talking about a student with a physical disability in his class, he shared,

> Without even thinking about it, kids will move sticks out of the way so my student who struggles with walking doesn't have to worry about stepping over the. It's all about kids helping kids, ya know?

Relationships and social connections were clearly a highlight of conversations and stories were shared with emotion. Participants who spoke of "this thing" that is "hard to quantify or qualify" at ODS, worked hard to find words to describe the influential experiences they have observed in their time with their program, with one participant stating, "it's where the magic happens." The "magic" of ODS can be interpreted as suggested that ODS is a place where the impossible is possible, especially when it comes to powerful relationships and social connections for students.

Theme 2: Student Engagement and Behavior

The importance of understanding different engagement styles as well as helping adults to differentiate instruction and define how they measure success and engagement was apparent during interviews. One participant shared, "We really prioritize flexibility and looking at student engagement signs." They went on to describe some foundational work their team had engaged in this year through training on how brain science impacts behavior and engagement of students. Another participant emphasized their program's commitment to "understanding the needs of students who are coming," and how this value is embedded into their systems of communication with families and school staff during their planning phase. Opportunities for growth in strategies to support engagement and behavior were noted by participants who shared ideas for future trainings. Quotes from teachers included:

> If I was the person running it [the training], I would say, find it in everything you do, a way for everybody, every student and adult to be successful in some way. And that doesn't mean that everybody does the same thing.
>
> I would want to share with them about different ways students communicate (e.g., AAC and pictures) and what success looks like for my students, because it's different.

Theme 3: Accessibility

A commitment to accessibility and the opportunity for "every kid" to attend ODS was expressed by all program directors. The firm belief that, "every kid feels like they can come and that they are welcome," was a non-negotiable for one program. This inclusive value was described by one participant as being, "very deep in [their] program's value system." Program directors described actions that represented this commitment to accessibility by sharing that they ask questions like, "What can we do to support [students with disabilities]?" And "What do we need to do to make sure that all students can come?" One ODS director shared, "It doesn't matter, we will do whatever it takes to have students there. I mean, the only way they will not come with us is if caregivers opt them out."

Theme 4: Collaboration

Collaboration between teams (e.g., ODS, school staff, and families) was noted as central to successful inclusion at ODS. The ability to have conversations about student needs, interests and strengths during the planning process allowed ODS staff to develop materials and experiences tailored to individual students. Collaborative processes such as family information nights, planning sessions, clear communication procedures were all noted as facilitators to inclusive programming. A special education teacher expressed a desire for "more communication and more relationship building between schools and ODS," as they saw it as central to students having a positive experience at ODS. The importance of ODS and school collaboration was also echoed by an ODS program director who commented on the "valuable and effective processes

and support systems" that schools already have in place for students at school, and the importance of "…working collaboratively to translate those systems to ODS."

Theme 5: Disability Awareness and Acceptance

General statements about disability acceptance and awareness were noted as important for successful inclusion across participants. This was represented by one participant who stated, "I think having Outdoor School staff trained and aware of disabilities, so that staff are more comfortable is a big piece." Two participants who work for the same program, shared the success of their volunteer program designed specifically to support inclusion of students with disabilities and how their volunteers, who have more experience with students with disabilities are vital to program success and inclusion. To increase disability awareness and acceptance for ODS staff and students, one ODS program director described a field study they had developed and have been implementing for several years during ODS.

> The absolute whole field study is based on different disabilities. So, kids become blind [by wearing blindfolds] and they get to go on blind hikes. We do a dexterity thing where we have gloves that have been sewn together and they have to write a letter. We used to have a wheelchair and kids would get the opportunity to become a wheelchair user too.

The field study was inspired by a former ODS student with a physical disability who had shared with staff that they just wished kids would ask questions about their experience with their disability so others understood why the way they did things looked a bit different.

Study II

Results from study II are presented below. First, survey results for both group training as well as coached participants are presented. Of the seven participants who received coaching, three of them also completed surveys before and after the group training. Fidelity results are presented next, followed by post-intervention interview data.

Results

Acceptability and feasibility (URP-I; Briesch et al., 2013). Overall ratings of acceptability (Table 5) were high for both the group training (M = 5.24) and coaching (M = 5.59), indicating that participants agreed that RR is acceptable for use at ODS. The mean acceptability score for participants who received coaching was slightly higher than the score for participants who only participated in the group training. Overall ratings of feasibility indicated slight agreement for group training (M = 4.96), and agreement for coaching (M = 5.54) that RR is feasible to implement at ODS.

Table 5

Acceptability and feasibility scores on URP-I

Item		Group Training (n = 34)		Coaching (n = 7)	
		M	*SD*	*M*	*SD*
	Acceptability Total	5.24		5.59	
A 1	Remaking Recess strategies are a good way to support inclusion of students with disabilities.	5.2	1.23	5.6	0.47
A 2	I would implement Remaking Recess strategies with a good deal of enthusiasm.	5.2	0.94	5.6	0.47
A 3	I would not be interested in implementing Remaking Recess strategies in the future.	5.1	1.37	5.6	0.47
A 4	I would have positive attitudes about implementing Remaking Recess strategies in the future.	5.2	1.07	5.6	0.47
A 5	Remaking Recess strategies are an effective choice for addressing inclusion at outdoor school.	5.3	1.01	5.5	0.5
A 6	I would be resistant to using Remaking Recess strategies in the future.	5.6	0.55	5.7	0.47
A 7	I would be committed to using Remaking Recess strategies in the future.	5.1	1.06	5.5	0.76
	Feasibility Total	4.96		5.54	
F 8	The total time required to implement RR strategies is manageable.	4.9	1.05	5.5	0.5
F 9	Material resources needed for RR are reasonable.	5.1	1.01	5.7	0.47
F 10	RR is too complex to carry out accurately.	5	0.71	5.8	0.37

Table 5 (continued)

Item		Group Training (n = 34)		Coaching (n = 7)	
		M	*SD*	*M*	*SD*
F 11	I would be able to allocate my time to implement RR.	4.9	1.03	5.2	0.9
F 12	Preparation of materials needed for RR would be minimal.	4.9	1.13	5.54	0.5

Note. A = acceptability, F = feasibility. Scores for items A3, A6, and F10 were reverse coded.

Sentiments and attitudes (SACIE: Loreman et al., 2007). Pre-training, post-training, and coaching means and standard deviations for total SACIE score and each subscale are reported in table 6. On average, total SACIE scores upon entry were high (M=3.18) out of a total possible score of four, indicating participants entered the training with overall positive attitudes, possessed moderate levels of concern about including students with disabilities at ODS, and had positive sentiments when dealing with persons with disabilities. After completing the training, scores increased for total SACIE (M=3.34) as well as each subscale. Total SACIE score (M = 3.2) for the coaching group was slightly higher than the pre-training mean but lower than the post-training mean.

Table 6

SACIE scores

Subscale	Pre-Training (n = 52)		Post-Training (n = 33)		Coaching (n = 7)	
	M	*SD*	*M*	*SD*	*M*	*SD*
Total	3.18	0.45	3.34	0.44	3.2	0.7
Sentiments	3.32	0.24	3.36	0.31	3.08	0.58
Attitudes	3.56	0.05	3.74	0.05	3.92	0.11
Concerns	2.66	0.3	2.92	0.4	2.62	0.5

Note. Scores for items included in the sentiments and concerns subscales are reverse coded.

Self-efficacy (TEIP; Sharma et al., 2012). Pre-training, post-training, and coaching means and standard deviations for total TEIP and each subscale are reported in table 7. On

average, participants entered the training with relatively high levels of total self-efficacy (*M*=4.5) out of a total possible score of 5. Delivering inclusive instruction (*M*=4.6) and supporting student behavior (*M*=4.41) subscales were also rated high upon entry. After completing the training, mean scores for total self-efficacy (*M*=4.86) and both subscales increased. Total self-efficacy score (*M* = 5.09) was higher for coaching participants than pre-training and post-training scores. Both subscales were also higher for coaching participants.

Table 7

TEIP scores

Subscale	Pre-Training (*n* = 53)		Post-Training (*n* = 32)		Coaching (*n* = 7)	
	M	*SD*	*M*	*SD*	*M*	*SD*
Total	4.5	0.45	4.86	0.34	5.09	0.57
Inclusive Instruction	4.6	0.46	4.96	0.21	5.3	0.5
Supporting Behavior	4.41	0.48	4.76	0.40	4.88	0.59

Knowledge. Pre-training, post-training, and coaching means and standard deviations for each knowledge component are reported in table 8. Upon entry, participants reported moderate levels of knowledge related to inclusion (*M* = 3.61), peer connections for students with disabilities (*M* = 3.37), and low levels of knowledge related to RR (*M* = 1.74) out of a total possible score of five. After completing the training, participants reported higher levels of knowledge on all three subscales, with the largest increase of 2.4 points reported for RR knowledge (*M* = 4.14). Coaching means were higher than entry but lower than post-training for inclusion (*M* = 4.1) and RR knowledge (*M* = 3.86), and higher than both pre-training and post-training means for peer connections (*M* = 4.52).

Table 8

Knowledge scores

Component	Pre-Training (n = 54)		Post-Training (n = 33)		Coaching (n = 7)	
	M	SD	M	SD	M	SD
Inclusion	3.61	0.7	4.4	0.55	4.1	0.35
Peer Connections	3.37	0.67	4.44	0.17	4.52	0.62
Remaking Recess	1.74	0.29	4.14	0.22	3.86	0.24

Intentions (MISII; Moullin et al., 2018). Mean scores as well as number of responses in all five response categories are reported for each MISII item for participants who only received the group training (Table 9) and for participants who received coaching (Table 10). Participants who only took the group training reported overall moderate intentions to implement RR (M = 2.87) out of a total possible score of four. Participants who received coaching reported overall great intentions to implement RR (M = 3.27) when compared to group training only scores.

Table 9

Post training number of responses (%) in all five response categories (n=30) and item means (M).

Item	Response category					(n = 30)
	0 none	1 slight	2 moderate	3 great	4 very great	M
Total						2.87
(1) I plan to use RR strategies with my students	1 (3.3%)	0	6 (20%)	13 (43.3%)	10 (33.3%)	3.0
(2) Using RR strategies is a high priority for me	1 (3.3%)	0	9 (30%)	11 (36.7%)	9 (30%)	2.9
(3) I will use all aspects of RR with my students	1 (3.3%)	1 (3.3%)	9 (30%)	13 (43.3%)	6 (20%)	2.7

Table 10

Coaching number of responses (%) in all five response categories (n=7) and item means (M).

Item	Response category					(*n* = 7)
	0 none	1 slight	2 moderate	3 great	4 very great	*M*
Total						3.27
(1) I plan to use RR strategies with my students	0	0	1(14.3%)	2(28.6%)	4(57.1%)	3.4
(2) Using RR strategies is a high priority for me	0	0	1(14.3%)	2(28.6%)	4(57.1%)	3.4
(3) I will use all aspects of RR with my students	0	0	2(28.6%)	3(42.9%)	2(28.6%)	3

Participant Fidelity

Complete data (e.g., three baseline and three intervention data points) are included for three participants and partial data are included for four participants. Activities in which observations were conducted are represented by different symbols for graphed data. See figures 5 and 6.

Jenn. Jenn's observations occurred during the challenge course, game facilitation, nature art and pond studies. During baseline, Jenn was using some of the strategies (e.g., identifying and monitoring peer engagement and making some attempts to boost engagement) and demonstrated relatively stable fidelity. Baseline mean percentage of fidelity was 16% with a range of 15%-25%. During intervention, Jenn immediately increased her use of strategies. There was minimal variability and a stable trend across intervention observations. The mean percentage of fidelity during intervention was 85% with a range of 83%-86%. Jenn significantly increased her use of all strategies during intervention. There was no overlap between baseline and intervention

datapoints. She consistently monitored student engagement and utilized several strategies to boost student engagement and facilitate peer to peer interactions. Jenn remained close to students who benefited from support and facilitated conversations between those students and their peers by inviting peers over to help or share an idea. For example, during pond studies, while students were looking at pond water under a microscope in pairs, she prompted a pair of students to invite a third student who did not have a partner or access to a microscope into their group by cueing them to share what they had found with the third student.

Chad. Chad's observations occurred during game facilitation, wood working, and stream studies. Chad used some of the strategies (e.g., identifying and monitoring engagement and approaching students who might benefit from support) during baseline. Baseline data were unstable and demonstrated a decreasing trend. The mean percentage of fidelity was 43% with a range of 33%-61%. During intervention, Chad did not increase his fidelity until the third observation. The mean percentage of fidelity during intervention was 39% with a range of 10%-79%. Intervention data was variable and significant overlap was present between baseline and intervention datapoints. Chad consistently engaged in activities with students and demonstrated interest and excitement during his teaching. He demonstrated use of strategies such as monitoring student engagement and use of boosting strategies such as encouraging children to join in with peers, providing appealing and appropriate activities, and arranging materials to facilitate group interactions. For example, during a wood working activity, Chad moved around from student to student to check in with them. He modeled use of the tools and interest in everyone's project by engaging them in conversation about the process to maintain their engagement.

Stephen. Stephen's observations occurred during game facilitation and pond studies. Stephen used several of the strategies consistently during baseline. His use of strategies was stable with little variability across baseline observations. The mean percentage of fidelity during baseline was 70% with a range of 68%-75%. During intervention Stephen demonstrated a slight increase in his fidelity after the first coaching letter, which was not maintained across the last set of observations. The mean percentage of fidelity during intervention was 72% with a range of 68%-85%. Data included significant overlap between the two phases. Stephen utilized several strategies across all observation and was skilled at monitoring and boosting student engagement using a variety of strategies. Stephen consistently engaged in activities with students during his teaching. He demonstrated use of multiple strategies to boost student engagement and to ensure that all students had the opportunity for peer-to-peer interactions. During observations, Stephen used more advanced strategies such as identifying students who might benefit from support and providing them with leadership roles. For example, during a group game, he identified a student who had fallen out of the game (based on the initial rules) and was sitting to the side observing. To re-engage the student, he facilitated an adaptation to the game where the student could re-engage and act as a leader for other students who fell out. This adaptation led to all students having a role in the game until it was time to transition.

