Therapeutic & Inclusive Recreation Programming in Arizona Schools

Full Report for Grant with Arizona Developmental Disabilities Planning Council

Questions?

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Contents

Executive Summary

All students, including those with and without disabilities, benefit from participation in recreation activities for physical, social, and emotional development. The purposeful design of structured recreational activities that integrate all youth creates an enjoyable space where students can learn collectively based on mutual support, reciprocity, and unity. This inclusion and sense of belonging is positively associated with important health and developmental outcomes. For instance, school age children may benefit from problem-solving, self-esteem, and emotional regulation, whereas the adolescent may develop a sense of identity and independence to prepare for transition from school to community support systems.[1] Despite the value of inclusive recreation-based learning experiences, opportunities for students with disabilities to participate in adaptive and inclusive recreation-based classes and extracurricular activities vary within schools and districts. Such constraints to full and inclusive participation negatively influence a student's emotional and physical health, academic performance, and social adjustment and acceptance.[2] To prevent the negative effects of limited meaningful recreation engagement and reduce the opportunity gap, strategies are needed to effectively implement a full range of adaptive and inclusive programming in all schools.

Schools can benefit from information about best practices, resources, and policies related to inclusive recreation. A number of school-based, evidence-based practices (e.g., universal design for learning (UDL) frameworks, culturally responsive instruction) serve as national models for inclusive education;[3] however, there are limited models to guide inclusive recreation-based learning experiences and extracurricular activities. Education and training can equip teachers and school staff with the skills to accommodate the needs of students with disabilities and facilitate active engagement among all students. Additionally, schools can employ trained and qualified personnel and establish formal partnerships with community organizations to provide quality adaptive and inclusive experiences without any additional financial burden. These best-practices and funding support strategies need to be identified and communicated widely in Arizona as a method of expanding inclusive recreation opportunities. Distribution of such information supports schools in their efforts to devise

strategies to build on their resources and unique characteristics to advance inclusive recreation opportunities for all students.

The therapeutic and inclusive recreation programming (TIRP) project was designed to foster school connectedness and valued involvement among 5th and 6th grade students at two schools in Arizona. Individualized TIRP programming was developed at each site through a collaborative partnership between school staff and researchers at Arizona State University (ASU), and led by a team of ASU students and a certified recreation therapist. The recommendations included in this abbreviated report summarize findings from 1) daily program reports, 2) student journals, 3) student surveys, 4) teacher and staff focus group interviews, 5) ASU student journals, and 6) a landscape analysis of inclusive recreation programs, policies, and funding sources in the state of Arizona.

Through TIRP programming, students gain knowledge and skills to effectively interact with diverse populations through participation in structured recreation-based interventions to promote school connectedness, social-emotional health, and self-determination. Students with and without limitations with function, disability, and health learn how to form friendships and develop a sense of belonging by sharing their individual strengths and characteristics as they engage in structured, meaningful inclusive educational and recreation experiences. This report highlights key insights, provides six recommendations learned after one year of programming, and describes the TIRP model supporting the need to develop evidence-based therapeutic and inclusive programs in schools.[4]

Findings and Recommendations

Inclusive Recreation Fosters a Culture of Health

Inclusive recreation provides students of all abilities and backgrounds the opportunity to meaningfully participate in a rich variety of recreation activities together. Engagement in socially valued, age appropriate recreation activities promotes individual health and self-determination, and also contributes to a school culture where inclusivity and recreation are valued as opportunities for students to develop positive relationships with peers and adults. These supportive relationships fostered through engagement in shared recreation experiences

contribute to feelings of school connectedness. Inclusive recreation in school nurtures natural supports, and optimizes school and community resources.[5] To integrate a comprehensive and sustainable model of inclusive recreation, it is recommended for schools to:

Recommendation #1: Increase positive shared inclusive recreation experiences with students and school staff to enhance school connectedness.

School connectedness - or a sense of belonging at school - is the belief held by students that the adults and peers in their school care about their learning as well as about them as individuals. Children **feeling valued and accepted** at school is positively associated with health and academic outcomes.[6] When students participate in recreation with supportive peers and adults, they build positive relationships through shared experiences and foster feelings of school connectedness.

Mixed Methods Analysis

Quantitative: Students report higher levels of school connectedness when they participate more often in therapeutic and inclusive recreation.

Qualitative: Student journal entries indicate the top five factors that contribute to happiness at school are activity-based learning, peer relationships, play and recreation, academics and adult relationships.

Student Survey

5th and 6th grade students (n_{VM}= 60, n_M = 69) responded to five questions about school connectedness.

School connectedness by level of TIRP participation
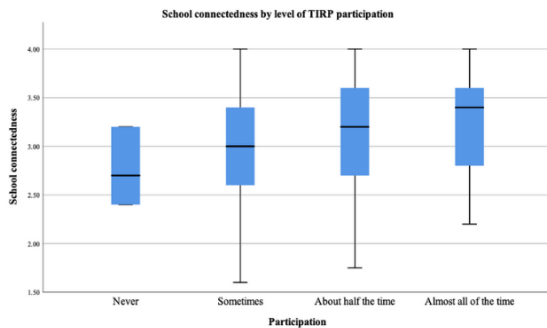
Note: Participation was measured by asking students how often they typically participated in the TIRP programming on a four point scale where 1 = never and 4 = almost all of the time. School connectedness is represented by a mean factor score of five items asking if students felt close to pople at school, were happy to be at school, felt like a part of school, felt safe and school, and felt teachers treated students fairly on a four point scale where 1 = not true at all and 4 = very true.

Journal Prompt

Draw a picture of something you love about your school. Describe what you drew. What is in the picture and why does it make you happy?

Factors of Happiness

We do all sorts of fun STEM related actvities like building bottle rokets.

Friends make school funner instead of going to class sitting there listening to an adult that thinks there better than me.

I drew me and my friends playing football. This makes me happy because I like being able to spend time with my friends. PS: ASU taught me alot with teamwork and I really enjoy playing games with ASU.

I like geography because it is interesting to learn about different places in the world and learn their culter and languages and their food.

Recommendation #2: Increase opportunities for meaningful inclusive recreation for all students to promote social-emotional health and self-determination

Creating opportunities for purposeful, structured inclusive recreation in the classroom, during recess, and before and after school can increase levels of inclusion. When students participate in inclusive recreation by choice, their level of participation is positively associated with feeling connected to school, optimistic at school, empathetic toward peers, and interested and competent during recreation.

> "The biggest attitude/culture shift that we need to see is the difference between inclusion and meaningful inclusion in schools."
> Katie DeVenuto – Special Olympics Arizona

Recommendation #3: Strategically implement a continuum of quality recreational therapy, activity-based learning, and structured autonomous play and recreation to promote greater inclusion.

A continuum of quality recreational therapy, activity-based learning, and play and recreation can promote greater inclusion by systematically supporting all students, widely integrating activity-based lessons and opportunities for participation in structured autonomous play throughout the school day. Students who actively engage in meaningful recreation develop supportive relationships with peers and adults and build self-determination, contributing to their social, emotional, physical, and cognitive health.

Inclusive Recreation Model

Facilitators: Recreational therapists
Approach: Therapeutic recreation/play interventions
Strategy: Systematic and evidence-based instruction
Outcomes: Social, emotional, physical, cognitive health

Facilitators: Instructional and support staff
Approach: Purposeful play and recreation activities
Strategy: Structured activity-based lessons
Outcomes: Academic growth/social, emotional health

Facilitators: School staff, community partners, and families
Approach: Enjoyable, age-appropriate leisure activities
Strategy: Meaningful and autonomous structured activities
Outcomes: Social, emotional, and physical health

Activity-Based Learning

Recreation Therapy

Play and Recreation
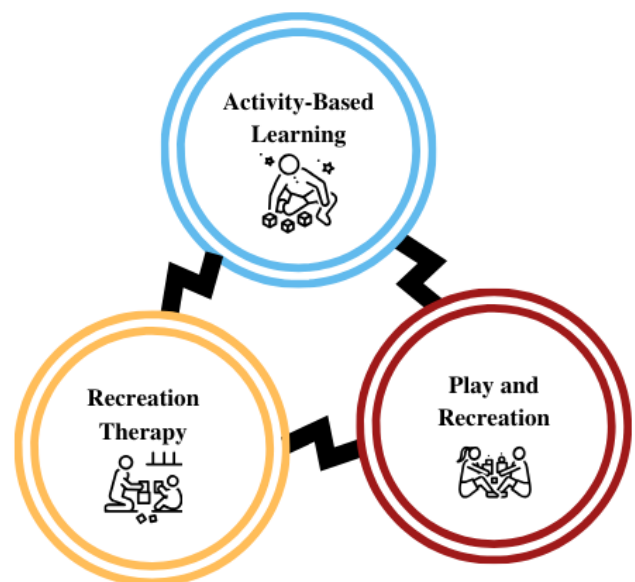
Recommendation #4: Mobilize interprofessional learning communities to transform and sustain inclusive recreation practices.

Teachers, school leaders, and community providers **participate in interprofessional learning communities** to collaboratively plan and implement contextually relevant, data informed, evidence-based practices to support student health and academic achievement. The approach can elevate priority given to inclusive recreation, enhance collegiality, and improve skills and confidence to facilitate inclusive activities throughout the comprehensive school day.

Recommendation #5: Leverage existing funding sources to optimize integration of individualized inclusive recreation practices.

Inclusive therapeutic recreation programs in Arizona are supported by multiple sources including special education funds and federal and state block grants. Increasing awareness of how to utilize these funding sources can provide sustained opportunities for students to engage in therapeutic and inclusive recreation throughout the comprehensive school day.

Recommendation #6: Develop collaborative partnerships between K-12 institutions, university academic programs, and community organizations to mobilize the internal assets of individual schools and external resources in the community.

The TIRP programs were developed through **collaborative partnerships** between a university, two public schools, and a local nonprofit organization. The research team at Arizona State University (ASU) worked closely with teachers, staff, and administrators to create and continuously adapt individualized programming based on the strengths and needs at both schools. TIRP content was delivered by a Certified Therapeutic Recreation Specialist in partnership with a local nonprofit organization and supported by a team of interprofessional ASU practicum students. By collectively focusing resources and assets to offer opportunities for inclusive recreation in schools, we support the health promotion of students and schools and support the collaborative approach to learning and health modeled by the Whole School, Whole Community, Whole Child (WSCC) framework.[7]

Goals

Five goals guided the therapeutic and inclusive recreation programming (TIRP) project. The following sections present each goal, methods, and strategies used to accomplish the goal as well as descriptive information about each goal outcome.

Goal #1

Promote and implement therapeutic and inclusive recreation programming in two schools.

TIRP Program Design

Individualized therapeutic and inclusive recreation programs led by a recreational therapist from Daring Adventures Healthy Day program and Arizona State University (ASU) students enrolled in an interprofessional service-learning course were piloted at two school sites. The programs were designed based on the unique needs and culture of each school and included three modalities of recreational therapy, activity-based learning, and play and recreation. The three modalities were implemented in small and large groups during class time, lunch, and recess to maximize the benefits of inclusive practices. The programs were adapted in scope and depth throughout the 2019-2020 school year to meet the needs of students and staff at both schools.
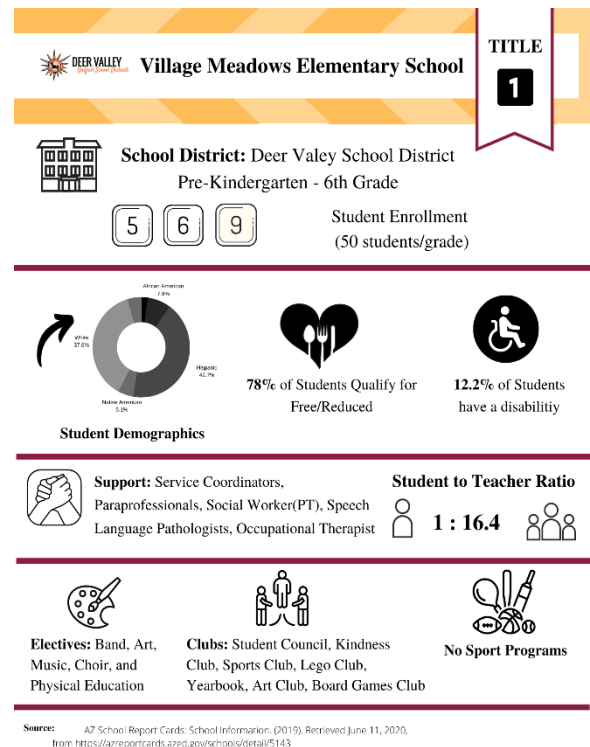
Wow Wednesday:

Deer Valley School District
Village Meadows Elementary School
2020 W Morningside Drive, Phoenix. AZ 85023

Program description: WOW Wednesday initially consisted of four 45-minute recreational therapy sessions provided one time per week with each 5th grade and 6th classroom (*n* = 25 students per classroom) to 1) promote social-emotional health and self-determination, and 2) integrate the use of purposeful inclusive activity-based learning in the classroom.

In January 2020, WOW Wednesday evolved into two 45-minutes small recreational therapy groups including identified students (*n* = 12 per classroom) who had the highest need and/or ability to develop and/or share social emotional skills with peers. Small group instruction was provided to achieve functional outcomes with the opportunity to effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions throughout the school day.

Additionally, two 15-minute structured autonomous play and recreation activities were planned and facilitated at recess one time per week to navigate social emotional challenges at lunch and recess where students had limited positive outlets and supportive structure. Students were given the autonomy to choose from 3-5 structured activities focused on offering students a variety of leisure and recreation activities and applying social emotional concepts through play.

In March 2020, in person WOW Wednesday programming was discontinued due to school closures as a result of COVID-19. Virtual activity-based learning, play, and recreation resources were developed and delivered to Village Meadows students and families through seven weekly newsletters and 12 videos. The teachers shared a link to the Daring Adventures' website (https://www.daring-adventures.org/rec-resources) during weekly check ins with their students at Village Meadows. Virtual programming supported student's continued learning through recreation with a focus on maintaining social and emotional health during physical distancing regulations. Students were provided these opportunities to continue to feel a sense of belonging and connectedness to their school, community, family and leisure lifestyles. An example of one of the newsletters is included in Appendix I). Figure 2 displays a timeline of the development of the program's structure based on the needs of the students.

Service Delivery: Table 1 outlines the total number of hours, days, sessions and youth who participated through March 11, 2020. Figure 1 displays the growth areas addressed during programming. Both the table and chart display service delivery prior to schools closing due to COVID-19.

Table 1. Wow Wednesday participation

# hours	# days	# sessions	#5th graders	#6th graders
79	32	114	57	56

Percentage of sessions focused on target growth areas at Village Meadows

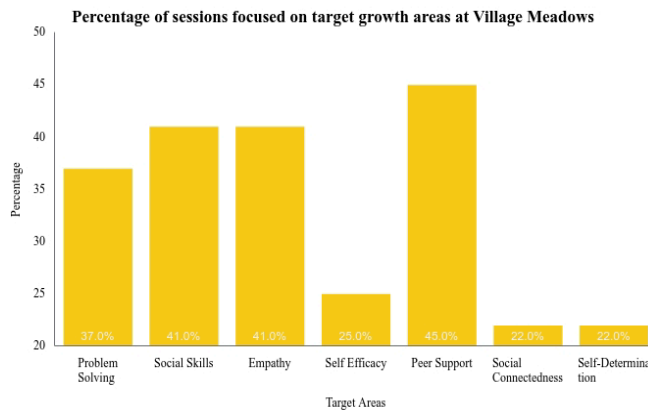|						
37.0%	41.0%	41.0%	25.0%	45.0%	22.0%	22.0%
Problem Solving	Social Skills	Empathy	Self Efficacy	Peer Support	Social Connectedness	Self-Determination

Figure 1. Wow Wednesday target growth areas

Village Meadows - Programming Timeline

August 2020	Focus Group	**Population:** School administration, teachers, and research team **Strategy:** Needs assessment and observation of resources **Purpose:** Student needs, program goals and development
Fall 2020	WOW Wednesday	**Population:** Students (5th and 6th grade), four sessions, ~25-30 students per session **Location:** Classroom, Art Room, Music Room, and Gymnasium **Duration and Frequency:** Weekly, 45-minute session with each class **Strategy:** A recreational-based social emotional program **Purpose:** Self-determination, self-efficacy, peer support, empathy, school-connectedness **Activity Examples:** Name games, problem solving activities, social games, role playing
January 2020	Mid-semester Evaluation	**Population:** School administration, teachers, and recreational therapists **Strategy:** Program assessment and evaluation **Purpose:** Gaps, programmatic changes, recommendations
Spring 2020	WOW Wednesdays	**Population:** Referred students (5th and 6th grade), four sessions, ~8-13 students per session **Location:** Classroom **Duration and Frequency:** Weekly, 45-minute sessions with each small group **Strategy:** Small group and one-on-one, recreational-based social emotional interventions **Purpose:** Self-determination, self-efficacy, peer support, empathy, school-connectedness **Activity Examples:** Circle of support, blind polygon, goal setting, simon says
	Recess	**Population:** Students (5th and 6th grade), two sessions, ~50 students per session **Location:** Playground and sport courts/fields **Duration and Frequency:** Weekly, 15-minute sessions with each grade level **Strategy:** Voluntary structured, inclusive recreational opportunities and support **Purpose:** Self-determination, self-efficacy, peer support, physical activity, school-connectedness **Activity Example:** Sports, dance, board games, arts and crafts, outdoor recreation, etc
	Teacher Trainings	**Population:** Teacher, paraprofessionals and administration **Location:** Classroom and gymnasium **Duration and Frequency:** 2, hour long sessions during the spring semester **Strategy:** Inservices on how to address challenges and barriers to inclusive recreation **Purpose:** Social emotional skills disability awareness, faciltation skills and techniques **Activity Examples:** Role playing, simulation, and problem solving activities
	Leisure Lunch	**Population:** Students (5th and 6th grade), two lunches, ~50 students per lunch **Location:** Cafeteria **Duration and Frequency:** 2, 30-minute sessions during the spring semester **Strategy:** Oversight and assistance in positive conversations and experiences at lunch **Purpose:** Social emotional skills and inclusion
COVID-19 Response - March 2020	Virtual Videos	**Population:** All grades (students and families) **Location:** Online- YouTube **Frequency:** Weekly **Purpose:** Opportunities for student engagement and access to leisure resources during Covid-19. **Outcomes:** Social emotional health, school-connectedness **Activity Examples:** Sensory activities, at-home workouts, DIY gardening, etc
	Newsletter	**Population:** All grades (students and families) **Location:** Online - school distributed **Frequency:** Weekly **Purpose:** Opportunities for student engagement and access to leisure resources during Covid-19 **Outcomes:** Social emotional health, school-connectedness **Activity Examples:** Brain teasers, coping strategies, recreation resources

Figure 2. Timeline of programming at Village Meadows

Rockin' Recess:

Madison School District
Madison No. 1 Middle School
5525 N. 16th Street, Phoenix, AZ 85015

Program description: Rockin' Recess initially consisted of two 20-minute inclusive recreation programs provided twice a week with 5th and 6th graders during recess to 1) encourage purposeful engagement and 2) develop leisure education and skills. Students were given the autonomy to choose from 3-5 structured activities focused on leisure education and applying social emotional concepts through play.

