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PROMOTING INCLUSION FOR STUDENTS THROUGH SERVICE-LEARNING

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CHARLENE WINTER

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PROMOTING INCLUSION FOR STUDENTS THROUGH SERVICE-LEARNING

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APPROVED

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Abstract

The following literature review explores how service-learning can be used in an inclusive setting. How can schools use service-learning to promote diverse learning by including students of varying abilities? Studies have shown that service-learning helps students with skills such as communication, leadership, and responsibility while still getting academic standards met. Concerns arise about how to assess whether academic standards are being met. Patterns in assessment methods are shown in the research with student self-reflections being a main source for teachers to evaluate what the students learned.. Service-learning has been shown to not only meet academic standards but to develop character traits in students who are engaged in the process. A large barrier is access to aspects like transportation or community partners who can host students of varying abilities. The research is clear that the benefits outweigh the barriers as they pertain to the use of service-learning to support inclusion in the classroom.

Table of Contents

Signature Page.....	2
Acknowledgements.....	3
Abstract	4
Table of Contents.....	5
Chapter I: Introduction	
Introduction.....	6
Rationale.....	7
Definitions of terms.....	8
Statement of the question or topic.....	10
Chapter II: Literature Review	
History of service-learning.....	12
Types of service-learning.....	16
Benefits and Barriers of service-learning.....	18
Implementing service-learning.....	22
Assessing service-learning.....	25
Inclusion and Least Restrictive Environment.....	28
Meeting Academic Standards and Individual Education Program Goals.....	32
Chapter III: Discussion and Conclusion	
Summary of Literature.....	42
Professional Application.....	43
Limitations of the Research.....	44
Implications for Future Research.....	45
Conclusion.....	46
References.....	48

CHAPTER I: INTRODUCTION

Introduction

There are many learning models in education such as project based, seminar based, and experiential. Service-learning is one model of learning that can also deliver curriculum content. Nelson Mandela once said that “education is the most powerful weapon which you can use to change the world” (Mandela, N.D., as cited in Harvey, 2022). Using a service-learning model can help students see how they can change the world. Service-learning connects classroom curriculum to community action projects. This method of learning helps students use real life applications and can provide meaning behind lessons. Educators are often asked why or when students will use the curriculum; service-learning projects demonstrate how curriculum can be used outside of the classroom. Service-learning can also be used in an inclusion classroom to help students with special needs make progress on their Individual Education Program goals.

Providing the least restrictive environment is the cornerstone of special education laws. A least restrictive environment means that a student with disabilities should receive their education alongside their peers as much as possible. Basically, it reinforces that special education is a way to provide services; it is not just a department in a school. Providing a least restrictive environment is often when inclusion is utilized. Inclusion is when a special education provider provides services to students who need them alongside the general education teacher in a general education classroom (IDEA, 2017). Service-learning is one method that can be used in a general education classroom that includes students with disabilities.

Rationale

According to the Minnesota Department of Education (n.d.), service-learning is a way to incorporate real life application of knowledge learned in the classroom. There are three different types of service-learning: direct, indirect, and advocacy. Direct service-learning is where students help an organization or solve a problem by directly working with the people in their community. Indirect service-learning is where students help an organization by doing tasks behind the scenes like collecting food for a food shelf. Advocacy service-learning is where students use their voices to raise awareness in their community about an issue that is important to the students.

Chiva-Bartoll et al. (2020), focuses on vulnerable children and their families, conducted a study in Spain on how service-learning (SL) affects younger children (grades three, four, and five) as there are few studies done for groups younger than high school. In fact, an analysis showed that only 4.6% of students sampled for SL research included elementary and middle school aged children. The study completed by Chiva-Bartoll, et al. (2020) hypothesized that younger students could experience the same benefits from engaging in SL projects as older students. More specifically, the areas of cooperation, solidarity, cohesion, coexistence, attitudes toward school, attitudes toward diversity, and achievement were measured using the Students' Social Wellbeing at School questionnaire. The questionnaire was given to a control group and experimental group before and after the service-learning program was implemented. It was given in all classes except music, physical education, and art to see if the service-learning program lessons would carry over to other classes. The results of the experimental group showed improvement in all areas except attitudes toward diversity in the students.

Service learning has also been shown to benefit staff. Ashton and Arlington (2019) showed that many people new to the teaching profession have preconceived notions about students with disabilities. Teacher candidates carry with them an idea of what teachers should be from their own experiences with teachers. Service learning is a contemporary way for teacher candidates and new teachers to experience something more relevant to current methodology. Service-learning is not experiential just for students, teachers also gain experience and have the opportunity to cast away misconceptions of what disabled students are capable of by teaching and using service learning in a classroom that is inclusive of those with disabilities (Ashton & Arlington, 2019, p. 52).

Definitions of Terms

Accommodations

Alterations to curriculum format/delivery (whereas a change in the curriculum itself would be a modification), environment, or equipment so students with disabilities can access the same standards as their non-disabled peers in the least restrictive environment (What Is the Difference Between Accommodation and Modification for a Student With a Disability? | DO-IT, n.d.).

Experiential Learning

A learning style where students participate in hands-on learning, service-learning falls into this category (Experiential Learning | Center for Teaching & Learning, 2001).

Free Appropriate Public Education

“A free appropriate public education must be available to all children residing in the State between the ages of 3 and 21, inclusive, including children with disabilities who have been suspended or expelled from school...” (Individuals with Disabilities Education Act, 2017).

Inclusion

“Educating children with special education needs full time in the regular classroom” (Santrock, 2010, p. 200).

Individuals with Disabilities Education Act

A congressional amendment created in 1997 that makes a free, appropriate public education available to students who meet the eligibility requirements to receive special education services (Spring, 2018).

Least Restrictive Environment

“A setting that is as similar as possible to the one in which children who do not have a disability are educated” (Santrock, 2010, p. 200).

Pedagogy

The practice or method of teaching theoretical concepts or an academic subject (“Definition of Pedagogy,” 2023).

Project Based Learning

“An active student-centered form of instruction which is characterized by students’ autonomy, constructive investigations, goal-setting, collaboration, communication and reflection within real-world practices” (Kokotsaki et al., 2016, p. 1).

Service-learning

“A form of education that promotes social responsibility and service to the community”
(Santrock, 2010, p. 102).

Subsumption

Placing or sorting into categories, for example red, blue and green can all be subsumed under the heading of color (“Subsumption - Definition, Meaning & Synonyms,” n.d.).

Universal Design for Learning

“Universal Design for Learning focuses on designing the learning goals, materials, methods, and assessments so that from the start to ensure any individual can access, build skills, and internalize the learning” (The Origins of UDL, n.d.).

United Nations Educational, Scientific and Cultural Organization (UNESCO)

A global organization concerned with inclusion, specifically in developing nations
(Spring, 2018).