Figure 5

Participants with complete data: Fidelity graphs

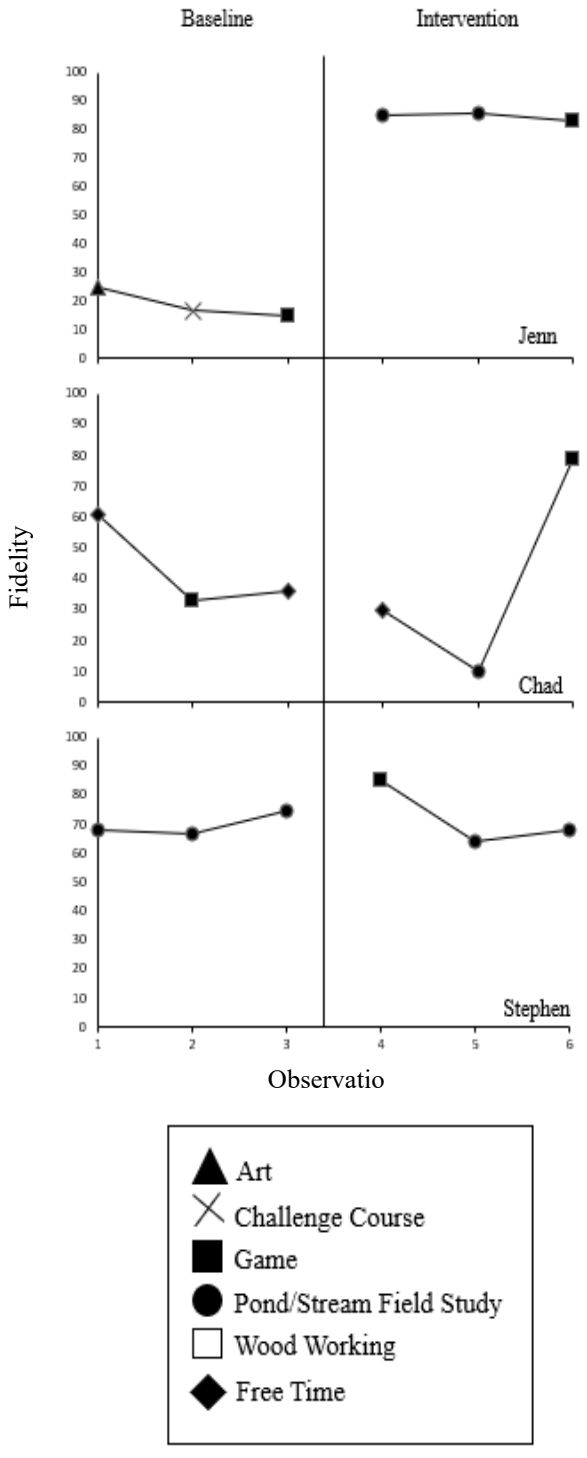
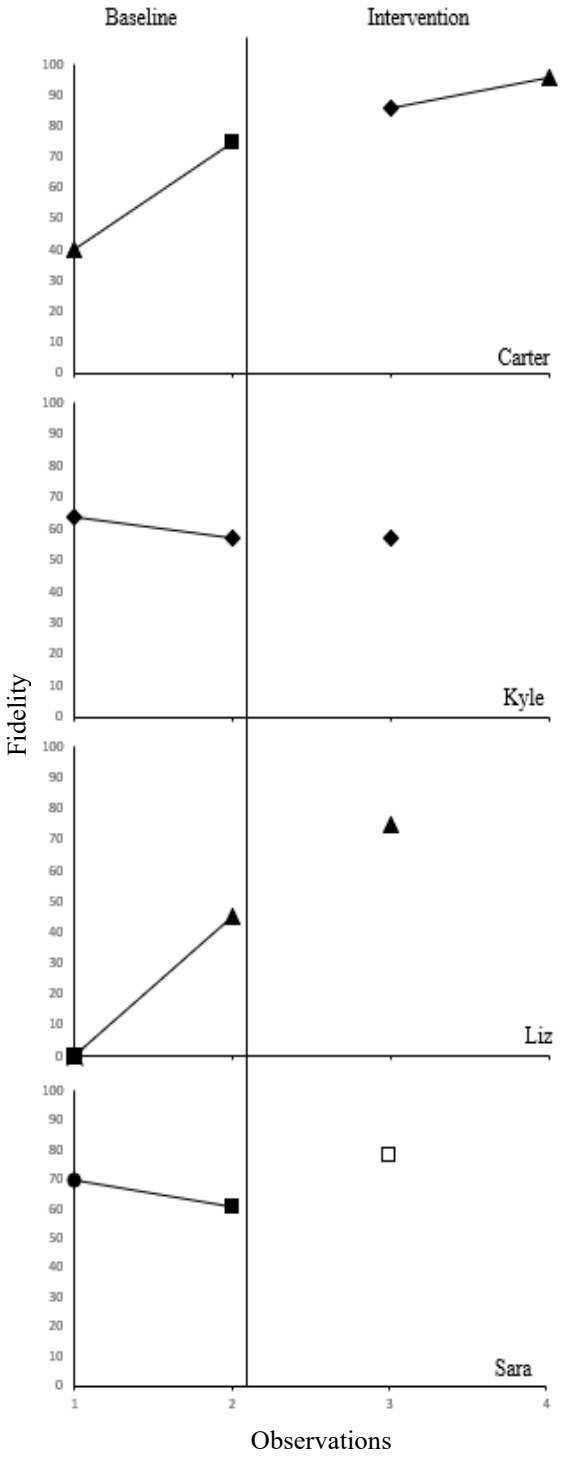


Figure 6

Participants with partial data: Fidelity graphs



Carter. Carter used some of the strategies (e.g., identifying and monitoring engagement and boosting student engagement by offering explicit opportunities to engage) during baseline. Baseline data demonstrated an increasing trend. The mean percentage of fidelity during baseline was 57.5% with a range of 40% to 75%. During intervention, Carter increased her fidelity with a mean percentage of 91% ranging from 86% to 96%. Intervention data was also stable and demonstrated an increasing trend. No overlap was present between baseline and intervention phases.

Kyle. Kyle demonstrated some use of strategies (e.g., identifying and monitoring engagement and boosting student engagement by modeling interest and participating in the activity) during baseline. The mean percentage of fidelity during baseline was 60.5% with a range of 57% to 64%. Baseline data demonstrated a slight decreasing trend. During intervention Kyle maintained his fidelity from baseline with a percentage of 57%. Overlap between the two baseline data points and single intervention data was present.

Liz. Liz demonstrated some use of strategies (e.g., identifying and monitoring engagement and boosting engagement by facilitating conversation between students) during baseline. There was an increasing trend during baseline observations. The mean percentage of fidelity during baseline was 22.5% with a range of 0% to 45%. During intervention, Liz increased her use of strategies demonstrating 75% fidelity. No overlap was present between the two baseline and single intervention data.

Sara. Sara demonstrated use of several strategies (e.g., identifying and monitoring engagement, boosting engagement by facilitating conversations and structuring partner and group activities, and developing in vivo social skills) during baseline. Baseline data represented a slight decreasing trend. The mean percentage of fidelity during baseline was 65.5% with a range

of 61% to 70%. During intervention Sara increased her use of strategies from baseline demonstrating 78% fidelity. No overlap was present between the two baseline data points and single intervention data point.

Post Intervention Interviews

When asked about their experience implementing RR strategies in post intervention interviews, comments included, “They all felt pretty natural and like strategies that flow with the group and the whole outdoor school experience,” and “I just found that the strategies allowed you to kind of like branch out into different needs for the kids and most of the strategies apply across a range of different needs.” One participant reported that the strategies were “easier” to implement than they had anticipated and another described themselves as “more aware” of how students were engaging than prior to having the training and coaching. A greater awareness of student engagement came up again when one participant noted, “Since the training, I look at groups of kids and think about their levels of engagement, which I’ve never done before.” While reflecting on use of the strategies, one participant said, “I think the experience shed light on the fact that we need more of these tools, and these are way more useful than we’ve realized in the past.”

Barriers to using RR strategies were also mentioned. Two participants talked about the struggle to manage both instructional responsibilities with peer engagement priorities and how having an extra person whose primary role was to support engagement might be helpful. This is evidenced by comments like, “[The strategies] were sometimes difficult given the reality of some of the specific activities we are doing.” And, “Trying to include some of the kids who were less engaged would require me to step aside from my [instructional] leadership position.” In both conversations, they were referring to the expansive physical space that ODS activities are often

facilitated in (e.g., field, large stream, trail) and how leaving the larger group to approach a student who may need more direct support felt like they were then sacrificing their quality of group instruction. Another participant echoed this feeling when they said, “It was difficult to use the strategies with students who were floating off, when you’re also trying to maintain the flow of the group.” Having a second staff member who could be dedicated to supporting students who may benefit from higher levels of support that included physical proximity, felt like a solution to meet the needs of individuals as well as the group. The changing dynamic of groups from week to week was also mentioned as a challenge. As on participant stated, “It’s difficult to say, was it the group, or was it the strategies, because I did notice it felt easier to implement the strategies with certain groups over others.” This participant also discussed the importance of efficiently and meaningfully building relationships with kids during such a short period of time (2-3 days), and how that was necessary to then effectively layer on RR strategies and to ensure they were tailored to the individual child’s strengths and needs.

Participants talked about benefits for students specifically related to social engagement. When asked what benefits they noticed for students, one participant shared, “One thing that comes to mind is like an activity we were doing where, by the end of it they were all working as a team. Seeing that was really cool.” Another mentioned how students who “needed a little extra help [engaging], sparkled a little bit more,” as a result of their strategy use. “Little shifts in getting more involved with the group,” were described by one participant as positive behavioral changes seen in children. Another participant shared her experience facilitating a hard conversation between students and how “there was a clear benefit” because they thanked her later that day.

Participants were asked for feedback about the training and implementation process and if there was anything they'd like to see changed if this were provided in the future for ODS educators. Suggestions included opportunities to observe a trainer or expert using the strategies with children and using other forms of coaching. Two participants noted wanting opportunities to observe the researcher implement the strategies with children as part of the training. One participant said, "I wanted Stacy to be like, oh, let me show you, like step by step and demonstrate," while another stated, "It would be great to watch Stacy or another trainer do it in action at our site." Different perceptions of the coaching process were provided with most participants stating how "helpful" the coaching letters were as reminders to use RR strategies. Two participants shared feedback on the coaching format that was used with one indicating they would have liked to have more feedback, especially after the last observation so they could "see how they improved." The second participant shared detailed feedback about how a different format or structure to coaching could have been more helpful for them by saying,

> The coaching was helpful, Stacy has a very gentle hand, so it was like soft and sweet. Honestly, I was expecting a bit more harshness, not in a way that's like abusive, but just like hey, this is what you could improve on, and I think I would like that a little bit more.

The same participant also stated,

> One other thing that might be kind of cool is to have some conversation between participants, like you know facilitate interaction between the trainees to have conversations about it, or like, hey, how is this working for you? What strategies are you using? Like comparing notes.

CHAPTER V

DISCUSSION

A great deal of research has been conducted on the effects of inclusion (Westling, 2019) and its potential benefits for both students with and without disabilities (Kefallinou et al., 2020; Oh-Young & Filler, 2015; Szumski et al., 2017). However, three gaps continue to exist in the inclusive education literature: (1) research reveals that students with disabilities do not make progress unless inclusive programs are well designed, (2) simply placing disabled students in settings with non-disabled peers is not sufficient, and (3) adults must make intentional efforts to facilitate meaningful inclusion into educational settings for students with disabilities (Carter et al., 2013; McLeskey et al., 2019). Furthermore, what inclusion looks like and how it is being approached in Oregon Outdoor School programs, has not been formally explored. This pilot work sought to address these gaps using an implementation science framework to examine the acceptability and feasibility of a training designed for ODS educators in Oregon focused on research-based inclusive strategies. The development, implementation, and evaluation of the training was guided by the EPIS framework (Aarons et al., 2011). In study I, input from ODS partners about the perceived facilitators and barriers to including students with disabilities at ODS was gathered through interviews. The training was developed based on input from ODS partners and included strategies from a social engagement program designed to reduce barriers to social connections and friendships for children with disabilities in educational settings.

Currently, there is limited research on the training needs and impacts of professional development on ODS educator knowledge, competence and observed performance related to training objectives (Wahl-Alexander et al., 2017). To the researcher's knowledge, this is the first time a social inclusion intervention (RR) has been adapted and explored in the ODS setting.

Furthermore, this is also one of the first studies in which direct observations of staff fidelity has been included as a measure of training impact for this population. In this chapter, a discussion of major study findings is presented along with directions for future research, current study limitations, and implications for practice.

Outdoor Schools Value Inclusion and are Well Positioned to Implement Evidence-Based Programs

Interviews with ODS leadership and partners (e.g., school staff) shed light on ODS program values as well as facilitators and barriers related to implementation of inclusive practices. Themes from the interviews included a focus on social inclusion, disability awareness and acceptance, prioritizing student engagement, accessibility, and the importance of collaboration. Interview participants regularly mentioned the importance of ensuring that all students feel valued, welcomed, and cared for at ODS. There were clear commitments to creating a culture of acceptance where diversity is celebrated and students with disabilities' social and emotional needs are met in addition to their right to access ODS programs with their non-disabled peers. This represents a major strength of ODS programs in Oregon and facilitator to development and sustainment of inclusive ODS programming, as implementation science work suggests that both culture (e.g., beliefs and shared expectations of an organization) as well as climate (e.g., shared perceptions of the social impact of the work environment) may influence the quality of service delivery and adoption of evidence-based inclusive practices in this case (Fixsen et al., 2005; Glisson & Green, 2006; Owens et al., 2014). Research specifically on inclusive education, also highlights that successful implementation of inclusive practices is largely dependent on educators (Pit-Ten Cate et al., 2018) and that they must have the

appropriate skills and knowledge to successfully implement evidence-based inclusive strategies (Borg et al., 2011), a primary focus of this study.