In January 2020, Rockin' Recess evolved with the addition of one 45-minute recreational therapy small group instruction once a week with an identified classroom to enhance students' participation during recess (*n* = 6 students). This instruction provided frontloading of activities and skills to successfully engage in recess activities.

In March 2020, in-person Rockin' Recess programming was discontinued due to school closures as a result of COVID-19.

Virtual activity-based learning, play, and recreation resources were developed and delivered to Madison No. 1 students through seven weekly newsletters and 12 videos. Resources were distributed weekly as part of Madison No. 1's resource packet sent via email to families. Virtual programming supported student's continued learning through recreation with a focus on maintaining social and emotional health during physical distancing regulations. Students were provided these opportunities to continue to feel a sense of belonging and connectedness to their school, community, family and leisure lifestyles. An example of one of the newsletters is included in Appendix I. Figure 3 displays a timeline of the development of the program's structure based on the needs of the students.

Service Delivery: Table 2 outlines the total number of hours, days, sessions and youth who participated through March 10, 2020. Figure 3 displays the growth areas addressed. Both the table and chart display service delivery prior to schools closing due to COVID-19.

Table 2. Rockin' Recess participation

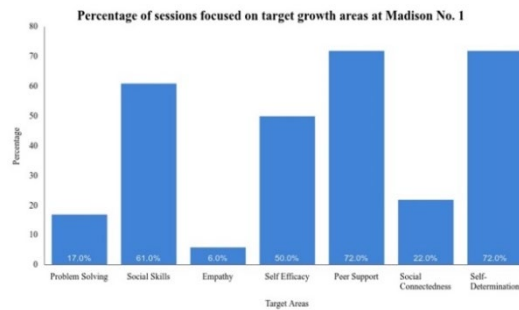| # hours	# days	# sessions	#5th graders	#6th graders
32	36	72	240	229

Figure 3. Rockin' Recess target growth areas

Madison No. 1 - Programming Timeline

August 2019	**Focus Group**	**Population:** School administration, teachers, and research team **Strategy:** Need assessment and observation of resources **Purpose:** Student needs, program goals and development
Fall 2019	**Rockin' Recess**	**Population:** Students. ~ 250 students per session **Location:** Playground, sport courts/fields, and library **Duration and Frequency:** Weekly - two, 25-minute sessions **Strategy**: Voluntary structured, inclusive recreational opportunities and support **Purpose:** Self-determination, peer support, physical activity, and school-connectedness **Activity Examples:** Sports, dance, board games, arts and crafts, outdoor recreation, etc
January 2020	**Mid-semester Evaluation**	**Population:** School administration, teachers, and recreational therapists **Strategy:** Program assessment and evaluation **Purpose:** Gaps, programmatic changes, recommendations
Spring 2020	**Front-loading Class**	**Population:** Special Education, ~6 students per session **Location:** Classroom **Duration and Frequency:** Weekly, 25-minute session **Strategy:** Opportunities for students with disabilities to learn skills required to play at Rockin' Recess prior to participation **Purpose:** Communication skills, fine and gross skills, coordination, social-emotional skills, leisure education, following directions/instructions, etc **Activity Examples:** Partner toss, soccer shoot out, different ways to jump rope, etc
	Rockin' Recess	**Population:** Students, ~ 250 students per session **Location:** Playground, sport courts/fields, library **Duration and Frequency:** Weekly, 25-minute sessions **Strategy:** Voluntary structured, inclusive recreational opportunities and support **Purpose:** Self-determination, peer support, physical activity, and school-connectedness **Activity Examples:** Sports, dance, board games, arts and crafts, outdoor recreation. etc
March 2020 - Covid-19 Reponse	**Virtual Videos**	**Population:** All grades (students and families) **Location:** Online - YouTube **Frequency:** Weekly **Strategy:** Access to leisure resources during Covid-19 **Purpose:** Social emotional health, school-connectedness **Activity Examples:** Sensory activities, at home workout, DIY gardening, etc
	Newsletters	**Population:** All grades (students and families) **Location:** Online - school distributed **Frequency:** Weekly **Strategy:** Access to leisure resources during Covid-19 **Purpose:** Social emotional health, school-connectedness **Activity Examples:** Brain teasers, coping strategies, recreation resources

Figure 3. Timeline of programming at Madison No. 1

Goal #2

Integrate individualized programming that enhances innovative initiatives.

To meet the project goal of increasing inclusion through therapeutic and inclusive recreation, we continuously gathered data through daily reports completed by programming staff and regular focus group interviews with school administrators, teachers, and staff. This information informed our evaluation of the efficacy of practices and guided the adaptation of programming to meet the unique needs of students within each school community. The following sections describe the daily report and interviews and highlight key findings that were used to inform and adapt the program throughout the 2019-2020 school year.

Daily Report

After each session, a member of the recreation therapy programming team completed a report based on indicators of the Leisure Ability Model (Figure 5) to inform and improve programming. **Indicators of recreation therapy** included (1) types of activities offered, (2) inclusive strategies utilized, and (3) accommodations used. **Indicators of inclusive leisure education** included the (1) purpose of each session and (2) target growth area based on social-emotional health indicators (problem solving, social skills, empathy, self-efficacy, peer support, social connectedness) and self-determination. **Indicators of inclusive school and community recreation** included reports of level of (1) participation, physical, social, and attitudinal inclusion, and overall student interest. The team also reported challenges to programming and reflective narratives about each session. This information was uploaded weekly and examined as a measure of program fidelity and used in conjunction with information from focus group interviews to adapt and improve programming. Appendix II includes an example of the daily report.
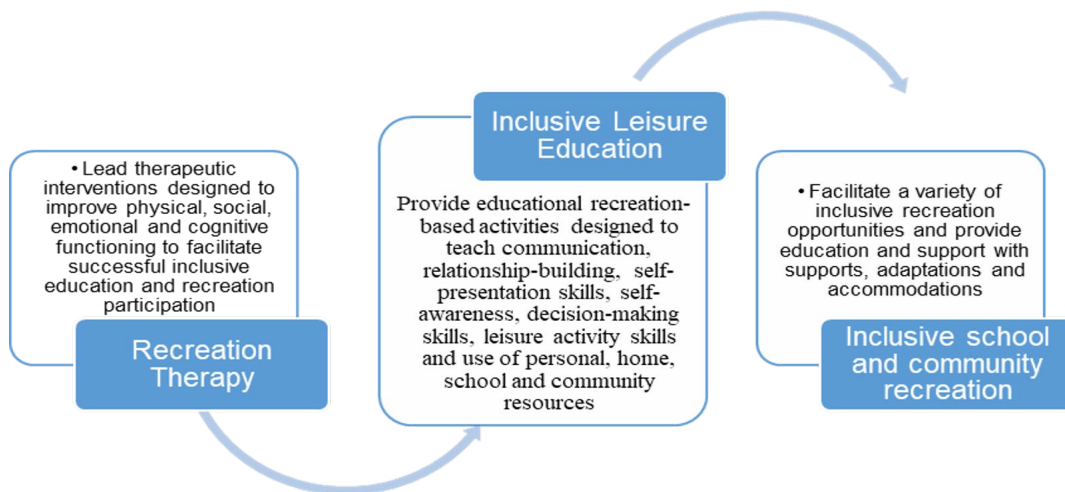
Figure 5. Adapted representation of Leisure Ability Model[8]

Daily Report Indicators of Inclusion

A total of 145 daily reports were completed ($n_{VM} = 73$, $n_M = 72$) throughout the 2019-2020 school year. The majority of sessions at Village Meadows were held in a classroom setting (71%) and sessions at Madison No. 1 were largely held on the playground (69%). The association of each indicator and level of inclusion/interest was considered by school using non-parametric Mann-Whitney U statistics. Significant results are reported below. See Appendix III for a table that displays descriptive information and associations between all programming and indicators of inclusion.

Recreation Therapy Indicators and level of inclusion/interest

1) **Activity Type**

Village Meadows: Playing games was positively associated with student interest. Sessions that did not include physical activity were associated with physical inclusion, attitudinal inclusion, and student interest. Relaxation activities were positively associated with physical inclusion.

Madison No. 1: Playing games was positively associated with physical inclusion. Sessions that did not include physical activity were associated with social inclusion, attitudinal inclusion, and student interest. Relaxation activities were positively associated with student interest.

Conclusion: Playing games and focusing activities on relaxation appealed to students at both schools and was positively associated with physical inclusion. Not focusing on physical activities was associated with physical, social, and attitudinal as well as student interest. Asking students which physical activities they would like to include may better align with inclusion goals and student interest.

2) **Inclusive Strategy**

Village Meadows: Students were more interested and levels of physical inclusion were higher when rules and meanings of activities were not modified and additional supports were not utilized.

Madison No. 1: Levels of physical inclusion were higher when rules and meanings of activities were not modified and additional supports were not utilized. Physical and attitudinal inclusion were higher when one on one support was not used.

Conclusion: No inclusive strategies utilized in the TIRP program were associated with inclusion or student interest. Other types of supports and modifications should be considered during programming.

3) **Accommodation Used**

Village Meadows: *No significant associations.*

Madison No. 1: Reports of physical inclusion were higher when accommodations to presentation styles and response options were utilized.

Conclusion: Utilizing a variety of presentation styles and response options appear to be effective accommodations to promote physical inclusion.

Inclusive Leisure Education and level of inclusion/interest

1) **Purpose of activity**

Village Meadows: Levels of physical inclusion and attitudinal inclusion were significantly higher when social-emotional learning was a focus, when leisure education was a focus, and when physical activity was not a focus.

Madison No. 1: Levels of attitudinal inclusion were higher when SEL was a focus. Levels of physical inclusion were higher when leisure education was not a focus. Levels of student interest were higher when social-emotional learning was a focus but when physical activity was not a focus.

Conclusion: Programming staff reported significantly higher rates of inclusion without attitudinal barriers (e.g., bullying, stereotypes) during lessons that include social and emotional learning. These associations were present during classroom programming at Village Meadows and recess programming at Madison No. 1.

2) Target Growth Area

Village Meadows: Student interest was higher when activities targeted empathy and when they did not target self-determination. Levels of physical and attitudinal inclusion were higher when activities did not target self-determination.

Madison No. 1: Targeting social skills was associated with higher levels of physical inclusion, attitudinal inclusion, and student interest. Overall inclusion was higher when activities did not target problem solving and self-determination. Physical inclusion was greater when lessons did not target self-determination.

Conclusion: The team should consider revising activities that target self-determination as the ones utilized in 2019-2020 did not appear to positively contribute to inclusion. Student interest was greater when activities focused on social skills at Madison and empathy at Village Meadows.

Inclusive School Recreation and level of inclusion/interest

1) Student participation

Village Meadows: Levels of student interest were lower when more 6th grade students did not participate. Madison No. 1: Overall inclusion was higher when more 6th grade students were participating in Rockin' Recess.

Conclusion: Level of participation impacts inclusion and student enjoyment. Seeing students playing at recess contributes to an image of a fun and engaging experience. Offering students with a variety of choices and autonomy to choose what to play is associated with participation.

Daily Report Narratives

The lead recreational therapist and team took detailed notes after each session to share descriptive information about programming and student experiences. These notes were managed and analyzed by the research team to inform programming throughout the project. Eight major themes emerged from the narratives throughout the year, highlighting both successes and opportunities for growth (Figure 6).

Key Insights

Students like **autonomy** and **choice**

Students enjoyed having l**eadership roles**

Students participated more when **instructors were engaged** and used **visual demonstrations**.

Training on lesson content in advance among program staff would help increase student interest and engagement

Students enjoyed learning **new activities** and **new ways to adapt activities**

Idle time was associated with negative student behaviors

Utilizing **different forms of assessments** and **pedagogical strategies** assisted with student engagement

Adaptation to activities should be considered for **every class** to meet each **student's individual needs**

Figure 6. Key insights from daily report narratives

Focus Group Interviews

Information was gathered from individual and focus group interviews with school administration (three at Madison No. 1 and two at Village Meadows). The initial meetings revealed a need for increased inclusive recreation, specifically at recess to promote student engagement, and support schools with integration of inclusive recreation activities throughout the school day. This information informed initial inclusive recreation programming, evaluation, and staff training. At the mid-year follow up meetings, school administration reported more engagement, and inclusion during TIRP, a need to provide additional support for some students, and a need for more collaboration, and instruction to increase benefits of inclusive recreation. The scope and depth of TIRP was adapted to include small group instruction with students, and provide professional development and coaching with school staff.

Key Insights

School Administration
- Schools need assistance supporting staff to develop skills, and confidence to lead inclusive activities designed to support the social, emotional needs of the students
- Schools need consistent inclusive recreation in different spaces and times during the school day
- Schools need to develop strategies to address logistic, and safety concerns during large group inclusive recreation activities

School staff
- School staff need opportunities to collaborate, and support each other to regularly incorporate inclusive activity-based instruction in all classrooms
- School staff need to develop awareness and understanding of the benefits of inclusive recreation
- School staff need support with their efforts to meet the social, and emotional needs of all students during and after school

Students
- Students benefit from a variety of inclusive recreation activities and experiences to make choices and practice social and recreation skills
- Students benefit from support with social and emotional skills in small and large groups
- Students benefit from inclusive recreation activities that are structured, guided, and routine

Goal #3

Conduct comprehensive evaluation of student knowledge and skills learned.

Student surveys

Design & Participants

All 5th and 6th grade students at both schools were invited to participate in an online survey during the fall and spring. A total of 191 students (99 at Village Meadows, 88% response rate and 92 at Madison No. 1, 20% response rate) completed the survey in the fall of 2019. A total of 129 students responded to the spring survey (60 at Village Meadows, 54% response rate and 69 at Madison No. 1, 15% response rate)[*]. Descriptive information related to the participants can be found in Table 3.

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[*] *Note about survey response rates. At Village Meadows, 103 parent permission slips were returned among students (92% of the 5th and 6th grade population). At Madison No. 1, a total of 267 students returned signed permission slips (58% of the 5th and 6thgrade population). The spring survey was administered remotely during the COVID-19 pandemic which contributed to the low response rates at both schools.*

During the spring semester, programming at both schools was modified to include small recreational therapy groups (pullout program at Village Meadows and an additional front-loading class at Madison No. 1). Of the 42 students in the pullout classes at Village Meadows, we identified 11 students who completed the spring survey (representing 26% of all small group participants, 18% of all survey respondents, and 10% of the overall 5th and 6th grade student population). Of the 12 students in the front-loading class at Madison No. 1, only one completed the spring survey (representing 8% of all small group participants, 1% of all survey respondents, and less than 1% of the overall 5th and 6th grade student population). No significant differences were found between small group participants and students who did not participate in small group programming.

Measures

The survey included items from three existing validated scales measuring (1) **school connectedness**,[9] (2) **social and emotional health** (empathy, collaboration, self-efficacy, problem solving, optimism, and peer support),[10] and (3) **self-determination** (enjoyment, perceived competence, perceived choice, and pressure).[11] Survey items were measured on a scale of 1 - 4 where 1 = not at all true and 4 = very true. Any question that was negatively phrased was re-coded so that all responses were measured on the same scale. A full survey instrument is included in Appendix IV.

Data Analysis

Initially, descriptive statistics including mean and standard deviation were calculated for each item on the survey and compared between fall and spring for both schools (Figures 7 – 27). A series of one-way ANOVAs were conducted to measure differences between reported levels of participation and all measures (Appendix V). Next, mean factor scores were calculated for each construct and compared between fall and spring. Independent samples *t* tests were used to examine differences from the fall and spring, between boys and girls (Appendix VI), and between 5th and 6th grade students at both schools (Appendix VII).

Results

Table 3 displays descriptive information about the sample.

Table 3.