Statement of the Question

The guiding question for this thesis is as follows: How can teachers incorporate service-learning to promote inclusion for students who qualify for special education services? In order to research this question in a thorough manner, it is important to look at several items. First, it is important to know the definitions of inclusion and least restrictive environment. It is also imperative to know the history of service-learning. Next it is pertinent to know the definitions of all types of service-learning and what service-learning is not. Third, it is vital to know some of the benefits and barriers to service-learning. Fourth, it is essential to understand ways to implement service-learning. Next it is imperative to know how service-learning can be

assessed. Finally, it is crucial to know how service-learning meets academic standards and Individual Education Program goals.

CHAPTER II: LITERATURE REVIEW

History of Service-Learning

Service-learning is an alternative to traditional classroom based teaching and learning approaches (Bandyopadhyay et al., 2021). In the United States, service-learning can be traced back to the mid-1960s to what was then seen as a community service internship program in Tennessee (Bandyopadhyay et al., 2021). According to a report by Desmet and Roberts (2022) in 1991 the National and Community Service Act was put into effect and stated that service-learning should include experiences that allow students to think, talk, or write about what they learned and observed.

According to Santana-Rogers (2022), theorists Ausubel and Gagne have been credited as the strongest influences in the areas of how to instruct and in understanding how students learn. Ausubel is known for his subsumption theory where he theorizes that in order to retain new information, students need an existing category for the brain to store the information in or some sort of previous knowledge that can be connected to the new information. Ausubel encouraged the use of advanced organizers or graphic organizers that show students how the new concept connects to previous knowledge. Ausubel's theories are along the same lines of Gestalt's schema and Bruner's spiral learning model (Santana-Rogers, 2022, p. 99).

The basis of Ausubel's theory is a basic funneling of information where one should present generalizations to students first and then narrow down the topic into specific subcategories in order to help students retain information (UW: Test Bed Stuff, n.d.). Ausubel was against just memorizing facts as that does not build connections. Ausubel believed that

concepts are gained through deductive reasoning. Service-learning is based on problems and solutions, which require deductive reasoning (UW: Test Bed Stuff, n.d.).

Ausubel's theory also focused on what he considered meaningful learning, which was influenced by Piaget's conceptual schemes. Service-learning can use the learner's previous knowledge in order to come up with solutions that are relevant to the community and to their academics. Meaningful learning gets stored in long term memory because the brain will link the new concept to a previous learned one, impactful service-learning should do the same. Ausubel's theory is purely cognitive based, whereas Gagne's learning theory adds a behavioral element (Learning Theories: Ausubel's Learning Theory, n.d.).

Gagne is known as a bridge between behaviorist and cognitivist. Gagne's theory is based on his belief that learning results in observable behavior changes and he referred to these changes as outcomes. His theory focused on chunking information so as to not overwhelm students with a flood of concepts. This style of teaching lends well to students with deficits in executive function as they may need large tasks broken down into smaller more manageable pieces. Gagne's theory is like the adage, how do you eat an elephant, one bite at a time (Learning Theories: Ausubel's Learning Theory, n.d.).

According to Gagne, instead of presenting students with the elephant and instructing them that the class will be completing the task one bite at a time, one should present students with one bite at a time then show them through reflection that they just ate an elephant. Gagne breaks his theory into pieces as well. The three elements to his theory are: taxonomy of learning outcomes, the conditions needed to achieve learning outcomes, and the nine events of

instructions to guide teachers through the process. His theory is slightly more behavior based and thus a teacher centered approach (Learning Theories: Ausubel's Learning Theory, n.d.).

Similar to Ausubel, Gagne's learning model starts with a pre-instructional phase, during this phase connections are made to prior knowledge to stimulate recall. Then teachers would move to the instructional phase where one provides guidance and feedback. Lastly teachers move to the post instructional phase, where they assess students. In service-learning the same model could be used where the class would brainstorm places they know about or have heard about that may need help, then the class plans with feedback from the teacher, then they reflect on the project and the teacher uses those reflections as assessment (Learning Theories: Ausubel's Learning Theory, n.d.).

Service-learning is also based on John Dewey's concept of experiential learning, which also focuses on the importance of environmental influences. Dewey-based experiential learning on the concept of wanting students to be able to see the connection between what they do (actions) and the reflection process (informing principles)(Bringle et al., 2004). Dewey provided the theoretical outline for understanding good instruction as it relates to service-learning. To Dewey, a good inquiry-based project or service-learning project must generate interest in the students, be worthwhile to the students, present problems that make students curious for more information, and the project should take up a considerable amount of time to foster and develop (Bringle et al., 2004). In 1933 John Dewey wrote "thinking begins in ... a forked road situation, a situation that is ambiguous, that presents a dilemma, that proposes alternatives.. demand for the solution of a perplexity is the studying and guiding factor in the entire process of reflection" (Bringle et al., 2004, p. 3).

Dewey created the foundation on which all types of experiential learning are based. Learning that is considered experiential contains all the following elements of reflection, critical analysis and synthesis. It also provides opportunities for students to take initiative, make decisions, engage intellectually, creatively, emotionally, socially, physically and be accountable for the results. Experiential learning provides opportunities for students to practice a growth mindset as well as they will have chances to learn from their mistakes, experience natural consequences and celebrate successes. Service-learning is a category of experiential learning (Center for Teaching & Learning, 2001).

In the 70 years since Dewey developed the conditions that he thought were needed for inquiry-based learning, those conditions have now expanded to include active learning, feedback from experts, students, community practitioners, collaboration, cognitive practices, and practical application . Today, many schools face the challenges of social injustices, the lingering effects from the COVID-19 pandemic, and other complex issues. Service-learning can help students to feel a sense of control in situations that are uncontrollable, for example during the pandemic a class could have partnered with a local fabric store or families to obtain fabric to make masks for frontline workers or even for their school community. They could have also made pamphlets about the benefits of masks and how others could make their own masks (Kaye, 2010). The measuring and cutting could meet math standards, the pamphlets could meet science and researching benefits of masks could apply to english language arts standards, and learning more about frontline workers can meet social studies standards. While the students are gaining academic skills projects like making masks can help children to feel less helpless in situations that can often feel overwhelming (Kaye, 2010). In 2005, after Hurricane Katrina, Tulane

University became the first research university to integrate public service into its curriculum; they helped students engage in their community in order to increase their knowledge of complex systems and to learn to collaborate across differences, which are the fundamentals of service-learning (Otten et al., 2021, p. 187).