ODS staff knowledge of and experience with different disabilities was mentioned during interviews as a priority for training. ODS educators, like classroom educators, frequently enter the field with varying degrees of experience with children with disabilities and may require education to address knowledge gaps about disability, and specifically, how disability is valued within an inclusive culture. Training on supporting students with higher levels of need and how to differentiate strategies to encourage engagement and positive behaviors were identified as important training needs for ODS seasonal field instructors at each of the participating sites. These needs identified by ODS leadership are consistent with research on inclusion in school settings that suggest that educators report feeling underprepared to work in inclusive settings (Forlin et al., 2010) and many of them have had little to no experience designing and implementing effective inclusive practices (Florian, 2012).

ODS Educator Beliefs and Attitudes

Results from the Sentiments, Attitudes, and Concerns about Inclusive Education (SACIE; Loreman at al., 2007) scale completed prior to and after the group training, suggest that participants in this study, had overall positive attitudes and sentiments and possessed only moderate levels of concern about teaching and including students with disabilities at ODS. Positive scores were maintained or slightly increased after taking the initial group training. This is an important finding as research suggests that educator attitudes and beliefs towards inclusive educational practices affects their successful implementation of strategies (Ewing et al., 2018). Similarly, scores from the Teacher Efficacy for Inclusive Practices (TEIP; Sharma et al., 2012) were also high for participants prior to the training and were maintained or slightly increased

after the training was complete. Perceived self-efficacy has been shown to influence educator's implementation of instructional strategies, the environments they create for students, as well as their judgments and commitment to tasks they will use to enhance student learning (Bandura, 1997; Tschannen-Moran et al., 1998; Tschannen-Moran & Hoy, 2001). Additionally, efficacious educators tend to assume greater responsibility for meeting the need of learners, believing that all children are capable of growth, and that their needs can be addressed through intentional teaching practices (Bandura, 1997; Pas et al., 2012). This is a surprising finding, and inconsistent with classroom-based research that suggests nonspecial educators possess overall low self-efficacy when it comes to supporting students with disabilities in their classrooms, which has been noted as a barrier to implementation of inclusive practices (Avramidis et al., 2019; Hellmich et al., 2019). These results highlight a major strength of the ODS educators who participated in the training and suggest that ODS educators in Oregon posses' positive attitudes and are highly efficacious when it comes to the implementation of inclusive practices. One interpretation of these results is that ODS programs attract staff who are naturally inclusive and come to the field with strong, positive beliefs about students with disabilities. Another explanation could be that the value ODS leadership has placed on inclusion (as evidenced by study I interviews) is supporting staff attitudes and efficacy, as previous research has shown a positive association between leadership support for program wide values (e.g., inclusion) and greater efficacy among staff members (McCoach & Colbert, 2010). Taken together, these results indicate that ODS educators who participated in this study already possessed important positive values and beliefs that prime them for successful implementation of inclusive practices in their work. Future research should seek to examine other areas of ODS educator self-efficacy and use that information to guide training development and objectives.

Acceptability and Feasibility of an Adapted Program

In study II, an intervention with a previously established evidence base (RR) was adapted and implemented in the ODS setting. Implementing previously developed programs in new contexts can be more efficient than developing new ones (Moore et al., 2021). Moore and colleagues (2021) posit that achieving a good fit between intervention and new context, requires careful assessment and adaptation for successful implementation. The use of the EPIS framework and seeking input from ODS partners during the exploration phase was a first step in increasing the likelihood of fit between the adapted program and ODS settings. Pretraining and post training surveys for staff who participated in the RR training, and for a smaller subgroup, who received coaching indicated overall high ratings of acceptability for both groups. Feasibility scores were also high for both groups indicating that participants believed that RR strategies can be successfully carried out at ODS. This is a positive finding as school-based literature suggests low acceptability of evidence-based practices may be a potential barrier to usage (Briesch et al., 2013) and can likely affect adoption and sustainability of implementation (Proctor et al., 2011). In addition, feasibility is thought to be most important as organizations try new interventions (Proctor et al., 2011) as was the case in this study. Furthermore, measures of intentions suggest that in addition to perceiving the training strategies as acceptable and feasible, participants also intended to use the strategies in their ODS work. According to the theory of planned behavior (Ajzen, 1991; 2002) and published research, there is a predictable relationship between the intentions of practitioners and their behavior (Eccles et al., 2006), suggesting that training participants who reported intentions to use RR strategies, are likely to be implementing them in practice. Based on the acceptability and feasibility scores of participants, the adapted RR program is thought to be a good fit for the ODS context. Furthermore, there is reason to believe

that participants who attended the group training, utilized the strategies in their ODS work, although this was not formally observed for participants outside of the coaching portion of the study. Future research should employ more systematic protocols and tools during the implementation process with ODS programs to examine fit and feasibility prior to program training and implementation. Metz & Louison's (2018) The Hexagon: An Exploration Tool was designed for this purpose and is intended to be used by a team to ensure diverse perspectives are represented in a discussion of contextual fit, and feasibility indicators. Furthermore, this process should not be a one size fits all, but rather implemented with the recognition that each ODS program or site has its own unique culture and structure.

Participants who received coaching in addition to the group training rated RR as slightly more acceptable ($M = 5.59$) and feasible ($M = 5.54$) than participants who only received the group training ($M = 5.24$; $M = 4.96$). This is exciting as participants who had a chance to practice RR strategies live with kids, continued to find them acceptable, and feasible. These results are consistent with RR research conducted in schools where staff members identified receiving positive feedback (a major component of the coaching letter) about their use of RR, as a facilitator to implementation (Locke et al., 2017). It is important to note here, that it is not clear whether it was the coaching itself, the structure of the coaching (which incorporated positive reinforcement components), or just the experience of practicing the strategies with children, that contributed to continued, and improved acceptability and feasibility ratings from the group who received coaching. Another factor worth considering is the researcher's positionality and her relationship with the participants. In this study, the researcher spent a significant amount of time with participants who received coaching outside of their observations. During this time, she engaged in conversations, active listening, observation, and provided support for individuals and

the program when requested. Similar to the impact of a strong alliance between therapist and client, which has been shown to impact acceptability of therapeutic interventions in the mental health field (Kazdin et al., 2005), the researcher's changing positionality from beginning to end of the study, and increased rapport, and time spent with participants, likely influenced their perceptions and experiences during the research process.

Post intervention interviews highlighted some perceived benefits of RR use for students. Participants noted positive shifts in engagement, particularly in children who were identified as potentially benefiting from some of the RR strategies to support engagement. These benefits were also noted by the researcher during observations. Although this study did not examine child level outcomes such as levels of engagement, or frequency and duration of peer-to-peer interactions, there appeared to be clear opportunities created by staff that may not have been available to children without their use of RR strategies. These observations are consistent with experimental examination of child outcomes in previous RR studies, where children demonstrated improvements in their joint engagement with peers, and reduced solitary engagement on the playground (Kretzmann et al., 2015; Locke, Kang-Yi, et al., 2019). Testing the pilot effectiveness of RR implementation on child outcome at ODS is a recommended next step to experimentally explore the benefits noted by participants in interviews.

Feasibility challenges highlighted by participants during post-intervention interviews were minimal, and included barriers related to managing group dynamics during instruction, and the need to provide higher levels of support for some students. This is not surprising given that participants in this study were encouraged to embed RR strategies into structured, semi-structured, and unstructured times of the day, often requiring them to manage group engagement with content and learning, along with individualized needs of students who required higher levels

of support. Additionally, across all seven participants, only two participants (both with degrees in education) reported having any previous training in special education or inclusive education. Given that the sample in this study had minimal training on inclusive education, and demonstrated moderate to high levels of RR fidelity, the adapted RR intervention is likely a good fit for ODS staff who enter this work with varying levels of experience and backgrounds.

Coaching as Implementation Support

In active implementation science frameworks, coaching has been identified as an important "driver" to ensure evidence-based programs are implemented as intended (Snyder et al., 2015). Research has continually demonstrated that training alone is insufficient in supporting individuals to implement evidence-based practices, regardless of the quality of the training (Fixsen et al., 2005; Gage et al., 2017; Poduska & Kurki, 2014), indicating a need for follow up supports such as coaching. Coaching in the form of individual performance feedback, has been shown to be a successful training approach for teachers (Fallon et al., 2015, 2019; Gage et al., 2017) and paraprofessionals (Sobeck et al., 2020). In this study, all seven participants who received coaching, demonstrated some use of strategies during baseline and most either maintained their fidelity or demonstrated increases in their fidelity during the coaching intervention. Across participants average fidelity was 47.6% (*R* = 16% to 70%) during baseline and 78.7% (*R* = 39% to 91%) during intervention. These results are consistent with other RR studies where educators demonstrated increased fidelity with an average fidelity score across participants of 82%, after coaching supports were provided (Locke et al., 2019[a]; Locke et al., 2019[b]). Notably, participants in study made growth with training and support provided in a significantly shorter period than participants in previous RR studies, where training and support was offered weekly, and in-person, for 16 sessions, over the course of 4-10 weeks. Participants

in this study received support for 3 sessions (one group training and two coaching e-mails). Furthermore, the coaching was provided via e-mail and participants were not provided with any in-person support from the trainer. These results suggest that a brief didactic training plus low doses (two e-mails) of e-mail coaching may be sufficient to support RR implementation fidelity at ODS. Examination of brief training and support models is important as research indicates feasibility challenges such as amount of time, and resources required to learn and implement interventions, may cause environmental disruptions, which in turn are likely to negatively impact the use of even the most effective programs (Briesch et al., 2013; Perepletchikova & Kazdin, 2005).

The use of e-mail to provide coaching to participants was novel in comparison to the in-person support offered during previous RR studies. E-mail coaching delivered one to two times, over the course of three to six observations was effective at supporting increased fidelity of participant RR fidelity. These results are consistent with other studies who have investigated the impact of training plus coaching on teacher's use of inclusive strategies, and found maintenance, and increases in fidelity after coaching was implemented. Barton et al., (2018), used a multiple baseline design across target behaviors, to examine the impact of email coaching on early childhood teachers' use of recommended practices within inclusive classrooms. They found that coaching, delivered via e-mail, was an effective method for increasing teachers' use of target behaviors. In a 2019 randomized controlled trial (Ascetta et al.), researchers examined the effect of feedback type (self-report vs. individualized performance feedback via e-mail), on teacher use of language enhancement strategies, and found that both forms were effective at increasing participant use of target strategies. Results from this study suggest that a group training, coupled with brief delayed e-mail coaching, was effective at supporting ODS educator use of RR

strategies. While this pilot study was not able to examine if there was a functional relation between group training, delayed e-mail coaching, and participant RR fidelity, future studies should employ more rigorous research designs to provide rigorous experimental evaluation of the training and coaching effects on participant fidelity.

Noteworthy in this study, were the relatively high levels of baseline implementation for several participants. Fifty seven percent (n = 4) of the participants who received coaching, demonstrated mean levels of fidelity at or above 50%, indicating they independently used multiple RR strategies with moderate levels of quality prior to any coaching. Since there was no baseline data taken prior to the group training, we can not make any conclusions about baseline performance. It is possible, that RR strategies are like strategies they have been naturally using as part of their work prior to receiving the training. It is also possible the group training, did in fact lead to their use of strategies, such that they were implementing RR with moderate levels of fidelity prior to coaching, although this cannot be concluded from this study.

Participant use of RR strategies prior to coaching, coupled with the positive sentiments and attitudes reported on the SACIE (both pre and post training), speak to the value and beliefs ODS staff, at the participating site held around inclusion. During observations, it was common to observe staff scanning the environment and attending to the engagement levels of all children in the group. Their intention to include all children in activities was apparent in the way they approached or addressed children, who appeared unengaged, or isolated during group activities to draw them back in. These approaches were done gently and with encouragement. Additionally, these individualized check-ins and efforts to include all children were observed outside of formal observations by the researcher, and across days, and activities at ODS. Future research examining the use of inclusive practices such as RR at ODS, should collect

observational data prior to commencement of the group training, to test the effectiveness of a group training only on participant implementation of strategies.

Participant feedback about their implementation experience provided important considerations for the training and coaching model used in this study. Feedback included recommendations about incorporating live modeling and demonstration during the training and coaching process. Although participants were exposed to a video model of an adult implementing RR, it was not contextually relevant to ODS. Modeling is an important part of instruction for adult learners, and has been associated with increased performance after training (Callahan et al., 2003), and is often identified as an important component of effective coaching models (Kretlow & Bartholomew, 2010; Kurz et al., 2017). In a meta-analysis that examined the effects of modeling, lecture and active participation as training components, modeling was significantly associated with adult learner performance (Callahan et al., 2003). Future studies that seek to implement this adapted program within a new context such as ODS should incorporate contextually relevant modeling into the training, and coaching phases of implementation.

Limitations

Several study limitations should be noted. First, this pilot study used a multiple methods design, with a small sample size, that did not involve randomization, or an experimental single case design. This prevents this study from drawing causal conclusions about trends in participant data. With only a small sample of complete pretraining and post-training survey data, this study was not powered to examine whether the difference in pre-training and post-training survey scores was statistically significant. The single case design used in this study is considered pre-experimental and does not meet single case design standards set forth by the What Works

Clearing House (WWC; Kratochwill et al., 2013). Therefore, the researcher is not able to determine if there was a functional relation between coaching and participant fidelity. A pre-experimental design was chosen over a more rigorous experimental design due to the limited window available for data collection and the pilot nature of the study. Additionally, as some observations were coded live by only the researcher, IOA was not able to be collected for a minimum of 20% of all observations across participants and phases, therefore decreasing the reliability of the observational data. Average IOA was low across videos that were coded due to time constraints which impacted the duration and quality of coder training.

Another limitation of the study was the lack of baseline data collection prior to the group training. Because baseline data was collected for all seven participants, only after they had all received the group training, it is impossible to determine whether the group training impacted their baseline fidelity scores or not. The programs that participated in this study operate on Fall and Spring sessions, with no sessions being run in the Winter, which was the time participants were consented to participate. Additionally, coaching participants were not identified until after the group training had been delivered, which did not allow for an opportunity to collect data prior to delivery of the group training.