Descriptive information about student survey participants ($n = 319$)[1]

	Village Meadows		Madison No. 1	
	Fall ($n = 99$)	Spring ($n = 60$)	Fall ($n = 91$)	Spring ($n = 69$)
	%	%	%	%
Gender[2]				
Girl	46.5%	55.0%	51.6%	65.2%
Boy	49.5%	45.0%	38.5%	29.0%
Grade				
5th	49.5%	43.3%	75.8%	47.8%
6th	50.5%	56.7%	24.2%	52.2%
TIRP Participation[3]				
Never	-	1.7%	-	8.7%
Sometimes	-	30.5%	-	52.2%
About half the time	-	33.9%	-	29.0%
Almost all of the time	-	33.9%	-	10.1%

[1] 33 cases (18 at Village Meadows and 15 at Madison No. 1) were removed due to incomplete data
[2] Excludes 4 participants (5.8%) who did not wish to answer
[3] Reported participation was added to the spring survey so comparisons to fall could not be made

Participation

At Village Meadows, significant differences were found between level of participation during Wow Wednesdays and school connectedness ($F_{SCS}(2,57) = 3.342$, $p = .043$) and competence ($F_{Comp}(2,57) = 4.280$, $p = .019$). Tukey post hoc tests revealed that ratings for both constructs were significantly higher with greater student participation. School connectedness scores were higher when students participated almost all of the time (M = 3.16, s.d. = .56) compared to only sometimes (M = 2.59, s.d. = .83). Students who participated almost all of the time felt more competent during recreation (M = 2.93, s.d. = .47) compared to those who participated about half of the time (M = 2.43, s.d. = .61).

Greater participation in Rockin' Recess at Madison No. 1 was significantly associated with a number of positive outcomes: school connectedness ($F_{SCS}(3,68) = 4.970$, $p = .004$), empathy ($F_E(3,68) = 2.931$, $p = .040$), optimism ($F_O(3,68) = 3.414$, $p = .023$), interest ($F_I(3,68) = 5.211$, p = .003), and competence ($F_{Comp}(3,68) = 5.860$, $p = .001$). Tukey post hoc tests revealed that ratings for each construct were significantly higher when students participated about half of the time or almost all of the time compared to never participating. School connectedness scores were higher when students participated about half of the time (M = 3.39, s.d. = .48, $p <$

.01) or almost all of the time (M = 3.43, s.d. = .45) compared to never participating (M = 2.53, s.d. = .82). Empathy scores were higher when students participated about half of the time (M = 3.50, s.d. = .57) compared to never (M = 2.67, s.d. = 1.19). Levels of optimism were higher when students participated about half of the time (M = 3.04, s.d. = .63) or almost all of the time (M = 3.29, s.d. = .68) compared to never participating (M = 2.29, s.d. = .69). Interest in recreation was higher when students participated about half of the time (M = 3.50, s.d. = .31) or almost all of the time (M = 3.69, s.d. = .45) compared to never participating (M = 2.57, s.d. = .94). Feeling competent during recreation was higher among students who participated about half of the time (M = 3.19, s.d. = .45) or almost all of the time (M = 3.24, s.d. = .55) compared to those who never participated (M = 2.20, s.d. = .68). There was no statistically significant difference between participating about half of the time and almost all of the time.

School Connectedness

In the fall at Village Meadows, girls reported higher levels of school connectedness (t_{86} = 2.418, p = .020). Compared to 6th graders, 5th grade students reported lower levels of school connectedness in both the fall (t_{97} = -2.786, p = .010) and spring (t_{58} = -2.305, p = .025). In the spring at Madison No. 1, 5th grade students reported lower levels of school connectedness (t_{67} = -2.157, p = .035).
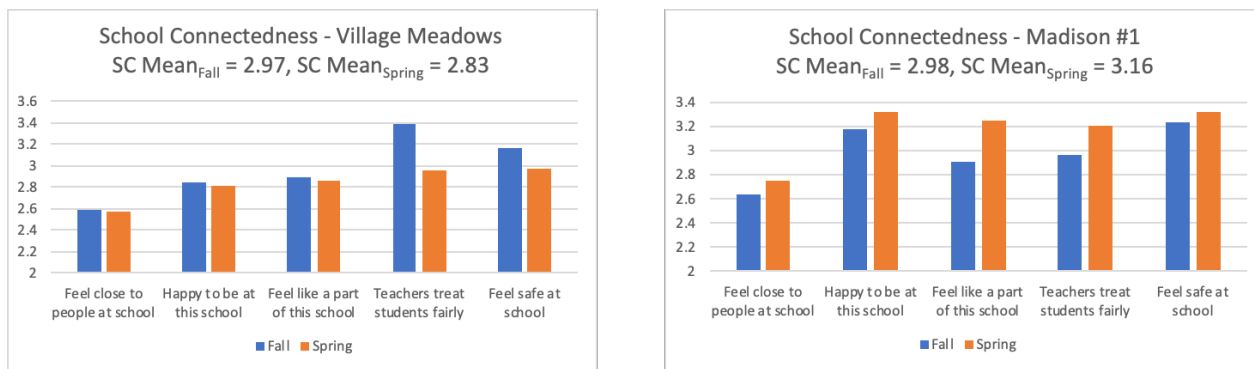
Figures 7 & 8. Mean school connectedness scores at Village Meadows and Madison No. 1

Social and Emotional Health Indicators

Overall levels of social and emotional health among students increased at Madison No. 1 but appear to decrease from fall to spring at Village Meadows. While we assume that students at Village Meadows could benefit from additional programming options to positively impact social and emotional health, we also recognize that a number of contextual factors related to the disruption in students' lives with the COVID-19 pandemic could have also contributed to the decline at Village Meadows. To address and aim to reverse the negative trend at Village Meadows, the program will be expanded in year two to focus on small group classroom-based recreation therapy pullout sessions as well as whole group structured activities during recess.
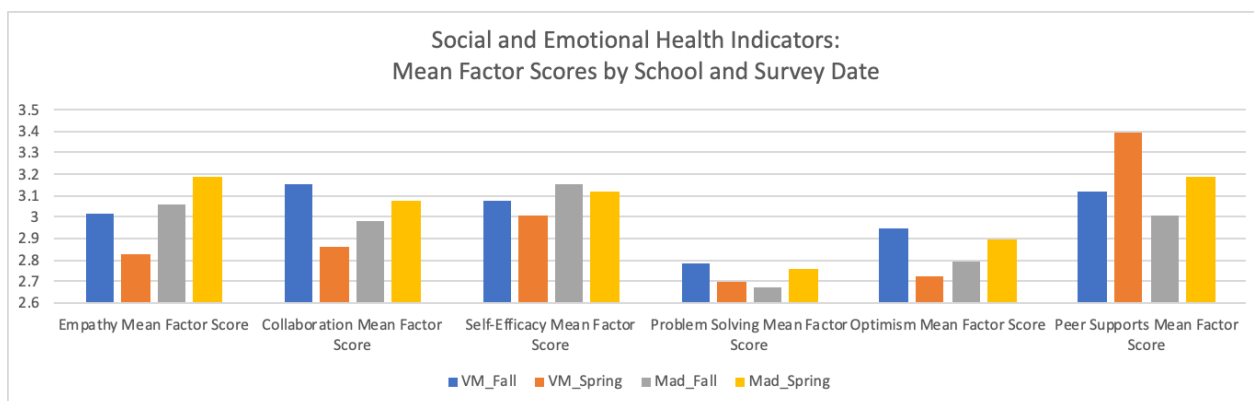
Figure 9. Mean factor scores of social and emotional health indicators by survey date and school

Empathy: At both schools, girls reported higher levels of empathy compared to boys (VM$_{fall}$: t_{93} 3.592, $p < .01$; Mad$_{fall}$: t_{80} 4.107, $p = .001$; (Mad$_{spring}$: t_{63} 2.339, $p = .022$).
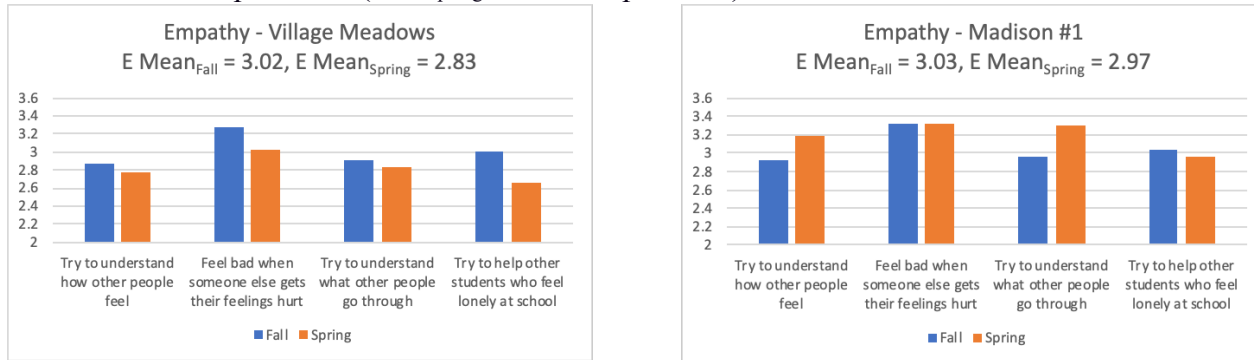
Figures 10 & 11. Mean empathy scores at Village Meadows and Madison No. 1

Collaboration: Student reports of collaboration were significantly lower in the spring compared to the fall among all students at VM ($t_{119} = 2.754$, $p < .001$). Compared to 6th graders, 5th grade students reported lower levels of collaboration in both the fall ($t_{97} = -2.586$, $p = .011$) and spring ($t_{58} = -2.687$, $p = .009$).
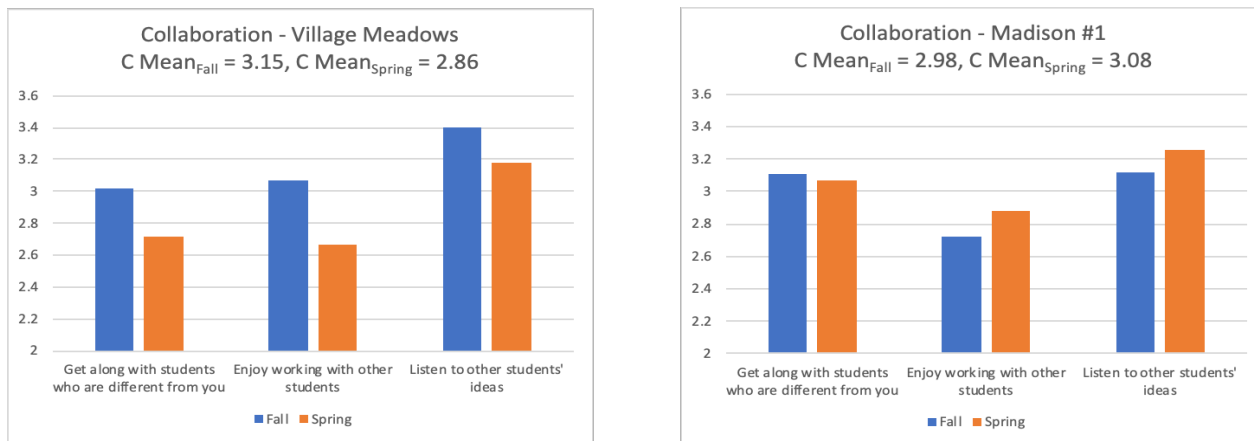
Figures 12 & 13. Mean collaboration scores at Village Meadows and Madison No. 1

Self-Efficacy: No significant differences in reported self-efficacy were found between boys and girls or 5th and 6th grade students at either school.
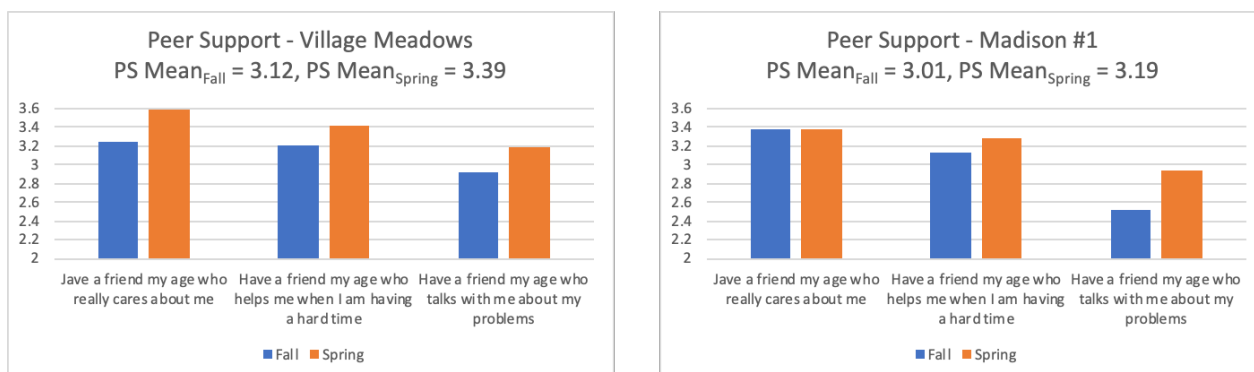
Figures 14 & 15. Mean self-efficacy scores at Village Meadows and Madison No. 1

Problem Solving: During the spring survey at Madison No. 1, girls reported higher levels of problem-solving capability compared to boys (t_{89} 2.636, $p = .010$).
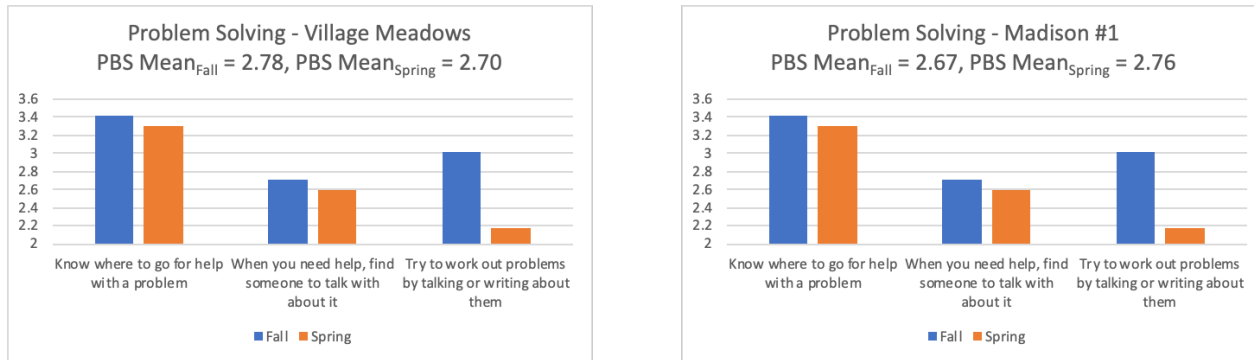
Figures 16 & 17. Mean problem solving scores at Village Meadows and Madison No. 1

Optimism: No significant differences in reported optimism were found between boys and girls or 5th and 6th grade students at either school.
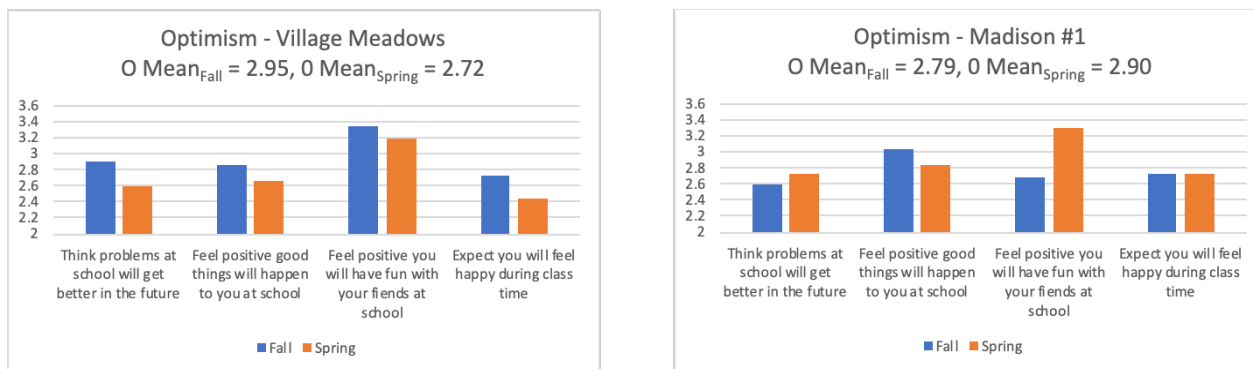
Figures 18 & 19. Mean optimism scores at Village Meadows and Madison No. 1

Peer Support: In the spring at Village Meadows, girls reported higher ($t_{42} = 2.612$, $p = .012$) and 5th grade students reported lower ($t_{43} = -2.753$, $p = .009$) levels of peer support. Girls at Madison No. 1 reported higher levels of peer support compared to boys during the fall ($t_{79} = 2.496$, $p = .015$).
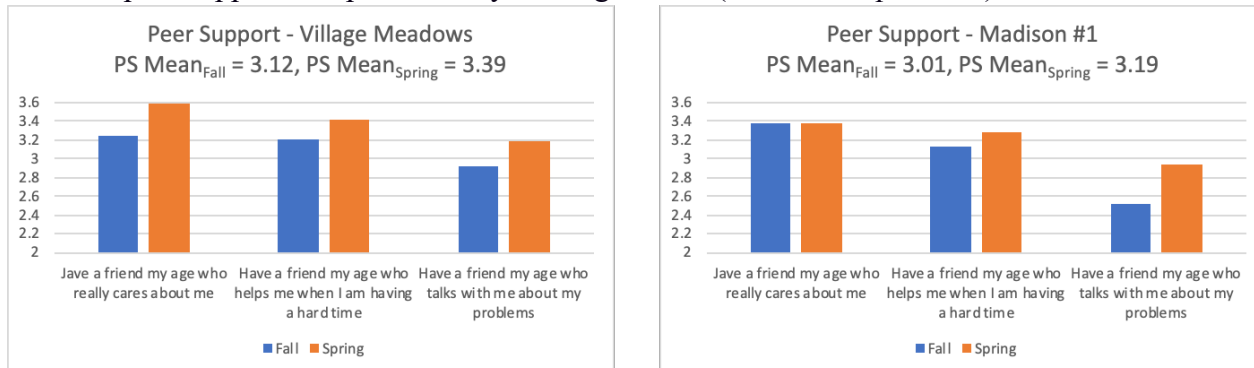
Figures 20 & 21. Mean peer support scores at Village Meadows and Madison No. 1

