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Creating UNICORNS: Teaching IEP Literacy and Accommodation Self-Advocacy Through Asynchronous Interactive Video Modules

Kathleen M. C. Dorr
Coastal Carolina University

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Creating UNICORNS

**Creating UNICORNS: Teaching IEP Literacy and Accommodation Self-Advocacy
Through Asynchronous Interactive Video Modules**

A DISSERTATION

Submitted to the Faculty of
Coastal Carolina University in partial fulfillment
of the requirements
for the degree of
Doctor of Educational Philosophy

by

Kathleen M.C. Dorr

Coastal Carolina University

Conway, SC

Date:

Dissertation Chair: Dr. Suzanne Horn

Abstract

Data indicate that individuals who disclose their disability status to self-advocate for accommodations at the postsecondary level may be as rare as the mythical unicorn. During the 2019–20 school year in the United States, 7.3 million public education students aged 3–21 years received some form of special education services. These students account for 14% of the nation’s public school enrollment (Irwin et al., 2021). In one study, only 20% of high school students reported having received any instruction on reading and understanding their own Individualized Education Program (IEP; Agran & Hughes, 2008). In another study, only 19% of postsecondary students reported receiving services or accommodations, while 87% of the same sample reported receiving services or accommodations at the secondary level (Raue et al., 2011).

The current study explored the effects of a program designed to fill a research and instructional gap by teaching college-bound secondary students with hidden disabilities how to self-advocate for accommodations. The UNICORNS program delivered instruction via asynchronous interactive video modules (IVMs). The IVMs taught students about self-advocacy, and IEP literacy. The program used a mnemonic to teach eight target behaviors for self-advocating and requesting accommodations. The UNICORNS program included instruction on the four subskills within Test et al.’s (2005) conceptual model of self-advocacy. The study’s findings suggest that asynchronous IVMs positively impacted all participants. Implications for practice and future research are provided.

Keywords: self-advocacy, special education, hidden disability, accommodations request, IEP literacy, asynchronous instruction, interactive video module, Edpuzzle

Dedication

I would like to dedicate this work to all the struggling students who come to school daily while fighting battles with internalized ableism, trauma, and mental illness. I dedicate this work to my past, current, and future students, as well as those who are no longer with us. You are all part of this journey. Lastly, I dedicate this thesis to all of my siblings in recovery, whether they are sick and suffering or enjoying the journey.

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There are several people I must acknowledge, as, without their support, this dissertation would have never come to completion.

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Chapter 1: Introduction

Background

During the 2019–20 school year, 7.3 million students aged 3–21 years in public education received some form of special education services in the United States (Irwin et al., 2021). These services, administered under the protective umbrella of Special Education, are granted under the Individuals with Disabilities Education Act 2004 (IDEA; Davis, 2005). Based on data reported in the 2021 Condition of Education Report, students served by special education services accounted for 14% of students enrolled in the nation’s public schools (Irwin et al., 2021). In the public education setting, special education services are provided by law to any student determined to have a disability that negatively impacts their learning. The primary goal of special education services, as outlined by the 2004 reauthorization of IDEA, is to ensure that all students, regardless of their disability, can become independent and productive members of their community after leaving public education (Balint-Langel et al., 2020; Palmer & Wehmeyer, 2003; Sitlington et al., 2010).

Students receiving special education services under IDEA must have an Individualized Education Program (IEP) developed at least yearly. An IEP is a written legal document that is developed, reviewed, and revised following Section 614(d) (20. USC § 614(d)(1)(A)(i) of IDEA 2004 (IDEA, 2004). An IEP is a living document that outlines the student’s special education services, and it should be updated and changed as required (Friend & Bursuck, 2006). This document also details the student’s current disabilities, learning strengths, and weaknesses, as well as necessary accommodations that would allow him or her to participate in the general education curriculum to the maximum extent possible (Individuals with Disabilities Education Act, 2004). By federal law, a transition plan must be included in each student’s IEP after they

turn 16 years of age, which should outline his or her future career goals, postsecondary programs, and needs. IEPs must be updated annually with current educational data and newly developed annual goals (Friend & Bursuck, 2006).

Over the years, numerous studies have explored the impact of encouraging students with disabilities that postsecondary education can be an obtainable transition goal (Shaw & Dukes, 2013). In 2013, Carnevale et al. estimated that by 2020, 65% of all jobs would require postsecondary education or specialized training beyond high school (Carnevale et al., 2013). However, in 2020, the Bureau of Labor Statistics reported that only approximately 17.9% of individuals with disabilities held jobs in the labor force. To ensure that students with disabilities receiving special education services can achieve productive lives after leaving public education, instruction in self-advocacy is required (Lipscomb et al., 2018). Self-advocacy refers to an individual's ability to make their own choices, find solutions to personal problems, develop life goals, take action steps to reach their goals, and accept consequences (Rowe et al., 2015).

Notably, secondary students with disabilities are far less likely to enroll in postsecondary programs than their nondisabled peers (Leake, 2015; Newman et al., 2011). Over the last 25 years, the postsecondary enrollment rates of these students have risen continuously (Madaus et al., 2018). Completed in 2012, the National Longitudinal Transition Study-2 (NLTS-2) indicated, based on IEP data, that 79% and 78% of students served for a specific learning disability (SLD) and other health impairments (OHI), respectively, are expected to enroll in postsecondary education. Another study suggested that 51% of young adults with disabilities plan to enroll at postsecondary institutions within 8 years of leaving secondary school (Newman et al., 2011).

However, mere enrollment in postsecondary education is insufficient to ensure that students with disabilities will succeed. This is because they remain at a higher risk of not

completing their postsecondary course of study than students without a disability (Leake, 2015; Newman et al., 2011). The 2022 Persons with a Disability: Labor Force Characteristics News Release reported that individuals with a disability were less likely to have earned at least a bachelor's degree than those with no disability (Bureau of Labor Statistics, 2022b). In March 2022, the Bureau of Labor Statistics reported that among respondents with a disability aged over 25 years, only 21.1% had earned at least a bachelor's degree. This rate was significantly lower than the 41.0% of respondents without a disability who had earned at least a bachelor's degree (Bureau of Labor Statistics, 2022a). According to another study, although the enrollment rate of students with disabilities in postsecondary education is increasing, many of them find the transition to secondary education challenging, which may explain their lack of program completion (Garrison-Wade, 2012).

Moreover, only 20% of high school students surveyed by Agran and Hughes (2008) reported having received instruction on reading and understanding their IEP. Students with IEPs whose transition plans include postsecondary education should receive instruction on the differences in their educational rights and services when entering postsecondary education (Tucker, 1996). Postsecondary students who have developed self-awareness concerning their disability are far more likely to complete the steps required to self-identify, which would enable them to access needed accommodations and supports (Getzel & Thoma, 2008).

Over the years, the unicorn has been the subject of Mesopotamian artwork, various cultures' myths, and even Bible passages. These creatures are often described as strong, fierce, loyal, and exceedingly rare (Encyclopedia Britannica Online, 2020). Data suggest that secondary students who have fully developed self-advocacy and knowledge of their IEP might be as rare as the mythical unicorn. To help secondary students with disabilities successfully transition to

postsecondary education, teachers must provide explicit instruction on developing self-advocacy skills. This instruction should also focus on increasing students' knowledge of self, which includes the contents of their IEP (Agran & Hughes, 2008; Getzel & Thoma, 2008). Thus, special education teachers can help to develop their students' skills so that they, like the mythical unicorn, can strongly and fiercely self-advocate for their needs in postsecondary settings.

Statement of the Problem

Students who do not receive instruction in advocating for their accommodations typically have little input in what accommodations they receive; moreover, they report believing that their teachers have total control over their accommodations (Prater et al., 2014). Research in public education settings has demonstrated that students who know how to advocate for themselves and their required accommodations are more likely to succeed in general education classes (Prater et al., 2014; Stang et al., 2009). A meta-analysis of literature on self-advocacy instruction at the secondary level found that vast amounts of research has focused on developing instruction methods that teach self-advocacy skills (Fiedler & Danneker, 2007). However, a study indicated that little instruction in self-advocacy is being provided in secondary classrooms nationwide (Fiedler & Danneker, 2007). Furthermore, students reported feeling unfamiliar with the contents of their IEPs and not being active in their IEP meetings (Agran & Hughes, 2008). In addition, special education teachers at the secondary level also reported that they have faced increasing demands to create meaningful and data-rich IEPs over the last few years; thus, they often feel that they cannot devote sufficient time to explicitly teaching their students self-advocacy skills (Fiedler & Danneker, 2007). This lack of instruction may have lasting effects on students with disabilities who transition to postsecondary education settings (Kranke et al., 2013). Another challenge that students with disabilities face upon transitioning out of public education is the

change in their role in securing needed accommodations. While in the public education setting, special education services protected under IDEA 2004 are overseen by special education case managers. Ensuring that students receive their accommodations and services is primarily the responsibility of special educators (Horowitz et al., 2017).

When students enter postsecondary education, their rights to accommodations become protected under the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act of 1990 (ADA; Horowitz et al., 2017; Tucker, 1996). Unlike IDEA 2004, which makes teachers responsible for ensuring that students receive accommodations, students transitioning to the postsecondary level become responsible for ensuring they have the accommodations they require. To receive accommodations at the postsecondary level, these students must first self-identify by voluntarily disclosing their disability status to their institution. To self-identify, students must typically present documentation that provides evidence to support their disability status, and they often must explain their needed accommodations to others (Horowitz et al., 2017; Lovett et al., 2015; Tucker, 1996). Therefore, students must have the self-advocacy skills required to face the “burden of proof” process, which is part of self-identification at the postsecondary level, to access their essential accommodations. Those who cannot do so are forced to suffer through postsecondary classes and coursework without their needed accommodations (Davis, 2005).

Data from the NLTS-2 indicated that, after enrolling in postsecondary education, students with disabilities often do not self-identify their disability status to their postsecondary institutions (Leake, 2015). Further data on postsecondary accommodation usage indicates that of those who reported having a disability, only 19% reported receiving services or accommodations at the postsecondary level; by contrast, 87% of the same sample reported receiving services or

accommodations when enrolled in secondary education (Raue et al., 2011). Another study suggested that postsecondary students with hidden disabilities have higher dropout rates and perform lower academically than their nondisabled peers in postsecondary settings (Kranke et al., 2013). Hidden disabilities refer to any disabling condition that is not visible or perceivable through casual observations of an individual (Davis, 2005). Individuals with hidden disabilities have higher program noncompletion rates, which may be correlated to their lower rate of receiving the same accommodations they had while in secondary education settings (Raue et al., 2011).

In addition, in the NLTS-2, 60% of respondents believed they no longer had a disability (Leake, 2015). NLTS-2 survey data also suggested that among the respondents who identified as having a learning disability, only 24% reported having self-identified their disability status to their postsecondary institution (Newman et al., 2011). Regarding the rates of postsecondary students with disabilities compared with those at the secondary level, the fact that postsecondary students must self-identify impacts the accuracy of the current data. It may be logical to assume that more students with disabilities who have never self-identified their disability status are currently enrolled in postsecondary education. Therefore, it could be safe to assume that no accurate data exist regarding the enrollment of individuals with disabilities, their lack of access to accommodations, and their postsecondary completion rate (Leake, 2015).

Notably, more accurate data exist regarding the number of students with disabilities in the secondary setting. In 2020–21, some 7.3 million students aged 3–21 years in public education received some form of special education services. Among them, 33% and 15% received services under the classification categories of SLD and OHI, respectively (Irwin et al., 2021). Both SLD and OHI can be described as hidden disabilities as they are not visible or perceivable through

casual observations (Davis, 2005). To meet the educational needs of students with disabilities, the use of accommodations is widespread in public education. The most common accommodations employed in the U.S. public education system are extra time on tests and assignments, shortened assignments, the use of computers and calculators, books in alternative formats, and electronic readers or interpreters (Newman et al., 2011).

To access accommodations at the postsecondary level, once a student has self-identified, they must ensure that their professors or instructors remain fully aware of their accommodations. Students at the postsecondary level are fully responsible for communicating their need for the accommodations granted by their postsecondary institution to others. To do so, they must be able to communicate – and often justify – their accommodations to their professors and instructors (Getzel & Thoma, 2008). While some students may no longer believe they have a disability, others may lack the skills required to ensure that they can express the extent of their hidden disabilities' impact on their learning to others (Davis, 2005). Studies have confirmed that students with disabilities who develop more effective self-advocacy skills have a higher likelihood of receiving postsecondary education and higher employment rates than those with lower levels of self-advocacy skills (Mazzotti et al., 2021; Test et al., 2009). Therefore, developing programs for secondary students with disabilities focused on increasing and practicing self-advocacy skills can positively impact their social/emotional health, academic success, and career readiness before transitioning to the postsecondary setting (Horowitz et al., 2017).