Finally, although it was the goal of the researcher to include student participants in the exploration and implementation phases of the work, no student data was collected. Attempts were made by the researcher to recruit student participants for Study I interviews, but she was not successful at recruiting students for participation. One barrier (noted by interview participants) was the lack of in person ODS programming, over the past two years, due to the COVI-19 pandemic. When interview participants were asked if they had recommendations for student participants, they expressed that since the classes of 2020 and 2021 had not been able to

attend ODs, they could not recall names of students with disabilities who would have been appropriate participants. Additionally, the researcher was not able to connect with many school staff, therefore, limiting access to students and families. During study II, the researcher had planned to gather data from students during, or after their ODS experience to explore student perceptions of an inclusive ODS experience. She had hoped to conduct interviews, or group discussions with students, but due to the pivot to in-person data collection and time constraints placed on the researcher, those activities were not able to be completed. Including student voice and input about inclusion at ODS is an imperative next step. This will ensure practices that staff are being trained to use, are also leading to meaningful inclusive experiences as judged by students themselves. Additionally, as this pilot study was focused on implementation, exploration of effectiveness on student outcomes was not conducted.

Implications

Moving forward there are implications for both practice and research that can be taken from this pilot work. In this study, focused on implementation, general input from partners was gathered prior to the training design and at the end of the study. Future work should seek to incorporate continued input from partners across all stages of implementation, including intervention or program design and adaption (Dingfelder & Mandell, 2011; Moore et al., 2021; Weisz et al., 2004). This can be accomplished by utilizing community-driven research methods, such as community-based participatory research (CBPR), to establish a collaborative implementation research network of partners (Lindamer et al., 2009). In community-based and community-driven research approaches, community members outside of the university-based research team are viewed as equal partners, and take part as decision makers in all aspects of the research. Utilizing a CBPR approach has the potential to strengthen implementation science

research quality at each step of the project by (a) ensuring relevance of the research topic, (b) enhancing validity, sensitivity, and quality of research instruments, (c) enhancing trust between communities and research entities, (d) increasing the relevance and feasibility of evidence-based practices, and (e) improving the potential for effective dissemination of findings (Minkler et al., 2018). Recent frameworks and recommendations for more systematic planning and evaluation of intervention adaptations that include partner input have been proposed. In the ADAPT model (Moore et al., 2021), which seeks to provide guidance for adapting interventions to achieve the best fit between context and innovation, and improve transparent reporting and evaluation of adaptations, partner involvement is included as an overarching principal of adaptation, rather than a discrete stage (Moore et al., 2021).

This study's focus on implementation raises important questions about effectiveness and student level outcomes at ODS. Previous research on RR in school settings suggests a positive impact of the program on child level outcome such as peer engagement, social network inclusion, and friendship nominations (Kretzmann et al., 2015; Locke, Shih, et al., 2019). It is not yet known if these same benefits will be present given the new space and context of ODS. Therefore, a pilot effectiveness study that includes systematic and statistical analysis of important child level outcomes is a natural next step. Additionally, as ODS is typically a limited experience for children (e.g., a few days), exploring whether child outcomes are impacted both at ODS, and back in the classroom, could supply important information about how programs such as RR, may provide lasting benefits, and contributions to social inclusion back in the classroom.

Conclusion

ODS educators in Oregon participated in this pilot study, which focused on exploring inclusive programming and training needs at Outdoor Schools, with an added program

evaluation of a novel inclusive practice professional development package. Results from this study indicate that ODS programs in Oregon place a strong value on inclusive practices and are committed to supporting the individual needs of all students at ODS. The findings from the group training are positive and suggest that school-based inclusive strategies like RR, may be acceptable and feasible to adapt, and implement at ODS. Additionally, coaching via e-mail is likely an effective way to provide ongoing support to ODS educators, as they work to implement inclusive practices at their sites. The findings from this study contribute to the understanding of ODS program values, training experiences and ability to successfully implement evidence-based inclusive practices.

APPENDIX A

STUDY I INTERVIEW QUESTIONS

Outdoor School Staff Focus Group and Interview Questions
1. When you think of including students with disabilities at ODS, what comes to mind?
2. What do you consider your biggest strengths when it comes to designing and implementing inclusive programming at ODS? What components of your program are you currently satisfied with and feel are already inclusive?
3. What components of your program are you currently satisfied with and feel are already inclusive?
4. What are some barriers you have experienced in the past or anticipate you will face when designing and implementing inclusive programming?
5. What components of your program would you like to change to be more inclusive?
6. What concerns do you have about designing and implementing inclusive programming?
7. What types of supports will be most helpful to your program when designing and implementing inclusive programming?

School Staff (teachers and administrators) Interview Questions
1. Tell me about your experience and involvement with ODS programming?
2. When you think about inclusive practices at ODS, what comes to mind?
3. What successes have you experienced or observed related to inclusive practices at ODS?
4. What challenges or barriers have you experienced or observed related to inclusive practices at ODS?

APPENDIX B

ADAPTED URP-I

Consider your experience with the Remaking Recess training and use of strategies included in the training. How much do you agree or disagree with each of the following statements?							
Item	Item Stem	Strongly Disagree 1	Disagree 2	Slightly Disagree 3	Slightly Agree 4	Agree 5	Strongly Agree 6
Q1	Remaking Recess strategies are a good way to support inclusion of students with disabilities.						
Q2	I would implement Remaking Recess strategies with a good deal of enthusiasm.						
Q3	I would not be interested in implementing Remaking Recess strategies in the future.						
Q4	I would have positive attitudes about implementing Remaking Recess strategies in the future.						
Q5	Remaking Recess strategies are an effective choice for addressing inclusion at outdoor school.						
Q6	I would be resistant to using Remaking Recess strategies in the future.						
Q7	I would be committed to using Remaking Recess strategies in the future.						
Q8	The total time required to implement Remaking Recess strategies is manageable.						
Q9	Material resources required to implement Remaking Recess strategies are reasonable.						
Q10	Remaking Recess strategies are too complex to carry out accurately.						
Q11	I am able to allocate my time to implement Remaking Recess strategies.						
Q12	Preparation of materials needed for Remaking Recess strategies is reasonable.						

APPENDIX C

SACIE

The following statements pertain to inclusive education which involves students from a wide range of diverse backgrounds and abilities learning with their peers in regular classroom environments that adapt and change the way they work in order to meet the needs of all. Please choose the response that best applies to you.					
Item	Item Stem	Strongly Disagree	Disagree	Agree	Strongly Agree
Q1	I am concerned that students with disabilities will not be accepted by the rest of the class.				
Q2	I dread the thought that I could eventually end up with a disability.				
Q3	Students who have difficulty expressing their thoughts verbally should participate at outdoor school with their non-disabled peers.				
Q4	I am concerned that it will be difficult to give appropriate attention to all students in an inclusive setting.				
Q5	I tend to make contacts with people with disabilities brief and I finish them as quickly as possible.				
Q6	Students who are inattentive should be able participate in outdoor school with their non-disabled peers.				
Q7	I am concerned that my workload will increase if I have students with disabilities in my group.				
Q8	Students who require communicative technologies (e.g., braille, sign language, or speech generating devices like an iPad) should participate in outdoor school with their non-disabled peers.				
Q9	I would feel terrible if I had a disability.				
Q10	I am concerned that I will be more stressed if I have students with disabilities in my group.				
Q11	I am afraid to look directly at a person with a disability.				
Q12	Students who frequently fail exams should participate in outdoor school with their non-disabled peers.				
Q13	I find it difficult to overcome my initial shock when meeting people with severe physical disabilities.				
Q14	I am concerned that I do not have the knowledge and skills required to teach students with disabilities.				
Q15	Students who need an individualized education program (IEP) should participate in outdoor school with their non-disabled peers.				

APPENDIX D

ADAPTED TEIP

This survey is designed to help us understand the nature of factors influencing the success of routine Outdoor School activities in creating an inclusive environment. Please choose the number that best represents your opinion about each of the statements. Please attempt to answer each question.							
Item	Item Stem	Strongly Disagree 1	Disagree 2	Slightly Disagree 3	Slightly Agree 4	Agree 5	Strongly Agree 6
Q1	I am able to provide an alternate explanation or example when students are confused.						
Q2	I am confident in designing learning tasks so that the individual needs of students with disabilities are accommodated.						
Q3	I can accurately gauge student comprehension of what I have taught.						
Q4	I can provide appropriate challenges for very capable students.						
Q5	I am confident in my ability to prevent disruptive behavior during Outdoor School lessons and routines before it occurs.						
Q6	I can control disruptive behavior during Outdoor School lessons and routines.						
Q7	I am able to calm students who are disruptive or noisy.						
Q8	I am able to get children to follow Outdoor School rules.						
Q9	I am confident when dealing with students who are physically aggressive.						
Q10	I can make my expectations clear about student behavior.						

APPENDIX E

ADAPTED MISII

Please answer the following questions about the extent to which you intend to use the strategies included in the Remaking Recess training.						
Item #	Item Stem	0 not at all	1 to a slight extent	2 to a moderate extent	3 to a great extent	4 to a very great extent
Q1	I plan to use Remaking Recess strategies with my students.					
Q2	Using Remaking Recess strategies is a high priority for me.					
Q3	I will use all aspects of Remaking Recess with my students.					

APPENDIX F

KNOWLEDGE MEASURE

Please rate your knowledge of the Remaking Recess program strategies.					
	very poor	poor	average	good	very good
1. My understanding of Remaking Recess is					
2. My ability to use Remaking Recess strategies in my job is					
3. My ability to explain the purpose of Remaking Recess is					
4. My ability to explain the benefits of Remaking Recess is					
5. My ability to describe to others how to use Remaking Recess is					

Please rate your knowledge of inclusion, peer connection, and friendships with regard to students with disabilities.					
	very poor	poor	average	good	very good
1. My understanding of a multifaceted definition of inclusion is.					
2. My understanding of the benefits of peer connections and friendships for all children is					
3. My ability to describe the benefits of peer connections and friendships for all children to other is					
4. My understanding of what research says about student with disabilities and peer connections is					
5. My understanding of strategies to support peer connections for students with and without disabilities is					

APPENDIX G

POST INTERVENTION INTERVIEW QUESTIONS

ODS Staff Post Intervention Interview Questions
1. How relevant do you feel the training was to your work at Outdoor School?
2. What did you think about the inclusive practice strategies taught during the training?
3. What was it like to use the strategies with kids at ODS? Follow up questions if needed: - What felt easiest? -What felt challenging?
4. What benefits did you notice for students as a result of your use of inclusive practices?
5. What changes would you like to see made if this training was provided to other ODS educators in the future?
5. Is there anything else that you would like to share that I didn't ask about?

APPENDIX H

ADAPTED HQPD

The professional development provider:	Observed? 1=Y 0=N
Preparation	
1. Provides an agenda (e.g., schedule of topics to be presented and times) at the beginning of the training.	
Evidence or example:	
2. Quickly establishes or builds on previously established rapport with participants.	
Evidence or example:	
Introduction	
3. Connects the topic to participants' context (e.g., community, school, district).	
Evidence or example:	
4. Includes empirical research foundation of the content (e.g., citations, verbal references to research literature, key researchers).	
Evidence or example:	
5. Content builds on or relates to participants' previous professional development.	
Evidence or example:	
6. Aligns with school/agency standards or goals.	
Evidence or example:	
7. Emphasizes impact of content on student learning outcomes.	
Evidence or example:	
Demonstration	
8. Builds shared vocabulary required to implement and sustain the practice.	
Evidence or example:	
9. Provides examples of the content/practice in use (e.g., case study, vignette).	
Evidence or example:	
10. Illustrates the applicability of the material, knowledge, or practice to the participants' context.	
Evidence or example:	
Engagement	
11. Includes opportunities for participants to practice and/or rehearse new skills.	
Evidence or example:	
12. Includes opportunities for participants to express personal perspectives (e.g., experience, thoughts on concept).	

Evidence or example:	
13. Includes opportunities for participants to interact with each other related to training content.	
Evidence or example:	
14. Adheres to agenda and time constraints based on individual group preferences (e.g., if no time limit, honors group wishes to have longer/more in depth conversations instead of moving along to finish on time)	
Evidence or example:	
Evaluation	
15. Includes opportunities for participants to reflect on learning.	
Evidence or example:	
16. Includes discussion or practice of specific indicators – related to the knowledge, material, or skills provided by the training – that would indicate successful transfer to practice.	
Evidence or example:	
17. Engages participants in assessment of their acquisition of knowledge and skills.	
Evidence or example:	
Mastery	
18. Details follow-up activities that require participants to apply their learning in a new setting or context.	
Evidence or example:	
19. Offers opportunities for continued learning through technical assistance resources.	
Evidence or example:	
20. Describes opportunities for coaching to improve fidelity of implementation	
Evidence or example:	

APPENDIX I

FIDELITY FORM

Participant:
Date of recording:
Coder Initials:
Date coded:

Identifying, Monitoring and Boosting Peer Engagement	
	Quality
1. Scans the area to monitor engagement states. By scanning and circulating, the adult clearly sees which children are engaged and what activities are happening. Adult actively seeks out targets/children that need assistance. LOOK FOR: • Adult visual scan of environment • Adult proximity to children	0 1 2 3 4 NA
Evidence or example:	
2. Identifies and approaches student who may benefit from a boosting strategy. The adult identifies child/children who are not actively engaged and approaches the child/children. The adult may approach multiple children simultaneously or one-by-one. LOOK FOR: • Adult physically approaching child/children • Adult persists if not successful on first approach (important for quality)	0 1 2 3 4 NA
Evidence or example:	
3. Uses 1 or more boosting strategies to boost engagement. Look FOR: • Recruits a peer to ask the child to play • Provides an appealing and appropriate activity • Encourages the child to join in with peer/s • Joins the play to model activity in a fun and engaging way • Cues the child to notice their peers by gesturing or saying something about the activity • Models focusing on and being interested in peer or group activity • Asks peers if they can demonstrate the game or activity • Arranges materials to facilitate group interactions (e.g., placing shared materials between students) *Consider persistence here, if first strategy is not successful, how many more do they try to boost child engagement. If one is attempted and failed without any other attempts, score 1.	0 1 2 3 4 NA
Evidence or example:	
Facilitating Peer Conversations	
	Quality
4. Initiates/stimulates conversation between 2 or more children. LOOK FOR: • Using language or gestures	0 1 2