Self-Determination

Interest: Student reports of interest during recreation were significantly lower in the spring compared to the fall among all students at VM ($t_{156} = 2.882$, $p < .001$). In the spring, 5th grade students reported lower levels of interest ($t_{79} = -3.690$, $p < .001$).
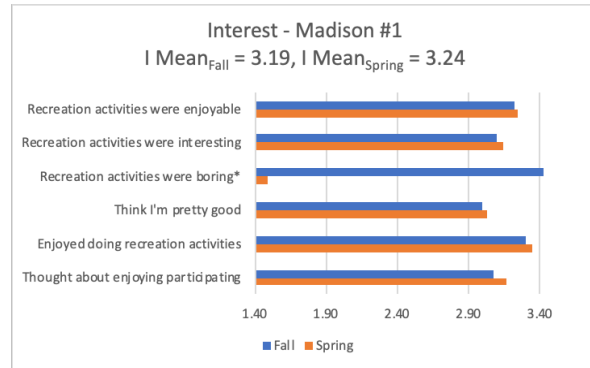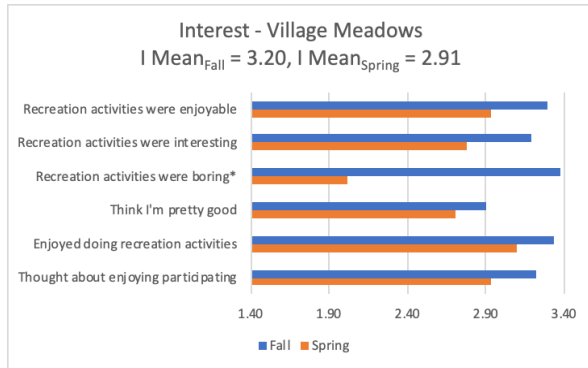
Figures 22 & 23. Mean interest scores at Village Meadows and Madison No. 1

Competence: Student reports of competence during recreation were significantly lower in the spring compared to the fall among all students at VM ($t_{156} = 2.185$, $p < .001$). During the fall at Madison No. 1, girls reported significantly lower levels of competence during recreation compared to boys ($t_{80} = -2.497$, $p = .015$).
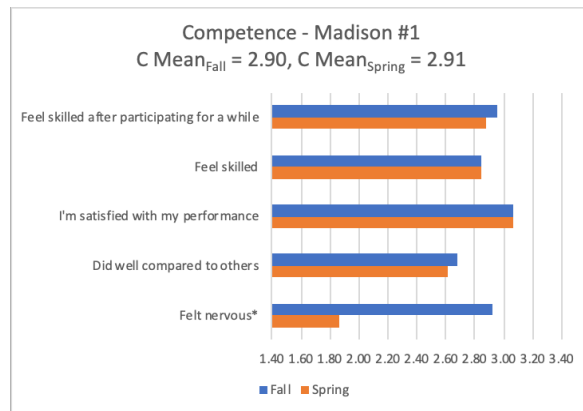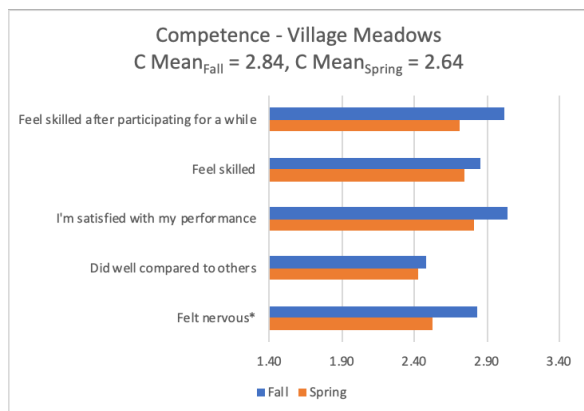
Figures 24 & 25. Mean competence scores at Village Meadows and Madison No. 1

Choice: In the spring at Village Meadows, 5th grade students reported lower levels of choice during recreation ($t_{97} = -2.440$, $p = .017$).
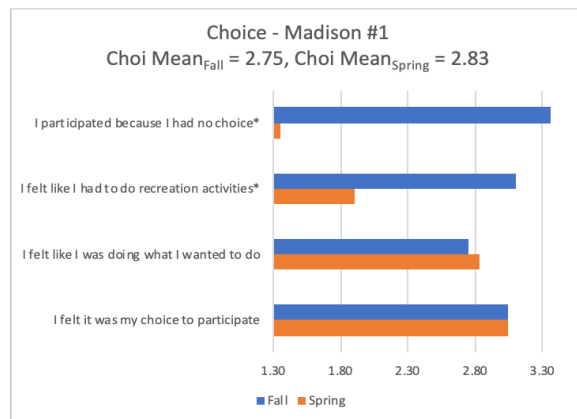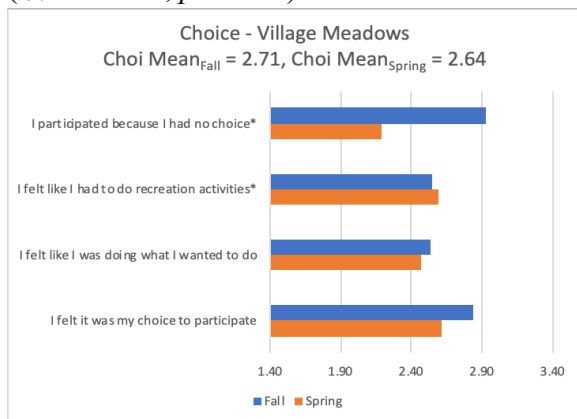
Figures 26 & 27. Mean perceived choice scores at Village Meadows and Madison No. 1

Journal Prompts

Students were asked to respond to a series of journal prompts that aligned with either school connectedness, social and emotional health, or self-determination every other week at both schools (Table 4). A total of 103 students at Village Meadows and 267 students at Madison No. 1 participated. All journals were de-identified by removing the front cover that contained student names and then shared with the research team. The journal prompts were designed to elicit responses to the three overarching research questions:

1. What contributes to **school connectedness**?
2. What contributes to **social-emotional health**?
3. What evidence of **self-determination** do we see among students?

Data Analysis

All journal entries were transcribed verbatim by three members of the research team. Non-responses and those that did not directly answer the prompt were removed resulting in a total of between 71-91 entries per journal prompt at Village Meadows between 182-243 entries per journal prompt at Madison No. 1. Responses to each prompt were aligned with school connectedness, indicators of social and emotional health, and self-determination and then organized by school, grade level, and classroom. The research team included one masters level student, three undergraduate students and one lead researcher; all who analyzed the data using In Vivo, and a set of categories as outlined in Table 4. The team met weekly with the project investigator to discuss coding experiences and to agree upon code inclusion criteria.

Table 4.
Research questions and coding strategies for student journals

RQ1: What contributes to school connectedness?	Coding categories
Prompt #1 - Draw a picture of something you love about your school. Describe what you drew. What is in the picture and why does it make you happy?	• Academic learning • Activity-based learning • Adult relationships • Food & Safety • Peer relationships • Play • Technology

RQ2: What contributes to social-emotional health?

Prompt #2 (social skills) - Imagine that you are playing tag with your friends. During the game, you notice that another student has been watching and looks like she wants to play. What would you do?	• Invitation • Peer support • Inclusion
Prompt #4 (problem-solving) - During free time, your teacher asks you to play a board game with a group of kids at your table. The teacher wants each group to show their best teamwork. One boy has a hard time sitting still and staying in his seat. What do you decide to do?	• Ignore • Separate • Aggressive • Assertive • Ask for help
Prompt #5 (empathy) - Think about a student in your class who is different than you. What makes him/her different? Describe a time you saw him/her do something cool or share something you've learned from that person.	• Differences • Strengths & skills • Openness to learn
Prompt #6 (peer support) - Think about a time that a friend felt sad or angry at school. Write about how you helped your friend to feel better. What did you do?	• Physically comfort • Verbally comfort • Defend • Encourage • Give something • Distract
Prompt #7 (self-efficacy) - Imagine that you see a new student on the playground. What activity do you enjoy that you would like to teach this new friend?	• Confidence teaching • Comfortable talking • Aware of activity

RQ3: What evidence is there of self-determination?

Prompt #3 - A friend picked an activity for the class to play, but you don't know how to play. What do you do?	• Try to play • Ask for help • Decide not to play • Offer alternative game

Key Insights

Research Question #1: What contributes to **school connectedness**?

Students love their school because they enjoy learning through activities, interacting with friends, opportunities for play/recreation, and caring teachers. When students were presented with an opportunity to draw a picture of what they love about their school and explain why it makes them happy, the majority of students depicted and wrote about a recreation activity. Further exploration of their response revealed students are most interested in structured, activity-based learning in a variety of contexts including; hands-on, interactive activities in the classroom, recreation-based classes or structured activities at recess, and participation in clubs led by a teacher. Additionally, students expressed enjoyment with opportunities to play; "when we get to unwind and/or have fun." They frequently reference time during the school day when they were able to interact and engage meaningfully with their friends. They liked their teachers because they "are really nice," "care for us," "push me, and believe in me," and "because they are really fun, and get to do cool things." However, reference to teachers/adult relationships in the journal prompt occurred less often than four other categories: activity-based learning, peer relationships, play, and academic learning.

Research Question #2: What contributes to **social-emotional health**?

To gain an understanding of the factors that contribute to social-emotional health, a series of five journal prompts explored student social skills, problem-solving skills, empathy, peer support, and self-efficacy. There is evidence that 5th and 6th graders are aware of positive approaches to solve problems independently, ask for help when needed, support their friends emotionally, engage with and learn from others, and include peers in activities. Students can benefit from learning additional strategies to navigate problems, becoming more comfortable talking to individuals they do not know, and confidence in their own strengths and talents. A description of the insights gained from each indicator of social-emotional health are outlined below.

Social skills

When presented with a prompt asking students to imagine what they would do if they were playing a game, and observed a peer watching nearby, a majority of students indicated that they would invite a student to play with them, and support them by teaching them how to play the game. Some students indicated they would provide emotional support to a peer looking sad. Responses also frequently included an awareness of social inclusion, recognizing the importance of all students participating in an activity with the group: "If I saw a girl watching me play tag, I would pause the game and ask the group is it is ok to go ask he if she wants to play. I would hate to be left out."

Problem solving

When presented with a prompt asking students to describe what they would do if a peer working in their group would not sit still, a majority of the students chose to be assertive, typically in the form of asking the student to stop and start cooperating and asking the teacher for help. Sample responses include, "tell him nicely to sit in his chair", and "if they keep doing it I will tell the teacher." Some of the responses included learned adaptive strategies they would use to help their peer; "telling them to close their eyes", "ask the teacher for a stress ball," and "take slow breaths".

Empathy

When presented with a prompt asking students to reflect on peers who are different than themselves and what they learned from that person, students showed an awareness of gender, physical and personality differences; "deep voice" "weaker" "stronger". Some students, particularly at Village Meadows, noticed socio-economic and cultural differences and similarities; "XXX he is diffrent from me is he is meixo and I am basnina we both have diffrent legives and he is a diffrent color," and "both mexican -love mexican food -longer hair - cute shoes -cute cloths -black, blue G -dark pink, black J -pretty eyes".

Additionally, students identified difference in interests, such as a favorite subject at school. When asked to identify something cool that the person did, many students talked about a special talent, strength, or unique characteristic of the person. These included "making a lot of shots during basketball," "he had to act something out he did the job better than the whole class", and "teaches me really cool stuff like about the solar system and

different animals". Some students demonstrated the ability to identify that they can learn from people different from themselves including values; "never let the haters get to you," and "not to care what others say," personal skills; "taught me to be better at the game," and new awareness; "people can succeed with disorders".

Peer support

When presented with a prompt asking students to think about how they would help a friend who was feeling sad or angry, a majority of students (62%) stated they would use verbal comfort. Physical comfort, cheering them up, and distracting them were the next most common answer. Only 16% of students responded that they would verbally comfort a friend. A pattern emerged where most of the students imagined their friend being sad instead of angry and how they would comfort them. This may have contributed to the low response rate of defending the friend.

Self-efficacy

When presented with a prompt asking students to describe an activity they would like to teach to a new friend, students identified activities that themselves enjoy, although a majority of the responses did not indicate their confidence in teaching the activity. A few responses indicated that students were not comfortable initiating conversation with someone they did not know, although a majority of the students indicated a willingness to play with the student and get to know them.

Research Question #3: What evidence of **self-determination** do we see among students?

Students are aware of when to ask for help, recognize alternative strategies to gain information, and communicate a willingness to support others. Figures 28 and 29 display the frequency of student responses to the self-determination prompt. When students are presented with a scenario where they do not know how to play an activity, a majority of students indicate they would respond with self-determined behavior by stating they would ask for help, either from their friend, peer, or teacher. The majority (85%) of students at Village Meadows stated they would ask for help and 52% of them said they would try to play the activity. The majority (91) of students at Madison No. 1 indicated that they would ask for help and 45% said they would try to play. Additionally, there was evidence students would use problem-solving skills, including the strategy of watching and observing how other students play the game in an effort to learn themselves. Some students wrote about explaining the rules to other students once they learned themselves.
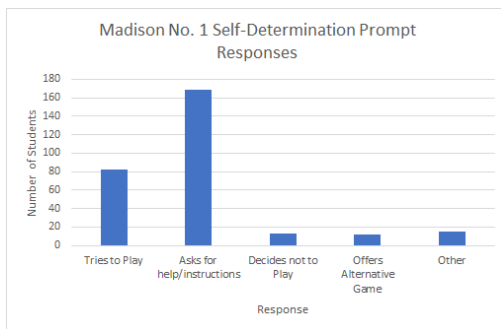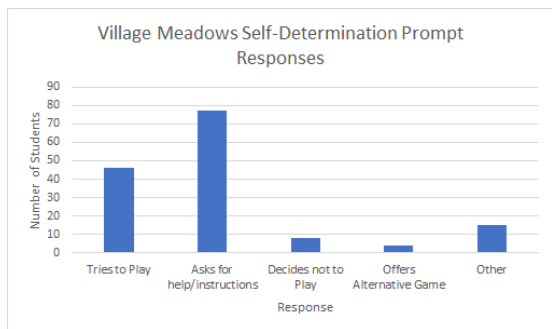
Figures 28 & 29. Frequency of student responses to self-determination prompt at Village Meadows and Madison No. 1

The insights gained from written journals indicate students experience school connectedness, have knowledge of social-emotional health indicators, and have awareness of the growth areas needed to develop self-determination. Despite the different characteristics between the two schools, all students shared a preference to engage in meaningful structured activities with peers and adults. Students in both schools were able to identify positive social skills, problem solving, empathy, peer support and self-efficacy, however, there are varying levels of complexity in their responses between students and between schools. A strong majority of all students know to ask for help from an adult when presented with a challenge, however, there is indication that students need to develop comfort interacting with peers they do not know, and confidence in their ability to share their own knowledge, and skills to help others.

Goal #4

Engage and educate college students and staff in the delivery of TIRP.

Arizona State University practicum course

Students enrolled in a three-credit practicum course at Arizona State University (ASU) supported the delivery of therapeutic and inclusive recreation. The course was specifically designed to prepare learners from a variety of disciplines to plan and facilitate inclusive recreation programming. These undergraduate students majoring in recreational therapy (5), kinesiology (3), nonprofit management (1), child life (1), and exercise and wellness (3) completed service-learning coursework and gained hand-on experience working directly with the Certified Therapeutic Recreation Specialist at the schools. The e-learning coursework covered topics such as relationships and communication, program planning, assessment, protocol development, teamwork, evidence-based practice, cultural competence, ethics, standards of practice, and professional development. Additionally, all students were required to complete the Inclusion Ambassador Training provided by the Inclusion Recreation Resource Center. Students also participated in interactive training on the Leisure Ability Model, inclusive recreation techniques, program planning and evaluation, leadership style and techniques, disability awareness, leisure modalities and interventions, social emotional health, and documentation and debrief.

Research Design

Throughout the practicum course, students completed 13 written assignments, 14 reflections on their learning experiences, co-created a total of 38 protocols with a classmate (20 in fall 2019, and 18 in spring 2020), facilitated 101 purposeful activities with 5th and 6th graders (50 in the fall 2019, and 51 in the spring 2020), created a total of 16 virtual activities through YouTube videos, and cooperatively developed seven newsletters.

Data Analysis

All reflections and written assignments from the 13 students were collected, de-identified, and compiled for analysis. The documents were uploaded into MAXQDA, a software program used for qualitative and mixed methods analysis. The analysis aimed to explore the knowledge, abilities, and attitudes needed to lead inclusive recreation activities and aimed to answer the following research questions:

1. How do students learn to lead inclusive recreation?
2. What skills do they need to effectively facilitate inclusive activities?
3. What attitudes toward inclusive recreation develop during a service-learning course?

The analysis included two cycles of coding with a collaborative team. The reviewers explored the questions outlined in Table 5 during the first cycle of coding, and themes emerged.

Table 5.
Cycle One Guiding Questions

General questions

How do the students write about, and characterize what is going on?
What assumptions are they making?
What do I see going on here?
What did I learn from these notes?
How is what is going on similar to or different from other information in the project?
What surprised me? What intrigued me? What disturbed me?

Analytic memo prompts

How do I personally relate to the participants and/or phenomenon?
What has influenced our code choices and their operational definitions?
What emergent patterns, categories, themes, concepts, and assertions are we seeing?
Do we see possible networks (links, connections, overlaps, flows) among the codes, patterns, categories, themes, concepts, and assertions?
Are we seeing emergent or related existing theories?
What are the tentative answers to the research questions?

A clearly defined coding system was established in the second cycle and two reviewers coded separately and alternatively using the themes outlined in Table 6. The team held discussions between each coding period to come to an agreement with the content associated with each code.