To help develop the skills required to self-identify and self-advocate for needed accommodations, secondary students should receive explicit instruction in self-advocacy. Test et al. (2005) developed a conceptual framework that incorporated many older definitions, such as

that of Skinner from 1998. Based on this framework, students must be taught four subskills to fully self-advocate for their needs, namely knowledge of self, knowledge of rights, communication, and leadership skills. The framework also visualizes the interconnections between the aforementioned four subskills. First, students must have knowledge of self, which relates to their disability as well as their learning strengths and weaknesses; second, students must have a basic understanding of their legal rights; third, students must be able to communicate the supports they require to those in power, such as teachers, school administrators, professors, and employers; finally, students must develop basic leadership skills and work with other team members effectively and respectfully (Test et al., 2005).

Many studies have researched ways to increase students' self-advocacy skills, such as teaching them how to lead their IEP meetings. Such studies have concluded that students can gain self-advocacy skills by participating in student-led IEP meetings. To lead their IEP meetings successfully, students must understand the required components of an IEP, which are as follows: their present levels of functioning, accommodations, annual goals, least restrictive environment (LRE), services, service times, and transition plan (Friend & Bursuck, 2006). However, asking students to be present and answer questions when directed in an IEP meeting may not be sufficient for increasing the self-advocacy skills required for them to transition to the postsecondary education system. A survey study indicated that among 56 junior high and 17 high school student respondents, only 49% of junior high and 20% of high school students reported having received any instruction in reading their own IEP (Agran & Hughes, 2008). This lack of instruction in reading, understanding, and locating information within one's IEP may negatively impact college-bound students' ability to self-identify and request accommodations at the postsecondary level. To develop these skills, students at the secondary level require more

instruction to understand their learning strengths, weaknesses, and needed accommodations (Janiga & Costenbader, 2002). Postsecondary students who have developed self-awareness related to their disability were found to be far more likely to complete the steps required to self-identify and focus on obtaining needed services and support (Getzel & Thoma, 2008).

In another study, coordinators of special services for students with disabilities who worked at 174 colleges or universities in the State of New York reported believing that most students possess inadequate self-advocacy skills (Janiga & Costenbader, 2002). Another study involving 59 college students and six college-level disability coordinators found that postsecondary students' lack of awareness of their disabilities and needs hindered their self-advocacy skills (Garrison-Wade, 2012). In addition, the National Center for Education Statistics (NCES) highlighted a discrepancy where 87% of students with disabilities reported receiving services and accommodations at the secondary level compared with just 19% at the postsecondary level, which illustrates the impact of not entirely building self-advocacy skills (Raue et al., 2011). Moreover, data from the NLTS-2 indicated that of the postsecondary students with disabilities who self-identified, only 23% reported receiving accommodations or services; meanwhile, 95% of those students reported receiving at least one accommodation when enrolled in secondary school (Newman & Madaus, 2015b).

Purpose of the Study

A recent meta-analysis on postsecondary disability services found a lack of research-based educational practices at the secondary level existed for increasing the postsecondary enrollment, retention, or graduation of students with disabilities (Madaus et al., 2018). As a result, those with hidden disabilities may lack self-advocacy skills and feel uncomfortable revealing their disability and need for accommodations to others (Gow et al., 2020). To increase

the postsecondary success rate of students with hidden disabilities, they must receive explicit instruction in the self-advocacy skills required in postsecondary processes for self-identifying and requesting accommodations (Garrison-Wade, 2012). For students to self-identify at the postsecondary level, they must receive instruction that increases their knowledge of self. This knowledge includes understanding one's disability, its effects on learning, and beneficial accommodations (Test et al., 2005). Such instruction is critical for students with hidden disabilities, who often report feeling stigmatized because of their disability. Notably, a fear of self-identification could stem from self-stigma resulting from internalized ableism. Ableism refers to discrimination based on able-bodied individuals being viewed as normal and superior to those with a disability, resulting in prejudice toward the latter (Corrigan & Rao, 2012). Engaging in discourse and instruction on self-advocacy and disabilities at the secondary level may mitigate students' internalized ableism, which is a barrier to self-identification at the postsecondary level.

Therefore, the current study explored a method for teaching self-advocacy skills and accommodations requests using asynchronous interactive video modules (IVMs) as part of the UNICORNS program. This program used the mnemonic "UNICORNS" to teach students target behaviors that they should use when self-advocating for accommodations at the postsecondary level. Asynchronous instruction was selected for the current study due to the high rate at which this form of instruction was employed across the nation due to COVID-19. In February 2021, approximately 43% of fourth through eighth-grade students were enrolled in remote instruction, while 21% and 35% were in hybrid and in-person instruction, respectively (Institute of Education, 2021). While remote instruction was novel on a national scale, a small percentage of special education students receive services in a homebound/home-based instructional model each year, which can be delivered remotely (National Center for Education Statistics, 2021).

In 2020, Russell and Pearl developed and explored the use of an entirely virtual asynchronous instruction method named Keys to Self-Advocacy Training (K2SA). Their aim was to teach college students how to overcome the challenges they face when advocating for accommodations at the postsecondary level. The study was built on a foundation developed by Roessler and Palmer (2000) in their work on self-advocacy and conflict resolution training (SACR) and Skinner's definition of self-advocacy (1998). The K2SA training program was an abbreviated and entirely online asynchronous video training course developed for traditional first-year college students who had already self-identified. The researchers indicated that one of the most significant limitations of the K2SA study was its lack of a learning management system (LMS), which resulted in the inability to track participants' progress within training videos or to ensure that the program was used with fidelity. Another limitation was that the only reported results were based on participants' qualitative self-reports collected pre- and postintervention. Therefore, more research using quantitative data collection protocols is required to explore the effect of asynchronous instruction on teaching self-advocacy.

The current study used a single-case multiple-probe-across-participants design to determine the effectiveness of the UNICORNS programs. It also used an LMS to track each participant's progress within each intervention stage. This intervention was developed to ensure that the asynchronous IVMs met participants' needs as secondary students who have yet to self-identify at the postsecondary level. The UNICORNS program included four IVMs that focused on increasing secondary students' self-advocacy skills by increasing (1) knowledge of disabilities, (2) knowledge of self by teaching IEP literacy skills, (3) knowledge of the postsecondary self-identification process, and (4) the steps to use when requesting accommodations. In the final IVM, the intervention also used the mnemonic "UNICORNS" to

teach students eight target behaviors to follow when requesting accommodations at the postsecondary level using the knowledge gained from the first three IVMs. The steps used in the current study were developed by shortening and modifying the 19 target behaviors in the Self-Advocacy and Conflict Resolution (SACR) intervention (Holzberg, 2017; Holzberg et al., 2019; Lopez et al., 2020; McGahee et al., 2021; Palmer, 1998; Roessler & Palmer, 2000; Walker & Test, 2011). It was hypothesized that participants would gain knowledge on the self-advocacy skills required to self-identify at the postsecondary level by participating in the UNICORNS program. The participants could also generalize the instruction to help them increase their ability to request accommodations.

Research Questions

This study used a single-case multiple-probe-across-participants design to determine whether a causal relationship existed between the independent and dependent variables under investigation (Alqraini, 2017; Horner et al., 2005). Four research questions were investigated with participants who were served by special education and identified as having a hidden high incidence disability, such as SLD or OHI. Additionally, all participants' IEP transition plans included the goal of enrolling in postsecondary education within the next 2 years. The research questions were as follows:

1. To what extent does the UNICORNS program increase the self-advocacy knowledge required to receive postsecondary accommodations in college-bound students with hidden disabilities?
2. To what extent does the UNICORNS program increase self-advocacy abilities for requesting accommodations in college-bound students with hidden disabilities?

3. Do participants believe that the UNICORNS program positively impacted their ability to self-advocate for needed accommodations?
4. Do teachers believe that the UNICORNS program positively impacted students' ability to self-advocate for needed accommodations?

Significance of the Study

The current study examined the effectiveness of the asynchronous IVMs that comprised the UNICORNS program. This program was developed to increase participants' knowledge of the self-advocacy skills required to self-identify and receive accommodations at the postsecondary level. Instruction on IEP literacy skills was included, which focused on increasing participants' ability to read, understand, and explain their IEP to self-identify and justify their accommodations as part of the self-advocacy subskill of knowledge of self. The instruction also included components related to building participants' knowledge about their legal rights to accommodations and the steps required to receive accommodations in the postsecondary setting. Through receiving this form of instruction, participants would obtain an enhanced understanding of their disability, their learning strengths and weaknesses, how to justify their needed accommodations to others, and the laws protecting their rights in different academic settings. This increased self-advocacy ability would also enable participants with hidden disabilities to self-identify and receive the accommodations they require at the postsecondary level. The broader social importance associated with this form of instruction is also related to the research-based theory that increased self-advocacy skills might increase postsecondary education program completion rates for students with hidden disabilities.

Definition of Key Terms

The following key terms are used throughout this thesis. They are operationally defined

in this section to explain their meaning and usage in the current study.

Accommodations: Accommodations “are adaptations that make the general curriculum and assessments accessible to the student without changing the standard or curriculum” (Prater, 2018, p 247). These changes are often related to timing, setting changes, response methods, or differences in information presentation. The goal of accommodations is to increase the amount of learning that a student retains and expresses regarding the general educational curriculum (Harrison et al., 2013; Sandall et al., 2016).

Americans with Disabilities Act of 1990: The Americans with Disabilities Act (ADA) grants civil protections to individuals with disabilities. It protects equal opportunities for individuals with disabilities in the areas of employment, public accommodations, transportation, state and local government services, and telecommunications (Jones et al., 2012). ADA also “extends protection against discrimination to the full range of state and local government services, programs, and activities including public schools regardless of whether they receive any Federal financial assistance” (IDEA: Individuals with Disabilities Education Act, n.d.).

Asynchronous online instruction: This form of instruction uses activities that are accessed online in a session format. Learners can perform different tasks in their own time and at their own pace. Asynchronous courses tend to be highly and clearly structured and arranged in weeks or learning blocks to monitor learner progress within the course and build upon course content. Communication occurs through message board discussions or forums, where participants can post and respond to other learners and teachers within a deadline (Psoinos, 2021).

College-bound: This refers to students whose IEP transition plan includes enrollment in postsecondary education programs. In the current study, the participants’ transition plans included enrollment in either traditional 4-year degree programs, 2-year degree programs, or

technical programs within the community college system (Hands, 2014).

Hidden disabilities: Nonapparent disabilities include SLDs, attention disorders such as attention deficit hyperactivity disorder (ADHD), psychiatric disabilities, and hidden medical conditions (Kranke et al., 2013). Outside observers often perceive individuals with these forms of disabilities as “normal” as they do not display the visual indicators that conform to society’s perception of a disability. Those with hidden disabilities can make an active choice to either hide or disclose their disability to others around them (Izzo & Horne, 2016).

High-incidence disability: High-incidence disabilities are conditions that have been identified in more than 100,000 people living in the United States. This term refers to individuals who have been diagnosed with SLDs, emotional and behavioral disorders (EBDs), mild to moderate intellectual disabilities (IDs), high-functioning autism (HFA), and ADHD (Prater, 2018). In the current study, this term referred to students in the public education setting identified and served with an IEP under the three most reported categories according to percentages based on the latest Condition of Education (COE) report. These three categories are SLD, speech or language impairment (SLI), and OHI (Irwin et al., 2021).

Individuals with Disabilities Education Act (IDEA): The stated purpose of IDEA is to “ensure that all children with disabilities have available to them a free appropriate public education (FAPE). Students have the right to special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living. It ensures that the rights of children with disabilities and parents of such children are protected” (IDEA: Individuals with Disabilities Education Act, n.d.).

Individual Education Program (IEP): An IEP is a written statement for each student with a disability that describes the child’s educational program’s capabilities, strengths,

accommodations, and interests (Friend & Bursuck, 2006).

IEP literacy: The primary investigator (PI) developed this term for the current study to explain an individual's ability to identify, understand, interpret, and communicate the different sections within an IEP.

Interactive video module (IVM): This study used the term IVM to explain the asynchronous video lessons with embedded questions to which learners had to respond to advance the instruction content. This method of instruction was used to deliver the content of the UNICORNS intervention and collect data through this study's baseline, intervention, and maintenance portions.

Learning management system (LMS): "An academic LMS is an online extension of, or replacement for, the classroom. It is a website where instructors and students meet and collaborate online. Instructors can post materials and assignments. Students can chat with the instructor or with one another, hand in assignments, and take quizzes" (Foreman, 2017, p. 14).