• Using a topic card or box • Pairing students with similar interests together • Calls other kids over • Moves towards other kids *Watch for this during wait time when an activity/a child's role in an activity may be over. If kids are in onlooker, how can conversations be initiated to boost into jointly engaged?	3 4 NA
Evidence or example:	
5. Monitors and provides support as needed to keep the conversation going. LOOK FOR: • Remains nearby target student • Maintains proximity to peers (calling peers over or moving toward peers) • Keeps visual contact on students to monitor interaction • Verbally models language and prompts students as needed to continue conversation • Uses open ended questions as opposed to closed ended *If didn't stimulate mark NA as no need for monitoring and supporting	0 1 2 3 4 NA
Evidence or example:	
6. Reinforces and praises students for target conversation skills. LOOK FOR: • Provides verbal or gestural praise for positive social skills (e.g., I really like how you listened to X while they shared their story OR that was a really great question you asked X about what they found at the pond.) • Praise can be specific or general • High fives or thumbs up *This can always be done regardless of whether adult initiated or not.	0 1 2 3 4 NA
Evidence or example:	
7. Fades out of the conversation (if appropriate). LOOK FOR: • **When appropriate**, adult fades out of the conversation to facilitate independent peer to peer conversations and engagement. • Physically removes self from interaction • Verbally removes self from conversation *Mark NA if not appropriate to fade or adult did not create an opportunity to support and thus, did not need to fade due to ack of opp. Consider if adult should have faded earlier or later when scoring. If too early or too late likely 1-2.	0 1 2 3 4 NA
Evidence or example:	
Developing In Vivo Social Skills when kids are in proximity to each other *Mark NA if not applicable or appropriate (e.g., monitoring and boosting/facilitating conversations was successful OR was not successful at boosting target child's engagement into a context that adult could use direct instruction)	
	Quality
8. Begins in the right position (face to face with student). LOOK FOR: • Adult is in appropriate proximity (nearby and face to face) to verbally instruct child/children.	0 1 2 3

	4 NA
Evidence or example:	
9. Provides direct instruction using clear and simple cues to direct or redirect student **OR** models goal behaviors for students **while student is attending to adult OR** uses visuals as needed to teach and prompt skills. LOOK FOR: • Cues are clear and consistent • Cues are directly related to desired behaviors	0 1 2 3 4 NA
Evidence or example:	
10. Provides feedback by reinforcing and acknowledging the use of appropriate social skills **OR** provides corrective feedback that supports the student to adjust their behavior. LOOK FOR: • Adult provides appropriate and accurate feedback about student behavior. • Positive feedback is specific and direct to student and context • Corrective feedback is given in a manner that is respectful and supportive of student that leads to another opportunity to practice or correct behavior.	0 1 2 3 4 NA
Evidence or example:	
Points Earned	
Total Possible	

Code Definitions

Quality	
0	**Not Present** Strategy is not present or attempted. Adult makes zero attempts to implement strategy and appears inattentive or unaware of environment and student behaviors.
1	**Emerging** The strategy is used one time for a moment appropriately but otherwise there is no use of the strategy or implementation is not aligned with RR. • Moments/beginning to use the strategy but significant coaching is required.
2	**Progressing** Implementation of the strategy is mixed. The strategy is used with moderate quality up to 50% of the time. • Done partially correct but significant feedback is required. • Adult may offer more significant amounts of support than needed or not enough.
3	**Fluent** Appropriate and accurate implementation of the strategy occurs up to 80% of the time. The strategies are consistent with RR but can be increased in frequency or with higher quality. • Good implementation, some suggestions or feedback is required.
4	**Mastered** Strategies are applied appropriately in 80-100% of opportunities. The strategies are consistent with RR and there is little to no feedback for the adult. • Very good implementation
NA	**Not applicable/appropriate** No need for support OR strategy use. Strategy use would be inappropriate given the context or setting.

APPENDIX J

EXAMPLE COACHING LETTER

Hey _____,

You worked hard this week! I know how rushed these weeks can feel, especially since you just pop in periodically without the added benefit of getting extra time during field studies to get to know kids 1:1.

It was clear that you were very intentional about the way you created opportunities for kids to connect and engage during your instruction on the solo hike!

During semi-structured activities such as nature art, I noticed how closely you monitored each student and provided multiple 1:1 check-ins as you evaluated their engagement states. Keep that up! Kids are benefiting from these opportunities you are creating for them to connect. I also noticed you using your boosting strategies to keep bringing kids back to a mutual activity. Your participation in the art as well as your modeling and prompts for kids about helping each other out or sharing about Andy Goldsworthy helped boost some of them out of that parallel/parallel aware into more jointly engaged moments.

Tips to consider for continued growth:

1. When you notice kids engaged with each other in a positive way (even if you prompted it first), verbally reinforce them for working together or using good social skills. This could sound like, "[name of children], thank you for working together, I really like how you thought through that and worked as a team to find a solution," OR "[name of child], that was really kind of you to compliment your friend for having a good idea." Catch them being good, even for the small things.

2. Once you've got kids jointly engaged in the same activity (e.g., looking at pond water under a microscope), think about ways to facilitate (make easier) a conversation about what they are looking at. This could look like giving them a question to think about and asking them to share their thoughts with each other or providing them with a prompt related to the activity that you want them to be ready to share with you or a peer later. Open ended questions are ideal here so the conversation can continue to develop as kids share back and forth. Remember to stay close and monitor until kids are independent in that interaction, in case they need your support to keep the conversation going.

_____, I look forward to seeing what you have planned for our next observation. You are doing a fantastic job supporting children's engagement in activities as well as supporting them in their connections with each other!

Stacy

APPENDIX K

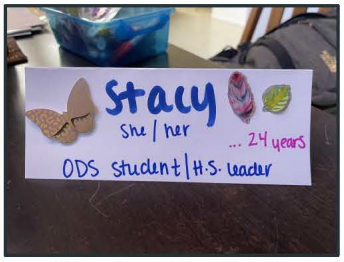
GROUP TRAINING SLIDES

7/8/2022

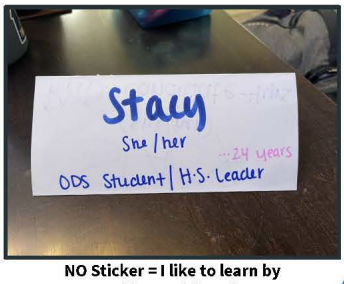
1

Entry Task

Name → Pronouns → ODS Role → Years at ODS → Sticker **OR** no sticker



Sticker = I want to be called on to talk and read.



NO Sticker = I like to learn by watching and listening.

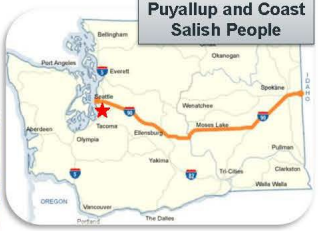
1

Who am I?

Stacy (she/her)

ODS

Homelands of the Puyallup and Coast Salish People



Bean Dip

Early Intervention

CATHEDRAL LAKES @ YOSEMITE

2

1

3

Outdoor School for All

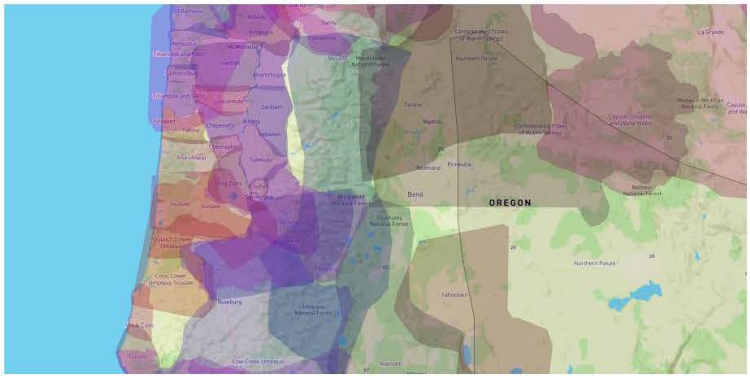
Inclusive practices for supporting social connections and peer engagement

Stacy Arbuckle M.Ed.
PhD. Candidate University of Oregon
March 2022

3

4

Land Acknowledgement



https://native-land.ca/

4

5

Group Norms and Expectations

- Ask questions and make comments as we go along
- Critical analysis and questions encouraged
- Assume positive intent of others
- Willingness to learn new things
- Please provide feedback
- We will take a break!

5

6

Agenda

01 Inclusion
-Defining inclusion
-Language matters
-Peer connections
-Loneliness

02 Remaking Recess (RR)
-Overview
-Objectives
-Raising your social power

03 Engagement
-Engagement states
-Why engagement?

04 Strategies
-Monitoring Engagement
-Using Games
-Facilitating Interactions
-Developing In-Vivo Skills

05 Planning
-Using RR strategies at ODS

06 Wrap Up
-Ongoing support opportunities

6

7

Inclusion

Vision	**Placement**	Curriculum	Assessment
Teaching	Leadership	Access	Acceptance
	Support	Resources	

7

8

Inclusion is more than just sharing space.

Our goal is meaningful inclusion, not just integration.

+Roles
+Responsibilities
+Peer connections

https://www.youtube.com/watch?v=PQgXBhPh5Zo

8

9

“

Fix systems NOT kids!

9

10

Language Matters

Person first
&
Identity first

10

Peer Connections and Friendships

- Critical for social development.
- Promote growth and learning (socially and academically).
- Promote a deeper sense of belonging.
- Provide sense of companionship and emotional support that can enhance well-being.
- Can serve as a protective factor during stressful life events.

(Biggs & Carter, 2016)
(Solish et al., 2010)

11

Peer Connections & Disability

- Students with disabilities often miss out on numerous social interactions and relationship opportunities throughout a typical school day.
- Social interactions take place infrequently between students with and without disabilities in inclusive settings without intentional efforts and adult support.
- Students who use augmentative and alternative communication (AAC) interact almost entirely with adults, even in inclusive settings.
- Students with disabilities are more likely to experience isolation and inconsistent social participation than non-disabled students.
- As early as the preschool years, children with disabilities experience more barriers to developing and maintaining friendships.

(Biggs & Carter, 2016)
(Azad et al., 2017)
(Solish et al., 2010)

12

13

Why Peer Connections and Relationships

1. Building those really, really solid **relationships** with students and helping them **feel really valued** and honored I think has helped students find their success.
2. It's the culture of **kindness and friendship** and acceptance, no matter what.
3. Our theme is, 'we are all **connected** through the land', so **connection is at the heart** of what we're trying to do.
4. Without even thinking about it, kids will move sticks out of the way so my student who struggles with walking doesn't have to worry about stepping over them. It's all about **kids helping kids**, ya know?
5. I find that students often get to see each other in a light that they haven't before. You know, maybe a kid does a skit on stage and their peers have never seen that side of them and think, oh my gosh that is so cool and now they have **something to connect on** and then they make a **friendship** because of this new way of seeing each other.

13

14

"My life changed when I experienced the gift of having someone, my own age, to talk to and call my friend. With a best buddy, you can enjoy life and have fun."

Katie

https://www.bestbuddies.org/what-we-do/featured-profiles/katie-and-tiffany/

14

15

"…during my freshman year of high school, my life was very different. My life was very lonely. Although I have two brothers and two sisters, I was sad. I was depressed and I hated everything about school. I sat alone at lunch and had no friends."

"Through Best Buddies, I met someobdy that has become my very best friend. Josie is her name. I know that this is going to sound dramatic, but it is the honest truth…Josie changed my life…she took time to get to know me, the REAL ME!"

"She gave me something that is priceless…her true friendship."
"My heart, my soul and my life have definitely been enriched. I actually like school now. I am extremely happy."

Jack-Best Buddies Global Ambassador

https://www.bestbuddies.org/what-we-do/featured-profiles/jack-mayor/

15

16

What is loneliness?

Loneliness IS a subjective, **unwelcome feeling** of **lack or loss** of companionship, which happens when we have a **mismatch** between the quantity and quality of social relationships that we have, and those we want.

Loneliness is **NOT** synonymous with **aloneness**, which, when **deliberate and chosen** by the individual (e.g., reading a book alone or playing alone), is associated with **pleasant, positive** and sometimes **desirable** feelings.

16

17

Loneliness

- Children as young as 3 (preschool) understand and can reliably report feelings of loneliness.
- Maturation (e.g., puberty) has been shown to place children who struggle with social interactions at higher risk for loneliness and depression.
- Children with disabilities are more vulnerable to feelings of loneliness than their non-disabled peers.
- Educators can reduce the likelihood of experiencing loneliness for children with disabilities by creating opportunities for social interaction during recess/play time, extracurricular activities and academics.

(Parvi, 2001)
(Bauminger, 2002)
(Heinze et al., 2015)

17

https://www.youtube.com/watch?v=Hz_d-cikWml&t=443s

18

19

What was your take-away from this story?

How does this connect to your current work?

Breakout Activity-10 minutes

- Choose a reporter to share out with the group
- 2-3 sentences per question

19

20

Remaking Recess (RR)

(Kretzmann, Locke, & Kasari, 2012)

Named by an autistic adult who told the team that they needed to **remake recess** as that was least positive experience of her school days.

Intervention that **changes the school environment**- adults become positive agents to help children **connect with peers.**

20

Objectives

1. Increase successful and meaningful **engagement** between children.
2. Promote a **supportive play** environment.
3. Promote **positive relationships** between students and educators.

21

Raising Social Power

-Ability to motivate and engage students during activities.

-Think of it as you "sway" with students.

22

"Children don't learn from people they don't like."

Dr. Rita Pierson

23

24

https://www.ted.com/talks/rita_pierson_every_kid_needs_a_champion?language=en

24

25

What characteristics or traits do you or your other ODS team members possess that give them "sway" with kids?

Make your own Wordle.

25

26

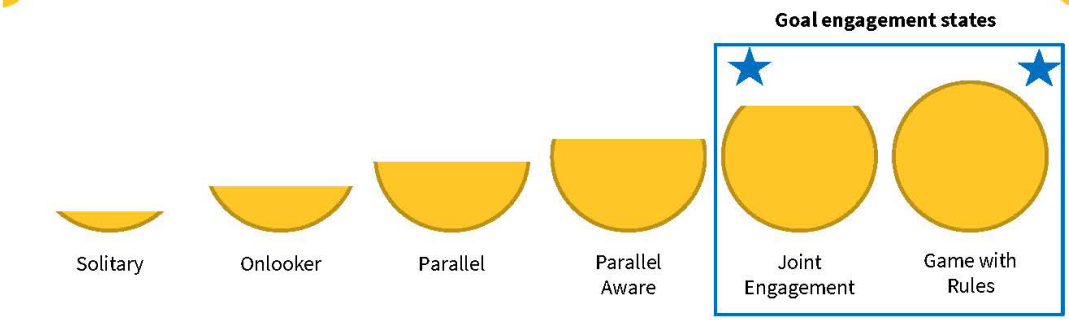
What words or phrases come to mind when you hear the word **ENGAGEMENT**?