Types of Service-learning

There are three main types of service-learning according to the Minnesota Department of Education (n.d.). First, there is direct service-learning where students help an organization or solve a problem by directly working with the people in their community; this is what most people think of when they hear the term service-learning. There is also indirect service-learning where students help an organization by doing tasks behind the scenes like collecting food for a food shelf; this is the type most primary schools use if the school uses service-learning because it is the easiest to organize. Lastly, advocacy service-learning is where students use their voices to raise awareness in their community about an issue that is important to them; this is often seen in organizations such as Girl Scouts or church youth groups when they post or hand out flyers about supplies needed at a local homeless shelter. Examples of community-based organizations include social service organizations, nonprofit providers, community-based youth development organizations, after school programs that include service or service-learning as part of their programming, and faith-based organizations that provide service and offer service experience as part of their programming (Roehlkepartain & Search Institute, 2007).

Service-learning, being a type of experiential learning, can often be misplaced as a sub category of project based learning (Center for Teaching & Learning, 2001). Project based learning is inquiry based rather than experiential based. There are elements of project based

learning and service-learning that do overlap. During project based learning students can have opportunities for experiential learning during their project but it is not a required step like it is in service-learning.

Students may also collaborate during project based learning but it is designed to be student centered and autonomous whereas service-learning is designed to be community based. Both project based learning and service-learning focus on a need or problem and solutions. Community service may involve acts of service however it does not have an academic component tied to it. Also with service-learning the results need to be tangible and not hypothetical, for example Feed My Starving Children is an excellent volunteer organization but since students cannot actually see the benefits others gain from them packaging food the results are only theoretical, making it a non-example of an organization to partner with for service-learning (Kaye 2010). It is understandable that the general public would place project based learning, service-learning and even community service into the same categories, however the academic and civic engagement aspects of service-learning set it apart from project based learning and community service (Kokotsaki et al., 2016).

Each category of service-learning offers benefits to organizations and the community. All three types of service-learning engage students in learning and encourage critical thinking skills. Students who participate in service learning use the skills gained throughout their lives regardless of the type implemented. Direct service-learning does avoid the ability to keep community issues out of sight or at arms length (Kaye, 2010).

One of the main goals of service-learning is to create an impact in one's community, including inclusion, “service-learning, [is] a pedagogical model that integrates experiential

learning with serving community needs....” (Otten et al., 2021, pp. 183-84). Students learn from their environment and experiences so this is the basis on which service-learning pedagogy was developed.

Benefits and Barriers of Service-learning

There are several benefits and barriers to service-learning, Celio et al. (2011) analyzed 62 studies that involved 11,837 students to show the positives and deficits in service-learning practices. Deficits in studies were that the majority of studies, 68%, focused on college undergraduate students, within that 68%, there may have been some bias from students who were required to take a service-learning course. The study showed that those students did not gain as much out of the program as their peers that chose to take the course. Limited information was another area of improvement for future studies as the ones looked at in this analysis showed that often only one area was focused on. Celio et al. (2011) originally looked at more than 62 studies but some had to be eliminated due to there being no control group.

Of the 62 studies where there was a control group, at least four standards or areas of learning were focussed on, and where students choice was included there was evidence of positive outcomes. The review found that service-learning had favorable effects on students in many areas such as their attitudes, social behavior, and academic performance to name a few (Celio et al., 2011, pg. 178). Furthermore, service-learning has been found to increase a sense of self in students with increases in self-esteem and moral standards. Students gained confidence in community relations, leadership, and other social skills such as interpersonal relationships. Social skills is often a goal standard for students who receive special education services so a gain in social skills is one way service-learning is inclusive. “Compared to community service, taking

a service-learning course is much more likely to generate student to student discussions” (Astin et al., 2000, p. 2). Positive effects of service-learning are partially credited to the likelihood that students will discuss their experiences with each other and receive support from faculty both emotionally and academically (Astin, 2000).

Improvements seen in students who participate in service-learning include higher grades in school, increased goal setting, higher self-esteem, an improved feeling of being able to make a difference for others, and an increased likelihood of serving as volunteers in the future (Santrock, 2010). “A study of more than 4,000 high school students revealed that those who work directly with individuals in need were better adjusted academically, and those who worked for organizations had better civic outcomes” (Santrock, 2010, p 102). Organizations that partner with students in service-learning projects also benefit, for example, service-learning projects meet the needs and priorities for the organization, students bring new energy, creative ideas, the community has opportunities to build positive relationships with students, and the organization can expand their personnel resources (Roehlkepartain & Search Institute, 2007).

Some of the deficits research has found in service-learning include that staff did not finish the program with feelings of hope that they can make a difference in future classrooms. Furthermore, some deficits also resulted in benefits, for example even though the service-learning program was time-consuming to establish, the schools now have a growing database of the community organizations to partner with in the future (Carrington & Sagers, 2008). In a study done by Krsmanovic (2022), there was a similar juxtaposition where the study showed that some barriers led to benefits. Krsmanovic’s 2022 study showed that self-reported data should be used with caution because it was not as objective as other methods such as the

impacts of academic performance and graduation rates. Students identified several areas where service-learning participation impacted them, including an increased awareness and understanding of others, building connections, applying knowledge learned in the classroom, engagement in the area of study, growing as a leader and preparation for the professional world after students graduate.

Benefits of Service-learning for Students with Disabilities

Research shows that the benefits outweigh the drawbacks of service learning. Dymond et al. (2008) found that service-learning is being used more often with students with disabilities as a form of pedagogy as it supports many curriculum and instruction standards and also addresses vocational and life skill goals that are often in students with disabilities Individual Education Program. Service-learning has also been found to promote critical thinking, therefore it is possible for students with diverse abilities to actively participate in ways that have meaning for them. Having students with disabilities work alongside their non-disabled peers in the community during a service-learning based project enables the students with disabilities to be in an inclusive environment while meeting their academic and Individual Education Program goals. One thing that can be a barrier to service-learning is a lack of time, a lack of interest or a lack of student engagement. Other barriers could be not enough transportation, lack of money, lack of coordination for the project to be inclusive, lack of support from other staff, not enough staff, the community partner not having proper equipment for disabled students, low expectations of students, a need for staff development and training, conflicting schedules, not enough time for teachers to plan or co-plan, and students with disabilities being afraid of participating in the service activity (Dymond et al., 2008).

However Ashton and Arligton (2018) agreed that the benefits are greater as students are gaining social capital and academic gains, students are also gaining a deeper understanding of themselves. Ashton and Arlington (2018) found that a con of service-learning when working with students with disabilities can be a teacher's preconceptions about the abilities of students with disabilities, such as some teachers feeling unprepared to work with a diverse representation of students. At its core “the benefit of the service-learning is its reciprocity, in that there is a mutual giving and receiving for the community and for students” (Wilson et al., 2021, p. 245). Dymond et al. (2008) noted at the conclusion of the service-learning project after students have done the preparations for the activity, performed at the service, and done the reflection where assessing what was learned is accounted for, there should also be a celebration of accomplishments.