Other health impairment (OHI): In the public-school setting under IDEA, a condition may be labeled under the OHI classification if it causes limitations to strength, vitality, or alertness. Such limitations may result in a heightened or limited alertness to environmental stimuli that affects the individual within the educational environment. A classification of OHI is often the result of chronic or acute health problems, such as – but not limited to – asthma, ADHD, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, and sickle cell anemia. All of these conditions and others may adversely affect an individual's educational progress (Prater, 2018).

The Rehabilitation Act of 1973, Section 504: This Act protects all students with disabilities within any organization that receives federal funding, such as state and community colleges and

universities, and addresses protections for students with disabilities. “No otherwise qualified individual with a disability in the United States... shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance [...]” (IDEA: Individuals with Disabilities Education Act, n.d.).

Self-advocacy: In 2005, Test et al. published their conceptual framework of self-advocacy for students with disabilities, in which individuals with disabilities must first acquire the foundational knowledge of self and of their rights as well as develop communication and leadership skills. For the current study, said conceptual framework laid the foundations for teaching students how to read their own IEP meetings and justify their needed accommodations.

Self-identification: This refers to the process through which an individual can meet the burden of proof and provide the required documentation to identify their disability and request their needed accommodations (Davis, 2005).

Specific learning disability (SLD): An SLD is a disorder in one or more of the basic psychological processes involved in understanding or using language, either spoken or written. The disorder may manifest in an imperfect ability to listen, think, speak, read, write, spell, or mathematical calculations. This classification includes any learning differences resulting from visual, hearing, or motor disabilities; intellectual disabilities; emotional disturbance; or environmental, cultural, or economic disadvantage (IDEA, 2004).

Assumptions

Several assumptions may have impacted the findings of this study. First, all students who participated in the study were assumed to be correctly identified and served for the disability that negatively impacts their learning, as documented on their IEP. Students served by special

education services are typically reevaluated every 3 years. Therefore, students in a special education class may be evaluated and found to no longer qualify under their original disability category. Testing out of disability categories is more likely to happen to students served under the SLD classification. Moreover, the frequency at which students are dismissed from special education services during high school is low. At the time of this study, all of the participants were eligible for special education services at their most recent triannual reevaluation meeting.

Second, the participants were assumed to genuinely plan to attend college in 2 years. This assumption was based on the belief that each participant's transition plan had been developed based on his or her honest input and transition plan. The transition plan documented in each participant's IEP was assumed not to have been developed based solely on the beliefs of his or her parents, guidance counselors, or special education teachers.

The third assumption correlated to the use of the asynchronous instructional format to deliver the interventions. Therefore, each participant was assumed to have completed the intervention with outside aid or support. Likewise, asynchronous surveys assumed that all teacher and student participants responded honestly to the social validity questionnaires. The student participants may have felt that they needed to respond positively to the intervention to please the PI, who had previously taught them. Additionally, the students may have felt pressure to respond positively to the intervention as it could have been seen as a class assignment for which a grade might be assigned. Students were informed that their responses and participation in the study would have no impact on their grades in any of their classes.

Limitations

In the current study, the first limiting factor was the district's adopted use of Google Classroom, which was used in the study's LMS. While other LMS programs exist, Google

Classroom was necessary to complete the current study due to the location where the study was completed.

The second limiting factor was the adopted school- and web-based Edpuzzle program. While other web-based programs exist for creating interactive video lessons based on the study location, Edpuzzle was the most student-friendly program, as all study participants had previously used it to complete class assignments.

Lastly, this study was limited by the PI, who was a current special education teacher at the study location. Since convenience sampling was used to develop the pool of potential participants, the PI knew three participants, which may have increased the bias in the research.

Delimitations

The current study used a delimitation factor related to the representation of different disability classifications and academic levels of participants. All participants selected for the study had to have current IEPs and were served for a disability in the high-incidence categories. The participants were also required to be served for a disability that could be classified as hidden. Based on this requirement, the participants selected for the study were served for disabilities in only three of the 13 areas identified by IDEA 2004. That is, the results of the current study are limited as the participants were only served for SLDs, OHIs, and speech-language impairments. Therefore, the results cannot be generalized to all disabilities considered hidden, such as autism spectrum disorder (ASD), traumatic brain injury (TBI), hearing impairments, and other nonvisible disabilities that may impact a student's need for accommodations at the postsecondary level.

In addition, the current study employed a delimitation related to the type of self-advocacy instruction provided to the participants. This study only provided instruction to participants

focused on the self-advocacy skills required to self-identify and request accommodations in the educational setting. It is hoped that the participants can transfer these skills to requesting accommodations in another setting. However, no attempt was made to generalize these skills to work-based or other settings where individuals may need to request accommodations.

Summary

While the attendance rates of students with disabilities at the postsecondary level continue to increase, their completion rates continue to lag compared with students without disabilities. When students with disabilities do not complete the first postsecondary program they start, this has long-term effects on their future employment and earning potential. Data indicate that, upon entering the postsecondary setting, many students – especially those with hidden disabilities – do not self-identify and therefore do not receive accommodations in their programs of study (Davis, 2005; Raue et al., 2011). However, research has indicated that students with high self-advocacy skills are more likely to request the accommodations they require upon transitioning to postsecondary education (Mazzotti et al., 2021; Test et al., 2009).

The current study, which focused on the UNICORNS program, was designed to fill a gap in research on the quantitative effectiveness of asynchronous self-advocacy instruction delivered through IVMs. This study used a single-case multiple-probe-across-participants design to explore the impacts of the UNICORNS program on the self-advocacy skills of college-bound secondary students with hidden disabilities. The UNICORNS program was created to help college-bound secondary students increase the self-advocacy skills require to self-identify and request accommodations at the postsecondary level. The UNICORNS program included explicit instruction on (1) knowledge of disabilities, (2) knowledge of self through IEP literacy skills

training, (3) knowledge of the postsecondary self-identification process, and (4) the steps to use when requesting accommodations.

Chapter 2: Literature Review

Chapter 2 will explore the foundational history of self-advocacy for those with disabilities. The starting point of self-advocacy instruction can be traced back to the normalization movement, which alleged that individuals with disabilities should live as close to normal as possible (Caruso & Osburn, 2011). The works of Niels Erik Bank-Mikkelsen, Bengt Nirje, and Wolf Wolfensberger furthered the fight for the rights of those with disabilities (Caruso & Osburn, 2011; McDonald, 2006). These social movements can, in turn, be linked to the idea that those with disabilities should have the right and instruction to self-determination and self-advocacy (Fraser, 1989). The definition of self-advocacy and its relationship with self-determination has continued to evolve over the years. Through this changing definition, the belief that individuals with disabilities should have explicit training in self-advocacy has only been amplified (Test et al., 2005).

Furthermore, various methods have been used throughout the years to increase the self-advocacy skills of students with disabilities (Hammer, 2004; Hock et al., 2017; Konrad et al., 2017; Konrad & Test, 2007; Konrad et al., 2006; Lancaster et al., 2002; Test & Neale, 2004). One method of secondary self-advocacy instruction, namely student-led IEP meetings, has been found to positively impact student self-advocacy skills. However, student-led IEP meetings are not always the norm in the secondary setting due to a lack of time and resources (Eisenman et al., 2005; Hawbaker, 2007; Martin et al., 2006; Mitchell et al., 2009; Poehls, 2009). Even though self-advocacy instruction has been proven essential for those with disabilities, a gap remains between the literature and the educational practices in secondary schools that further the development of self-advocacy skills for aiding in successful matriculation to postsecondary education (Fiedler & Danneker, 2007; Madaus et al., 2018). Data indicate that many secondary

students lack instruction in IEP literacy, which impacts their understanding of their disabilities (Agran & Hughes, 2008). Students who do not receive IEP literacy skill instruction at the secondary level may not understand how their disability affects their learning, which is a component of the self-advocacy subskill of knowledge of self (Test et al., 2005). The lack of evidence-based practices in self-advocacy taught in secondary schools is believed to be correlated to the low rates of self-identification and use of accommodations at the postsecondary level by students with hidden disabilities (Madaus et al., 2018; Shaw & Dukes, 2013).

A Fight for Rights

The rise of the current self-advocacy movement can be linked to the fight for the individual civil rights of those with disabilities, which started after World War II. Wehmeyer et al. (2000) explained that “in the late parts of the 19th century and the early parts of the 20th century, people with an intellectual disability were typically viewed as menaces and linked with crime, poverty, promiscuity, and the decline of civilization” (p. 106). During this period, the study of intellectual disabilities was solely medical. Doctors and other medical professionals held complete control over the care and life experiences of those with intellectual disabilities placed in their care (Wehmeyer et al., 2000).

Due to advances in medicine after World War II and the postwar baby boom, more children with disabilities were born and survived infancy. Until the 1960s, public policy upheld that the best placement for children with intellectual disabilities was in an institution. Due to the social pressures and ideas of the time, the postwar baby boom resulted in more children living in medical institutions, who were often kept and cared for in questionable conditions (Ferguson, 2008; Parish, 2005). The increased birth rate would lead the families of those with intellectual disabilities and cerebral palsy to band together to form advocacy groups (Handler, 2007;

Wehmeyer et al., 2000).

From Normalization to Social Role Valorization

Bank-Mikkelsen, who spent time imprisoned in Nazi concentration camps, developed the principle of normalization. This idea stemmed from his perception that institutionalized patients with disabilities lived in conditions only slightly better than those who, like himself, had been subjected to Nazi concentration camps. The purpose of the normalization principle was to ensure that people with disabilities had the same rights to community-based programs, including housing, education, work, and leisure, as their nondisabled peers (Block, 2006). Although flawed, the normalization principle is believed by many to be the single most significant social model to have directly impacted policy and services for those with disabilities over the past 50 years (Simpson, 2018). While the principle was focused solely on those living in institutions, Bank-Mikkelsen set the foundational groundwork for the idea that those with intellectual disabilities can and should be able to live a life as close to normal as possible (Parmenter, 2006).

Nirje further developed the idea of equality for those with disabilities while collaborating with the Swedish Red Cross, working as United Nations welfare coordinator, and working as director of the Swedish Parents' Association for Mentally Retarded Children from 1961 to 1971 (McDonald, 2006). Nirje revised Bank-Mikkelsen's original concept from the foundational work of normalization by further refining it to form the normalization principle (Osburn & Caruso, 2011). In 1999, Nirje explained his original idea as follows: "[T]he Normalization principle means that you act right when you make available to all persons with intellectual or other impairments or disabilities those patterns of life and conditions of everyday living that are as close as possible to, or indeed the same as, the regular circumstances and ways of life of their communities and their culture" (Nirje, 1999, p. 17). The works of Nirje in Sweden then traveled

over the Atlantic to the United States to inspire Wolfensberger (Lemay, 1995).

Wolfensberger initially followed in Nirje's footsteps and collaborated with him to further the ideas of normalization. In 1972, Nirje and Wolfensberger published the book *The Principle of Normalization in Human Services*. It was significantly influential in the field of human services as it was the first full-length book to describe the concept of normalization as well as the normalization principle (Caruso & Osburn, 2011). Wolfensberger's work with Nirje helped to transfer the social ideals of the normalization principle from Europe to North America (Lemay, 1995). Wolfensberger's work was later expanded through his theory of social role valorization (SRV). SRV theory helped to spearhead the American deinstitutionalization movement, just as Bank-Mikkelsen and Nirje's work on normalization and the normalization principle had in Sweden and Canada (Parmenter, 2006).

SRV was developed as a social science theory that endeavored to inform society about improving the lives and defending the rights of those at risk. The goal of SRV was to enhance the social image and competencies of those devalued by society (Wolfensberger, 2011). In 2000, Wolfensberger explained that while SRV grew out of the normalization principle, it strived to move beyond just those living in institutions. Wolfensberger aimed to develop a theory to empower all those devalued by society (Wolfensberger, 2000). The theory assesses the relationships of devalued individuals within society and what happens to them due to the value society assigns to them (Wolfensberger, 2011).

While both normalization and the normalization principle were formed to help individuals with severe intellectual disabilities, the concept of SRV was applied to a far greater number of individuals. In his theory, devalued populations included all those with mental impairments and physical disfigurements; those who behaved in unorthodox ways; those who

rebelled against the social order; the poor; those with limited skills; and all others not valued for reasons such as race, ethnicity, religion, and illegal immigration status. SRV also applies to individuals at both ends of the age spectrum, including the unborn, newborns, teenagers, and the elderly. Wolfensberger's theory revolved around the concept that a devalued individual's social image and personal competencies could be raised, and society would, in turn, begin to see the inherent value of all people (Wolfensberger, 2000, 2011). The normalization movement and SRV are considered by many to be the top contenders for the single most crucial developments in the field of human services in the past 50 years (Caruso & Osburn, 2011).