Share Out
POSTER

26

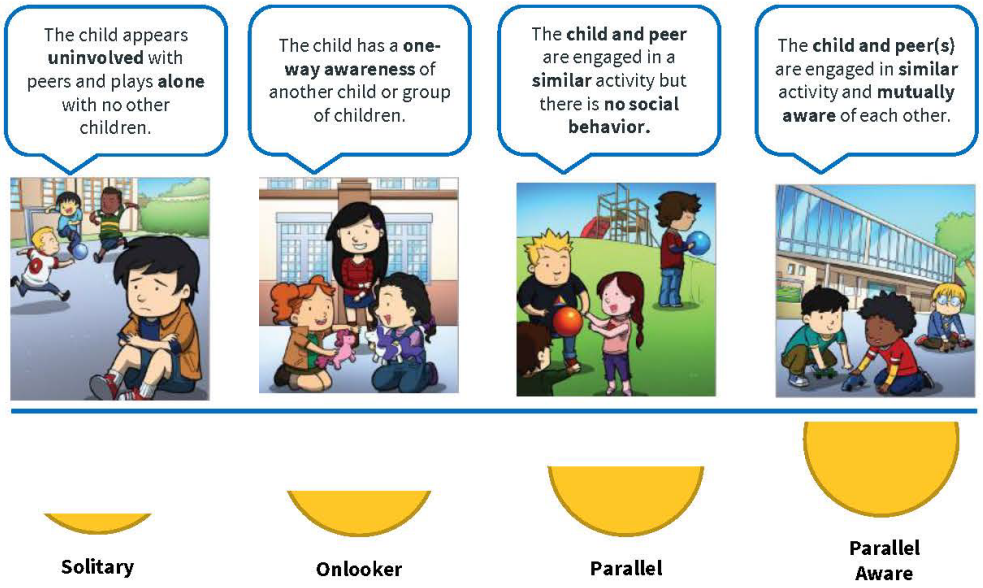
27

Engagement States



Engagement is the way students interact with things and people in their environment.

27



28

The child and peer(s) **direct social behavior with one another** (e.g., offer objects, have conversations, exchange turns in an activity like reading a book or drawing.)

Joint Engagement

The child **participates in an organized game** with **clear rules** and/or engages in fantasy or pretend play with **clearly defined roles** set by the child or their peers. Involves at least 1 other child.

Game with Rules

SOCIAL INTERACTIONS

Reciprocal process in which children are effectively **initiating and responding** to one another (Shores, 1987).

29

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15 Minute Break

30

32

Why Engagement?

- Students who spend time in higher engagement states have **more opportunities to build and develop friendships.**
- Increased time spent in higher engagement states (Joint Engagement & Games w/ Rules) provides increased exposure to language models.
- Social engagement provides opportunities for language and communication learning.
- Time spent in higher engagement states = **more opportunities to practice both initiating and responding** to peer communication.

(Bakeman & Adamson, 1984)
(Adamson et al., 2019)

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Strategy Types

1

Environment

How can I change the environment to naturally support peer engagement?	Move materials or visuals between peers or peer groups so they are all facing each other.

2

Facilitation (make it easier)

What can I do to make it easier for students to engage?	Plan transition routines that involve peer connections.

3

Direct Instruction

What do I need to **do** or **say** to **make sure the student understands** the goal? What do I need to **do** or **say** to **support the student to be successful**?	Use clear verbal cues such as "respond to Stacy" or "ask Stacy if she wants to join." Visual schedules or directions can also be helpful!

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RR Strategies

Identifying and Monitoring Peer Engagement

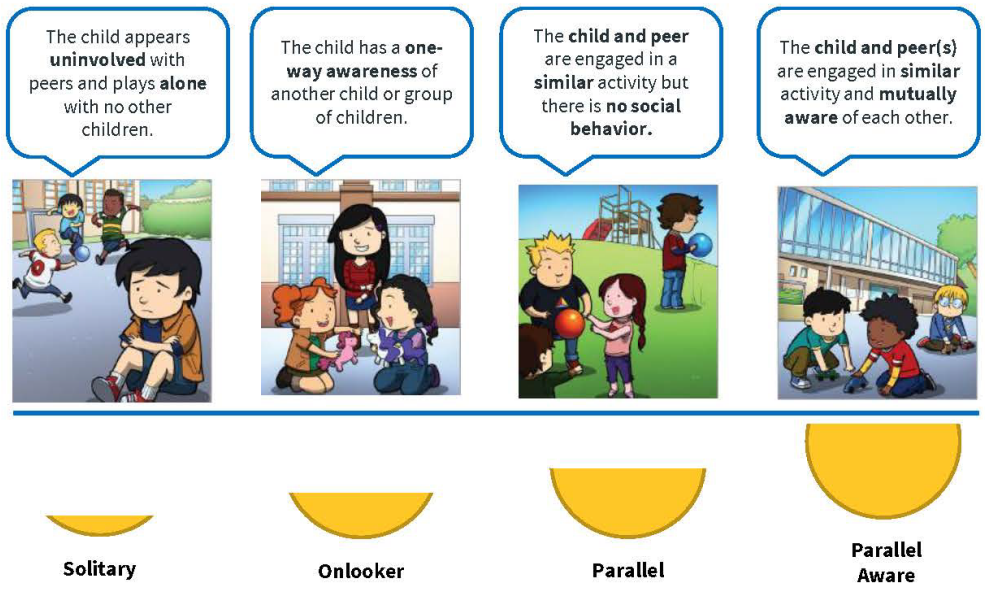
Using Games to **Facilitate** Peer Engagement

Facilitating Peer Conversations

Developing **In Vivo** Social Skills

In Vivo means **"as something is forming."** In this case, as students are naturally interacting and playing.

33



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The child and peer(s) **direct social behavior with one another** (e.g., offer objects, have conversations, exchange turns in an activity like reading a book or drawing.)

Joint Engagement

The child **participates in an organized game** with **clear rules** and/or engages in fantasy or pretend play with **clearly defined roles** set by the child or their peers. Involves at least 1 other child.

Game with Rules

SOCIAL INTERACTIONS

Reciprocal process in which children are effectively **initiating and responding** to one another (Shores, 1987).

35

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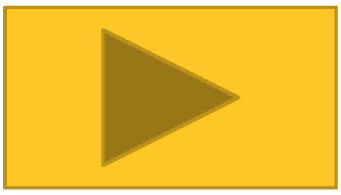
Equal

Active



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https://www.youtube.com/watch?v=_JmA2ClUvUY

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Group Activity Instructions

- Just watch
- Identify engagement states for children in red circle
  - **Chalk 1**
    - Child 1
    - Child 2
  - **Kickball**
  - **Basketball Court**
  - **Chalk 2**

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Onlooker

Parallel

Game with Rules

Solitary

Parallel Aware

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Identifying and Monitoring Peer Engagement

	Description	ODS Example
Solitary	The child appears **uninvolved** with peers and plays **alone** with no other children.	
Onlooking	The child has a **one-way awareness** of another child or group of children.	
Parallel	The **child and peer** are engaged in a **similar** activity but there is **no social behavior.**	
Parallel Aware	The **child and peer(s)** are engaged in **similar** activity and **mutually aware** of each other.	
Joint Engagement	The child and peer(s) **direct social behavior with one another** (e.g., offer objects, have conversations, exchange turns in an activity like reading a book or drawing.	
Games with Rules	The child **participates in an organized game** with **clear rules** and/or engages in fantasy or pretend play with **clearly defined roles** set by the child or his/her peers. Involves at least 1 other child.	

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Breakout Rooms
10 minutes

https://jamboard.google.com/d/1wLyKumY8LY59NCl-XBw4tJzXPhAERy4sIZOI8_osSBQ/viewer?f=7

Briefly describe common examples you have noticed **at ODS** for **EACH engagement state** (all 6).

Add ODS examples to your JAM board. Format anyway you want.

Format examples on **page 1** and table with descriptions on **page 9**.

Choose one person who will be ready to share **one example** with the group.

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Boosting Peer Engagement

Parallel Aware	• **Ask peers** if they can **demonstrate** the game or activity to each other. • **Model focusing** on and **being interested** in a peer's or group's activity.
Parallel	• **Join in the play**, so you can **model** the activity in a fun and engaging way. • **Cue** them so they can notice their peers by gesturing and saying something like, "The game Stacy and Sara are playing looks like so much fun!"
Onlooker	• **Recruit** a peer to invite them to the game or activity. • **Encourage** them to join in with peers or encourage them to ask a friend to play.
Solitary	• **Recruit** a peer to ask them to play. • Provide an **appealing and appropriate activity** to draw the child into a parallel or onlooker state.

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Use Games to Facilitate Peer Engagement

Although it's crucial to choose a game that will attract participation from peers, it is sometimes more important to choose an activity that is **motivating** for the student (s).

Follow the student(s) choice of activity

It is beneficial to show interest in the activity to encourage students' participation.

Check that the activity/game is common for the student(s) and peers.

It may be helpful to ask yourself, "Will this game promote peer engagement?"

When choosing a different game/activity, build off the student(s) strengths.

Consider their strengths when suggesting a game/activity.

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What games do you have planned for ODS days in person?

Poster List

44

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Facilitating Peer Conversations

A conversation is a back-and-forth exchange between at least two individuals.

Step 1: Initiate/Stimulate Conversation → **Step 2:** Fade Out of the Conversation → **Step 3:** Monitor and Provide Support as Needed

Step 4: Reinforce and Praise Students

GOAL: Have students initiating and responding during conversations without adult prompting.

EQUAL and **ACTIVE** roles for each student.

45

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This is the goal of facilitating conversations!

46

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Facilitating Peer Conversations

TIPS

Use visuals such as topic cards or a topic box.

Notice students who have similar interests and pair them together.

Stay close and monitor so you are available to provide support if needed.

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Supporting Behavior

It's important to remember that behaviors happen for a reason! Students use behavior to communicate a variety of wants and needs.

Seeking attention or support

- ☐ Is the student looking for **social attention** or **connection**?
- ☐ Do they need some **support** with something?

Gaining access to an item or activity

- ☐ If the activity is not available in the moment, explain to the student **when they CAN** have access to the activity.
- ☐ "Right now we are at water study, we will get to go on a hike after lunch!"
- ☐ The words **"no"** and **"can't"** can be triggers for some kids.

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Supporting Behavior

It's important to remember that behaviors happen for a reason! Students use behavior to **communicate** a variety of wants and needs.

Meeting a sensory or regulation need

- ☐ Is the student **OVER-STIMULATED?** If so, maybe they need a break.
- ☐ Is the student **UNDER-STIMULATED?** If so, do they need a more challenging activity or role?

Avoiding an activity or interaction

- ☐ **Why** is the student wanting to avoid?
- ☐ Do they have the skill set to be successful? Kids do well if they **CAN.**
- ☐ How can you **incorporate student strengths** to support success and engagement?

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Behavior Correction in Action

Ignore does not mean DON'T correct inappropriate behaviors. It means address the behaviors without focusing on the inappropriate behaviors. If appropriate, ignore the behavior, **NOT** the student.

DO	DON'T
Prompt the student or **model** what you want them to do or say instead.	**Tell them what NOT to do**. "We don't scream and stomp." Or "Stop yelling."
This teaches them **what to do to** continue engaging in positive social interactions OR how to manage conflict and frustration appropriately.	This only tells them what they shouldn't be doing and does not help them learn what to do instead. This may further irritate the student and stop social engagement all together.

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Developing In Vivo Social Skills

Social skills instruction is when we **explicitly teach** students the skills necessary to successfully participate in social interactions with others.

WATCH for moments where friendships form or fracture.

- Stay near the student as they engage.
- Observe and provide support as needed.

Begin in the Right Position

Provide Direct Instruction

- Use clear and simple cues to direct or redirect the student.
- Model goal behaviors or use visuals as needed to teach and prompt skills.

- Reinforce (praise) and acknowledge use of appropriate social skills.
- If appropriate, ignore inappropriate behaviors

Provide Feedback

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Developing In Vivo Social Skills

Prevent friendship fractures by intervening when physically or verbally aggressive behavior occurs.

Intervene when a moment occurs that can have a **lasting impact** on social relationships.

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Strategies in Action

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Planning for Implementation

Self-Reflect
6 minutes

ODS for All Inclusive Practices Self Reflection

Make a copy first if you use this form :)
Go to File - Make a copy

What do I have/know to use these strategies successfully?	
What do I still need to use these strategies successfully?	
When do I plan to use these strategies?	
Where do I plan to use these strategies?	

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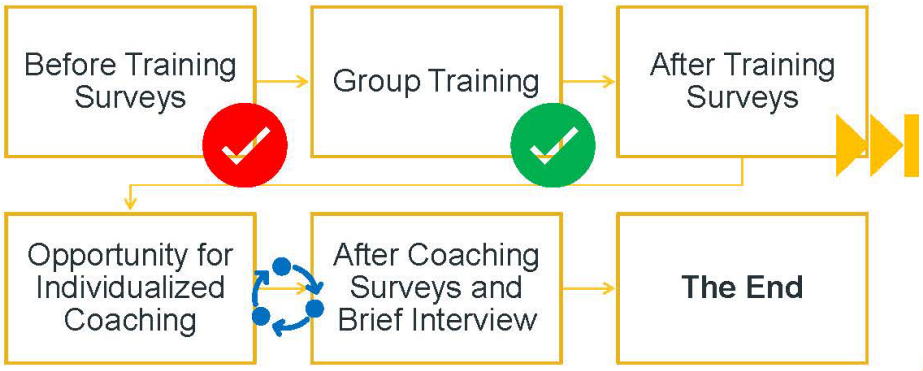
Next Steps and Opportunities for Continued Learning



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References Cited

Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research*, *38*(1), 4–23. https://doi.org/10.1007/s10488-010-0327-7

Ainscow, M., & Miles, S. (2008). Making Education for All inclusive: Where next? *PROSPECTS*, *38*(1), 15–34. https://doi.org/10.1007/s11125-008-9055-0

Ajzen, I. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior1. *Journal of Applied Social Psychology*, *32*(4), 665–683. https://doi.org/10.1111/j.1559-1816.2002.tb00236.x

Ajzen, I., Joyce, N., Sheikh, S., & Cote, N. G. (2011). Knowledge and the Prediction of Behavior: The Role of Information Accuracy in the Theory of Planned Behavior. *Basic and Applied Social Psychology*, *33*(2), 101–117. https://doi.org/10.1080/01973533.2011.568834

Alquraini, T. (2012). *Critical components of successful inclusion of students with severe disabilities: Literature review*. *27*(1), 18.