In addition to service-learning being an inclusive and community-based way for students to show that they meet learning standards, Bringle et al. (2004) listed benefits such as, service-learning helping students be educated in the problems of society. Service-learning lets students experience, understand, and act on social problems in their community. When assessing service-learning using reflection activities, staff should intentionally link the experience, the course based learning objectives, be structured, allow feedback, and occur regularly to gain beneficial feedback. The different types of assessing service-learning reflection, experimental, surveys, qualitative, or correlational all have various strengths and weaknesses. Assessment all depends on the appropriateness for the students that are in the classroom that is using the service-learning model.

Furthermore, increased access to the range of supports and opportunities, increased sense of responsibility, increased self-efficacy, higher academic achievement, interest in furthering higher education, better problem solving skills, team building skills, planning abilities, and better civic engagement attitudes as benefits (Roehlkepartain & Search Institute, 2007). A study done by Billig (2000) listed some of the positive effects on the social emotional development of public school students who participated in service-learning as increased personal and social responsibility, better communication skills, a sense of educational competence, higher sense of responsibility, increased social competence, increase self-efficacy and self-esteem, fewer behavioral problems, decreased at risk behaviors, reduced levels of alienation, increased relation to culturally diverse groups, increased bonds with adults, elderly people, disabled people, increased empathy, and students became more dependable. Other areas that were impacted were civil responsibility, academic learning, and career aspirations. When implemented fully and with intent, service-learning can be applied in general education classrooms and be inclusive for those with disabilities while making progress on academic standards and Individual Education Program goals.

Implementation of Service-learning

“What takes service-learning to the next level is that it combines serving the community with the rich academic front loading, assessment, and reflection typically seen in Project based learning” (Wolpert-Gawron, 2016, p. 1). From the mid 1980s to the late 1990s, the number of service programs available in schools was on the rise nationwide, service-learning increased from 2% to 25% by 1999 and 64% of all public schools were involved in some sort of service-learning for their students (Billig, 2000). In the United States, there are now several cities

and even some states that have set service-learning goals for students or strongly encourage students to participate in service-learning as a strategy for education reform (Billig, 2000).

“Service-learning is often more effective when two conditions are met, one giving students some degree of choice in service activities in which they participate and two providing students opportunities to reflect about their participation” (Santrock, 2010, p. 102). When using service-learning as real world experience, the project should be a learning experience about issues or problems outside of their own school and home. It could involve the community or a country anywhere in the world where students not only study the issues but create solutions as well (Tileston, 2010). If students were to do something like collecting trash around the school neighborhood or even off the playground that would just be considered a volunteer project. To make it a service-learning project the students would then have to analyze the trash and come up with solutions to reduce the amount of trash in their community or litter in their community or develop educational materials to educate others on the issue in hopes of reducing the problem.

Tileston (2010) listed examples of service-learning projects such as studying the consequences of natural disaster and then designing kits for families to use in case of a natural disaster or learning the consequences of poor nutrition and lack of exercise and then conducting health fairs making healthy cookbooks or having a school farmers’ market “Students will be able to make the transition from surface knowledge to more complex thinking . . . their use of knowledge will go beyond boundaries of the classroom and themselves to the real world” (Tileston, 2010, p. 112). Service-learning can also look like reading a book about pet care, then taking a trip to a local non-profit such as the Humane Society. After the trip students can write their own how to care for pets books to distribute. All of the items would need to fit into an

aspect of the classroom curriculum to make it a service-learning project. Service-learning applies to academic, social, and personal skills that help the community. The academic application is what sets service-learning apart from community service. Including standards into the community activity rests mostly on the teacher, while student focus is on progressing through the project. The process includes investigation, preparation/planning, action, reflection and demonstration/assessment (Kaye, 2010).

Service-learning can also demonstrate progress on Individual Education Program goals as well as academic gains for students who receive special education services. Service-learning can also be used across classes, when used in classes such as electives it can be more inclusive for those students who are not able to participate in other general education environments. For example a theater elective course could partner with an elementary school to do a reader's theater about a service topic such as animal care. The music department could assist by turning the reader's theater into a musical or even adding a musical score to the material. Art classes could design posters promoting the event or information about animal care. Service-learning that is cross-curricular offers students more opportunities to reinforce the topic and the academic concepts (Kaye, 2010).

Santana-Rogers' (2022) demonstrated that service-learning projects involve applying the understanding of an academic theory. Students apply their classroom knowledge and non-academic situations with real-world audiences, agencies, or community members, then students are given feedback on their work through assessment/ feedback from the organization or educational staff.

Assessing Service-learning

What makes a community service idea, like collecting food for the homeless, a service-learning unit is that one includes curriculum things like pre-reflection, research, having students do a presentation, and reflection so it is not just volunteering. To assess service-learning units, the pre-reflection research presentation and reflection are graded items (Wolpert-Gawron, 2016). While deciding what method of assessment would work best for the students, the following criteria should be the basis of all methods. Staff should create time and space for students to reflect on what they have done or achieved during service-learning projects while also guiding students through the process as needed. As technology has grown, so has service-learning. Activities centered around service-learning provide students more chances to develop their positive creativity and use some of their other 21st century skills such as collaboration, communication, and critical thinking. Positive outcomes become evident with service-learning when educational staff promote a welcoming environment where students feel like they can share freely without consequences (Desmet & Roberts, 2022).

DeZure (2002) focused on the complexity of assessing service-learning. The reviewer cited how the principles and technique book identified three dimensions of service-learning that need to be assessed: community awareness, career advancement, and self-awareness (DeZure, 2002, p. 2). DeZure (2002) also outlined the following methods to assess those dimensions: interviews, surveys, student portfolios, and focus groups (which were most commonly used) primarily used in the principles and technique book.

DeZure (2002) then discussed the pros and cons of the above mentioned assessment methods. One method of assessment reviewed was interviews; it was found that interviews can

be time consuming, however they provide first hand feedback. Another method of assessments used is surveys. The largest barrier with surveys was that questions were worded in such a way that the person taking the survey was given a positive bias. For example people gave the answer they perceived would be a positive reflection on them. Such as when asked if they are comfortable working with a diverse population, the answer was overwhelmingly “yes” because people want others to think they are comfortable working with all people. The main pro of surveys is their ease of use. Another method looked at was student portfolios, which gave less biased results and could be used to promote learning but are more labor intensive for the assessor to produce. Lastly, focus groups had similar cons to surveys with the added perceived pressure of answering like others. On the positive side, focus groups give people the opportunity to not respond if questionnaires or surveys cause anxiety. Overall, it was found that no matter the assessment used, it should be clear and concise to avoid student confusion (DeZure, 2002).