The rights of those with disabilities, hard-fought for through the work of the initial theories of normalization and SVR, extend into the realm of education when one applies the thoughts of Nancy Fraser. Fraser suggested that if we believe that all individuals deserve the legal right to freedom of speech, it must be more than just a substantive right. If individuals speak for themselves in a meeting place, they require an education that will allow them to work in jobs that pay them enough money to afford the cost of transportation. Individuals must also have a level of education that allows them to obtain employment in jobs that grant them time off work to attend such meetings. This level of educational attainment also teaches individuals how to articulate their thoughts in these meetings (Fraser, 1989). In drawing from feminist insight to build an authentic and deliberative democratic society for individuals with disabilities, the expectation of just mere acceptance is not the ultimate goal. Without being granted accommodations, those marginalized by society are typically denied the fundamental rights of citizenship, including income, property ownership, health care, education, social capital, caloric intake, and leisure time (Knight, 2015). Therefore, to raise the personal competencies of individuals with disabilities, education with needed accommodations becomes a principal focus

for those who believe in forming a democratic society that benefits all individuals.

The Foundations of Special Education in America

For many years, excluding students with disabilities from all forms of education was a long-standing practice within the American public education system. Until the mid-1970s, parents fighting on behalf of their children with disabilities for their right to free public education were almost always unsuccessful (Colker, 2013). The first successful litigation for fair and equal education rights in the United States can be traced to the 1954 *Brown vs. Board of Education of Topeka* case. While this case focused on the rights of Black students and the racial desegregation of schools, it would help to set a path toward increasing the rights of students with disabilities (Russo et al., 2009). The same year *Brown vs. Board of Ed.* was won, Public Law 83-531 was also passed, providing grants that helped fund education for students with intellectual disabilities (Colker, 2013). Following this, Public Law 85-926 supported the development of educators trained to deliver instruction to students with intellectual disabilities (Kleinhammer-Tramill & Fiore, 2003). Then, under President Kennedy's administration in 1960, Public Law 88-164 was passed, which formed the Division of Handicapped Children and Youth. This law would also expand the focus of special education from just individuals with intellectual disabilities to students with deafness and hearing impairments, speech impairments, visual impairments, emotional disabilities, along with physical and other health impairments (Burke, 1976; Colker, 2013; Harvey, 1980; Kleinhammer-Tramill & Fiore, 2003).

In 1965, the Elementary and Secondary Education Act (ESEA) was passed to improve education and end poverty (Reed, 2016). Subsequently, a House Education and Labor Subcommittee reported that while 5.5 million children had disabilities, only one-third received special education services. The other two-thirds were altogether excluded from the educational

setting or placed in a general education setting without the necessary support until they inevitably dropped out (Colker, 2013). While the ESEA attempted to improve the public education system for all students, including racial minorities, students with disabilities, and students whose first language was not English, it was unsuccessful (Reed, 2016). To counteract this, Title VI was added to the ESEA to provide grants for supporting educational programs in separate schools for students with disabilities (Colker, 2013). In 1963, The Association for Children with Learning Disabilities began to build public knowledge regarding the impact of learning disabilities on the educational outcomes of students with learning disabilities (Colker, 2013; Crawford, n.d.). By 1969, the Children with Specific Learning Disabilities Act of 1969 was passed, which extended coverage to students with learning disabilities. This Act was the first time that SLDs were recognized as disabling conditions that impacted an individual's educational pursuits and life within the greater society (Colker, 2013; Grigorenko et al., 2020).

In 1971, the *Pennsylvania Association for Retarded Children vs. Pennsylvania* (PARC) set forth the following three notions: First, students with disabilities could not be denied access to public schools; second, a student's educational placement should not be changed without procedural due process; and third, the least restrictive environment (LRE) was always the goal of all educational services (Russo et al., 2009). That same year, the Education of the Handicapped Act (EHA) was passed and became the first freestanding special education statute. It extended special education coverage to those with an intellectual disability, hard of hearing, deafness, speech impairments, visual impairments, emotional disabilities, physical disabilities, OHIs, and SLDs (Colker, 2013).

This landmark inclusion of many different disabilities would be followed in 1972 by *Mills v. Board of Education of the District of Columbia* (Mills). In this case, a federal trial court

found that schools could not deny services to children with disabilities, nor could they be excluded from public education without due process (Russo et al., 2009). Public law 94-142 (1972) was the first law to stipulate “that an individualized education program IEP is to be developed under the guidance of a team of parents and professionals” (Schloss et al., 2007). In 1975, Congress enacted the Education for All Handicapped Children Act (EAHCA), which mandated that any state receiving federal special education funds must educate all children with disabilities. The EAHCA brought a meaningful change within the American public education field and its related policies by clarifying that all children, regardless of their disability, should receive an adequate education (Colker, 2013). Today, three key statutes protect the rights of students with various disabilities in public, private, and postsecondary education settings. These statutes are IDEA, Section 504 of the Rehabilitation Act, and the Americans with Disabilities Act (ADA) (Katsiyannis et al., 2009).

IDEA and Public Education. The EAHCA was passed in 1975, revised in 1986, and had its most recent revision completed in 1990. When revised in 1990, the EAHCA was renamed IDEA, which was reauthorized in 1997 and again in 2004 (Russo et al., 2009). IDEA provides federal funds for administering special education services to children in the public education setting, thereby protecting their right to free appropriate public education (FAPE) through special education services (Education of Individuals with Disabilities). Under IDEA regulations, special education is defined as specially designed instruction provided at no cost to children. To be eligible to receive services under IDEA, students must meet the following criteria: (a) have a documented disability that (b) negatively affects their educational attainment. In its first adaptation, IDEA protected the educational rights of students aged 6–21 years. These rights have since been extended to students with disabilities from birth to 21 years while receiving

educational services from public institutions. IDEA established the following six major elements that impact students with disabilities: (1) the right to FAPE, (2) a nondiscriminatory evaluation process, (3) procedural due process, (4) an IEP, (5) the LRE, and (6) parental participation (Judge, 2011).

Under IDEA, students with qualifying disabilities who are entitled to special education must have IEPs developed by special teams of school personnel, teachers, parents/guardians, and – in many cases – themselves. The IEP created by this team should include the student’s current educational levels, measurable annual goals, required special educational services, an LRE statement, and service dates. Additional IEP components outline how the student’s disabilities affect their learning and the necessary accommodations for optimal access to the general education curriculum (Russo et al., 2009). The accommodations given to students with disabilities involve changes to the learning materials used or how students demonstrate their learning on formative or summative assessments. Accommodations differ from modifications, which refer to changes to the scope and materials taught (Thurlow & Kopriva, 2015). The National Center on Educational Outcomes (2006) determined that the most commonly used accommodations include extended time, response accommodations, reading aloud, and changes to locations (Bottsford-Miller et al., 2006).

The Rehabilitation Act of 1973, Section 504: While the EACHA was the first significant act to protect the rights of students with disabilities, it was not the first attempt to protect the rights of individuals with disabilities. Rather, Section 504 of the Rehabilitation Act of 1973 was the first federal statute that protected their civil rights (Brougher, 2010). Before it was passed, services existed only for disabled veterans; no federal mandates protected the rights of otherwise qualified postsecondary students with disabilities (Madaus et al., 2018). Section 504 “prohibits

discrimination, exclusion or denial of benefits to otherwise qualified handicapped individuals by any program or activity receiving Federal financial assistance” (Klebe, 1973. p.32). Due to the nature of the Act, protection of the equal treatment of individuals with disabilities extends beyond the scope of the K-12 public education system. Section 504 has a far wider stance regarding what constitutes a disability compared with IDEA. Protection under IDEA is limited to students whose disabilities fall within only 13 distinct categories; thus, IDEA protects students whose disabilities negatively impact their educational achievement. Under Section 504, more expansive protections are given to any individual whose physical or mental impairment limits a major life activity, such as walking, seeing, hearing, speaking, breathing, caring for oneself, learning, working, and performing manual tasks (Work et al., 2017).

Unlike IDEA, Section 504 also protects the rights of students in all levels of education, including all colleges and universities that receive any federal funding (Disabilities Rights Education & Defense Fund, n.d.). Under Section 504, postsecondary students who meet the academic and technical standards required for admission cannot be denied acceptance based solely on their disability status. Furthermore, postsecondary institutions cannot require applicants to share their disability status before admission. Under 504, colleges and universities must also offer and inform students of the availability of services, auxiliary aids, accommodations, and the coordinator’s name at the Disability Services Office. However, at the postsecondary level, ensuring that a student receives their needed services, accommodations, or auxiliary aids is the responsibility of the student with the disability (Newman et al., 2019; Walker et al., 2018). Postsecondary students must not only self-advocate for their educational needs but also provide documentation before receiving any services or accommodations. The required documentation can include medical, psychological, and emotional testing results (Getzel & Wehman, 2005; Gil,

2007).

ADA. ADA (1990) is one of the most far-reaching legislative acts focused on ending discrimination (Jones et al., 2012). This law was enacted to provide equal protection and access to programs and activities outside of public education (protected by IDEA) or entities that receive federal funding (protected under Section 504; Jones et al., 2012; Murphy, 2020). Like Section 504, the definition of a disability was left extremely broad. Under ADA, a disability refers to any physical or mental condition that limits life activities. In 1992, Kohl and Greenlaw estimated that more than 43 million Americans were protected under ADA provisions due to this broad definition of a disability. ADA extended the protection of individuals to the private sector, including private postsecondary institutions (Berry & Katsiyannis, 2012). Regarding accommodations, ADA requires postsecondary education institutions to make “reasonable modifications in policies, practices, or procedures” (ADA Regulations, § 36.302(a)) unless it would “fundamentally alter the nature of the good or service provided” (ADA Regulations, § 36.302 (a)). After its passing, one scholar predicted that one of the major impacts of passing ADA would be an increase in the number of students with disabilities attending postsecondary education (Jarrow, 1991).

In 2008, ADA was amended and renamed the Americans with Disabilities Amendments Act (ADAAA) of 2008. The most meaningful change was the modification of what constitutes a disability. Under this amendment, the phrase “substantially limits” in the definition was reworded to “materially restricts,” widening the breadth of the definition of a disability and further increasing the coverage of the Act (Jones et al., 2012). This change in terminology shifted the purpose of providing postsecondary institutions with documentation to receive needed accommodations. It was intended to reduce the documentation required to self-identify by

focusing more on ensuring that students receive appropriate accommodations (Keenan et al., 2019).

Self-Advocacy in Education

While various laws protect the rights of individuals with disabilities both inside and outside of the public education setting, individuals with disabilities must have the ability to ensure that their rights are being protected. Students with higher self-advocacy skills are more likely to request more accommodations than their peers with fewer skills in this area (Murray et al., 2014). Self-advocacy is essential for a successful transition out of secondary education (Mazzotti et al., 2021). It requires an individual to have skills in the following four areas: (1) knowledge of self, (2) knowledge of rights, (3) communication, and (4) leadership (Test et al., 2005). Having skills in self-advocacy has been considered a predictor of academic success for students with disabilities in the postsecondary setting (Adams & Proctor, 2010; Fleming et al., 2017; Getzel & Thoma, 2008; Mazzotti et al., 2021; Murray et al., 2014). Self-advocacy is a movement for people to express and assert their rights, unique to the late 20th century (Buchanan & Walmsley, 2006).

Since the 1970s, the self-advocacy movement has been observed globally in many developed countries. In some countries, it resulted from parents' associations, while in others it developed as an extension of services provided by other ally groups (Walmsley, 2014). In 1974, a small group of individuals with cognitive disabilities formed the People First organization in Salem, Oregon. This advocacy group is often credited as being the driving force behind the U.S. self-advocacy movement (Hall & Syracuse University, 2010; Wehmeyer et al., 2000). By 2004, over 800 self-advocacy groups overseen by Self Advocates Becoming Empowered (SABE) were estimated to exist in the United States alone (McDonald, 2006).

Many scholars have worked to define the term self-advocacy over the years. Kennedy and Killius (1986) defined it as “people with developmental disabilities speaking up and speaking out for their rights. For people who cannot speak, it may mean having someone interpret what you want to say” (Zubal et al., 1997, p. 3). Self-advocacy was expanded in 1988 when a study with adults with mild handicaps mentioned that individuals should be able to “assert their legal rights” (Sievert et al., 1988, p. 21). This definition was again expanded in 1991 to include that individuals are able to ensure that their needs are met by others after stating their needs and legal rights (Balcazar et al., 1991). In 1994, the definition was again extended to include the ability to recognize and meet the needs specific to one’s learning disability without compromising the dignity of oneself or others (Brinckerhoff, 1994). In 1998, the following operationally defined definition of self-advocacy for postsecondary students was provided: “[S]tudents become self-advocates when they (a) demonstrate understanding of their disability, (b) are aware of their legal rights, and (c) demonstrate competence in communicating rights and needs to those in positions of authority” (Skinner, 1998, p. 71).