Amor, A. M., Hagiwara, M., Shogren, K. A., Thompson, J. R., Verdugo, M. Á., Burke, K. M., & Aguayo, V. (2019). International perspectives and trends in research on inclusive education: A systematic review. *International Journal of Inclusive Education*, *23*(12), 1277–1295. https://doi.org/10.1080/13603116.2018.1445304

Anderson, R., Taylor, S., Taylor, T., & Virues-Ortega, J. (2021). Thematic and textual analysis methods for developing social validity questionnaires in applied behavior analysis. *Behavioral Interventions*, bin.1832. https://doi.org/10.1002/bin.1832

Anguera, M. T., Blanco-Villaseñor, A., Losada, J. L., Sánchez-Algarra, P., & Onwuegbuzie, A. J. (2018). Revisiting the difference between mixed methods and multimethods: Is it all in the name? *Quality & Quantity*, *52*(6), 2757–2770. https://doi.org/10.1007/s11135-018-0700-2

Armitage, C. J., & Conner, M. (2001). Efficacy of the Theory of Planned Behaviour: A meta-analytic review. *British Journal of Social Psychology*, *40*(4), 471–499. https://doi.org/10.1348/014466601164939

Ascetta, K., Harn, B., & Durán, L. (2019). Comparing Self-Reported and Performance-Based Online Feedback on Early Childhood Teachers' Implementation of Language Strategies. *Early Childhood Education Journal*, *47*(3), 353–365. https://doi.org/10.1007/s10643-019-00934-8

Avramidis, E., Bayliss, P., & Burden, R. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in one local education authority. *Educational Psychology*, *20*(2), 191–211. https://doi.org/10.1080/713663717

Avramidis, E., Toulia, A., Tsihouridis, C., & Strogilos, V. (2019). Teachers' attitudes towards inclusion and their self-efficacy for inclusive practices as predictors of willingness to implement peer tutoring. *Journal of Research in Special Educational Needs*, *19*(S1), 49–59. https://doi.org/10.1111/1471-3802.12477

Baker, S., Gersten, R., & Keating, T. (2000). When Less May Be More: A 2-Year Longitudinal Evaluation of a Volunteer Tutoring Program Requiring Minimal Training. *Reading Research Quarterly*, *35*(4), 494–519. https://doi.org/10.1598/RRQ.35.4.3

Baldwin, J., Duerden, M., & Witt, P. (2010). The impact of counselor training on new and returning camp counselors. *Camping Magazine*, *83*, 8–11.

Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, *38*(1), 9–44. https://doi.org/10.1177/0149206311410606

Bandura, A., & Adams, N. E. (1977). Analysis of self-efficacy theory of behavioral change. *Cognitive Therapy and Research*, *1*(4), 287–310. https://doi.org/10.1007/BF01663995

Bauminger, N., & Kasari, C. (2000). Loneliness and Friendship in High-Functioning Children with Autism. *Child Development*, *71*(2), 447–456.

Biggs, E. E., Carter, E. W., Bumble, J. L., Barnes, K., & Mazur, E. L. (2018). Enhancing Peer Network Interventions for Students with Complex Communication Needs. *Exceptional Children*, *85*(1), 66–85. ERIC.

Biggs, E. E., Carter, E. W., & Gustafson, J. (2017). Efficacy of Peer Support Arrangements to Increase Peer Interaction and AAC Use. *American Journal on Intellectual and Developmental Disabilities*, *122*(1), 25–48. https://doi.org/10.1352/1944-7558-122.1.25

Billingsley, B., DeMatthews, D., Connally, K., & McLeskey, J. (2018). Leadership for effective inclusive schools: Considerations for preparation and reform. *Australasian Journal of Special and Inclusive Education*, *42*(01), 65–81. https://doi.org/10.1017/jsi.2018.6

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, *26*(13), 1802–1811. https://doi.org/10.1177/1049732316654870

Brannan, S. A. (2003). *Including youth with disabilities in outdoor programs: Best practices, outcomes, and resources* (Issue v. 1). Sagamore Pub. https://books.google.com/books?id=RsCBAAAAMAAJ

Briesch, A. M., Chafouleas, S. M., Neugebauer, S. R., & Riley-Tillman, T. C. (2013). Assessing influences on intervention implementation: Revision of the usage rating profile-intervention. *Journal of School Psychology*, *51*(1), 81–96. https://doi.org/10.1016/j.jsp.2012.08.006

Callahan, J. S., Kiker, D. S., & Cross, T. (2003). Does Method Matter? A Meta-Analysis of the Effects of Training Method on Older Learner Training Performance. *Journal of Management*, *29*(5), 663–680. https://doi.org/10.1016/S0149-2063_03_00029-1

Cole*, B. A. (2005). Mission impossible? Special educational needs, inclusion and the re-conceptualization of the role of the senco in england and wales. *European Journal of Special Needs Education*, *20*(3), 287–307. https://doi.org/10.1080/08856250500156020

Connor, D. J., Gabel, S. L., Gallagher, D. J., & Morton, M. (2008). Disability studies and inclusive education—Implications for theory, research, and practice. *International Journal of Inclusive Education*, *12*(5–6), 441–457. https://doi.org/10.1080/13603110802377482

Crandall, S. J. S. (1998). Using interviews as a needs assessment tool. *Journal of Continuing Education in the Health Professions*, *18*(3), 155–162. https://doi.org/10.1002/chp.1340180305

Dearing, J. W., & Singhal, A. (2020). New directions for diffusion of innovations research: Dissemination, implementation, and positive deviance. *Human Behavior and Emerging Technologies*, *2*(4), 307–313. https://doi.org/10.1002/hbe2.216

DeSilets, L. D. (2007). Needs assessments: An array of possibilities. *The Journal of Continuing Education in Nursing*, *38*(3), 107–112. https://doi.org/10.3928/00220124-20070501-05

Dingfelder, H. E., & Mandell, D. S. (2011). Bridging the Research-to-Practice Gap in Autism Intervention: An Application of Diffusion of Innovation Theory. *Journal of Autism and Developmental Disorders*, *41*(5), 597–609. https://doi.org/10.1007/s10803-010-1081-0

Eccles, M. P., Hrisos, S., Francis, J., Kaner, E. F., Dickinson, H. O., Beyer, F., & Johnston, M. (2006). Do self- reported intentions predict clinicians' behaviour: A systematic review. *Implementation Science*, *1*(1), 28. https://doi.org/10.1186/1748-5908-1-28

Embry, D. D. (2004). Community-based prevention using simple, low-cost, evidence-based kernels and behavior vaccines. *Journal of Community Psychology*, *32*(5), 575–591. https://doi.org/10.1002/jcop.20020

Evans, R. E., Craig, P., Hoddinott, P., Littlecott, H., Moore, L., Murphy, S., O'Cathain, A., Pfadenhauer, L., Rehfuess, E., Segrott, J., & Moore, G. (2019). When and how do 'effective' interventions need to be adapted and/or re-evaluated in new contexts? The need for guidance. *Journal of Epidemiology and Community Health*, *73*(6), 481–482. https://doi.org/10.1136/jech-2018-210840

Fallon, L. M., Collier-Meek, M. A., & Kurtz, K. D. (2019). Feasible coaching supports to promote teachers' classroom management in high-need settings: An experimental single case design study. *School Psychology Review*, *48*(1), 3–17. ERIC.

Fallon, L. M., Collier-Meek, M. A., Maggin, D. M., Sanetti, L. M. H., & Johnson, A. H. (2015). Is performance feedback for educators an evidence-based practice? A systematic review and evaluation based on single-case research. *Exceptional Children*, *81*(2), 227–246. https://doi.org/10.1177/0014402914551738

Fixsen, D. L., Blase, K. A., Naoom, S. F., & Wallace, F. (2009). Core Implementation Components. *Research on Social Work Practice*, *19*(5), 531–540. https://doi.org/10.1177/1049731509335549

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., Wallace, F., Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., Wallace, F., Burns, B., Carter, W., Paulson, R., Schoenwald, S., Barwick, M., Chambers, D., Petrila, J., Rivard, J., & Shern, D. (2005). *Implementation research: A synthesis of the literature*.

Florian, L. (2012). Preparing teachers to work in inclusive classrooms: Key lessons for the professional development of teacher educators from scotland's inclusive practice project. *Journal of Teacher Education*, *63*(4), 275–285. https://doi.org/10.1177/0022487112447112

Florian, L., & Linklater, H. (2010). Preparing teachers for inclusive education: Using inclusive pedagogy to enhance teaching and learning for all. *Cambridge Journal of Education*, *40*(4), 369–386. https://doi.org/10.1080/0305764X.2010.526588

Forlin, C., Cedillo, I. G., Romero-Contreras, S., Fletcher, T., & Rodríguez Hernández, H. J. (2010). Inclusion in mexico: Ensuring supportive attitudes by newly graduated teachers. *International Journal of Inclusive Education*, *14*(7), 723–739. https://doi.org/10.1080/13603111003778569

Forlin, C., Earle, C., Loreman, T., & Sharma, U. (2011). The sentiments, attitudes, and concerns about inclusive education revised (sacie-r) scale for measuring pre-service teachers' perceptions about inclusion. *Exceptionality Education International*, *21*(3). https://doi.org/10.5206/eei.v21i3.7682

Gage, N. A., MacSuga-Gage, A. S., & Crews, E. (2017). Increasing teachers' use of behavior-specific praise using a multitiered system for professional development. *Journal of Positive Behavior Interventions*, *19*(4), 239–251. https://doi.org/10.1177/1098300717693568

Gaumer Erickson, A. S., Noonan, P. M., Brussow, J., & Supon Carter, K. (2017). Measuring the quality of professional development training. *Professional Development in Education*, *43*(4), 685–688. https://doi.org/10.1080/19415257.2016.1179665

Glisson, C., & Green, P. (2006). The Effects of Organizational Culture and Climate on the Access to Mental Health Care in Child Welfare and Juvenile Justice Systems. *Administration and Policy in Mental Health and Mental Health Services Research*, *33*(4), 433–448. https://doi.org/10.1007/s10488-005-0016-0

Grol, R. P. T. M., Bosch, M. C., Hulscher, M. E. J. L., Eccles, M. P., & Wensing, M. (2007). Planning and studying improvement in patient care: The use of theoretical perspectives. *The Milbank Quarterly*, *85*(1), 93–138. https://doi.org/10.1111/j.1468-0009.2007.00478.x

Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. Routledge.

Hellmich, F., Löper, M. F., & Görel, G. (2019). The role of primary school teachers' attitudes and self-efficacy beliefs for everyday practices in inclusive classrooms – a study on the verification of the 'Theory of Planned Behaviour.' *Journal of Research in Special Educational Needs*, *19*(S1), 36–48. https://doi.org/10.1111/1471-3802.12476

Hemmeter, M. L., Snyder, P., Kinder, K., & Artman, K. (2011). Impact of performance feedback delivered via electronic mail on preschool teachers' use of descriptive praise. *Early Childhood Research Quarterly*, *26*(1), 96–109. https://doi.org/10.1016/j.ecresq.2010.05.004

Hunt, D. P. (2003). The concept of knowledge and how to measure it. *Journal of Intellectual Capital*, *4*(1), 100–113. https://doi.org/10.1108/14691930310455414

Hunt, P. F. (2011). Salamanca Statement and IDEA 2004: Possibilities of practice for inclusive education. *International Journal of Inclusive Education*, *15*(4), 461–476. https://doi.org/10.1080/13603110903131713

Kalambouka, A., Farrell, P., Dyson, A., & Kaplan, I. (2007). The impact of placing pupils with special educational needs in mainstream schools on the achievement of their peers. *Educational Research*, *49*(4), 365–382. https://doi.org/10.1080/00131880701717222

Kazdin, A. E., Marciano, P. L., & Whitley, M. K. (2005). The Therapeutic Alliance in Cognitive-Behavioral Treatment of Children Referred for Oppositional, Aggressive, and Antisocial Behavior. *Journal of Consulting and Clinical Psychology*, *73*(4), 726–730. https://doi.org/10.1037/0022-006X.73.4.726

Kefallinou, A., Symeonidou, S., & Meijer, C. (2020). Understanding the value of inclusive education and its implementation: A review of the literature. *PROSPECTS*, *49*, 1–18. https://doi.org/10.1007/s11125-020-09500-2

Klassen, R. M., Tze, V. M. C., Betts, S. M., & Gordon, K. A. (2011). Teacher Efficacy Research 1998–2009: Signs of Progress or Unfulfilled Promise? *Educational Psychology Review*, *23*(1), 21–43. https://doi.org/10.1007/s10648-010-9141-8

Kratochwill, T. R., Hitchcock, J. H., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M., & Shadish, W. R. (2013). Single-Case Intervention Research Design Standards. *Remedial and Special Education*, *34*(1), 26–38. https://doi.org/10.1177/0741932512452794

Kretzmann, M., Shih, W., & Kasari, C. (2015). Improving Peer Engagement of Children With Autism on the School Playground: A Randomized Controlled Trial. *Behavior Therapy*, *46*(1), 20–28. Academic Search Premier.