Table 6.
College Student's Assignment Coding System

Code

Adapting rules and methods
Applied knowledge and strengths
Attitudes and beliefs
Collaboration and communication
Creating opportunities and being patient
Encouragement and redirection
Teaching and instruction
Training and education
Planning and leading
Understanding and rapport
Use of adapted equipment and supplies

Key Insights

Research Question 1: How do students learn to lead inclusive recreation?
Students learn to lead inclusive recreation activities by:
- cooperatively planning and facilitating a variety of purposeful recreation activities
- collaborating and communicating with team members for optimal delivery
- engaging in a learning process of instruction, practice, feedback, reflection
- interacting directly with youth to develop rapport and understanding
- applying knowledge and skills from diverse perspectives, and sharing strengths

Research Question 2: What skills do they need to effectively facilitate inclusive activities?
Students learn to facilitate inclusive activities by:

- planning and creating opportunities for engagement & being patient
- communicating clear instructions to individuals and groups
- encouraging participation and redirecting behavior
- adapting rules of an activity and methods of engagement as needed
- selecting and using adapted equipment and supplies as needed

Research Question 3: What attitudes toward inclusive recreation develop during a service-learning course? Students who participate in an inclusive recreation service-learning course develop:

- new perspectives of the potential of students with disabilities and the barriers they experience
- confidence in their ability to facilitate inclusive activities
- awareness of how to use individual and team strengths to facilitate inclusive activities
- awareness of how the principles of therapeutic recreation can be applied in a variety of settings to facilitate inclusion

The insights gained from the pilot inclusive recreation service-learning course indicate an alignment with interprofessional education emphasizing Core Competencies for Collaborative Practice: 1) values/ethics, 2) roles/ responsibilities, 3) communication, and 4) teams and teamwork.[12] Additionally, learners develop knowledge, abilities and attitudes toward inclusive recreation when the course includes; e-learning modules, written assignments, weekly reflections, cooperative protocol development, consistent dedicated time for team collaboration, and immediate feedback during program delivery.

Trainings with School Staff

Initially, in August 2019, staff at both schools were oriented to therapeutic and inclusive recreation, including an overview of inclusive recreation, recreational therapy, the Leisure Ability Model, and an introduction to the Daring Adventures Healthy Day program. At Madison No. 1, an initial orientation and training video was distributed to teachers, paraprofessionals, and administrators. At Village Meadows, three teachers, two administrators, and one social worker participated in the in-person orientation. In addition, staff from both schools (11 at Madison No. 1, and 10 at Village Meadows) were invited to complete a free three-hour online Inclusion Ambassador Training provided by the Inclusion Recreation Resource Center covering disability awareness, physical inclusion, social inclusion and measuring inclusivity. The online training was completed by one administrator at Village Meadows.

> "It was cool that I was able to discuss and transfer ideas between the supervisor as well as the other leader for this week's activities. I felt more at ease and was able to take the ideas and suggestions that they gave me to take my activity idea to the next level. It was nice that I was able to exchange ideas in a healthy and professional manner."
>
> - ASU Student

Next, mid-year school administration meetings were held with administrators at both schools and revealed a need for additional staff training. Both schools were offered training with a consultant from Platform To Play, an organization that provides professional development and coaching to create awareness and competency to integrate inclusive play and recreation opportunities. In January, 2020, Platform To Play facilitated a 1.25 hour training with 34 school staff (27 teachers, 5 paraprofessionals, two administrators) designed to challenge the professionals to step outside their comfort zone and into the shoes of their students to enhance their own awareness of self and others in order to navigate their dynamic roles as professionals. The interactive training, facilitated by a Certified Therapeutic Recreation Specialist, included recreation-based activities, debrief discussions to reflect on inclusive practices related to student behaviors, student and staff roles across school environments, behavior as a form of communication, considerations across diverse learning profiles, and communication strategies. The purpose of the professional development was for school staff to change their lens to match the perspective of the student, think beyond the academic needs of a curriculum, and reflect on the social emotional needs of the students. Follow up coaching was provided with three 5th and 6th grade teachers in March 2020 to discuss strategies for further support to address

> "I just want them to be good people."
>
> -teacher at Madison No. 1

the specific needs of their students. The teachers displayed extensive passion and dedication to the success of the students' development in their lives. They expressed their individual purpose for becoming teachers and the desire to guide students through a positive learning process with emphasis on accomplishments, rather than a focus on learning everything. Plans for ongoing coaching did not occur due to school closures as a result of COVID-19.

Key Insights
- Professional development is needed for school staff to develop 1) understanding of the value of inclusive recreation, 2) skills to consistently facilitate, and adapt the delivery of inclusive activities to address individual needs of all students, and 3) knowledge of individual and team roles, and responsibilities to inclusively support all students with social, emotional, and physical health while enhancing academic performance.
- Schools need time to plan in advance to integrate training experiences, and coaching strategies for interprofessional school staff to collaboratively support each other as they learn, plan, and evaluate inclusive recreation activities.

Goal #5

Conduct a landscape analysis to review 1) existing therapeutic recreation initiatives, 2) current federal and state policies, 3) the impact of inclusive recreation programs and best practices on social and emotional health, and 4) educational trends in training, and 5) funding resources for inclusive recreation programming.

Research Design

A landscape analysis is an evaluation method of examining what policies and programs exist in a topic area (Figure 30). To answer these questions, data was gathered through web-related search, a literature search of peer-reviewed articles, and interviews with key stakeholders. Data were summarized to examine trends in evidence-based practices and gaps in service.
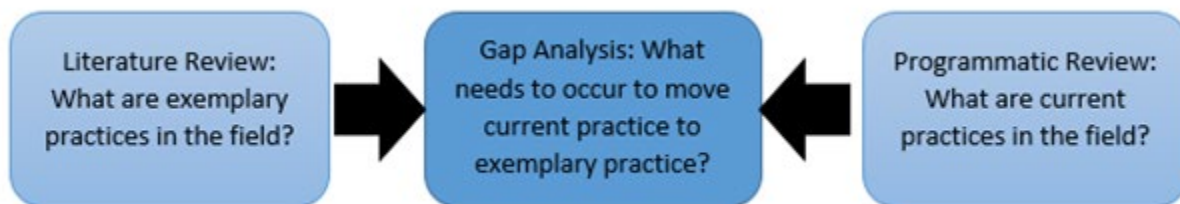
Figure 30. Landscape Analysis

To examine inclusive therapeutic recreation programs, Google web-site searches using the keywords "therapeutic recreation" "inclusion" and "youth" in the United States were used. This produced over one million results. To refine the list, programs that were focused on school aged children, and had a comprehensive description of the program online were initially included. The list was compiled through an extensive internet search and from community contacts of inclusive therapeutic recreation programs associated with this project (e.g., Daring Adventures, Special Olympics, and the ADDPC website). The purpose of creating a comprehensive list was to identify commonalities among the programs and gaps in service. All of the programs included had a website with information about the program ranging from minimal to detailed. Further, in order to obtain a more complete picture, organizations were contacted by

phone and via email. It is important to note that, because of the global health crisis as a result of the COVID-19 pandemic, most in-person programs had to abruptly cancel their remaining activities and events planned for the spring.

For the literature review sections, we focused specifically on research studies that included individuals with disabilities or professionals who served this group. The selected articles included in the literature review were collected through an extensive internet search as well as with the use of Arizona State University's library database using search terms: inclusion, therapeutic recreation, and school. Articles selected for inclusion provided sophisticated research methods and statistical results, contributed thought-provoking conclusions, and proposed meaningful changes within the field of inclusive therapeutic recreation.

Goals

The goals of the landscape analysis were to examine the following:

1. A review of existing adaptive, inclusive, and/or therapeutic recreation initiatives and programs to understand the trends and gaps in existing programs, and characteristics of exemplary programs,
2. Federal and state laws and policies regarding delivery of therapeutic recreation services,
3. Exemplary program components of adaptive, inclusive and/or therapeutic recreation that are associated with positive social-emotional outcomes,
4. Educational trends in teacher preparation programs, in-service professional development, and therapeutic recreation training programs, and
5. Funding resources for adaptive, inclusive therapeutic recreation programs.

5.1. Review of Existing Adaptive, Inclusive, and/or Therapeutic Recreation Initiatives and Programs

Trends and Gaps in Existing Programs

A review of existing programs found that therapeutic recreation services primarily focused on physical activities, arts and creative activities, games, music, sports, and life skills. Program services are offered during school hours, after-school, and in camp settings. Notable gaps in therapeutic and inclusive recreation programs in the United States and across the state of Arizona include:

- The majority of programs were held outside of school hours with fewer programs held during school hours.
- Most programs were offered in urban and suburban communities. Rural areas lacked inclusive recreation programs.
- Programs tended to be segregated by focusing on youth with specific needs rather than inclusive of all abilities. The programs sometimes had limited or no capacity for youth with behavioral issues.
- In Arizona, most programs were English language based and with limited presence in rural areas, possibly limiting participation of dual-language families and participation of Native American groups on reservations.
- Informational and experiential lack of understanding within educational communities (staff) regarding the existence of and need for socio-behavioral supports.

5.2 Federal and State Laws Regarding Therapeutic Recreation

Review of the current federal laws, specifically the Individuals with Disabilities Education Act (IDEA) requires a "free appropriate public education to eligible children with disabilities".[13] IDEA pertains to school time activities unless the school funds extracurricular and afterschool programs for children, then those services are included as well. Students eligible for special education services must go through assessment for identification of a disability, goals are then developed and services provided to meet those goals are reimbursable through state special education funding provided through a federal IDEA block grant. In addition, the Arizona Health Care Cost Containment System (AHCCCS), the state Medicaid agency will reimburse for medically necessary services for children deemed eligible by Medicaid and IDEA.[14]

According to Section 300.34(c) (11) of IDEA legislation, therapeutic recreation is identified as a related service to assist a student with a disability to benefit from special education. In Arizona, some related services are both a right under the law as well as a reimbursable expense. However, lack of awareness of therapeutic recreation as resource exists with special education administrators, teachers, general education teachers, and families creating a gap between services available and services offered. Arizona school districts are required by law to provide related services identified by a student's IEP team and written into their IEP. Therapeutic recreation is a related service available to students to meet measurable functional goals as a part of their IPE to meet needs that result from the disability and other educational needs. Schools have discretion to make choices on how to optimally use funds.

However, Arizona schools, to the extent possible, use the Arizona Health Care Cost Containment System (AHCCCS) School Based Claiming Program, to cover the cost of related services rendered by Qualified Providers. Currently, Chapter 700 of the AHCCCS Medical Policy describes the following covered services, a portion of IDEA related services; audiological, behavioral health, nursing, physical therapy, occupational therapy, speech therapy, and transportation.[14] The lack of specific inclusion of recreational therapy as a covered service by a Qualified Provider in AHCCCS prevents families, and schools who want to use recreational therapy to meet functional and academic goals, as identified under an IEP.

Currently, the Arizona Department of Education administers an Empowerment Scholarship Account (ESA) that provides a full range of educational services, including recreational therapy, for qualified Arizona students who opt out of the public-school system. This allows for funding earmarked for public school services to be transferred to families to purchase educational services for their children from private entities.[15] Families using ESA funding to purchase special education services through the private sector for their child have greater flexibility in choosing services from licensed or accredited practitioners and providers. There are a full range of therapies using recreation modalities including; art, aquatic, equine, music, play, and recreational therapy provided by qualified professionals. A Certified Therapeutic Recreation Specialist (CTRS), nationally certified by the National Council of Therapeutic Recreation is the qualified provider of recreational therapy services. Families utilizing ESA funding are given greater options to a broader range of quality services than families with special education students in the public-school system; creating a gap in access to services.

Whereas, Arizona recognizes competencies and standards for quality physical education (PE), the state does not specify any amount of required PE for elementary and middle school students. However, Arizona is one of only nine states requiring recess be incorporated into the school day for elementary school students. While the state mandates schools provide time for students "to engage in physical activity or social interaction with other pupils",[16] limited resources are currently available to support students during recess. Programming

such as TIRP can support schools to fulfill this recess mandate by providing safe and inclusive opportunities for play and recreation during free time.

Outside of publicly funded school-based educational opportunities, the American with Disabilities Act (ADA) is designed to ensure access of opportunities to people with special needs.[17] Inclusive recreational programs in and out of school need to consider how to create spaces accessible to all abilities (Inclusive Recreation Resource Center, 2018). Further, these programs need to provide meaningful opportunities through both physical and social inclusion.

5. 3 Literature Review: Characteristics of Exemplary Adaptive, Inclusive Therapeutic Recreation Programs Associated with Social-Emotional Outcomes

The literature review details how inclusive education promotes social-emotional outcomes for children with disabilities and subsequently impacts academic achievement.[18–20] While social-emotional programming has been found to be effective in many areas of youth development, there remains an informational and experiential lack of understanding within educational communities regarding the existence of and need for these types of socio-behavioral supports.[21] The literature review revealed that successful programs promoting inclusion and social-emotional learning (SEL) shared the following components (see Appendix VIII for a detailed review with references):

- Social-emotional learning embedded in all activities, not a stand-alone curriculum;
- Extension of activities in out of class time that included recess, lunch, and other transitions between classes;
- Continuous evidence-based professional development and coaching of school staff throughout the program to ensure continuity of practice;
- SEL practices that were sequenced, active, focused and explicit (SAFE);
- Person-first and abilities based-approach in providing services that valued the individual participants assets; and
- A Universal Design for Learning (UDL) framework to allow equitable engagement of all people with all abilities.
- Community recognition and understanding of the importance of social-emotional learning and inclusive practices within schools and districts.

5.4 Literature Review: Educational Trends in Teacher Preparation, Professional Development, and Therapeutic Recreation Training

The literature review (see Appendix IX for a detailed report) indicated that while many in-service teachers reported a general understanding of inclusive practice and understood its importance, teachers reported that their college preparation left them feeling unprepared and lacking the specific training necessary to provide an inclusive environment for students when they became the classroom teacher of record. [22–24] While only 2% of Certified Therapeutic Recreation Therapists (CTRS) work in school settings, [25] they (along with colleagues who worked in community settings) reported that they would also benefit from additional training in inclusive programming.[18,26] Based on the findings of current practice, recommendations for educational practices in inclusive therapeutic recreation include:

- Revise teacher and administrator evaluation instruments to include the appropriate use of inclusive practices.
- Regularly integrate components of SEL training into teacher professional development activities to support the importance of socio-emotional learning in school achievement.

- Provide teachers with best practice strategies to successfully embed social emotional strategies into academics, classroom management, and student interactions.
- Include SEL goals with academic goals when rating schools on success metrics.
- Provide evidence-based staff professional development training; interprofessional collaboration will provide a holistic approach to meeting the goals of a child's IEP. Evidence-based practices used in successful professional learning communities consistently demonstrate increased student achievement.
- Consider including SEL goals and school culture perceptions in addition to standardized testing/academic goals as measures of school success.

5.5 Funding Resources for Adaptive, Inclusive Therapeutic Recreation

Arizona has cut over $1 billion from education funding every year since 2008 and is ranked last or near the bottom in per-student funding and teacher salaries.[27] Per-pupil spending in Arizona's public schools was third-lowest in the nation in 2018, hampering the state's efforts in recent years to improve education funding.[28] Limited funding sources are available to support special education services. Therapeutic recreation services can be considered *'related services'* if directly aligned to a learning goal to be a component of a student's Individualized Education Program (IEP). Below are some school-based and non-school based funding sources that might be used for expenses incurred by implementing activities related to a child's IEP and/or non-special education students:

- Special Education Funding through IDEA block grants
- Every Student Succeeds Act (ESSA) through federal block grants
- Title VII Impact Aid: Federal funding for schools serving youth living on tribal land and military bases
- AZ Coordinated Early Intervening Services (CEIS)
- Arizona Health Care Cost Containment System (AHCCCS), Arizona's Medicaid agency
- Arizona Proposition 301 Classroom Site Fund
- Arizona Public School Tax Credits for supporting extracurricular activities
- Funding from Charitable Foundations
- Empowerment Scholarship Account (ESA): Alternative educational services available to qualified Arizona students who opt out of the public school system

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LEARNING THROUGH RECREATION

WE ARE HERE FOR YOU!

Staying active at home can feel new and perhaps awkward. Finding a routine that works for you is ideal, and we are here to help. .The members from Arizona State University and Daring Adventures have worked together to create the Therapeutic Inclusion Recreation Program (TIRP). This program helps facilitate fun and creative activities that students can enjoy in the comfort of their own home. It is our goal to help educate and offer services that will help develop your households physical fitness habits. Within this weeks newsletter we will try to provide you and your family activities to build the excitement, creativity, and playful curiosity to stay active. This weeks news letter aims to assist in developing your physical activity plan---supporting your immune system and coping with stress & anxiety.

Keep Calm and Stay Active

CLICK THE BUTTON BELOW TO JOIN TIRP FOR ONLINE FUN:

Healthy Day TV

#Self Care

ACTIVITIES FOR ALL:

- **Commercial break**: Challenge each other to see who can perform the most amount of push-ups, jumping jacks, or burpees during commercial breaks or between episodes when you're watching TV.

- **Potato Drop game:** Have all family members place a potato between their knees and race to a finish line to drop it into a designated bowl or bucket. If the potato is dropped, or if your hands touch it, you have to start over.

- **Cultivating mindset:** Our emotions are important during this time. Answer these 3 questions to help yourself stay active:
  - Why do you want to be active? (physical health, mental health, routine, fun, other)
  - Who are you most active with?
  - Do you enjoy exercising indoors or outdoors and why?

Online Classes
FREE FUN FOR FAMILIES

corepower YOGA

pf

the Y

Click any of the three images for a workout on us!