Throughout the years, the concept of self-advocacy has been advancing while also being used interchangeably with the term self-determination. Self-determination refers to a combination of skills, knowledge, and beliefs that allows individuals to engage in goal-directed, self-regulated, automatic behaviors (Karvonen et al., 2004). Self-advocacy is related to an individual’s ability to make their own choices, find solutions to personal problems, develop life goals, take active steps to reach their goals, and accept the consequences (Rowe et al., 2015). Self-advocacy refers to an individual’s ability to express one’s needs and ensure that they are met; these skills are essential to self-determination (Miller et al., 2007). Instruction in self-advocacy skills is necessary to ensure that students with disabilities know what they want, what

they need, how to ask for it, and how to assert their rights. (Wehmeyer, 2007). These constructs lead to a unified conceptual framework that incorporates many of these ideas into one working concept, which can be systematically taught to individuals with disabilities. For postsecondary students with disabilities, the ability to self-advocate for needed accommodations is essential (Lynch & Gussel, 1996).

A Conceptual Framework of Self-Advocacy

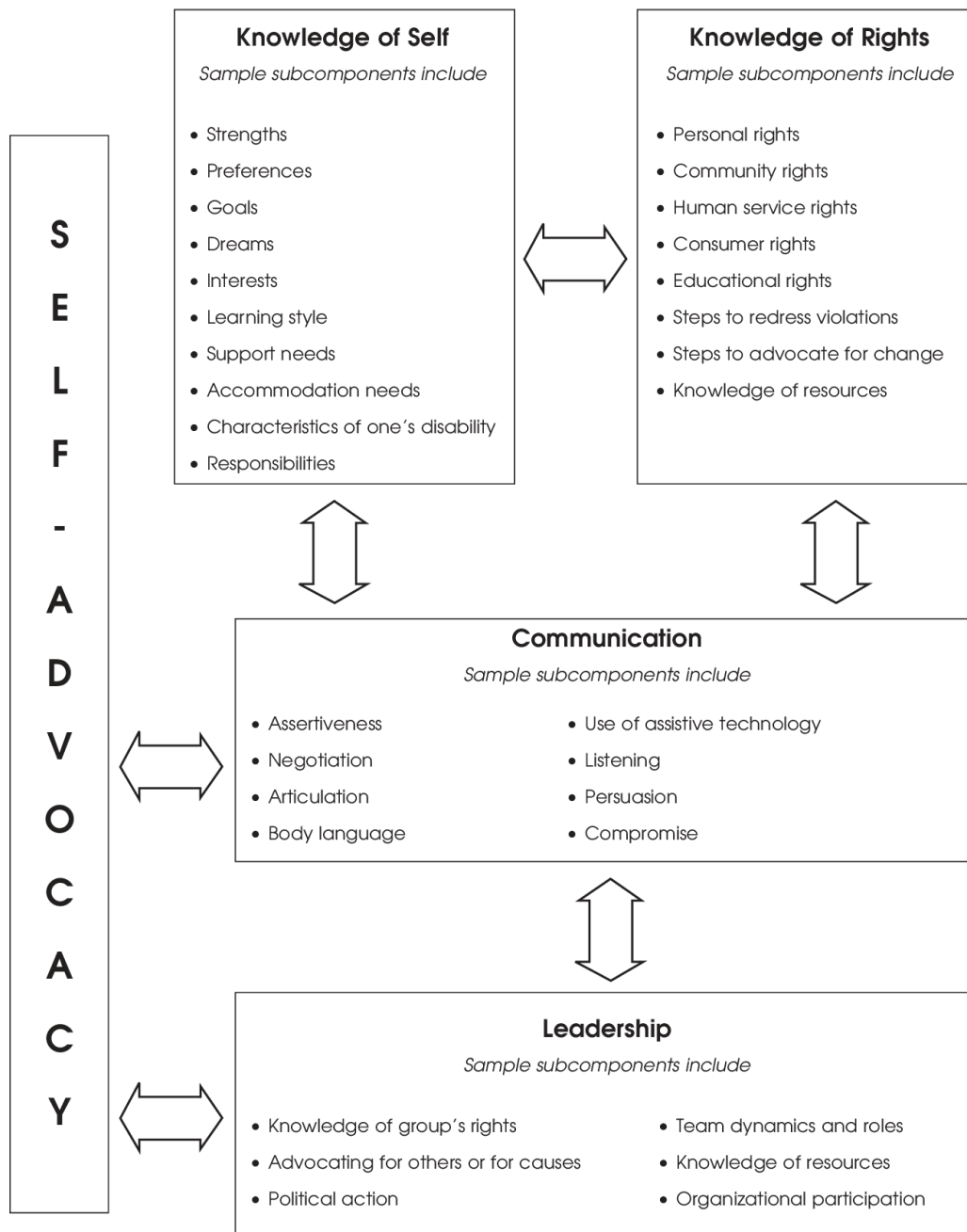
If postsecondary students with disabilities are expected to self-identify and make formal requests for accommodations, students must develop self-advocacy skills (Madaus, 2005). Students with disabilities who develop strong self-advocacy skills have been observed to have higher attainment in all aspects of life, including education, work, and community living (Getzel & Thoma, 2008; Test et al., 2005). Strong self-advocacy skills have been found to increase the ability of individuals with disabilities to ensure that their educational needs are met in their adult life (Fabian, 2007). Teachers can use practices such as roleplay as well as whole-group, small-group, or one-on-one instruction to teach these skills. However, they must examine their beliefs and those of their students' families regarding self-advocacy. Thus, they can increase the effectiveness of student involvement in self-advocacy during school years (Wehmeyer, 2007).

In 2005, Test et al. developed a conceptual framework of self-advocacy for students with disabilities. This framework explores the use of four subskills required for practical self-advocacy skills. They should be taught in a timed and systematic manner, involving instruction in (1) knowledge of self, (2) knowledge of rights, (3) communication skills, and (3) leadership abilities. First, students must know their interests and learning style, but they must also understand their disabilities, strengths, weakness, and needs (accommodations or supports). Concurrently, students require instruction on their legal rights as citizens and individuals with a

disability. Once students have gained the knowledge of self and rights, they can move to instruction in communication. Students must communicate their knowledge of self and rights effectively. The last step for full self-advocacy is leadership skills. According to Test et al., leadership involves learning the roles of group members, functioning within a group, and advocating for others. Figure 1 presents a flowchart that depicts the conceptual framework of self-advocacy, in which the four subskills are interconnected to comprise the skill of self-advocacy (Test et al., 2005):

Figure 1

Flowchart of the Conceptual Framework of Self-Advocacy



Note: This framework was produced in 2005 to explain the interconnections between the subskills that comprise self-advocacy. Source: “A conceptual framework of self-advocacy for students with disabilities” by Test et al., 2005. *Remedial and Special Education*, 26(1), p. 49.

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Hidden Disabilities and Postsecondary Accommodations

Equal opportunities in all aspects of life are one of the most significant provisions of Section 504 and ADA; therefore, accommodations must be made for those with disabilities (Cole et al., 1995). While the rate of students with disabilities entering postsecondary education has continued to rise over the years, their graduation rate has remained low. Data suggest that students who self-identify and receive accommodations or other forms of support are far more likely to complete their program of study than those who do not (Newman et al., 2019). ADA attempted to increase the accessibility of accommodations and services to students with disabilities in the postsecondary setting by limiting the documentation required to prove the existence of one's disability. Instead, ADA placed a greater focus on demonstrating how a disability impacts a student's learning, and it allows this information to be gathered from high school IEPs, testing records, and student self-reports (Keenan et al., 2019).

While ADA has continued to lessen the burden of proof, many individuals with hidden disabilities still struggle to receive their needed accommodations. Data indicate that postsecondary students with hidden disabilities tend to underperform and have higher dropout rates compared with their nondisabled peers (Kranke et al., 2013). Furthermore, the NLTS2 indicated that only 11.1% of undergraduate students reported their status as individuals with a disability to their postsecondary institution. While the category of specific learning disabilities is the largest population of students served by special education in the public-school setting, only 4.8% of self-reporting students at the postsecondary level identify as having this form of disability (Skomsvold, 2014). Another study indicated that only 19% of self-identified postsecondary students reported receive any services or accommodations from their postsecondary institution. This finding is in sharp contrast to the fact that 87 % of the same

students reported that they had received some form of service or accommodations while at the secondary level (Raue et al., 2011).

Various issues combine to result in the low rates of self-identification and accommodation usage at the postsecondary level. The NLTS2 also indicated that 63% of students who had been served as students with a disability at the secondary level did not believe that they had a disability after they transitioned to postsecondary education. The survey also revealed that only 28% of postsecondary students self-identified to their postsecondary institutions to receive accommodations or services (Newman et al., 2011). In the postsecondary setting, the study found that those with hidden disabilities were less likely to receive the academic supports that they require; rather, students who received accommodations or support services typically had more apparent disabilities, such as hearing, visual, or orthopedic impairments; autism; or multiple disabilities, such as deaf-blindness (Newman & Madaus, 2015a).

Since postsecondary schools rely on students to self-identify to receive services or accommodations, students must be aware of the proactive steps to take (Lovett et al., 2015). Postsecondary students may be unaware of their rights and responsibilities when self-identifying to their institutions. This lack of knowledge limits these students' ability to request and receive academic support or accommodations (Lynch & Gussel, 1996). In one study, disability coordinators at the postsecondary level specified that preparing future postsecondary students for enrollment was a weakness within the secondary school setting (Raue et al., 2011). Students also reported that their support and services differed between the secondary and postsecondary levels. Postsecondary students with disabilities reported knowing that they were entitled to services; however, they were unsure what was required to obtain disability services or how to access them

at the postsecondary level (Garrison-Wade, 2012). The NCES found that 93% of postsecondary institutions reported using a website to post essential information to students. However, only 24% of these institutions included information on how students with disabilities can receive accommodations. Additionally, only 9% of postsecondary institutions stated that they encourage students with disabilities to self-identify by distributing materials to inform them of their services (Raue et al., 2011).

Furthermore in 2011, when surveyed about the types of documentation considered sufficient for verifying a student's disabilities, 92% of institutions stated that they required verification of some form outside of the student's reporting (Raue et al., 2011). Of these institutions, 44% accepted the most current IEP, while 40% accepted 504 Plans from secondary schools. Moreover, 80% of postsecondary institutions also accepted a vocational rehabilitation (Voc Rehab) agency evaluation (Raue et al., 2011). In 2012, the Association on Higher Education and Disability (AHEAD) provided new guidance to postsecondary institutions to help increase the achievement of students with disabilities. It suggested that students' self-identification and postsecondary disability service professionals' impressions take precedence over external objective records when determining students' need for accommodations (Lovett et al., 2015).

In its 2012 guidance on the process for requesting accommodations and documentation, AHEAD stated the following: "No legislation or regulations require that documentation be requested or obtained to demonstrate entitlement to legal protections because of disability and seek reasonable accommodations" (p. 1). Moreover, AHEAD placed far more emphasis on students' self-reports serving as primary documentation, followed by observations and interactions with college staff. Based on AHEAD's recommendations, less emphasis should be

placed on the documentation provided by third parties, including IEP paperwork or even historical evidence of accommodations often found in a student's special education Summary of Performance (SOP; Association on Higher Education and Disability, 2012).

Furthermore, for students who successfully self-identify at the postsecondary level and receive accommodations, there may still be issues to overcome. The documentation that enrolling students usually provide to a postsecondary institution may not always offer a clear indication of what accommodations are required to optimally mitigate the effects of their disability. Therefore, college-level service providers often decide what accommodations a student receives without the best data (Banerjee et al., 2015). A study on the accommodations provided at the postsecondary level to students with SLDs indicated that the most commonly utilized were extended time (90%), technology use (69.4%), text readers (46%), tutoring (24.8%), recorded books (17.8%), use of dictation (13.4%), and differences in testing locations (26.2%). The study concluded that some clinicians sometimes recommend accommodations in a one-size-fits-all model. They also found that often the accommodations provided did not directly correlate to a student's needs due to their disability or their academic requirements (Weis et al., 2016). This study indicated that even when students with disabilities have been given appropriate accommodations in the secondary setting, many of these same students struggle to obtain the accommodations at the postsecondary level.

Barriers to Postsecondary Accommodations

When students with disabilities receive their needed accommodations in the postsecondary setting, they tend to have higher GPAs (Lightner et al., 2012). Research indicated that 77% of students with disabilities in 2-year and technical programs who receive needed accommodations complete their program of study; by contrast, only 50% of students with

disabilities who do not receive accommodations complete their program of study (Newman et al., 2016). Postsecondary students with disabilities have, on average, lower GPAs and graduation rates (Anctil et al., 2008; Horn & Berktold, 1999; Mazzotti et al., 2021; Murray et al., 2000; Newman et al., 2010). While many laws and mandates have attempted to increase students' achievement at the postsecondary level, those with disabilities still face significant issues when seeking accommodations (Grimes et al., 2017; Lightner et al., 2012). Postsecondary students must have the knowledge and skills for completing a cost–benefit analysis between the cost of self-identification and the benefit of the accommodations (Brown, 2021). They must also overcome stigma, fear of discrimination (bias), past negative experiences, gaps in knowledge, and a lack of transition services focused on postsecondary education to access their needed accommodations (Grimes et al., 2017; Lightner et al., 2012).