Astin et. al (2000) also did a study assessing service-learning. In the study, data was collected from 22,236 college undergraduates attending a national sample of baccalaureate granting colleges and universities:

“30% of the students participated in course-based community service (service-learning) during college, and an additional 46% participated in some other form of community service. The remaining 24% did not participate in any community service during college. The impact of service-learning and community service was assessed on 11 different dependent measures: academic outcomes (three measures), values (two measures), self-efficacy, leadership, (three measures), career plans, and plans to participate in further

service after college. Most of these outcomes were presented when the students entered college as freshmen.” (Astin et al, 2000, p. 1)

The results showed significant positive effects on all 11 outcomes. Qualitative and quantitative findings provide support for the service-learning courses. Service-learning courses should be designed with intent to assist students in making connections between the service-learning and their academic material (Astin et al., 2000, p. 4).

One way to assess service-learning is by doing reflective activities where students would write for 10 to 15 minutes using guiding questions such as what did they do, how did they feel, what did they learn, and then they can put that together in a larger report (Chamberlain & Johnson, n.d.). In one partnership, the teacher was asked if the students' service-learning project interfered with the English class curriculum. The teacher's response was that when the students began the service-learning partnership with another class, the experience gave the students a real purpose for writing about a real life event. The students had a ready-made topic: their feelings and learning experiences resulting from their service-learning work with the students in another class (Chamberlain & Johnson, n.d., p. 19).

Bringle and Hatcher (1999) looked at ways to assess service-learning and reported largely on journaling as an assessment method. Bringle and Hatcher (1999) listed several types of reflective journals. Key phrase journals, which is where students are asked to use an identified list of terms or key phrases into their journal entries that relate to the service-learning project that they did and then they can underline or highlight the key phrases after they have used them in sentences or paragraphs. Another type is the double entry journal, which is where students use spiral notebooks and on the left side of the journal, students describe the service experience,

reflection, thoughts, and feelings. Then on the right side of the journal, students put key concepts like the standards related material, then the students can draw arrows from the items they reflected on on the left side to the standards on the right side. There are also critical incident journals where students focus on a specific event that occurred during the service-learning project and then are asked to respond to prompts that hopefully involve deeper level thinking and planning for future action. There are also three-part journals where students are asked to respond to three separate issues in each of their journal entries. Full entry or three part journals include direct ratings about how the course materials relate to the service - learning project, an analysis of the project, and the course content.

Bringle and Hatcher (1999) also mentioned class presentations as another method of assessing service-learning projects. Students would create PowerPoints or Google slideshows, posters, or they can even make a speech to present to the class about what they accomplished during the service-learning project. This could also be turned into a showcase night where members of the community agency that was worked with during the service-learning project are invited to see the student presentations. A large part of the assessment piece of any part of education is using research based methods.

Inclusion and Least Restrictive Environment

Section 504 of The Rehabilitation Act of 1973 prevents discrimination based on ability, therefore inclusion should be used in educational institutions (Section 504, n.d.). Inclusion refers to the integration of children with disabilities into general education classrooms. The Education for All Handicapped Children Act has a clause that specified that as much as is appropriate to do so, children with disabilities are educated with children who are not handicapped, unless the

severity of the handicap is such that education in the general education classroom is not appropriate to meet the needs of the student's Individual Education Program, even with the use of accommodations or inclusion services (Individuals with Disabilities Education Act, 2023).

The isolation of children with disabilities deprives them of equipment and interactions that are available to their non-disabled peers. For example a student who was isolated wouldn't be able to form relationships with their peers of the same age or attend electives like a foreign language. Isolation strips those students of a complete free appropriate public education, as well as going against section 504 of the Rehabilitation Act of 1973 (Spring, 2018, p. 140). A free appropriate public education is a federal regulation that mandates that states must provide children between the ages of three and twenty one, regardless of ability, a free appropriate public education. This mandate is the result of the Individuals with Disabilities Education Act which is a federal law, and is the piece that ensures that a student is placed in the least restrictive environment (Individuals with Disabilities Education Act, 2022).

The least restrictive environment depends on the student's abilities. Some children have a speech impairment and can be educated in the general education classroom but children with severe impairments may need a separate class or even a separate school to get a similar education as students without impairments (Santrock, 2010). The least restrictive environment is determined by the student's needs identified in the evaluation. In order to determine what services a student qualifies for they first go through the qualification process.

The qualification process starts with either a parent request or a parent granting permission to the school to have their child evaluated. In the case of the school seeking permission to evaluate the student, this is done after the student has been mentioned by teachers

using a process that the school has set up. Then the staff try interventions, after at least six weeks of data collection showing that classroom interventions have not worked, then the student is brought up in a child find meeting (Understanding the Special Education Process, n.d.). After the child find meeting is held and it is agreed upon by staff that the student should be evaluated, the parents are asked if the student can be evaluated.

Provided parent permission is obtained then a trained evaluation team uses research based, such as a standardized assessment designed to gather more information relevant to the area of student academic or behavioral need. There are other cognitive evaluation tools as well as social emotional evaluation tools, what is used varies by school and by the students age (The Arc Minnesota, 2023). Based on the evaluation report that reflects the test results and includes information from observations, it is then determined by the Individual Education Program team for that student what their needs are. Included in an Individual Education Program is, where, duration of and what service(s) should be. What percentage of time the student spends away from their same age peers in order to meet their needs determines their federal instructional setting (The ARC Minnesota, 2023, pp. 2–3). For example if a student receives the most of their education in general education classes, meaning they are outside of the general education classroom less than 21% of the school day, they are considered to be at the federal instructional setting one. Conversely a student who is at a federal instructional setting 8 receives their education services in a homebound, hospital, or home based setting. This is a specially designed education program only for students receiving special education (The ARC Minnesota, 2023, pp. 2–3).

United Nations Educational, Scientific and Cultural Organization (UNESCO) is an organization that focuses on inclusion in developing countries. They base their support of inclusion on Article 26 of the Declaration of Human Rights, which states that:

Everyone has the right to education... Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Education shall be directed to the full development of human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace (Spring, 2018, p. 142)

The United Nations Educational, Scientific and Cultural Organization (UNESCO) uses that information for its own detailed definition of inclusion. The United Nations Educational, Scientific and Cultural Organization sees inclusion as a process that addresses and responds to the needs of all learners. This is accomplished through increasing participation, from students and staff, in learning, cultures and communities. Also there needs to be a reduction of exclusion in the general education setting. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children (Spring, 2018, p. 142).