Send a picture doing your favorite yoga pose to **sarah@daring-adventures.org**

VOLUME 4   The Therapeutic Inclusion Recreation Program's newsletter.   MAY 2020

38

TIRP Daily School Report

Person completing this report: Date:

Start Time: End Time:

School:

Location:

- ☐ Classroom
- ☐ Gym
- ☐ Playground
- ☐ Auditorium
- ☐ Other: _____

Attendance:
Number of active participants: 5th Grade : _____
Number of inactive/observing participants: 5th Grade : _____
Number of active participants: 6th Grade : _____
Number of inactive/observing participants: 6th Grade : _____
Number of teachers : _____
Number of recreational therapists : _____
Number of classroom aides : _____
Number of college students : _____
Total : _____

Purpose of Activity (select all that apply)

- ☐ Social Emotional
- ☐ Educational Skill Development
- ☐ Leisure Education (awareness, skill, resources)
- ☐ Physical Activity

What growth areas were targeted with the activity/intervention?

- ☐ Problem Solving
- ☐ Social Skills
- ☐ Empathy
- ☐ Self-Efficacy
- ☐ Peer Support
- ☐ School Connectedness
- ☐ Self Determination

Type of Therapeutic and Inclusive Activity

- ☐ Art
- ☐ Dance/Movement
- ☐ Drama
- ☐ Games
- ☐ Music
- ☐ Physical Activity
- ☐ Self-Care/Relaxation

What type of inclusive strategies were actively used to facilitate the activity?

- ☐ Equipment/Supplies _____
- ☐ Rules and Methods _____
- ☐ Instructional Aids _____
- ☐ Supports (teacher, aides, students, Daring Adventures staff) _____
- ☐ How many times was one on one support needed? _____

Select any of the individualized accommodations used and the number of students who utilized this technique

	Accommodation Used		Number of Students	Describe accommodation
	Yes	No	Number	Comments
Presentation	○	○		
Response	○	○		
Setting	○	○		
Timing and Scheduling	○	○		

What behavioral challenges were observed? (select all that apply)

- ☐ Behavior Management: Individual
- ☐ Behavior Management: Group
- ☐ Limited Independent participation
- ☐ Staff knowledge

Notes: Plans to improve or additional comments

Please rate the level of physical inclusion:

1	2	3	4	5
Space not accessible/available equipment not physically inclusive and did not meet the needs of the students.	Many physical barriers in space (i.e: desk/table height, stairs, no braille) and few adaptations/assistive devices.	Some physical barriers. Assistive, supportive and adaptive devices available	Few to no physical barriers and most needs were accommodated	No physical barriers and all individual needs were met.

	0	1	2	3	4	5
Level of Physical Inclusion						
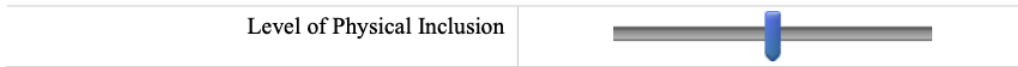
Please rate the level of social inclusion:

3	4	5	2	1
About half of students were socially engaged w/peers;groups' social needs met about 50% of the time.	Most students socially engaged w/peers;most/all of their social needs were met 80% of the times.	All students socially engaged;social needs met 100% of the time.	Some students socially engaged w/peers;few social supports provided.	Little to no students engaged w/peers; no social supports Many students self-isolated

	0	1	2	3	4	5
Level of Social Inclusion						

Please rate the level of attitudinal inclusion:

	1	2	3	4	5
	Little to no students engaged and enjoy the activity due to attitudinal barriers (pity, hero worship, ignorance, denial, fear, stereotypes, inferiority, etc)	Some students engaged in the activity there was many interruptions due to differences, bullying, stereotyping and perceptions.	Students engaged in the activity about 50% of the time without disruptions due to attitudes, stereotypes, bullying, or perceptions.	Most students engaged in activity 80% of the time without disruptions due to attitudes, stereotypes, bullying, or perceptions.	All students engaged in activity together and there were no disruptions based on attitudes, beliefs or perceptions.

	0	1	2	3	4	5
Level of Attitudinal Inclusion						
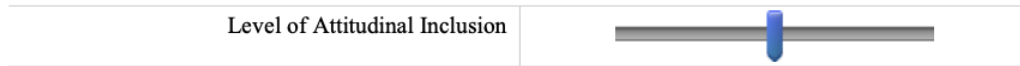
Please rate the level of overall inclusion:

	1	2	3	4	5
	Little to no students engaged in the activity, and requirements and support did not allow for needs to be met.	Some students engaged in the activity and some individualized needs were met.	About half of the students engaged in activity and needs met 50% of the time.	Most students engaged in activity and most/all of needs met 80% of the times.	All students engaged in activity and all of needs met 100% of the time.

	0	1	2	3	4	5
Level of overall inclusion						
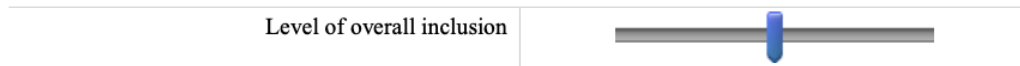
Please rate the level of student interest:

2	**1**	**3**	**4**	**5**
About 25% of the students were engaged in the activity and appeared to be having fun, few disruptions.	Few students were engaged in the activity and most of the students did not appear to be having fun.	About 50% of the students were engaged in activity and appeared to be having fun; there were few to none disruptions.	Most of the students were engaged in the activity and appeared to be having fun approx. 75% of the time.	All/Most students were engaged in the activity and appeared to be having fun 90-100% of the time.

	0	1	2	3	4	5
Student Interest						

Additional Comments and/or Notes:

Appendix III.
Associations between daily report indicators and student interest and inclusion

Descriptive information and associations between indicators of inclusion and student interest during the 2019-2020 school year ($n = 143$)

		Village Meadows ($n = 71$)							Madison #1 ($n = 72$)						
		Mean/Count	Std. Dev.	Association with Physical Inclusion	Association with Social Inclusion	Association with Additudinal Inclusion	Association with Overall Inclusion	Association with Student Interest	Mean/Count	Std. Dev.	Association with Physical Inclusion	Association with Social Inclusion	Association with Additudinal Inclusion	Association with Overall Inclusion	Association with Student Interest
Recreation Therapy	**Activity Type**														
	Art[1]	28.8%	-	-	-	-	-	-	16.7%	-	-	-	-	-	[green]
	Dance[1]	0.0%	-	N/A	N/A	N/A	N/A	N/A	13.9%	-	-	-	-	-	-
	Drama/Movement[1]	5.5%	-	-	-	-	-	-	0.0%	-	N/A	N/A	N/A	N/A	N/A
	Games[1]	82.2%	-	-	-	-	-	[green]	77.8%	-	[green]	-	-	-	-
	Physical Activity[1]	26.0%	-	[red]		[red]		[red]	83.8%	-	-	[red]	[red]	[red]	[red]
	Self-Care/Relaxation[1]	13.7%	-	[green]	-	-	-	-	11.1%	-	-	-	-	-	[green]
	Inclusive Strategy														
	Equipment	100.0%	-	-	-	-	-	-	0.0%	-	N/A	N/A	N/A	N/A	N/A
	Rules & Meanings	33.0%	-	[red]	-	-	-	[green]	72.0%	-	[red]	-	-	-	-
	Instructional aids	100.0%	-	-	-	-	-	-	94.0%	-	-	-	-	-	-
	Supports	55.0%	-	[red]	-	-	-	[green]	86.0%	-	[red]	-	-	-	-
	One on one support	41.0%	-	[red]	-	[red]	-	-	60.0%	-	[red]	-	-	-	-
	Accommodation Used														
	Presentation	40.3%	-	-	-	-	-	-	63.2%	-	[green]	-	-	-	-
	Response	19.4%	-	-	-	-	-	-	54.5%	-	[green]	-	-	-	-
	Setting	18.1%	-	-	-	-	-	-	35.3%	-	-	-	-	-	-
	Timing and Scheduling	29.2%	-	-	-	-	-	-	33.8%	-	-	-	-	-	-
Inclusive Recreation	**Purpose of Activity**														
	Social Emotional[1]	63%		[green]	-	[green]	-	-	27%		-	-	[green]	-	[green]
	Educational Skill Development[1]	15%		-	-	-	-	-	3%		-	-	-	-	-
	Leisure Education (awareness, skill, resources)[1]	14%		[green]	-	[green]	-	-	54%		[green]	-	-	-	-
	Physical Activity[1]	22%		[red]	-	[red]	-	-	63%		-	-	-	-	[red]
	Target Growth Area														
	Problem solving[1]	37%	-	-	-	-	-	-	17%	-	-	-	-	[green]	-
	Social skills[1]	41%	-	-	-	-	-	-	61%	-	[green]	-	[green]	-	[green]
	Empathy[1]	41%	-	-	-	-	-	[green]	6%	-	-	-	-	-	-
	Self-efficacy[1]	25%	-	-	-	-	-	-	50%	-	-	-	-	-	-
	Peer support[1]	45%	-	-	-	-	-	-	72%	-	-	-	-	-	-
	Social connectedness[1]	22%	-	-	-	-	-	-	22%	-	-	-	-	-	-
	Self determination[1]	22%	-	[red]	-	[red]	-	[red]	72%	-	[red]	-	-	[red]	-
	Location														
	Classroom	71%	-	[green]	-	[green]	-	-	1%	-	-	-	-	-	-
	Playground	19%	-	-	-	[red]	-	[red]	69%	-	-	-	-	[red]	[red]
	Participation														
	Active participants: 5th grade[2]	13.8	14.3	-	-	-	-	-	31.5	34.1	-	-	-	-	-
	Inactive/observing participants: 5th grade[2]	0.3	1.2	-	-	-	-	-	6.4	7.1	-	-	-	-	-
	Active participants: 6th grade[2]	14.1	15.3	-	-	-	-	-	24.9	29.7	-	-	-	[green]	-
	Inactive/observing participants: 6th grade[2]	0.5	1.8	-	-	-	-	[red]	5.0	6.9	-	-	-	-	-
Outcomes	Physical Inclusion[3]	4.6	0.7	-	-	-	-	-	4.3	-	-	-	-	-	-
	Social Inclusion[3]	4.0	0.7	-	-	-	-	-	3.9	-	-	-	-	-	-
	Attitudinal Inclusion[3]	4.0	0.7	-	-	-	-	-	3.8	-	-	-	-	-	-
	Overall inclusion[3]	4.0	0.7	-	-	-	-	-	3.9	-	-	-	-	-	-
	Student Interest[3]	4.5	0.7	-	-	-	-	-	4.0	-	-	-	-	-	-

[1] Binary item (yes/no); Items in table indicate yes response; Associations measured with Mann–Whitney U statistic

[2] Measured as continuous variable; Associations measured with Spearman correlation statistic

[3] Measured on 5-point scale where 1 = did not meet needs and 5 = all needs met

Note. All significant associations are marked with either a green (beneficial) or red (not beneficial) box. No significant differences between indicators of inclusion or student interest were found between schools. Lesson purposes are not being compared against each other.

Appendix IV
Student survey

We want to know about you and what you think of school. This is not a test! Please answer each question honestly – there is no right or wrong answer!

1. Would you describe yourself as?
   a. Female
   b. Male
   c. Other
   d. Don't wish to answer

2. What grade are you in?
   a. 5
   b. 6

For the next questions, we are going to ask you about school. Please mark how you feel for each question.

	1 = No, never	2 = Yes, some of the time	3 = Yes, most of the time	4 = Yes, all of the time
3. Do you feel close to people at school?				
4. Are you happy to be at this school?				
5. Do you feel like you are part of this school?				
6. Do teachers treat students fairly at school?				
7. Do you feel safe at school?				
8. Do you get along or work well with students who are different from you?				
9. Do you enjoy working with other students?				
10. Do you try to understand how other people feel?				

11. Do you feel bad when someone else gets their feelings hurt?				
12. Do you try to understand what other people go through?				
13. Do you listen to other students' ideas?				
14. Can you do most things if you try?				
15. Do you try to work out your problems?				
16. Are there many things you do well?				
17. Do you know where to go for help with a problem?				
18. When you need help, do you find someone to talk with about it?				
19. Do you try to help other students who feel lonely at school?				
20. When you have a problem at school, do you think it will get better in the future?				
21. Do you feel positive that good things will happen to you at school?				
22. Do you feel positive that you will have fun with your friends at school?				
23. Do you expect that you will feel happy during class time?				
24. I have a friend my age who really cares about me.				
25. I have a friend my age who helps me when I am having a hard time.				
26. I have a friend my age who talks with me about my problems.				
27. Do you try to work out your problems by talking or writing about them?				

For the next questions, we are going to ask you about how you feel about recreation activities at school. When we say recreation, we mean activities that you do in class like playing games, dancing, music, or art. For each of the following statements, please indicate how true it is for you, using the following scale.

	1 = Not at all true	2 = A little true	3 = Pretty true	4 = Very true
28. When I participate in recreation activities at school, I think about how much I enjoy them.				
29. I enjoy doing recreation activities at school very much.				
30. I feel that it is my choice to do recreation activities at school.				
31. I think I am pretty good at recreation activities at school.				
32. I find recreation activities at school very interesting.				
33. I feel nervous during recreation activities at school.				
34. I think I do pretty well at recreation activities at school, compared to other students.				
35. Doing recreation activities at school is fun.				
36. I feel relaxed while doing recreation activities at school.				
37. I am satisfied with my performance during recreation activities at school.				
38. I am anxious during recreation activities at school.				
39. I think recreation activities at school are very boring.				
40. I feel like I'm doing what I want to do during recreation activities at school.				

41. I feel pretty skilled at recreation activities at school.				
42. I think recreation activities at school are very interesting.				
43. I feel pressure during recreation activities at school.				
44. I feel like I have to do recreation activities at school.				
45. I would describe recreation activities at school as very enjoyable.				
46. I do recreation activities at school because I have no choice.				
47. After doing recreation activities at school for a while, I feel pretty skilled.				

Appendix V
TIRP participation and outcomes by school

One-way analysis of variance of TIRP participation and outcomes by school

Mean Factor Score	Source	Village Meadows					Madison No. 1				
		SS	df	MS	F	p	SS	df	MS	F	p
School Connectedness	**Between Groups**	**3.213**	**2**	**1.607**	**3.342**	**0.043**	**4.136**	**3**	**1.379**	**4.97**	**0.004**
	Within Groups	**26.437**	**55**	**0.481**			**18.029**	**65**	**0.277**		
	Total	29.65	57				22.165	68			
Empathy	Between Groups	0.642	2	0.321	0.415	0.663	**3.947**	**3**	**1.316**	**2.931**	**0.04**
	Within Groups	42.6	55	0.775			**29.178**	**65**	**0.449**		
	Total	43.242	57				**33.125**	**68**			
Collaboration	Between Groups	1.437	2	0.718	1.595	0.212	2.784	3	0.928	2.25	0.091
	Within Groups	24.772	55	0.45			26.805	65	0.412		
	Total	26.209	57				29.589	68			
Self-Efficacy	Between Groups	2.19	2	1.095	2.777	0.071	1.773	3	0.591	1.796	0.157
	Within Groups	21.687	55	0.394			21.399	65	0.329		
	Total	23.878	57				23.172	68			
Problem-Solving	Between Groups	2.274	2	1.137	2.022	0.142	4.05	3	1.35	2.731	0.051
	Within Groups	30.936	55	0.562			31.641	64	0.494		
	Total	33.211	57				35.691	67			
Optimism	Between Groups	1.511	2	0.756	1.548	0.222	**3.727**	**3**	**1.242**	**3.414**	**0.023**
	Within Groups	26.356	54	0.488			**23.29**	**64**	**0.364**		
	Total	27.867	56				**27.017**	**67**			
Peer Support	Between Groups	2.378	2	1.189	1.929	0.155	0.233	3	0.078	0.086	0.967
	Within Groups	33.275	54	0.616			56.706	63	0.9		
	Total	35.653	56				56.939	66			
Interest	Between Groups	1.917	2	0.958	2.647	0.08	**6.008**	**3**	**2.003**	**5.211**	**0.003**
	Within Groups	19.549	54	0.362			**24.98**	**65**	**0.384**		
	Total	21.465	56				**30.988**	**68**			
Competence	**Between Groups**	**2.558**	**2**	**1.279**	**4.28**	**0.019**	**5.687**	**3**	**1.896**	**5.86**	**0.001**
	Within Groups	**16.139**	**54**	**0.299**			**21.027**	**65**	**0.323**		
	Total	**18.697**	**56**				**26.714**	**68**			
Choice	Between Groups	0.423	2	0.212	0.432	0.651	0.952	3	0.317	0.745	0.529
	Within Groups	26.431	54	0.489			27.668	65	0.426		
	Total	26.854	56				28.62	68			

Note. Significant associations are bolded.