Fear of Bias. A study of 63,802 students who had self-reported their disability status to their postsecondary institutions found that they felt a heightened sense of bias on the campus compared with those without disabilities. This bias may explain why, of the students who self-identified, only 33% used their accommodations (McGregor et al., 2016). A feeling of bias, in turn, may affect a student's sense of social belonging on campus. Higher levels of belonging have been linked to elevated levels of student satisfaction, and positivity impacts postsecondary students' program completion rates (Fleming et al., 2017).

A study in South Africa found that students with hidden disabilities felt that if they disclosed their disabilities status to their professors, they would be stigmatized, and therefore, they never requested the accommodations or supports they required (Gow et al., 2020). Students with disabilities may feel that, by requesting accommodations, they will be viewed as lazy or attempting to gain an unfair advantage over their peers (Lightner et al., 2012). Another study

found that 53% of students with disabilities believed that the public held negative stereotypes about them, such as believing them to have lower intelligence than those without a disability (May & Stone, 2010). Such views may fall into the category of ableism, a term that is rooted in discrimination and of the feeling of not the same as the larger social group (apartism). It is built on the belief that those who are nondisabled are the norm and thus superior to those with disabilities (Hehir, 2005), which leads to the marginalization of those with disabilities (Campbell, 2009).

Self-Stigma and Internalized Ableism. Another reason for students with hidden disabilities struggling to receive their needed and individualized accommodations at the postsecondary level may lie in self-stigma concerning their status as an individual with a disability. Students with hidden disabilities often struggle with self-stigma, which is also known as internalized ableism (Grimes et al., 2017; Lightner et al., 2012). The term self-stigma, often used in the mental health field, explains how an individual's shameful feelings concerning their disabilities are the result of them internalizing public attitudes, prejudice, and discrimination (Corrigan & Rao, 2012).

This same form of shame may be tied to the idea of internalized ableism within the disabled community. Internalized ableism refers to a feeling of self-hatred because of one's status as disabled. This self-hatred stems from the ableist viewpoint that disabilities are inherently flawed and should be cured or eliminated. Individuals with hidden disabilities, such as SLDs and ADHD, are only tolerated by society instead of being celebrated as a variation of the human experience (Campbell, 2008). In its internalized form, ableism leads to self-loathing, resulting in individuals with disabilities devaluing that which makes them different from others or being perceived as "normal" instead of embracing their differences (Campbell, 2009).

Negative Experiences. One study indicated that even leaders in the self-advocacy movements have negative experiences with labeling and bullying due to disclosing their disability status (Caldwell, 2010). Postsecondary students who have historically had adverse reactions to requesting accommodations may hesitate to request them again, even when they know that they require accommodations. A study of higher education professionals, faculty, and staff found that some working at the postsecondary level may have rigid teaching practices, hold negative attitudes toward students with disabilities, and be resistant to change – even evidence-based practices (Bradshaw, 2020). One survey of individuals working at the postsecondary level indicated that some instructors had been observed denying accommodation requests, and one individual stated that they had witnessed an instructor roll their eyes when students with disabilities made such requests (Bradshaw, 2020).

Negative past experiences may also transfer from the secondary setting and result in students with disabilities wishing to leave their disability status behind. Students with disabilities at the postsecondary level stated that low teacher expectations and a lack of understanding about the effects of their disability on their learning resulted in them feeling marginalized and increased their levels of self-doubt (Garrison-Wade, 2012). Negative perceptions and a lack of understanding of the need for accommodations may create a social structure that prevents students seeking services. Students with disabilities who receive extra time on tests may consider themselves to have an unfair advantage over their nondisabled peers. This feeling may become guilt, leading students to attempt to prove that they can succeed without accommodations (James et al., 2020). Thus, individuals with disabilities who experienced negative interactions with peers in the secondary setting due to their disability reported feelings of self-doubt, uncertainty about entering college, and fear of not achieving (Garrison-Wade, 2012).

Lack of Disability Knowledge. The lack of a complete understanding of the effects of one's disability also impacts the likelihood that the individual will self-identify at the postsecondary level. A qualitative study undertaken with postsecondary African American male students highlighted the impact of misconceptions regarding one's disabilities on the academic and social lives of those with disabilities. While students may develop compensatory skills to adapt to their disability, they may see accommodations as a form of "help" for a cognitive weakness rather than serving to mitigate the effects of a disability (Banks, 2014). Students with higher levels of self-awareness, including knowledge of their disability, strengths, and weaknesses, are more likely to self-identify and focus on obtaining services and support (Getzel & Thoma, 2008).

Secondary Transition Services

Many students with disabilities entering postsecondary education lack the skills to transition successfully. Enhanced collaboration between special education teachers at the secondary level and professionals at the postsecondary level may be a missing component of the effective secondary transition process (Gil, 2007). Currently, transition services are required under IDEA 2004 for all students and must begin at 16 years of age. These services should coordinate activities that consider the students' interests and future goals. Future goals should include the student's plan after leaving public education as well as education or training for employment and daily living skills (Janiga & Costenbader, 2002). High-quality transition programs result in improved postsecondary outcomes and higher self-determination levels among students with disabilities (Morningstar et al., 2010). Another study found that students with disabilities enrolled in career and technical education who had effective transition planning

while in high school were more likely to receive support at the postsecondary level (Newman et al., 2016).

However, in another study with postsecondary students with disabilities, one participant explained that his teachers never discussed his plans to attend college; instead, his transition planning only revolved around securing full-time employment after graduation (Banks, 2014). While many transition services and activities derived from research exist, many secondary teachers may continue to rely on activities and services with few to no positive effects on postschool outcomes (Rowe et al., 2015). In one study, college-bound students with higher levels of adaptive skills were found to be less likely to receive transition services at the secondary level (Mello et al., 2021). This finding indicates that special education teachers at the secondary level may require better training and access to materials, provided by organizations such as the Council for Exceptional Children of the Division on Career Development and Transition (DCDT). The DCDT encourages educators to increase meaningful student participation and engagement in transition planning (Martin & Williams-Diehm, 2013).

Methods of Self-Advocacy Instruction

Fiedler and Danneker (2007) found a lack of self-advocacy instruction in special education. Other researchers indicated that only half of secondary schools had adopted a curriculum designed to teach secondary students self-advocacy skills (Kochhar-Bryant et al., 2009). Data suggest a vast difference between the salaries and employment rates of those with disabilities who only have a high school diploma compared with those who earned a degree or completed specialized postsecondary training (Shaw & Dukes, 2013). Therefore, special education teachers must work to support the self-advocacy skills of those on their caseload.

Numerous studies have examined various methods for teaching students self-advocacy skills, which are discussed in the following subsections.

Student-Led IEP Meetings

One method used in secondary settings to teach self-advocacy skills is student-led IEP meetings. Their use for increasing self-advocacy skills varies from study to study (Poehls, 2009). Over the years, the number of students with disabilities actively participating in their IEP meetings has increased (McGahee et al., 2001). When students learn how to participate in their IEPs, they learn about their own needs and the distinct roles of the IEP team members (Bateman & Linden, 2012).

Martin et al. (2006) found that in traditional teacher-led IEP meetings, special education teachers talked for 51% of the time, general education/administrators for 9%, support staff for 6%, and students for only 3%. However, when surveyed after the meeting, special education teachers reported feeling that the students talked a lot during the meeting. On a 12-indicator checklist of student IEP engagement and leadership skills, 94% of the students did not meet nine of the indicators. After receiving instruction in student-led IEP meetings, students spoke out more in their meetings. Additionally, they had more leadership, positive perceptions of their meetings, and higher transition ratings.

While many teachers know that student-led IEPs are best practices and increase student advocacy, few students entirely lead their meetings. Eisenman et al. (2005) interviewed 22 teachers who participated in workshops on beginning student-led IEP meetings in their schools and found that even small steps for starting student-led IEP meetings could be effective. Many of the teachers expressed that jumping into the process through small initial steps resulted in a ripple effect that increased the amount of students' involvement in their IEP meetings. However,

many teachers stated that they have obstacles to overcome before starting the student-led IEP process. These obstacles include a lack of time, student motivation, disability, resources, and administrative support (Hawbaker, 2007).

In 2007, the Northeast Independent School District, located in San Antonio, Texas, started transitioning to student-led IEP meetings as a means of increasing self-advocacy. The District selected a local middle and high school for its pilot project. During the first year, it used professional development for teachers and the joint training of students alongside their teachers. After two days of instruction, a study found that more students requested to participate in the following training. This study also suggested that the instruction increased student involvement in self-monitoring of grades and progress in their classes (Mitchell et al., 2009).

In addition, a post-hoc case study followed the IEP meetings of one student from her sophomore to junior year. The student was served by special education for an SLD and received student-led IEP intervention instruction through a year-long intervention process using the Self-Directed IEP lesson package. The study found that after the intervention, there were significant increases in the student's use of leadership steps, her total words spoken, and the length of time that she spoke for during her IEP meeting. Moreover, the student had a more detailed plan for her transition after secondary school and was more willing to discuss her plans with others. The study indicated that using the Self-Directed IEP lesson package resulted in clearer postschool goals as well as increased confidence and self-advocacy skills (Woods et al., 2013).

Embedding Self-Advocacy Instruction in Writing Instruction

The “Go 4 It...Now” strategy uses a mnemonic device and instruction based on paragraph writing to increase students' self-advocacy. This instruction focuses on students' ability to set individual goals and express them to others. The mnemonic “Go 4 It...Now” is split

between rules to follow when writing an IEP goal paragraph and steps to ensure self-regulation. In the mnemonic, “Go 4 It” stands for (G) goal, (O) object unreserved, (4) four objectives, and (It) identified timeline. The last part of the mnemonic, “Now,” teaches students how to self-check their work to ensure that they have (N) named their topic, (O) ordered their steps, and (W) wrapped up [the paragraph]. The “Go 4 It...Now” strategy is effective for inclusive and whole-group settings where lessons must align with state content standards. (Konrad et al., 2006). Over the years, three studies have evaluated this instructional method’s effectiveness. All of them have found that this strategy could be a highly effective method for teaching self-advocacy skills when lessons are required to align with state content standards (Konrad et al., 2017; Konrad & Test, 2007; Konrad et al., 2006).

First, Konrad et al. (2006) studied four high schools that served special education for orthopedic impairments in a self-contained setting. All four students were on the second investigator’s caseload in an urban high school in the Southeastern United States. Each of these students had received previous instruction on how to write a paragraph using the standard model of the main idea, followed by supporting details. Instruction was provided in 45-minute one-on-one sessions. Each student received instruction in writing a paragraph that followed the mnemonic “Go 4 It.” After practicing the four skills, students were instructed to self-regulate their writing by self-checking their work. Finally, they were provided instructions on rechecking their work using the mnemonic “Now” to ensure that they had stated their topic, provided their steps to reach their goal, and concluded their paragraph. The intervention improved all four students’ ability to write their IEP goals (Konrad et al., 2006).

Second, Konrad and Test (2007) investigated the “Go 4 It...Now” method; however, this time the participant base included 12 students in four different middle school resource

classrooms, who could write a sentence but not complete paragraphs. Prior to the intervention, all students participated in five lessons that focused on increasing IEP awareness. Next, the students received instruction through 11 small group lessons delivered to an entire special education class in a whole group setting. Each of these lessons lasted approximately 45 minutes. The students selected for the study in all four classes improved their self-set goal-writing skills. The study proved that this method is effective with lower-grade students through whole-class instruction (Konrad & Test, 2007).

Third, to further prove the effectiveness of this self-advocacy instructional strategy, Konrad et al. (2017) created a third study with a sample of five participants in a high school setting. All of the students were served for mild-intellectual disabilities. Using a multiple-probe-across-participants experimental design, the researchers selected the students with the most stable baseline scores to begin the intervention. The instruction was presented over 14 lessons in a one-on-one setting for three participants and in a one-to-two setting for the remaining two participants due to time constraints. All lessons followed the stages of self-regulated strategy development, including instruction in (1) teaching self-management, (2) teaching through examples, and (3) programming everyday stimuli. Again, this study indicated improvements in all of the participants' ability to write IEP goal-based paragraphs. It concluded that this method of instruction with extended practice and feedback could be generalized to other paragraph formats (Konrad et al., 2017).