Another component of inclusion is accommodations. Accommodations, alterations that students with disabilities need to participate in their least restrictive environment, are written into student's Individual Education Programs (Understanding Academic Accommodations - National Parent Center on Transition and Employment, n.d.). In the United States, accommodations seem

to be put in place by necessity or legal requirement and are done retrospectively (Mole, 2013). Accommodations and modifications are intended to be based on what the student needs to be successful in the least restrictive environment. According to Mole (2013), research found that 27.3% of the students asked, felt that their exam accommodations were not effective. One student's accommodations stated that exams would be provided in a location separate from their peers, this made the student feel that their sense of belonging in the classroom was disrupted, which is a direct contradiction to the intent behind accommodations (Mole, 2013, p. 63).

Since the passage of the Individuals with Disabilities Education Act there has been development and implementation to bring academic and social benefits to students with or without special educational needs into inclusive environments where a balance is created between disabled and non-disabled students (Ashton & Arlington, 2019). Inclusive service-learning intentionally brings together students to take part in projects in a way that will support their individual academic goals or standards and boost their problem solving and leadership skills. Service-learning blends academic learning with the building of social capital. Building on social capital is beneficial to students so when they leave educational institutions they have the skills needed to obtain and maintain a career, a belonging in their community and a support system of friends and family that they can feel comfortable communicating with. Service-learning also helps students, with and without special needs, with self-advocacy as they have to communicate their needs in order to collaborate with others on a project.

Meeting Academic Standards and Individual Education Program Goals

Something most if not all areas of educational institutions have in common is a use of, or a requirement to use research based practices, no matter the subject or department. One research

based method is Universal Design for Learning or UDL. Universal Design for Learning started as an architectural concept. An architect from North Carolina State University, Ron Mace, wanted to implement practices that met the requirements of the Americans with Disabilities Act but still appealed to the masses. This concept is based on the Individuals with Disabilities Education Act of 1975 that all people should have access to products and environments regardless of ability, so certain benchmarks were instituted, for example automatic doors are now commonplace because of Ron Mace's concept of universal design (UDL: The UDL Guidelines, n.d.).

In 1984, two researchers from Harvard, Dr. Ann Meyer and Dr. David Rose, applied Mace's concepts to education. Meyer and Rose founded The Center for Applied Specialized Technology (CAST Inc.) where the original goal was to introduce technology that would increase schools' ability to include students with special needs(The Origins of UDL, n.d.). Over time the goal evolved and changed to include the framework it now follows. Universal Design for Learning (UDL) centers on designing learning materials, methods/goals, and assessments that any individual can use to build academic and non-academic skills, in order to internalize learning from the start of their education (The Origins of UDL, n.d.). The framework of UDL is based on scientific studies on how people learn. Universal Design for Learning is informed for feedback thus it is updated often. Currently the guidelines include: engagement, representation, action, and expression (UDL: The UDL Guidelines, n.d.).

Each of those guidelines includes access, build, internalize, and goal levels. At the access level of engagement, the UDL framework provides options for interest. It does this through the optimization of choice, relevance, and value. Engagement also minimizes distractions. During

service-learning, this would be the brainstorming stage and would include ideas from all students regardless of ability. At the build level, engagement involves persistence, which is when students narrow down their service-learning project while ensuring that everyone is included and can use their strengths. It builds on the collaboration and community piece of service-learning and in the inclusion classroom in general, as an inclusive classroom is its own micro community that works based on collaboration. The internalization piece of engagement is where reflection happens. Students can reflect on the academic gains they have received through service-learning as well as coping strategies and skills they have learned, coping strategies gained also show progress on an Individual Education Program for a student with an emotional regulation goal. The goal of the engagement piece is to create learners who are motivated and purposeful in their learning. A service-learning project should also be purposeful, as are Individual Education Program goals, academic standards, and determining what is the least restrictive environment (UDL: The UDL Guidelines, n.d.).

Means of representation is essential to Universal Design for Learning. For staff this means making sure all students have mirrors and not just windows to see themselves in the classroom or for their involvement in a service-learning project. Mirrors and windows refers to a phrase that was initially introduced by Emily Style for the National SEED Project (Staff, 2021), which is an organizational effort to create change systemically. The phrase originated to reflect how students see themselves in books or classroom literature. The phrase has now evolved to be, windows, mirrors and sliding glass doors. Mirrors means giving students ways, i.e. other community members, to see themselves reflected back. A window refers to how students understand their place in the world, or in the case of service-learning, their community.

Service-learning can be a sliding glass door for students because it can be a way for them to open the window and step into their community. This is also when one can encourage students to delegate tasks based on strengths of each individual (Staff, 2021).

At the access level, representation is based on perception. It is also where accommodations and/or modifications will be most represented as this part is focussed on various delivery methods such as auditory options versus just text options. Having access to information in multiple ways not only helps students who have Individual Education Programs with accommodations but it is another way to give students choice, students could choose the method that they feel most comfortable with or that they have had success with before. During the build piece of representation, the focus is on the clarity of language and symbols. This includes alternate delivery methods as well as making sure tasks like vocabulary are clarified (UDL: The UDL Guidelines, n.d.).

When doing a service-learning project and going over terms students need to know, it is essential to ensure that the definitions are presented at an appropriate level, i.e. words like agriculture where the dictionary definition includes words like cultivation and rearing, which for some students those words also would need to be defined, instead the definition of agriculture should already be filtered by educational staff to convey the same meaning using words the students know. At the internalization level, representation is evident in comprehension. At this portion of a service-learning-project transfers and generalizations are being made so students can demonstrate or understand how their project is going to impact the community. The goal of representation is to have students who are knowledgeable and resourceful. This is also where self-advocacy skills can be built upon as students need to be able to communicate what they need

to be successful in the classroom and during a service-learning project (UDL: The UDL Guidelines, n.d.).

The UDL Guidelines (n.d) list the third guideline in UDL as action/expression. The access portion of action and expression is when the experiential portion of service-learning happens. From a special education point of view this is also when assistive technology comes into play. For example, a student may need a communication device in order to effectively participate in the service-project or even in the school community in general. During the build section there should be choices for expression or communication, such as during a service-learning project a showcase where students get to display their outcomes in a method that is successful for them would fit into this category. Action and expression can also be shown at the internalization level with options to exhibit executive function. Educational staff are monitoring at this stage, this is when students are goal setting, strategically planning, and managing information. Educational staff need to ensure that students' goals, plans, and information are reasonable as well as achievable. During service-learning, students need enough space to safely experience setbacks and natural consequences but have enough of a growth mindset to persevere. The goal is to have learners who are goal directed and strategic. For students with executive function goals or accommodations about task breakdown, setting strategic goals is excellent practice for what is reasonably achieved while working with general education peers (UDL: The UDL Guidelines n.d.). In addition to research based methods such as UDL, there are pedagogies that have provided insight into how students learn.