Appendix VI
Comparisons of mean factor scores by gender and grade level at Village Meadows

T test comparison of mean factor scores by gender and grade level by survey date at Village Meadows

Mean Factor Score	Group	Fall 2019							Spring 2020						
		N	Mean	SD	t	df	p	Mean difference	N	Mean	SD	t	df	p	Mean difference
School Connectedness															
Gender					2.42	86	0.02	0.29				0.96	58	0.34	0.18
	Girl	46	3.17	0.48					33	2.92	0.63				
	Boy	49	2.88	0.69					27	2.74	0.82				
Grade					-2.79	97	0.01	-0.35				-2.31	58	0.03	-0.42
	5th	49	2.80	0.71					26	2.60	0.84				
	6th	50	3.15	0.52					34	3.01	0.56				
Empathy															
Gender					3.59	93	0.00	0.49				1.93	48	0.06	0.44
	Girl	46	3.28	0.57					33	3.02	0.74				
	Boy	49	2.79	0.73					27	2.58	0.98				
Grade					-1.07	97	0.29	-0.15				-0.95	58	0.34	-0.22
	5th	49	2.94	0.74					26	2.70	0.94				
	6th	50	3.09	0.65					34	2.92	0.82				
Collaboration															
Gender					1.05	93	0.30	0.13				0.81	58	0.42	0.14
	Girl	46	3.26	0.53					33	2.92	0.56				
	Boy	49	3.14	0.66					27	2.78	0.79				
Grade					-2.59	97	0.01	-0.32				-2.69	58	0.01	-0.45
	5th	49	2.99	0.69					26	2.60	0.69				
	6th	50	3.31	0.54					34	3.05	0.60				
Self-Efficacy															
Gender					0.17	93	0.86	0.02				-1.04	58	0.30	-0.18
	Girl	46	3.14	0.52					33	2.93	0.52				
	Boy	49	3.13	0.55					27	3.10	0.78				
Grade					-1.36	84	0.18	-0.16				-0.75	58	0.46	-0.13
	5th	49	3.00	0.70					26	2.94	0.75				
	6th	50	3.16	0.47					34	3.06	0.56				
Problem-Solving															
Gender					1.55	93	0.12	0.21				0.08	58	0.94	0.02
	Girl	46	2.93	0.60					33	2.71	0.78				
	Boy	49	2.72	0.71					27	2.69	0.79				
Grade					-2.38	86	0.02	-0.33				-0.18	58	0.86	-0.04
	5th	49	2.62	0.80					26	2.68	0.79				
	6th	50	2.95	0.56					34	2.72	0.78				
Optimism															
Gender					-0.43	93	0.67	-0.06				-0.14	57	0.89	-0.03
	Girl	46	2.96	0.62					33	2.70	0.66				
	Boy	49	3.02	0.71					26	2.73	0.77				
Grade					-2.26	97	0.03	-0.31				-0.54	57	0.59	-0.10
	5th	49	2.79	0.76					26	2.66	0.74				
	6th	50	3.10	0.60					33	2.76	0.68				
Peer Support															
Gender					4.78	72	0.00	0.89				**2.61**	**42**	**0.01**	**0.54**
	Girl	45	3.60	0.58					33	3.63	0.60				
	Boy	49	2.71	1.15					26	3.09	0.90				
Grade					-1.83	91	0.07	-0.37				**-2.75**	**43**	**0.01**	**-0.56**
	5th	49	2.93	1.13					26	3.08	0.88				
	6th	49	3.31	0.88					33	3.64	0.61				
Interest															
Gender					81.42	1	0.20	0.11				-0.02	57	0.99	0.00
	Girl	46	3.35	0.39					33	2.91	0.58				
	Boy	49	3.15	0.62					26	2.91	0.68				
Grade					-3.69	79	0.00	-0.42				-0.08	57	0.94	-0.01
	5th	49	2.98	0.68					26	2.90	0.63				
	6th	50	3.40	0.41					33	2.91	0.62				
Competence															
Gender					-1.07	93	0.29	-0.12				-0.23	57	0.82	-0.03
	Girl	46	2.82	0.47					33	2.62	0.54				
	Boy	49	2.94	0.58					26	2.66	0.64				
Grade					-0.90	97	0.37	-0.10				1.11	57	0.27	0.17
	5th	49	2.79	0.59					26	2.73	0.58				
	6th	50	2.89	0.53					33	2.56	0.59				
Choice															
Gender					0.43	93	0.67	0.05				-0.16	57	0.87	-0.03
	Girl	46	2.78	0.61					33	2.62	0.66				
	Boy	49	2.72	0.61					26	2.65	0.77				
Grade					-2.44	97	0.02	-0.30				0.25	57	0.80	0.05
	5th	49	2.57	0.61					26	2.66	0.67				
	6th	50	2.86	0.59					33	2.62	0.74				

Note. Significant associations are bolded.

Appendix VII
Comparisons of mean factor scores by gender and grade level at Madison No. 1

T test comparison of mean factor scores by gender and grade level by survey date at Madison No. 1

Mean Factor Score	Group	N	Mean	SD	t	df	p	Mean difference	N	Mean	SD	t	df	p	Mean difference
						Fall 2019							**Spring 2020**		
School Connectedness															
Gender					1.26	80	0.21	0.16				0.98	63	0.33	0.13
	Girl	47	3.12	0.54					45	3.26	0.49				
	Boy	35	2.95	0.63					20	3.12	0.53				
Grade					0.35	89	0.73	0.06				**-2.16**	**67**	**0.04**	**-0.29**
	5ᵗʰ	69	3.01	0.62					33	3.01	0.64				
	6ᵗʰ	22	2.95	0.75					36	3.30	0.47				
Empathy															
Gender					**4.11**	**80**	**0.00**	**0.57**				**2.34**	**63**	**0.02**	**0.35**
	Girl	47	3.36	0.57					45	3.40	0.52				
	Boy	35	2.79	0.68					20	3.05	0.65				
Grade					0.91	89	0.36	0.16				-0.08	67	0.93	-0.01
	5ᵗʰ	69	3.11	0.71					33	3.19	0.74				
	6ᵗʰ	22	2.95	0.70					36	3.20	0.67				
Collaboration															
Gender					1.15	80	0.25	0.16				1.87	63	0.07	0.28
	Girl	47	3.09	0.58					45	3.24	0.53				
	Boy	35	2.92	0.69					20	2.96	0.60				
Grade					0.83	89	0.41	0.14				-1.02	67	0.31	-0.16
	5ᵗʰ	69	3.03	0.65					33	2.99	0.71				
	6ᵗʰ	22	2.89	0.72					36	3.16	0.61				
Self-Efficacy															
Gender					0.36	80	0.72	0.04				0.45	63	0.65	0.06
	Girl	47	3.24	0.50					45	3.20	0.51				
	Boy	35	3.20	0.63					20	3.13	0.55				
Grade					-0.40	89	0.69	-0.06				-1.20	67	0.23	-0.17
	5ᵗʰ	69	3.14	0.59					33	3.03	0.57				
	6ᵗʰ	22	3.20	0.67					36	3.20	0.59				
Problem-Solving															
Gender					**2.64**	**80**	**0.01**	**0.44**				1.61	62	0.11	0.30
	Girl	47	2.91	0.73					44	2.91	0.69				
	Boy	35	2.48	0.75					20	2.62	0.67				
Grade					0.27	89	0.79	0.05				-0.49	66	0.62	-0.09
	5ᵗʰ	69	2.70	0.74					33	2.71	0.74				
	6ᵗʰ	22	2.64	0.88					35	2.80	0.73				
Optimism															
Gender					1.10	80	0.28	0.16				-0.12	62	0.90	-0.02
	Girl	47	2.93	0.62					44	2.94	0.58				
	Boy	35	2.76	0.73					20	2.96	0.62				
Grade					0.19	89	0.85	0.03				-1.53	66	0.13	-0.23
	5ᵗʰ	69	2.81	0.73					33	2.78	0.70				
	6ᵗʰ	22	2.77	0.71					35	3.01	0.56				
Peer Support															
Gender					**2.50**	**79**	**0.02**	**0.45**				1.99	61	0.05	0.45
	Girl	47	3.27	0.77					43	3.43	0.85				
	Boy	34	2.82	0.83					20	2.98	0.81				
Grade					-0.53	89	0.60	-0.11				0.99	61	0.32	0.22
	5ᵗʰ	69	2.98	0.82					33	3.30	0.78				
	6ᵗʰ	22	3.09	0.97					34	3.08	1.05				
Interest															
Gender					-0.31	80	0.76	-0.04				1.85	63	0.07	0.27
	Girl	47	3.20	0.59					45	3.42	0.54				
	Boy	35	3.25	0.69					20	3.14	0.58				
Grade					-0.09	89	0.93	-0.02				-1.91	67	0.06	-0.31
	5ᵗʰ	69	3.20	0.69					33	3.08	0.78				
	6ᵗʰ	22	3.21	0.64					36	3.39	0.54				
Competence															
Gender					**-2.50**	**80**	**0.02**	**-0.37**				0.68	63	0.50	0.10
	Girl	47	2.79	0.63					45	3.01	0.57				
	Boy	35	3.16	0.70					20	2.91	0.56				
Grade					1.24	89	0.22	0.22				-0.25	67	0.80	-0.04
	5ᵗʰ	69	2.94	0.75					33	2.89	0.70				
	6ᵗʰ	22	2.73	0.59					36	2.93	0.56				
Choice															
Gender					0.47	58.528	0.64	0.07				0.53	63	0.60	0.09
	Girl	47	3.15	0.54					45	3.27	0.70				
	Boy	35	3.08	0.76					20	3.18	0.51				
Grade					-0.73	56.688	0.47	-0.09				-1.62	67	0.11	-0.25
	5ᵗʰ	69	3.04	0.71					33	3.08	0.69				
	6ᵗʰ	22	3.14	0.45					36	3.33	0.59				

Note. Significant associations are bolded.

Appendix VIII
Literature review of inclusive recreation programs and associated SEL outcomes

Characteristics of Exemplary Adaptive, Inclusive Therapeutic Recreation Programs Associated with Social-Emotional Outcomes Programs

Social Emotional Learning (SEL) Programs

Exemplary Social Emotional Learning (SEL) youth programs are "interactive in nature, use coaching and role playing, and employ a set of structed activities to guide youth toward achievement of specific goals" (Durlak, et al., 2011, p. 418). Successful SEL programs need to strategically embed social-emotional learning in all school interactions (Jones & Bouffard, 2012). Successful SEL programs most often include the following (CASEL, 2003):

- SAFE practices,
- Evidence-based practices,
- Integration of SEL activities during academic school time, with activities throughout the school year rather than a one-time event,
- Extension of activities during non-classroom time including recess, lunch, restroom breaks, and anytime children are transitioning between classes or in the hallways, and
- Training for teachers and all staff that interact with students on SEL-related issues.

SAFE Practices. Programs that used the four evidence-based components of SAFE practices: Sequenced, active, focused, and explicit for SEL programs were significantly more successful in improving students' socio-emotional skills than programs that did not use SAFE practices (CASEL, 2003.; Durlak, et al., 2011). Providing clear and explicit instruction and allowing students to be active participants engaged in practicing SEL skills found to be the most effective approach when working with students.

Sequenced. Activities are used that are sequential and intentional to reach intended goal

Active. Activities use active and hands-on learning to teach social skills

Focused. Activities include at least one element focused on teaching social skills

Explicit. Activities explicitly focus on specific SEL skills rather than broad interventions

Evidence-Based Practices. Successful SEL programs, as shown on Figure 1 below, provide safe and nurturing learning environments while providing instruction on social and emotional skills (CASEL, 2003). These components taken together are shown to increase students' school attachment and decrease students' negative behaviors all leading toward better school success. In a meta-analysis of SEL interventions, effective programs significantly increased students' social-emotional skills, positive attitudes towards school, decreased disciplinary issues, all of which were found to have a positive association with academic performance (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011)..

Figure 1.
Impact of Evidence-Based SEL Programs on Student Success
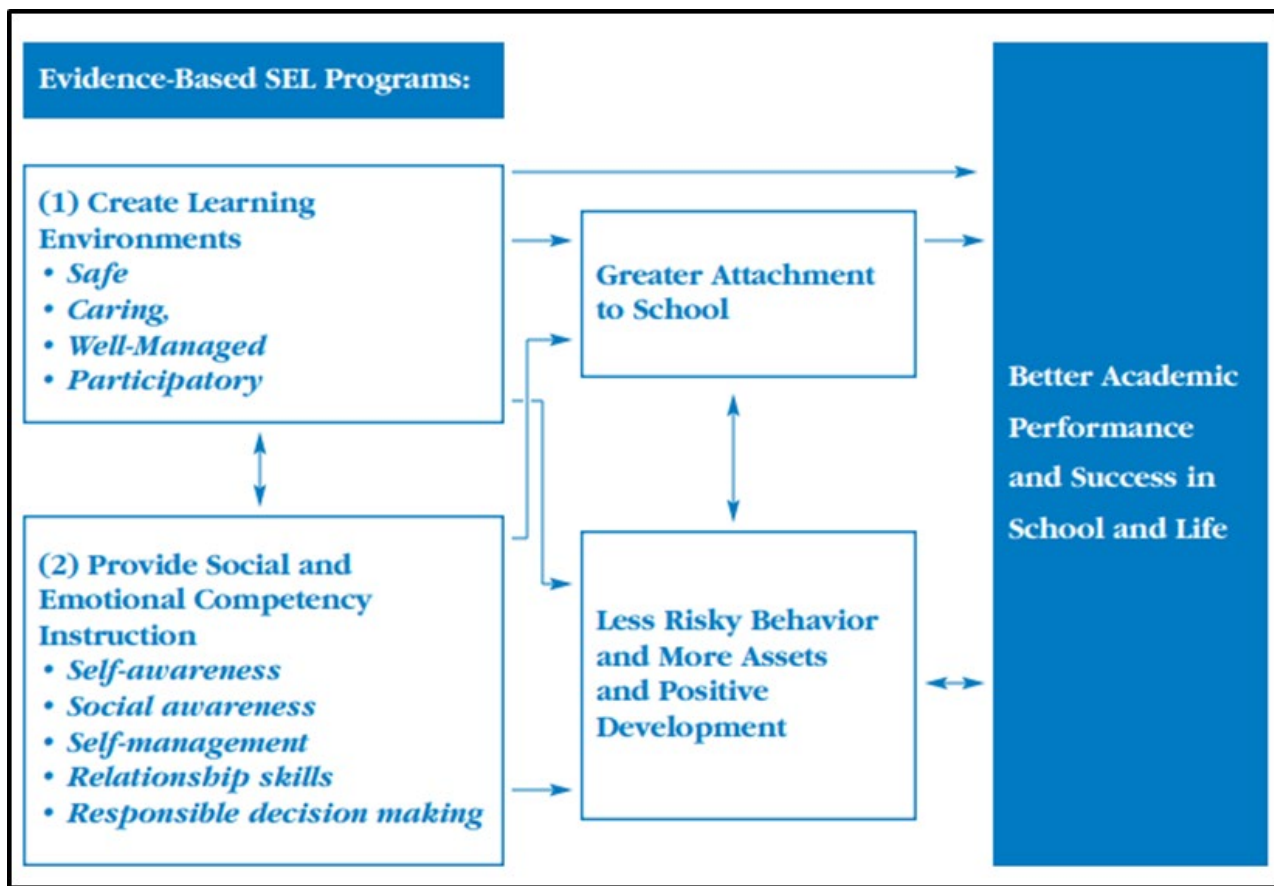
CASEL (2003). How Evidence-Based SEL Programs Work to Produce Greater Student Success in School and Life

Integration of SEL Activities into Academic Time. As illustrated below, providing youth with a school environment that has a positive school culture and effective SEL activities can lead to positive outcomes (Jones & Bouffard, 2012). Thus, inclusive programs need to consider both how to effectively integrate youth into activities and provide all students the tools to effectively interaction with each other. One study found that SEL programs can reduce physical aggression and programs aimed at increasing teacher empathy regarding negative behavior reduced student disciplinary referrals (Espelage, Low, Polanin, & Brown, 2013)
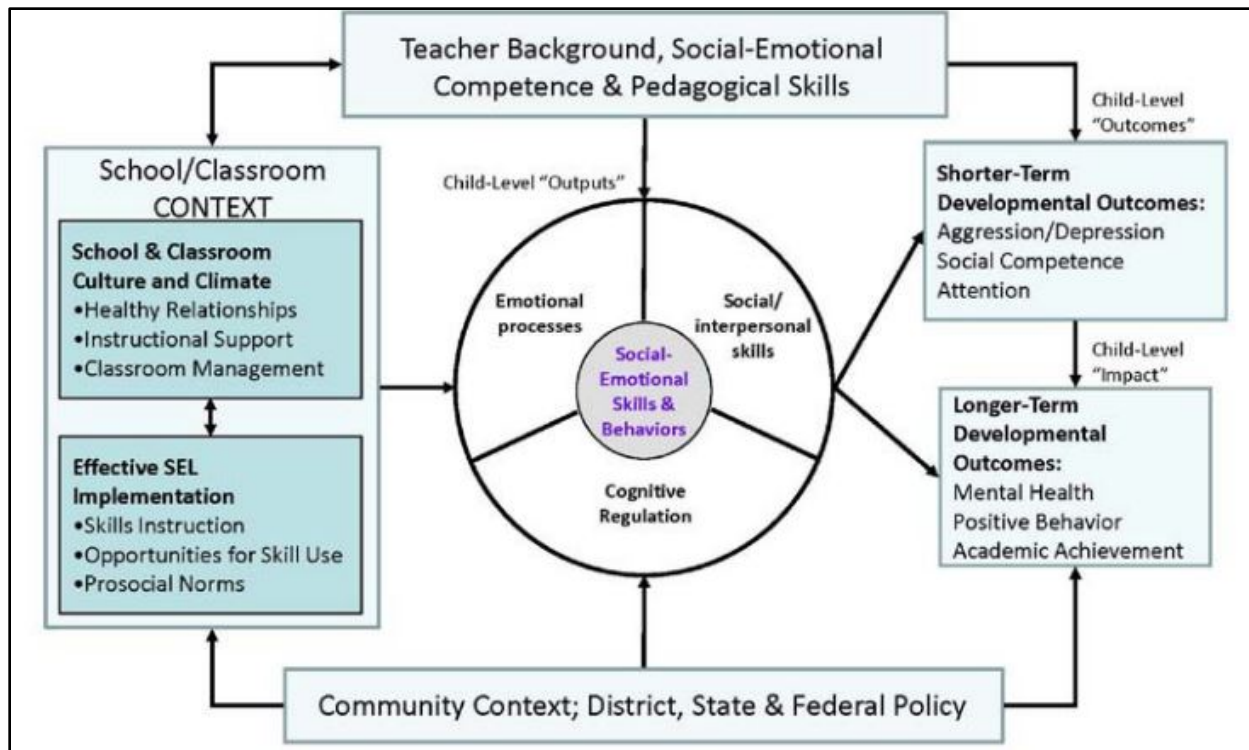
Taken from *Jones & Bouffard (2012)*

Extension of SEL Activities to Non-Classroom Time. An examination of Social Emotional Learning (SEL) and character education programs in out of school settings found that intentional instructional practices were key to impacting social-emotional learning (Bouffard, Parkinson, Jacob, & Jones, 2009; Jones, et al., 2017). Of importance to therapeutic recreation, these best practices included playing games and kinesthetic activities that involve movement. Further, discussion among students and creative writing applying SEL themes to activities within their own lives provided additional reinforcement to positive SEL skills being built.