The Self-Advocacy Strategy

In 1994, Van Reusen et al. published the Self-Advocacy Strategy (SAS), an instructional method that would later be further revised in 2007. This strategic instruction model (SIM) was developed to help students engage in their IEP process. SIMs were created and researched by the

Kansas University Center for Research (KUCRL). Each module was created to help students with learning disabilities become productive members of society by increasing their school and life skills. Each SIM model followed a set method of research and instruction, including set instructional routines, graphic organizers, learning strategies, and skills-based instruction (Hock et al., 2017). This strategy has been the subject of numerous studies throughout the years.

In 1996, Van Reusen updated the SAS intervention. This program used the mnemonics “I PLAN” and “SHARE” to help students remember the steps in the intervention. The mnemonic “I Plan” was related to the information that students should provide in their meetings and how they should behave during them. The mnemonic stands for (I) inventory, (P) provide your inventory information, (L) listen and respond, (A) ask questions, and (N) name your goals. Students were also taught the mnemonic “SHARE,” which was developed to help students remember the techniques for effective communication. It stands for (S) sit up straight, (H) have a pleasant tone of voice, (A) activate your thinking, (R) relax, and (E) engage in eye contact. The most notable change in this updated version was the addition of steps for different meeting formats, inventory sheets for students to complete, and transition planning inventories and skills lists for students in middle, secondary, and postsecondary settings (Van Reusen, 1996).

In 2004, Test and Neale completed a study on the same instructional strategy with middle school students who had never attended an IEP meeting. The participants were three male and one female student aged 12–13 years. The study used single-subject multiple-probe design to determine the effectiveness of an intervention at the level of the students’ contributions in their IEP meetings. Based on the Arc Self-Determination Scale, a norm-referenced assessment tool focused on self-determination, the students made positive gains from pre- to posttest. A functional relationship was found to exist between the SAS intervention and the quality of

student input in the IEP process. After the intervention, all of the students were able to provide more information about their IEP (Test & Neale, 2004).

Self-Advocacy Strategy CD-ROM

Lancaster et al. (2002) studied 22 high school students with high-incident disabilities in a medium-sized community in the Western United States, all of whom received special education services in the resource setting. Instruction was provided after the students were split into two distinct groups. As outlined in the SAS manual, one group was given standard live in-person instruction in five or six 30–45-minute sessions. The other group received the same number of instructional sessions for the same length of time; however, the instruction was provided through an interactive hypermedia program with a small number of teacher interactions. Both groups learned the original “I PLAN” and “SHARE” behaviors and role-played with the researchers. The study concluded that those who received this instruction were able to share valuable information about their strengths, weaknesses, learning, and testing preferences. Participants completed a 15-question probe that asked them what self-advocacy was, when they may use the behaviors they learned, and to name the steps in the “I PLAN” and “SHARE” mnemonics. Furthermore, the students were able to share this information in their IEP meetings (Lancaster et al., 2002).

The SAS-CD intervention was investigated again in 2004 by Hammer, who completed a study using the same strategy. The author used a participant base that included three 12- and 13-year-old students at a private Midwest school for students with learning difficulties. The study used a set of 10 questions developed by Van Reusen et al. to determine students’ ability to answer questions related to their IEP. The instruction was delivered through the technology-based program SAS CD-ROM with no in-person direct instruction (Lancaster & Lancaster,

2003). The instruction was delivered in six lessons that lasted 30–45 minutes. After receiving instruction using the SAS, all students participated in their IEP process; moreover, all of the students could verbalize statements about their strengths and weaknesses (Hammer, 2004).

In 2013, Cease-Cook et al. investigated the effects of the SAS CD-ROM program with five high school students in the 10th grade aged 14–16 years. All participants were served by special education for a mild intellectual disability. The five lessons in the intervention ranged from 14 to 135 minutes in length and used modules to teach the student the steps and behaviors in “I PLAN” and “SHARE.” Student responses to a 10-question probe were used to determine the effectiveness of the intervention. The results indicated that SAS CD-ROM was effective at teaching students with mild intellectual disabilities to increase their contributions to their IEP meetings (Cease-Cook et al., 2013).

While the aforementioned SAS and SAS CD-ROM studies explored the effects of the interventions on students’ ability to use the skills in IEP meetings, no evidence had yet been collected on this intervention in other forms of meetings. To determine its effect in a broader range of social contexts, another study was completed in 2013 by Schelling and Rao. The participants were eight high school students served with intellectual disabilities based on their IEP data. Based on the increased use of technology, the intervention used was the SAS CD-ROM program, which again instructed students on the “I PLAN” and “SHARE” mnemonics. This program allows students to read the text on the screen or have it read aloud by the computer. After completing the computer lessons, the students completed two separate role-playing sessions with the researcher. A single-case multiple-probe-across-participant-and-settings design was used. The participants then generalized the information learned to informal conferences to validate the method for more than just student input in the IEP meeting. The findings indicated

that students who received the SACD CD-ROM instruction could use the skills taught to discuss their learning needs with special and general education teachers (Schelling & Rao, 2013).

Another study used the same SACD instructional materials with 15 middle schoolers with mild and moderate disabilities (Balint-Langel et al., 2020). Again, instruction was provided in five lessons across 2 weeks, with all sessions lasting on average for 1.5 hours. Unlike all of the previous studies, this study used a whole group setting with one-on-one or small groups. After completing the sessions, students acted out role-playing sessions with the researchers using the “I PLAN” and “SHARE” behaviors. After intervention data were collected through the Self-Advocacy Self-Report, a protocol of 10 IEP-related questions, significantly positive results were found for students in the treatment group. The skills taught were also generalized to informal individual meetings with their special education teachers (Balint-Langel et al., 2020). SAS has also been found to be a valuable instructional tool when working with students with EBDs (Balint-Langel & Riden, 2021).

Advocating for Accommodations

While previous studies have researched methods and the effect of secondary teaching students being active members of their IEPs, other studies have investigated strategies for helping students with disabilities to request accommodations. These studies have addressed various methods of instruction both at the secondary and postsecondary levels (Durlak et al., 1994; Holzberg et al., 2019; Lopez et al., 2020; Palmer, 1998; Prater et al., 2014; Roessler & Palmer, 2000; Walker & Test, 2011). At the secondary level, a research study (Durlak et al., 1994) explored the effect of teaching high school students how to self-advocate for accommodations. The eight recruited students were identified and served by special education for SLDs. Through videotaped lessons and role-playing activities, the participants were

instructed on the skills required to self-advocate for their accommodations. Then, the students practiced these skills in real-world settings. The study determined that students with SLDs, when provided with the proper explicit instruction, could learn and maintain the skills necessary to self-advocate for the accommodations they require to be successful in general education settings (Durlak et al., 1994).

Another study that year (Prater et al., 2014) explored the effect of the same intervention when administered in a larger group setting. Student participants were enrolled at one high school in three different special education English classes. Each class had 8–15 students served for an SLD. During three 80-minute class sessions, direct instruction was provided to the participants. In the first lesson, students learned the meaning of self-advocacy. The second lesson had students learn and explain their learning strengths and weaknesses. In the third lesson, students learned five steps to request their needed accommodations. In this study, the mnemonic “FESTA” was used to help teach the following five steps: (F) face the teacher, (E) eye contact, (S) state the accommodation and why it was needed, (T) thank the teacher, and (A) use the accommodation. In the final lesson, the students role-played with their teacher to practice the skills they had learned in the previous lessons. Four of the participants were then followed to their general education settings to determine the success of the lessons. Interactions between the students and their general education teacher were recorded to determine whether the students could use the skills they had been taught. The study concluded that taking time to explicitly teach students how to self-advocate for the accommodations they require in general education settings increased their self-advocacy skills (Prater et al., 2014).

Self-Advocacy and Conflict Resolution Training

Another highly researched method designed to enable students to increase their self-advocacy skills and aid in the ability to request accommodations is Self-Advocacy and Conflict Resolution (SACR) training. The SACR method was created in 1998 as the result of a 3-year grant from the Office of Special Education Programs (OSEP), called the Accommodations Planning Training (APT) project, through the Department of Rehabilitation at the University of Arkansas; furthermore, it was first investigated as part of a dissertation study (Palmer, 1998; Rumrill et al., 1999). The SACR intervention is a composite strategy based on the SAS program developed by Rossler et al. in 1997 and the principled negotiation strategy created by Fisher and Ury in 1984 (Palmer, 1998).

Various researchers have explored the effect of this instructional method on self-advocacy skills. Typically, SACR is presented in multiple training sessions, in which students learn about accommodations and how to request them. Students are taught to use 19 target behaviors when requesting accommodations, which are presented in Table 1 on the following page (Holzberg et al., 2019). Students also received instruction on their legal civil rights protections and their role in ensuring that their rights to accommodations are protected. The SACR instructional strategy focuses on increasing students' use of accommodations in secondary and postsecondary settings by teaching them how to use conflict resolution methods. Researchers have investigated the impact of SACR in various populations, and all have found positive impacts on students' self-advocacy skills (Holzberg et al., 2019; Lopez et al., 2020; Palmer, 1998; Roessler & Palmer, 2000; Walker & Test, 2011).

Table 1*Operational Definitions of SACR Targeted Behaviors*

Target Behavior	Operational Definitions
1. Greets Professor	<ul style="list-style-type: none"> ✓ The student verbally greets the professor. ✓ The student states their name to the professor. ✓ The student states the class of the professor they are in.
2. Identifies Disability Status	<ul style="list-style-type: none"> ✓ The student issues a general statement about their disability.
3. Explains Disability in Functional Terms	<ul style="list-style-type: none"> ✓ The student explains how the disability affects them.
4. Identifies Previous Accommodations	<ul style="list-style-type: none"> ✓ The student makes a statement explaining an accommodation they have used before. ✓ If the student has not used accommodations in the past, they explain which accommodation they are requesting.
5. Explains Benefits of Previous Accommodations	<ul style="list-style-type: none"> ✓ The student explains the benefit of the past or hypothetical accommodation.
6. Requests Use of Accommodations	<ul style="list-style-type: none"> ✓ The student verbally states that they believe the accommodation will help them in class.
7. Identifies Resources and How they Help	<ul style="list-style-type: none"> ✓ The student verbally states how the accommodations can be provided.
8. Explains Their Role	<ul style="list-style-type: none"> ✓ The student states their responsibility for using the accommodation.
9. Asks for Agreement	<ul style="list-style-type: none"> ✓ The student asks if the accommodation sounds suitable.
10. Professor Voices Concerns	<ul style="list-style-type: none"> ✓ The student responds to the professor's concerns by asking for clarification. ✓ The student asks questions, such as "What are your concerns?" ✓ The student acts in a socially appropriate manner.
11. Reflection <i>Student Validates Professor's Concerns</i>	<ul style="list-style-type: none"> ✓ The student explains that they understand the nature of the professor's concerns. ✓ The student states that they understand the concerns. ✓ The student acts in a socially appropriate manner.
12. Mutualization	<ul style="list-style-type: none"> ✓ The student directs the conversation to focus on shared interests and common ground areas. ✓ The student makes a statement on how both parties share the same concerns. ✓ The student acts in a socially appropriate manner.
13. Collaboration <i>Student Works with Professor to Reach an Agreement</i>	<ul style="list-style-type: none"> ✓ The student explains the importance of collaborating with the professor to find more options. ✓ The student makes a collaborative statement. ✓ The student acts in a socially appropriate manner.

Table 1 (continued)

Target Behavior	Operational Definitions
14. Invention <i>Student Works with Professor to Problem Solve</i>	<ul style="list-style-type: none"> ✓ The student discusses other solutions to the problem with the professor. ✓ The student demonstrates that they are flexible. ✓ The student makes an inventive statement.
15. Summarization	<ul style="list-style-type: none"> ✓ The student informs the professor of the alternative accommodations that they may be able to use. ✓ The student lists the accommodation options without any ranking. ✓ The student summarizes their preferred accommodation.
16. Selection	<ul style="list-style-type: none"> ✓ The student asks the professor which alternative they would prefer. ✓ The student identifies a few options that they both can agree may be beneficial. ✓ The student makes a statement on which accommodation they would like to use.
17. Restates Accommodation	<ul style="list-style-type: none"> ✓ The student verbally states which accommodation they will use.
18. Clarifies Role	<ul style="list-style-type: none"> ✓ The student verbally states what they will do to ensure the correct usage of the accommodation.
19. Closes with a Positive Statement	<ul style="list-style-type: none"> ✓ The student makes a general statement and expresses appreciation.

Note: This table was adapted from the operational definitions of SACR targeted behaviors.

Source: “The effects of self-advocacy and conflict resolution instruction on the ability of college students with hidden disabilities to request and negotiate academic accommodations,” by Holzberg, D. G. (2017). *The Effects of Self-Advocacy and Conflict Resolution Instruction on the Ability of College Students with Hidden Disabilities to Request and Negotiate Academic Accommodations* (Publication No. 10266122) [Doctoral Dissertations, The University of North Carolina at Charlotte]. ProQuest Dissertations and Theses Global.