Depth of Knowledge is a pedagogy based on the level of understanding required to answer a question or perform an activity according to Strader (n.d). Depth of Knowledge started

as a pedagogy only used for math and science. It has since been adapted for all subjects. Webb designed levels for depth of knowledge. In order for an assessment to be considered comprehensive it should include all four levels of Webb's depth of knowledge. Level one assessment would be basic questions and answers, for example who was Abraham Lincoln and why is he important in US History is a level one question. At level two, questions need to lead students to make connections, such as compare and contrast two types of clouds. Level three includes strategic thinking, or citing evidence found, for example what evidence supports the author's claim that grape jelly is better than strawberry jelly would be a level three question. Level four items require students to solve complex problems where the outcome cannot be predicted. Level four is where students would create solutions to problems. Depth of Knowledge can be used for more than assessment purposes. When doing a service-learning project, one could start with level one questions like what are issues students see in their community, then level two would be comparing and contrasting two possible solutions. This is when math could be used as well to analyze the cost effectiveness of any viable solutions or materials needed. Level three would be the student's reflection after the project is done where they take an in depth look at what was accomplished. Level four could be something like a showcase night where students can present their work and distribute materials related to their solution (Strader, n.d.). Another leveled learning pedagogy is Bloom's Taxonomy.

Bloom's Taxonomy is an educational framework consisting of six categories, in 1965, Bloom worked with others to create what is now known as Bloom's Taxonomy (Mcdaniel, 2010). Mcdaniel (2010) reported the original six categories are knowledge, comprehension, application, analysis, synthesis, and evaluation. The knowledge category is a recall of previous

knowledge, which is the category where Ausubel's theory would be applicable. Gagne's pre-instructional phase and level one of Depth of Knowledge also apply to this category. The comprehension category is where ideas or concepts are explained; in Ausubel's theory this is when knowledge is gained and stored into long term memory (Mcdaniel, 2010).

Gagne's instructional phase and Bloom's levels two and three could be incorporated in this category as well. Then there is real life application, which is when students can build connections between concepts taught and use them in real life situations. This is the category for Bloom's level three or level four. Then analysis is when students are assessed on what they have learned. This would be Gagne's post instructional level and could be Depths of Knowledge level four. Synthesis involves putting everything together to form a whole, which would be when students reflect (Mcdaniel, 2010). Lastly is an evaluation piece where students can evaluate the learning and what was gained.

Bloom's Taxonomy has been updated since 1956, since 2001 the categories have been remember, understand, apply, analyze, evaluate, and create (Mcdaniel, 2010). When doing service-learning one can go through Bloom's Taxonomy as if it were an outline for the project. First, students recall organizations in the community that can be partnered with. Then students explain ideas for how to help to show comprehension of the problem. Students then apply the knowledge to form a solution, analyze the solutions by comparing and contrasting, budgeting for supplies, evaluate the best solution, and create the solution. Service-learning can work with Ausubel's subsumption theory or Gagne's model of instructional design. It can also cover pedagogies like depth of knowledge, and Bloom's Taxonomy.

As early as kindergarten, educational standards include tasks like modeling real-world objects when students are learning about two and three dimensional shapes. Service-learning is one way to encompass standards and real life application. Kaye (2010) has sample lesson plans one could use in which educational theories and pedagogies could be used along with standards so cross-curricular academic needs are being met and progress is being made on Individual Education Program goals.

One such example of a service learning unit from Kaye (2010) suggested an environmental theme. Once one has brainstormed ideas for a topic with their class, i.e. the environment, the next step is for the teacher to fit environmental issues across subjects. To continue with this example the class has narrowed down the topic to waste in the cafeteria, food and non-food waste. In math, students could calculate the amount of money that is thrown away from food waste, also what the school pays for a dumpster and waste removal. Students can then shop for other waste removal companies. In social studies, students can find out the city ordinances regarding compost and start a compost program at the school. For science, students can research local farms that would use the compostable items to feed the animals and study the life cycles of the farm animals. In English Language Arts, students can read and analyze non-fiction articles about composting then write persuasive essays about the benefits. To have it all come together, students could present the findings to the school board to get approval for starting a composting program. Students could also partner with a local nursery to build garden boxes and start a community garden to grow food for the school to use and further reduce the cost of meals. All of the steps can fit into state standards and pedagogies such as UDL, Depths of Knowledge and Bloom's Taxonomy. Students can work on steps individually and collaboratively,

service-learning even provides opportunities for differentiation. Overall research has shown that service-learning can be a real life application of classroom content that is also inclusive to students who receive special education services as service-learning can also show progress on Individual Education Program goals, even the non-academic goals like social communication, executive function, or emotional regulation (Kaye, 2010).

One of the most important elements of service-learning is student participation in all steps of the process. This includes students who receive special education services in an inclusive delivery style. In a podcast titled *The Social Breakdown*, guest Dr. Colleen Rost-Banik talks about benefits and barriers to service learning in the episode *The Peaks and Valleys of Service Learning*. According to Rost-Banik students should be identifying a need for a partnership, the teacher could have a list of three to four choices of places or organizations that would fit the needs of a service-learning project, especially for younger students who may want to help everyone. Once a choice has been made by the students, either with or without guidance from their teacher(s) then they should be doing the research into the fundamental issue or need from the community partner and how the partnership can benefit the school or class as well so the service-learning experience does not end with student feeling as if they have “saved” the community partner (Spotify, n.d.).

Students may contribute to the planning portion where they decide how to implement their plan and what is needed to implement the plan. For example will there be a need for transportation and if so does it need to be wheelchair accessible, does the community partner location need to be wheelchair, walker, or other mobility assistance device accessible, and any other things that need to be considered for all students in the class to participate. When the plan

is implemented that teacher(s) may need to step in and guide the students more with things like how to engage in conversations with the members of the community partners, i.e. what questions would and wouldn't be appropriate to ask. After the implementation portion is complete students should be able to showcase how students used their strengths to contribute and teachers can use that information as assessment and as feedback. Then everyone can celebrate the successes together and reflect on the new skills students gained and community members the students and staff have impacted and have been impacted by. Having an impact on the community and having the community have an impact on the class, including staff, while achieving academic gains and making progress on Individual Educational Program goals, sums up service learning (Kaye 2010). "The job of an educator is to teach students to see the vitality in themselves" (Campbell, n.d., as cited in Kaye, 2010, p.18).

Often service-learning is a cycle. One project ignites a curiosity in students who then want to do more in their community, even though the assessment has been done and the loop essentially closed on one project, another adjacent project could be done for the next curriculum standard. Getting the foundation built makes the next project easier to get started because the community relationship part is already established. The skills gained, such as questioning, observing, experiencing diverse perspectives, working alone and with others, and self-advocacy tend to stay with students as well and work into various research based methods, educational theories and pedagogies (Kaye, 2010).

CHAPTER III: CONCLUSION

This chapter will provide a broad summary of the literature reviewed in this paper. Then it will address professional applications, followed by limitations of the review. It will close by offering recommendations for further study and a final conclusion.