Locke, J., Kang-Yi, C., Frederick, L., & Mandell, D. S. (2020). Individual and organizational characteristics predicting intervention use for children with autism in schools. *Autism*, *24*(5), 1152–1163. https://doi.org/10.1177/1362361319895923

Locke, J., Kang-Yi, C., Pellecchia, M., & Mandell, D. S. (2019). It's messy but real: A pilot study of the implementation of a social engagement intervention for children with autism in schools. *Journal of Research in Special Educational Needs*, *19*(2), 135–144. https://doi.org/10.1111/1471-3802.12436

Locke, J., Shih, W., Kang-Yi, C. D., Caramanico, J., Shingledecker, T., Gibson, J., Frederick, L., & Mandell, D. S. (2019). The impact of implementation support on the use of a social engagement intervention for children with autism in public schools. *Autism*, *23*(4), 834–845. https://doi.org/10.1177/1362361318787802

Locke, J., Wolk, C. B., Harker, C., Olsen, A., Shingledecker, T., Barg, F., Mandell, D., & Beidas, R. (2017). Pebbles, rocks, and boulders: The implementation of a school-based social engagement intervention for children with autism. *Autism*, *21*(8), 985–994. https://doi.org/10.1177/1362361316664474

Loreman, T., Earle, C., Sharma, U., & Forlin, C. (2007). The development of an instrument for measuring pre-service teachers' sentiments, attitudes, and concerns about inclusive education. *INTERNATIONAL JOURNAL OF SPECIAL EDUCATION*, *22*, 10.

MacFarlane, K., & Woolfson, L. M. (2013). Teacher attitudes and behavior toward the inclusion of children with social, emotional and behavioral difficulties in mainstream schools: An application of the theory of planned behavior. *Teaching and Teacher Education*, *29*, 46–52. https://doi.org/10.1016/j.tate.2012.08.006

Malak, Md. S., Sharma, U., & Deppeler, J. M. (2018). Predictors of primary schoolteachers' behavioural intention to teach students demonstrating inappropriate behaviour in regular classrooms. *Cambridge Journal of Education*, *48*(4), 495–514. https://doi.org/10.1080/0305764X.2017.1364698

Male, D. B. (2011). The impact of a professional development programme on teachers' attitudes towards inclusion. *Support for Learning*, *26*(4), 182–186. https://doi.org/10.1111/j.1467-9604.2011.01500.x

McAvoy, L., Smith, J. G., & Rynders, J. E. (2006). Outdoor adventure programming for individuals with cognitive disabilities who present serious accommodation challenges. *Therapeutic Recreation Journal*, 16.

McCoach, D. B., & Colbert, R. D. (2010). Factors Underlying the Collective Teacher Efficacy Scale and Their Mediating Role in the Effect of Socioeconomic Status on Academic Achievement at the School Level. *Measurement and Evaluation in Counseling and Development*, *43*(1), 31–47. https://doi.org/10.1177/0748175610362368

McIntosh, M. J., & Morse, J. M. (2015). Situating and Constructing Diversity in Semi-Structured Interviews. *Global Qualitative Nursing Research*, *2*, 2333393615597674. https://doi.org/10.1177/2333393615597674

Moore, G., Campbell, M., Copeland, L., Craig, P., Movsisyan, A., Hoddinott, P., Littlecott, H., O'Cathain, A., Pfadenhauer, L., Rehfuess, E., Segrott, J., Hawe, P., Kee, F., Couturiaux, D., Hallingberg, B., & Evans, R. (2021). Adapting interventions to new contexts—The ADAPT guidance. *BMJ*, n1679. https://doi.org/10.1136/bmj.n1679

Moullin, J. C. (2018). *Development and testing of the measure of innovation-specific implementation intentions (misii) using rasch measurement theory*. 10.

Moullin, J. C., Dickson, K. S., Stadnick, N. A., Rabin, B., & Aarons, G. A. (2019). Systematic review of the exploration, preparation, implementation, sustainment (epis) framework. *Implementation Science*, *14*(1), 1. https://doi.org/10.1186/s13012-018-0842-6

Movsisyan, A., Arnold, L., Evans, R., Hallingberg, B., Moore, G., O'Cathain, A., Pfadenhauer, L. M., Segrott, J., & Rehfuess, E. (2019). Adapting evidence-informed complex population health interventions for new contexts: A systematic review of guidance. *Implementation Science*, *14*(1), 105. https://doi.org/10.1186/s13012-019-0956-5

Navarro, S. B., Zervas, P., Gesa, R. F., & Sampson, D. G. (2016). Developing teachers' competences for designing inclusive learning experiences. *Journal of Educational Technology & Society*, *19*(1), 17–27.

Nilholm, C., & Göransson, K. (2017). What is meant by inclusion? An analysis of European and North American journal articles with high impact. *European Journal of Special Needs Education*, *32*(3), 437–451. https://doi.org/10.1080/08856257.2017.1295638

Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. *Implementation Science*, *10*(1), 53. https://doi.org/10.1186/s13012-015-0242-0

Norwich, B., & Nash, T. (2011). Preparing teachers to teach children with special educational needs and disabilities: The significance of a national PGCE development and evaluation project for inclusive teacher education. *Journal of Research in Special Educational Needs*, *11*(1), 2–11. https://doi.org/10.1111/j.1471-3802.2010.01175.x

Oh-Young, C., & Filler, J. (2015). A meta-analysis of the effects of placement on academic and social skill outcome measures of students with disabilities. *Research in Developmental Disabilities*, *47*, 80–92. https://doi.org/10.1016/j.ridd.2015.08.014

Orsmond, G. I., Krauss, M. W., & Seltzer, M. M. (2004). Peer Relationships and Social and Recreational Activities Among Adolescents and Adults with Autism. *Journal of Autism and Developmental Disorders*, *34*(3), 245–256. https://doi.org/10.1023/B:JADD.0000029547.96610.df

Owens, J. S., Lyon, A. R., Brandt, N. E., Masia Warner, C., Nadeem, E., Spiel, C., & Wagner, M. (2014). Implementation Science in School Mental Health: Key Constructs in a Developing Research Agenda. *School Mental Health*, *6*(2), 99–111. https://doi.org/10.1007/s12310-013-9115-3

Park, M.-H., Dimitrov, D. M., Das, A., & Gichuru, M. (2016). The teacher efficacy for inclusive practices (TEIP) scale: Dimensionality and factor structure. *Journal of Research in Special Educational Needs*, *16*(1), 2–12. https://doi.org/10.1111/1471-3802.12047

Pellicano, L., Bölte, S., & Stahmer, A. (2018). The current illusion of educational inclusion. *Autism*, *22*(4), 386–387. https://doi.org/10.1177/1362361318766166

Perepletchikova, F., & Kazdin, A. E. (2005). Treatment Integrity and Therapeutic Change: Issues and Research Recommendations. *Clinical Psychology: Science and Practice*, *12*(4), 365–383. https://doi.org/10.1093/clipsy.bpi045

Pinnock, H., Barwick, M., Carpenter, C. R., Eldridge, S., Grandes, G., Griffiths, C. J., Rycroft-Malone, J., Meissner, P., Murray, E., Patel, A., Sheikh, A., & Taylor, S. J. C. (2017a). Standards for reporting implementation studies (stari) statement. *BMJ*, i6795. https://doi.org/10.1136/bmj.i6795

Pinnock, H., Barwick, M., Carpenter, C. R., Eldridge, S., Grandes, G., Griffiths, C. J., Rycroft-Malone, J., Meissner, P., Murray, E., Patel, A., Sheikh, A., & Taylor, S. J. C. (2017b). Standards for reporting implementation studies (stari): Explanation and elaboration document. *BMJ Open*, *7*(4), e013318. https://doi.org/10.1136/bmjopen-2016-013318

Pit-Ten Cate, I. M., Markova, M., Krischler, M., & Krolak-Schwerdt, S. (2018). *Promoting inclusive education: The role of teachers' competence and attitudes*. 15.

Poduska, J. M., & Kurki, A. (2014). Guided by Theory, Informed by Practice: Training and Support for the Good Behavior Game, a Classroom-Based Behavior Management Strategy. *Journal of Emotional and Behavioral Disorders*, *22*(2), 83–94. ERIC.

Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., Griffey, R., & Hensley, M. (2011). Outcomes for Implementation Research: Conceptual Distinctions, Measurement Challenges, and Research Agenda. *Administration and Policy in Mental Health and Mental Health Services Research*, *38*(2), 65–76. https://doi.org/10.1007/s10488-010-0319-7

Rodriguez, C. C., & Garro-Gil, N. (2015). Inclusion and integration on special education. *Procedia - Social and Behavioral Sciences*, *191*, 1323–1327. https://doi.org/10.1016/j.sbspro.2015.04.488

Rotheram-Fuller, E., Kasari, C., Chamberlain, B., & Locke, J. (2010). Social involvement of children with autism spectrum disorders in elementary school classrooms. *Journal of Child Psychology and Psychiatry*, *51*(11), 1227–1234. https://doi.org/10.1111/j.1469-7610.2010.02289.x

Sharma, U., & Jacobs, D. K. (2016). Predicting in-service educators' intentions to teach in inclusive classrooms in India and Australia. *Teaching and Teacher Education*, *55*, 13–23. https://doi.org/10.1016/j.tate.2015.12.004

Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs*, *12*(1), 12–21. https://doi.org/10.1111/j.1471-3802.2011.01200.x

Shernoff, D. J., Sinha, S., Bressler, D. M., & Ginsburg, L. (2017). Assessing teacher education and professional development needs for the implementation of integrated approaches to STEM education. *International Journal of STEM Education*, *4*(1), 13. https://doi.org/10.1186/s40594-017-0068-1

Shih, W., Dean, M., Kretzmann, M., Locke, J., Senturk, D., Mandell, D. S., Smith, T., & Kasari, C. (2019). Remaking Recess Intervention for Improving Peer Interactions at School for Children With Autism Spectrum Disorder: Multisite Randomized Trial. *School Psychology Review*, *48*(2), 133–144. https://doi.org/10.17105/SPR-2017-0113.V48-2

Shogren, K. A., McCart, A. B., Lyon, K. J., & Sailor, W. S. (2015). All means all: Building knowledge for inclusive schoolwide transformation. *Research and Practice for Persons with Severe Disabilities*, *40*(3), 173–191. https://doi.org/10.1177/1540796915586191

Snyder, P. A., Hemmeter, M. L., & Fox, L. (2015). Supporting Implementation of Evidence-Based Practices through Practice-Based Coaching. *Grantee Submission*, *35*(3), 133–143. ERIC.

Sobeck, E. E., Robertson, R., & Smith, J. (2020). The Effects of Didactic Instruction and Performance Feedback on Paraeducator Implementation of Behavior Support Strategies in Inclusive Settings. *Journal of Special Education*, *53*(4), 245–255. ERIC.

Srivastava, M., de Boer, A., & Pijl, S. J. (2015). Inclusive education in developing countries: A closer look at its implementation in the last 10 years. *Educational Review*, *67*(2), 179–195. https://doi.org/10.1080/00131911.2013.847061

Szumski, G., Smogorzewska, J., & Karwowski, M. (2017). Academic achievement of students without special educational needs in inclusive classrooms: A meta-analysis. *Educational Research Review*, *21*, 33–54. https://doi.org/10.1016/j.edurev.2017.02.004

Thurber, C. A., Scanlin, M. M., Scheuler, L., & Henderson, K. A. (2007). Youth development outcomes of the camp experience: Evidence for multidimensional growth. *Journal of Youth and Adolescence*, *36*(3), 241–254. https://doi.org/10.1007/s10964-006-9142-6

Tristani, L., & Bassett-Gunter, R. (2020). Making the grade: Teacher training for inclusive education: A systematic review. *Journal of Research in Special Educational Needs*, *20*(3), 246–264. https://doi.org/10.1111/1471-3802.12483

Trivette, C. M., Dunst, C. J., Hamby, D. W., & O'Herin, C. E. (2009). Characteristics and consequences of adult learning methods and strategies. *C. M.*, *3*(1), 33.

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, *17*(7), 783–805. https://doi.org/10.1016/S0742-051X(01)00036-1

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, *68*(2), 202–248. https://doi.org/10.3102/00346543068002202

Tschannen-Moran, M., & McMaster, P. (2009). Sources of Self-Efficacy: Four Professional Development Formats and Their Relationship to Self-Efficacy and Implementation of a New Teaching Strategy. *The Elementary School Journal*, *110*(2), 228–245. https://doi.org/10.1086/605771

Wahl-Alexander, Z., Howell, S., & Richards, K. A. R. (2017). Influence of a training program on camp counselors' perceived competency when accounting for prior camp experience. *Journal of Outdoor Recreation, Education, and Leadership*, *9*(3), 298–313. https://doi.org/10.18666/JOREL-2017-V9-I3-7866

Wahl-Alexander, Z., Richards-Rosse, K. A., & Howell, S. (2018). The influence of online training on camp counselor perceived competence. *Journal of Park and Recreation Administration*, *36*(4), 72–89. https://doi.org/10.18666/JPRA-2018-V36-I4-8611

Waitoller, F. R., & Kozleski, E. B. (2013). Working in boundary practices: Identity development and learning in partnerships for inclusive education. *Teaching and Teacher Education*, *31*, 35–45. https://doi.org/10.1016/j.tate.2012.11.006

Walker, V. L., DeSpain, S. N., Thompson, J. R., & Hughes, C. (2014). Assessment and planning in k-12 schools: A social-ecological approach. *Inclusion*, *2*(2), 125–139. https://doi.org/10.1352/2326-6988-2.2.125

Ware, L. (2001). Writing, identity, and the other: Dare we do disability studies? *Journal of Teacher Education*, *52*(2), 107–123. https://doi.org/10.1177/0022487101052002003

Webb, T. L., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin*, *132*(2), 249–268. https://doi.org/10.1037/0033-2909.132.2.249

Weisz, J. R., Chu, B. C., & Polo, A. J. (2004). Treatment Dissemination and Evidence-Based Practice: Strengthening Intervention Through Clinician-Researcher Collaboration. *Clinical Psychology: Science and Practice*, *11*(3), 300–307. https://doi.org/10.1093/clipsy.bph085

What is Outdoor School? —Friends of Outdoor School. (n.d.). Retrieved November 19, 2021, from https://www.friendsofoutdoorschool.org/what-is-outdoor-school

Wilson, C., Woolfson, L. M., Durkin, K., & Elliott, M. A. (2016). The impact of social cognitive and personality factors on teachers' reported inclusive behaviour. *British Journal of Educational Psychology*, *86*(3), 461–480. https://doi.org/10.1111/bjep.12118