Exemplary Inclusive Practices

Whereas the use of the term "inclusion" in the United States is often based on educational practices rather than policy, US laws including ADA provides equal rights to young people with varying abilities is a civil right that "prohibits discrimination based on disability" (Dalton, Lyner-Cleophas, Ferguson, & McKenzie, 2019, p. 2). Thus, inclusive practices provide education services and supports for all children with varying levels of ability in a general education classroom. To provide an appropriate inclusive experience, programs should be abilities-based and follow a Universal Design for Learning (UDL) framework, both discussed below.

Abilities-Based Approach. It is critical to examine inclusion through an asset-based model rather than a medical model to ensure a person-centered approach to working with all children (Emes, Longmuir, & Downs, 2002). With this approach, it is not about "retro-fitting" activities for ability but rather creating activities that will embrace all abilities.

Universal Design for Learning (UDL).
Universal design for learning (UDL) provides a framework for inclusive education that aligns with the unique needs of all students who enter one's classroom (CAST, 2016; Capp, 2017). As illustrated below, at the center of the approach is to design educational opportunities for all learners that diminish barriers that can impair learning. While the overall goal of UDL is for personalized education for all students, putting these strategies into practice may not be easy and can prove a challenge for teachers not familiar with UDL (Scott, Thoma, Puglia, Temple, D'Aguilar, 2017).

Chrissie Butler CORE Education Adapted from UDL Framework CAST 2016
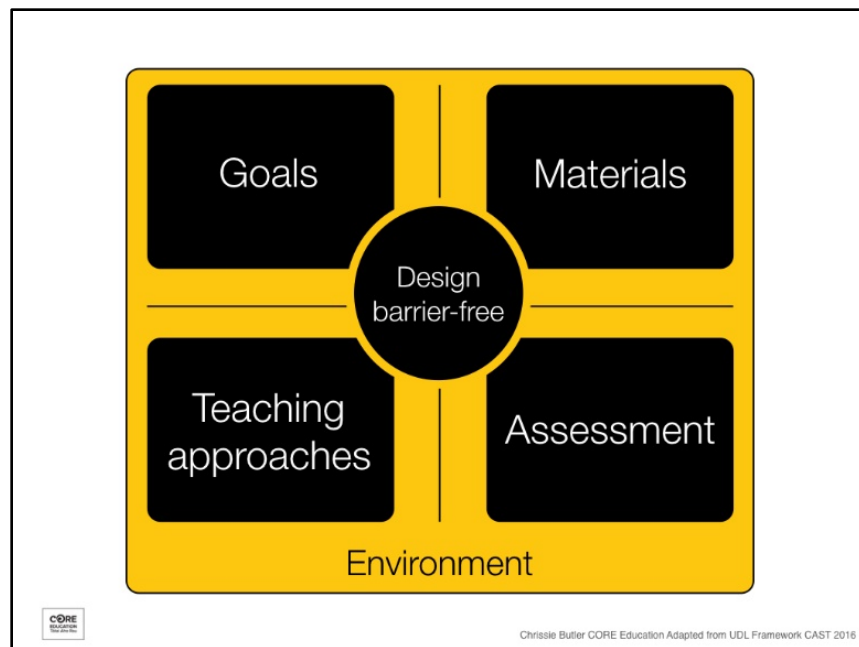
By providing a UDL environment for the inclusion of children with special needs in educational settings, not only should the physical space accommodate all students' needs, it also highlights the importance of working collaboratively with teachers, support staff, and peers to create an environment accessible to all (Lieverman, Grenier, Brian, & Arndt, 2020). By following the principles of UDL, inclusive spaces for all abilities can be created. The seven principles as detailed by the National Disability Authority (n.d.) should be used to design accessible environments, these include:

1. **Equitable use**. People of all abilities can utilize the design
2. **Flexibility in use.** Individual abilities are all considered in the use
3. **Simple and intuitive use**: Regardless of a person's experience or abilities, the design is understandable
4. **Perceptible information.** All sensory abilities are considered when information is presented
5. **Tolerance for error.** There is no or little risk of harm to participants
6. **Low physical effort.** People of all abilities can comfortably participate without fatigue
7. **Size and space for approach and use.** All body types and abilities are considered to ensure the ability of participants to fully engage with the design

Benefits and Challenges of Inclusive Programming

Overview

As mentioned in the section above, programs should be designed so that activities are provided that allow all participants regardless of their ability to fully participate (Dattilo, et al., 2019; D'Eloia & Price, 2018).Strategies designed to include individuals with disabilities within inclusive leisure activities should be focused on celebration of inclusion while promoting social, psychological, and physical engagement (Dattilo, 2018). A lack of inclusive activities available to students with special needs impacts their ability to create friendships with others who have similar interests as them. This, in turn, can lead to students with disabilities to feel socially isolated from peers (Montie & Aveby, 2011). This next section details the approach, benefits, and challenges with inclusive programming.

Community Integration. When providing inclusive recreation services, it is important to consider Community Integration (CI) of the activity. CI extends beyond just physical inclusion to include social integration within activities (Stumbo, et al., 2015). Providing social integration is essential for young people to feel part of a community, and school is one of the most salient community groups to which they belong. Therefore, the creation of a school identity and sense of belonging are important facets of their inclusive experience. Programs that encourage social inclusion for youth should occur in settings where children typically play and interact together such as lunch and recess time (Heyne, Wilkins, & Anderson, 2012).

Therapeutic Recreation as a Mechanism for Inclusion. While under-utilized as an intervention strategy, engaging students with disabilities in therapeutic recreation therapeutic recreation programming specifically influences youth in positive ways (Green, Brown, Gordon, & Martin, 2018; Shultz, Wozencroft, & Cihak, 2017). The American with Disabilities Act (ADA) requires that inclusive sports and recreation programs be the norm and that those segregating by ability are not equal. Thus, therapeutic recreation is well situated to facilitate social interactions among students of all abilities (Heyne, Wilkins, & Anderson, 2012) by providing opportunities for all abilities to participate regardless of skill.

Benefits

Inclusive education promotes social-emotional outcomes for children with disabilities and subsequently impacts academic achievement Dattilo, 2018; Green, Brown, Gordon, & Martin, 2018; Shultz, Wozencroft, & Cihak, 2017). Inclusion experiences benefit both individuals with and without disabilities. When individuals with and without disabilities have these influential experiences, their current attitudes, behaviors, and practices as a child, it will most certainly influence their attitudes, behaviors, and practices as an adult (D'Eloia & Price, 2016). Research within inclusive education literature indicates the impact on multiple skills for all involved.

Physical/Athletic Identity. An examination of inclusive out-of-school time physical activity programs for children/youth with physical disabilities found that these types of program are influential in a child's positive psychological and physical skill development (Arbour-Nicitopoulus, et al., 2018; Emes, Longuir, and Downs, 2002). When individuals with disabilities participate in these types of programs, they express having a better quality of life because they identify as an athlete and improve their health (Zabriskie, Lundberg, & Groff, 2005). That is not to say there isn't a place for adapted sports competitions solely designed for youth with special needs. As one study found, individuals with disabilities showed a sense of competence in their skills and abilities and felt connected with other individuals with disabilities. Individuals flourished and thrived with the chance to be themselves (Groff & Kleiber, 2001).

Social Skills and Communication. Communication and interaction among peers during school is of critical importance as difficulties with social-emotional interactions negatively impact academic performance (Parker & Asher, 1987; 1993). Social interactions among students in the classroom can be facilitated by inclusive recreational activities through modeling interactions and social norms to increase communication between children with special needs and their peers (Shultz, Wozencroft, & Cihak, 2017). Participating in inclusive recreation activities increases participants' social skills (Green, et al., 2018; Pettry, 2018) by providing opportunities for one-on-one interactions where students with disabilities learned from the cues of their peers (Shultz, Wozencroft, & Cihak, 2017). One intervention using Inclusion Advocates to oversee activities during recess on the playground found that providing cooperative games and modeling appropriate interactions increased friendships and positive communication among students as well as fewer disruptive behaviors and negative interactions (Heyne, Wilkins, & Anderson, 2012).

Sense of Belonging. Students who report a sense of belonging in their school feel that they are valuable members of their school community. Feeling as though they are part of their school leads to better academic outcomes, greater rates of school attendance, and higher motivation to perform well in school (Osterman, 2000). To truly feel part of their school, it is critical that students with special needs are not just placed within a general education classroom, rather they are integrated and "welcomed" into the classroom (Loreman and Deppler, 2002). Further, a sense of belonging also added to higher reports on the quality of life (Chun, et al., 2008)

Self-Efficacy and Academic Performance. Inclusive practices increase students with disabilities self-efficacy, confidence in one's ability to reach a goal. Higher levels of self-efficacy is associated with higher levels of academic achievement. A meta-analysis found that children participating in SEL programs not only improved their social skills, but had significant gains in academic performance (Durlak, et al., 2011). Further, as Heyne & Anderson (2011) posit, therapeutic recreation programs create environments where students with disabilities feel connected to their peers increasing their social emotional skills that ultimately leads to increased academic performance.

Challenges

In addition to a lack of quality recreation programs integrating social, physical and recreation (Albrechsten, et al., 2012), there are challenges to including youth with physical disabilities in community athletics include a lack of opportunities, lack of funding, in addition to families lack of awareness of accessible programs along with the ability to coordinate activities within children's already busy schedules (Leo, Faulkner, Volfson, Bassett-Gunter, & Arbour-Nicitopoulos, 2018). There is also a lack of opportunities for young people with special needs to participate in public school athletic program (Green, Brown, Gordon, & Martin, 2018).

Moreover, while social-emotional programming has been found to be effective in many areas of youth development, there remains an informational and experiential lack of understanding within educational communities regarding the existence of and need for these types of socio-behavioral supports (Scott, Thoma, Puglia, Temple, D'Aguilar, 2017). In addition, it has been found that training staff may be one of the key components for the success of effective formal and informal leisure education (Albrechsten, et al., 2012). Hence, it is essential to understand how education and therapeutic recreation professionals receive the necessary professional development to provide effective inclusive programming in schools.

Teaching: Educational Trends, Training, and Preparation

A review of the literature found that while teachers tend to perceive inclusive practices as important, the vast majority report that they have not received the training to properly implement this practice. Teachers reported not having the resources to successfully include all children, and teachers also reported that implementing inclusive activities are detrimental because of the time and adjustment of activities for children with special needs. The literature shows the complexity of the topic and the lack of understanding of inclusive practice.

Overview

While many in-service teachers reported a general understanding of inclusive practice and understood its importance, teachers reported that their college preparation left them feeling unprepared and lacking the specific training necessary to provide an inclusive environment for students when they became the classroom teacher of record (D'Eloia & Price, 2016; Lidor & Hutzler, 2019; Rekaa, Hanisch & Ytterhus, 2018). The section focuses on teacher training in inclusive practices, SEL training, and the benefits of professional development on teachers' skills.

Training on Inclusive Practices. Philosophically, teachers report on the importance of inclusive practices within educational settings; unfortunately, they also report difficulty implementing such practices (D'Eloia & Price, 2018). Teachers state that a lack of training leaves them unprepared and a lack of support leaves them unable to effectively provide inclusive instruction (Hodge, et al., 2004). As one study reported, "Even if teachers demonstrate good intentions, they often feel inadequately trained to meet the demands of an inclusive classroom" (Lindor & Hutzler, 2019, p.2).

Teachers report they do not have the ability or the resources to accommodate a wide range of students in one class; thus, teachers find themselves in a situation where they have the goal of creating an inclusive education experience for students with and without disabilities but do not think it is achievable (Rekaa, Hanisch, & Ytterus, 2018). Even in non-classroom time, where there is more flexibility, there remains the challenge of classrooms and activities are not set up appropriately for children of varying abilities (Neville, Makopoulou, & Hopkins, 2019). Teachers need to be given the tools, resources, and training to successfully implement inclusive physical education. Simply "telling" teachers or "explaining" the goal of inclusive physical education is not effective nor sufficient (Rekaa, et al., 2018).

Social-Emotional Instruction. Within the school setting, many teachers are not provided adequate training to promote effective social-emotional learning and therefore need support and mentoring as they integrate these efforts within their classroom (Jones, et al., 2017; Lopes, Mestre, Guil, Kremenitzer, & Salovey, 2012). However, research finds that teachers are of great importance. As one study found, while SEL programs facilitated by school staff and non-school staff both showed success in student socio-emotional outcomes, only programs led by school staff found a significant increase in student academic success (Durlak, et al., 2011).

Professional Development. Professional development opportunities can increase teachers sense of self efficacy (Yoo, 2016). One study found that providing training to support staff on inclusive practices resulted in their ability to assist youth to fully participate, model appropriate social behavior, and to facilitate interactions between youth with and without disabilities (Miller, Schleien, & Bowens, 2010). Another found that hands-on professional training significantly increased teacher self-efficacy in inclusive physical education practices (Neville, Makopoulou, & Hopkins, 2019). Because pre-service teachers rarely receive specific training on SEL practices (Jones & Bouffard, 2012), SEL training for in-service teachers is necessary. Studies show that teachers who attended SEL trainings not only increased their skills, but they also provided high-quality SEL interventions that in turn led to students who were significantly more likely to show positive socio-emotional outcomes (Durlak, et al., 2011; Jones & Bouffard, 2012).

Support staff should be included in all professional development opportunities that promote inclusive and social emotional learning practices (Taylor & Adelman, 2011). Support staff support both student needs as well facilitate positive school climate for the students sense of belonging. The authors continue,

> *Caring schools that support the participation, valuing, and success of students with*
> *and without disabilities are not something that can be created in the absence of comprehensive,*
> *multifaceted, and cohesive efforts to address barriers to learning*
> *and teaching and promote healthy development (p.15).*

Support staff can be critical to the success of programs. As one study found these staff members assisted youth with varying needs to fully participate by facilitatating interactions between youth with and without disabilities (Miller, Schleien, & Bowens, 2010)

Therapeutic Recreation: Educational Trends, Training, and Preparation

Therapeutic Recreational is a profession integrating recreational and activity-based interventions for the wellbeing of individuals. This systematic approach seeks to assist one's health through individualized attention to their physical, cognitive, or emotional needs. Recreational therapy is provided in a variety of settings from inpatient and outpatient medical facilities to parks and recreation programs. Through individual assessment, personalized therapeutic plans, and goal-setting, therapeutic recreation provides applicable strategies for participants to use in daily life.

Overview

The greatest proportion of Certified Therapeutic Recreation Therapists (CTRs) work in medical facilities (hospitals, nursing homes, and mental health facilities) with less than 2% of CTRs reported working in a school setting (Rile & Connolly, 2007) up from less than 1% just a decade earlier (Lawson, Coyle & Ashton-Shaeffer, 2001). Even with a small percentage situated in special educational environments, therapeutic recreation is a related service enhancing students' wellbeing; therefore, it is critical that therapeutic recreation programs train students to work within these environments (Lawson, Coyle, & Ashton-Shaeffer, 2001). Further, once in school settings, CTRs report that they would also benefit from additional training in inclusive programming (Dattilo, 2018; Heyne & Anderson, 2011).

Training on Inclusive Practices. As recreation programs began to serve those with disabilities, these segregated programs mostly existed in urban areas with greater numbers of non-profit and recreation agencies (Bullock & Mahon, 2017). Importantly, these programs eventually shifted to people-first services embracing

inclusive recreation programming. Training programs should explicitly address how practitioners can meet the needs of students with disabilities through inclusive recreational activities (Arbour-Nicitopoulus et al., 2018; Shultz, Wozencrost, & Cihak, 2017).

Professional Development. While Certified Therapeutic Recreation personnel are trained at the post-secondary level, as one study points out those working in school or community programming need to acknowledge that, "Recreation skills, similar to academic and other life skills, require systematic instruction or they will not be learned" (Heyne and Anderson, 2011, p. 16). As quality recreation programs strive to provide activities and experiences integrate social, physical, and leisure development, training remains a key component for the success of formal and informal leisure education (Albrechsten, et al., 2012).

One study found that it is important not to just train personnel working with participants, but also train individuals in leaderships roles (i.e. community program supervisors) as they indicated that they did not feel self-assured of their training and abilities (Scholl, Smith, & Davison, 2005). While coaches, instructors, and leisure companions were more confident in their training and abilities, they, nonetheless, stated they would benefit from additional training if it was offered.

Importance of Inter-Professional Communities. As Hawkins and colleagues (2012) stated, there are many issues that remain regarding the underrepresentation of therapeutic recreation. These include inadequate communication among therapeutic recreation professionals, education systems, and families, limited specificity of therapeutic recreation within educational legislation and policy, and limited knowledge of and compliance with credentialing standards with the therapeutic recreation profession. There should be an effort to expand the knowledge of what therapeutic recreation services are and the benefits to school systems and parents. Successful programming is a collaborative effort with communities working together, networking, and communicating efficiently to better serve individuals with disabilities (Zabriskie et al., 2005). In order for truly inclusive recreation to become a reality, educators, professionals, families, communities, and individuals with disabilities must come together to strengthen attitudes, educate all of those involved with appropriate ways to communicate using respectful terminology, and advocate (Dattilo, 2018; Heyne, Wilkins, & Anderson, 2012).

Professional Training Recommendations
- Add inclusion and inclusive practices to teacher competencies in evaluations
- Since socio-emotional learning is integral to a child's success in school, integrate SEL training into all professional development activities for teachers.
- Provide teachers the tools to successfully embed social emotional strategies into academics, classroom management, and interactions with students.
- Include SEL goals with academic goals when rating schools on success metrics
- Teach the importance of interprofessional collaboration
- Consider including SEL goals and school culture perceptions in addition to standardized testing/academic goals as measures of school success.

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