Summary of Literature

This literature review sought to examine service-learning and how it could be inclusive for students with disabilities. The literature listed many similar benefits such as community building, communication skills development, leadership skills development, collaboration, and exposure to diversity (Astin et al., 2000). Students are able to build on those skills and more while teachers are still able to make sure academic standards are being met. For students who have disabilities, service-learning also enables more opportunities to make progress on their Individual Education Program goals, specifically goals in the areas of social communication, executive function, or emotional regulation. Service-learning can meet the requirements of a Free Appropriate Public Education and the standards of the Individuals with Disabilities Education Act as the project can be inclusive for students with disabilities to participate alongside their non-disabled peers. An inclusive model benefits all students as it encourages diversity and helps students to learn interpersonal skills like cooperation, as well as building on character traits such as respect. The literature also showed how service-learning fits into theory like those of Ausubel and Gagne , as well as pedagogies like Depths of Knowledge and Bloom's Taxonomy (Learning Theories: Ausubel's Learning Theory, n.d.)(Mcdaniel, 2010)(Strader, n.d.). When initially setting up a service-learning model or project, the barriers may seem overwhelming for staff, however the literature reviewed shows the benefits being

greater than barriers, specifically once the implementation stage is reached so teachers can then let the project be more student-led. The literature reviewed showed several opportunities for professional application that meets academic standards and is inclusive for students using special education services.

Professional Application

There are strategic approaches to ensure that service learning is implemented in a way that supports all learners. One reason there could be benefits to starting service-learning in early grades would be to avoid biases before they are formed. A true service-learning model should be a mutually beneficial arrangement between the class and the community. In the previous example of working with a farm to set up a school compost system, the school gets the benefit of lowering their environmental footprint while the farm benefits from food for the animals like pigs who can eat composted food. There are also opportunities for formative and summative assessments in the various subjects that can relate to the service-learning project. Service-learning is truly collaborative; specifically if students have more than one teacher, i.e. middle school students who rotate classes, the staff need to work together as well to model for students how collaborations and cooperation are beneficial. Also cross curricular projects like a service-learning project once set up and in the implementation stages can lift some lesson planning burden off of teachers since aspects of the project should be student-led. Service-learning also promotes a growth mindset as students experience natural consequences and learn from their mistakes, which also encourages the character trait of perseverance.

Service-learning is a learn by doing model. It fits the criteria the Center for Teaching and Learning (2001) listed of what experiential learning is. The criteria include opportunities

for students to take initiative, make decisions, engage intellectually, creatively, emotionally, socially, reflect and be accountable for the results. The process follows Kolb's Cycle of experiential learning. Kolb's cycle is basically the concept that experiential learning, and its sub categories such as service-learning, are continuous (Center for Teaching & Learning, 2001). Students might originally start with observing that peers or even students themselves aren't making healthy choices. The students then conceptualize partnering with a local gym, nutritionist, police department to raise awareness of health issues facing youth today. The students then take what was learned from the experiences they had with the partnerships and put together a public service announcement that can be used in other grades or even other schools. While working with the partnership community members the students are having concrete experiences while they learn about healthy exercise, food choices, and drug and alcohol resistance. While learning about healthy choices across curriculum subjects students might start to wonder about how homeless people stay healthy which could start the cycle of the next service-learning project (Kaye, 2010, p. 146). Once expectations and norms have been established for service-learning one could truly let students lead and have ownership over their topics while teachers are still teaching the standards, the cycle of service-learning, in general education and in classes that include students with disabilities, can continue in this manner for as long as it is sustainable. "It is not that you can make a difference; it is that everything you do makes a difference" (Philippe Cousteau as quoted in Kaye, 2010 p.125).

Limitations of the Research

This thesis was not an exhaustive search, however based on the forty four resources this researcher used, it was found that most literature was regarding projects that high school or

college students had done to meet graduation requirements. There is limited research on service-learning in the primary and middle school grades (kindergarten through eighth grade) or non-compulsorily service-learning (Chiva-Bartoll, et al 2020). Celio et al (2011) even found that students, with or without Individual Education Programs, who were required to do service-learning procrastinate because they had a negative impression of service-learning, then after having done a service-learning project the students found that they did gain skills while achieving academic goals (Celio et al., 2011). Research was also generally focused on direct service-learning and not the other types. Most research did not address service-learning being a category of experiential learning so readers may think that service-learning is not a subcategory of experiential learning. The literature was also missing information of professional development, as the studies were student focussed.

Implications for Future Research

This literature review summarized how service-learning could be inclusive and meet academic standards. There could be more research studies done in grades kindergarten through eighth grade to show that service-learning projects can meet several academic and Individual Education Program goals for all students, not just fill a civics requirement in high school or college as is often the case. More research could also be done on indirect and advocacy service-learning as those types may be better suited for younger students. There could even be a development of research into school budgeting or grants for service-learning as one of the biggest barriers mentioned was the financial burden. Service-learning could be quite an expenditure for a school, especially if they would be providing training for the staff, as well as if the project involved students needing to go to another location using buses. The literature

was mostly student focussed so there is an opportunity to do studies on how service-learning affects staff, the classroom as a whole, or even the grade level or school depending on if the project is cross curricular. Another area of research that could be useful for service-learning would be co-teaching, specifically if the project is going to be cross-curricular. There can be a lot that goes into service-learning and not all of the parts of the process have been explored.

Conclusion

The guiding question for this literature review was: How can teachers incorporate service-learning to promote inclusion for students with disabilities? It became evident that service-learning can be incorporated into the classroom to promote inclusion by promoting collaboration and leadership skills. Service-learning can also cover a broad spectrum of academic standards for disabled and non-disabled students. Overall service-learning helps students not only gain academic equity but civic equity (Bandyopadhyay et al., 2021).

Students, regardless of ability, can gain academic success by having standards woven into the service-learning project. Service-learning should be cross-curricular so students are exposed to standards from all their core subjects: math, science, social studies, and English language arts. Electives could be included if they would fit into the project or can be used as an opportunity for students to experience achievement in non-project areas (Kaye 2010). Students who do receive special education services can achieve gains in academics and make progress on their Individual Education Program goals. Service-learning projects involve aspects of cooperation and collaboration, which promote social skills. Service-learning also encourages self-advocacy in that students need to be able to respectfully voice their opinion. Emotional regulation can even

be part of service-learning, students need to be able to work with peers and community members in a variety of situations and display expected reactions (Ashton & Arlington, 2019).

Overall the literature showed that service-learning has more benefits than barriers, has academic standards built in, can provide a Free Appropriate Public Education and be inclusive, and can assist with progress on Individual Education Program goals while students of all abilities work together to accomplish a community goal.

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