SACR in the Postsecondary Setting. Palmer’s (1998) original study explored the effects of an 8-hour training program with 50 college students who had been identified by their postsecondary institutions as individuals who require accommodations. The study also used a control group of 26 additional students with disabilities to gauge the effects of the training. The

study was conducted at four geographically diverse postsecondary institutions. The instruction was broken into two modules and evaluated the SACR training between control and experimental groups. The first module included self-advocacy and communication skill instruction, and participants practiced self-advocacy skills. The second module was focused on conflict resolution through negotiation, during which participants practiced requesting and negotiating accommodations with the training faculty and staff. The data analysis used a chi-square test of association and found a statistically significant difference between the control and treatment groups' understanding of accommodations and the requirements to receive them after the intervention sessions (Palmer, 1998; Roessler & Palmer, 2000).

The effect of SACR training was explored again using a single-case multiple-probe-across-participants design (Walker & Test, 2011). This study used a participant base of four African American postsecondary students recommended by a faculty member from their university. These students had already self-identified to their institution as requiring accommodations due to SLDs or ADHD. The instruction included the use of the first module of the SACR strategy and was split into seven lessons. On the first day, each student watched all but one part of the video *Transitions to Postsecondary Learning for Students with Learning Disabilities and/or Attention Deficit Disorders* (Tabata, 1998). Participants then discussed their disability and their needed accommodations with a researcher. The following six lessons instructed the students on the target behaviors of the SACR method and allowed them to role-play the steps learned with the researchers. The study results indicated a positive correlation between the intervention and the students' skills for requesting their needed accommodations. The social validity reported in the study also indicated that one college's director of Disability Student Services (DSS) believed the intervention to be effective and that it should be used with

more students (Walker & Test, 2011).

In another dissertation study, Holzberg (2017) explored the effects of the SACR strategy on the self-advocacy skills of four postsecondary students with hidden disabilities (i.e., anxiety, ADHD, ASD, and depression). All of the participants had submitted the required documentation to self-identify at the postsecondary level. For this multiple-probe-across-participants study, the SACR method was broken into four individual in-person sessions lasting 30–45 minutes. Each lesson started with a role-playing session, descriptions, and modeling of the behaviors being taught, followed by a practice session and a role-playing activity involving the target behaviors. Both modules of the SACR method were taught during the study, with the 19 target behaviors serving as the primary dependent variable. Again, this study found a functional relationship between the intervention and the participants' ability to use the target behaviors to request and negotiate accommodations during role-playing situations (Holzberg, 2017).

SACR in Secondary Settings. The use of SACR has also been explored to instruct secondary students to request and negotiate accommodations. In 2015, SACR training was studied as part of another dissertation investigating its effects on the self-advocacy skills of high school students (Bethune et al., 2015; Bethune, 2015). The participants were all diagnosed with mild autism and enrolled in the 9th, 10th, or 12th grade with a transition goal that included postsecondary education. The study used both modules in the original SACR protocol in a single-case multiple-probe-across-participants design. The findings indicated that SACR training that incorporated the use of stated learning targets, modeling, nonexamples, verbal or written descriptions, visual supports, and role-playing was an effective strategy for the participants. Furthermore, the students were also able to generalize the skills taught to complete accommodations requests with real college instructors (Bethune et al., 2015; Bethune, 2015).

SACR was studied again in a single-case multiple-probe-across-participants design study (Holzberg et al., 2019) with secondary college-bound high school seniors. All participants had taken the Scholastic Aptitude Test (SAT) or American College Test (ACT) and had a disability that was either an SLD, ADHD, or mild autism. Student participants were recommended based on the school principal, counselors, or teachers' belief that they had poor self-advocacy skills. The two modules that comprise the SACR training protocol were taught in four sessions, each of which lasted approximately 30 minutes. Each session included explicit instruction, role-playing, scripted notecards, role-playing with the notecards, and a review of the target behaviors taught in the lesson. Again, this study found a functional relationship between instruction with SACR and students' ability to request accommodations in a secondary setting (Holzberg et al., 2019).

Another study (Lopez et al., 2020) on a modified version of SACR training investigated the effects after it was used to instruct five high school students with high-incident disabilities. The study was a systematic replication of that by Walker and Test (2011). SACR training was modified and instruction was provided over seven lessons on 14 of the original 19 target behaviors. These lessons were scripted and adhered to the following instruction plan: (1) a description of the target skills; (2) statement of the lesson's objectives; (3) provision of examples of the skill; (4) teacher modeling; (5) student practice; and (6) role-playing of the skills in combination with previously learned skills. A functional relationship was again observed between the intervention and the ability of students to request accommodations. Students maintained these skills with an accuracy rate of 71–100%. They also generalized the skills and completed between eight (57%) and 14 (100%) of the skills taught (Lopez et al., 2020).

More recently, a multiple-baseline across-participants study (McGahee et al., 2021) investigated a different version of SACR training. It modified the SACR method to include 17 of

the original 19 target behaviors. Students received instruction over 6 weeks in seven sessions held after school. All five participants were college-bound sophomores, juniors, and seniors served by special education due to academic deficits related to SLDs. The intervention was delivered to students using scripted lesson plans, PowerPoint presentations, and student workbooks. Instruction was provided in a three-phase design. In the first phase, lessons 1–3 were taught, focusing on the first eight target behaviors. After the instruction, participants role-played the first eight target behaviors while requesting accommodations. In phase two, instruction was provided through lessons 4 and 5, which addressed target behaviors 9–12. The participants then role-played the first 12 target behaviors while requesting accommodations. In the last phase of the study, lessons six and seven taught the remaining five target behaviors. Students then participated in role-playing sessions again until they demonstrated a proficiency level of at least 88% of the target behaviors for three consecutive role-playing sessions. The researchers stated that the participants were all able to learn, maintain, and generalize the skills taught through the modified SACR (mSACR) method to request accommodations (McGahee et al., 2021).

Online Instruction

To slow the spread of COVID-19, many public schools closed their doors to students and moved instruction to online formats (Baron et al., 2020). As a result of this shift in educational instructional practices, online learning has risen in usage (Love & Ewoldt, 2021). During the initial school closures due to COVID-19, secondary teachers were asked to shift their instruction to remote methods as part of the “new normal” (Lemov, 2020). Teachers had to adapt to providing instruction in various formats, including all online, with intermittent phases of online instruction, and various hybrid models of instruction (Serravallo, 2020). During this time, teachers had to increase their educational practices by learning to use different LMSs,

multimedia software, mobile apps, browser extensions, cloud-based environments, and web conferencing tools (Rao et al., 2021).

Recorded videos can be used in remote learning situations, in flipped classrooms, and to supplement the learning opportunities in more traditional face-to-face learning formats (Cesare et al., 2021). Online programs such as Edpuzzle have also been researched and found to positively impact students' online learning. Research has also found that Edpuzzles have significantly improved students' problem-solving and critical-thinking skills (Giyanto et al., 2020). Online instruction takes two primary forms, namely synchronous and asynchronous learning (Solomon & Verrilli, 2020). The synchronous approach to instruction requires learning to occur simultaneously for all students but in various locations (Solomon & Verrilli, 2020). Synchronous learning allows teachers and students to engage with each other as a learning community in real-time while in separate locations (Moorhouse & Wong, 2022). By contrast, asynchronous instruction allows students to engage in learning activities at various times and locations (Solomon & Verrilli, 2020). Asynchronous instruction and the current research related to asynchronous self-advocacy instruction are respectively discussed further in the following two subsections.

Asynchronous Instruction

Asynchronous online instruction delivers academic content through web-based programs and allows teachers to create self-paced instruction. Teachers can present and organize content, easily track students' access to materials and task completion, and quickly record grades (Foreman, 2017). In 2019, 22 studies that used asynchronous instruction to implement behavior analytic assessments and interventions were analyzed in a literature review (Gerencser et al., 2020). This review found that five different formats are typically used when instructing students

with disabilities, namely stand-alone self-instructional manuals, self-instructional manual packages, video modeling, video modeling with voiceover instructions, and computer-based instructions. The data collected in the meta-analysis did not allow the authors to determine whether one method was vastly superior to the others (Gerencser et al., 2020). When using these asynchronous methods to instruct students with disabilities, special education teachers must ensure that the materials address students' learning goals and needs. Special education teachers often find that they need to adjust and adapt online materials to meet the needs of their students (Love & Ewoldt, 2021). Teachers can help to ensure active engagement in asynchronous settings by embedding the same forms of questions they would ask students during in-person lessons. Frequent questioning using various formats embedded in interactive video lessons was found to positively impact student learning (Cesare et al., 2021).

Asynchronous Self-Advocacy Instruction. COVID-19 and the nationwide move to online learning formats also increased the interest in the delivery of self-advocacy instruction to students using online formats (Baron et al., 2020; Russell & Pearl, 2020). The Keys to Self-Advocacy (K2SA) training used a short instructional method based on the SACR method. The study explored the effects of online video-based modules on the self-advocacy skills of first-year college students with disabilities. The participants were first-year postsecondary students from two colleges and all had previously self-identified to their respective institutions. The instruction provided through online asynchronous videos focused on helping students to overcome various barriers to receiving accommodations at the postsecondary level. The K2SA videos were developed around the three required behaviors for self-advocacy based on Michael Skinner's 1998 definition. Skinner stated that for students to achieve self-advocacy, they must "demonstrate an understanding of their disability," "be aware of their legal rights," and

“demonstrate competence in communicating rights and needs to those in a position of authority” (p. 278). After viewing the videos, 80% of the participants who responded to an online survey reported believing that the materials would be helpful for future situations at the postsecondary level in which they needed to self-advocate for their needs (Russell & Pearl, 2020).

As a result of the K2SA instruction, 80% of the participants stated that viewing the video modules that comprised the K2SA program would be helpful for future accommodations requests. However, the researchers indicated that one of the most significant limitations of the K2SA study was the lack of an LMS. This resulted in the researchers’ inability to track participants’ progress within the training videos or to ensure that the program was used with fidelity. Another limitation was that the only reported results were based on participants’ qualitative self-reports collected pre- and postintervention. Therefore, more research using quantitative data collection protocols is required to explore the effect of asynchronous instruction on teaching self-advocacy (Russell & Pearl, 2020).

The Current Research Gap

Research has demonstrated that students with a higher sense of belonging and self-advocacy skills are more likely to be satisfied with and complete their postsecondary course of study (Fleming et al., 2017; Getzel & Thoma, 2008). Various research-based self-advocacy instructional practices exist, including student-led IEP meetings, SAS, “Go 4 It...Now,” and SACR. Therefore, it would be logical to assume that self-advocacy is actively addressed in special education classrooms nationwide. Unfortunately, while many studies have focused on self-advocacy skills in the school setting, extraordinarily little seems to be taught in these areas (Fiedler & Danneker, 2007). Students with disabilities at the secondary level are typically unfamiliar with their IEPs and not active in their IEP meetings (Agran & Hughes, 2008;

Hawbaker, 2007). This lack of instruction may be due to time constraints and the increased demand on special education teachers to teach various skills while keeping track of detailed documentation and assessment data regarding their students (Fiedler & Danneker, 2007).

In one study, 21.9% of students reported that their special education teachers had not discussed the contents of their IEP before the meeting (Martin et al., 2006). Another study indicated that of the 56 junior high students and 17 high school students who responded to a survey, only 49% and 20% reported receiving instruction on reading their own IEP, respectively (Agran & Hughes, 2008). Using online learning options, including asynchronous instructional methods, can expand opportunities for learners, including those with disabilities (Love & Ewoldt, 2021). Currently, a gap in the research exists in online asynchronous transition instruction at the secondary level. This instructional gap includes quantitative data on the explicit asynchronous instruction of the self-advocacy skills required to request accommodations at the postsecondary level. The current study explored the effects of asynchronous IVMs developed as part of the UNICORNS self-advocacy program to deliver instruction to secondary students with hidden disabilities.

Summary

As the literature review has revealed, a straightforward journey in social beliefs, social acceptance, and the legal requirements for equal treatment of those with disabilities set the foundation for the self-advocacy movement. Students with disabilities now have more access to public education and the general education curriculum due to IDEA 2004 and ADA. The impact of these laws can be seen even outside of secondary schools, as the attendance rates of students with disabilities continue to increase in postsecondary settings. However, while these students'

enrollment rates have increased, their completion rates continue to lag compared with their nondisabled peers.

Data suggest that students with hidden disabilities typically do not self-identify their disability status to their postsecondary institutions, and therefore, they do not receive accommodations. Students with hidden disabilities struggle with self-identification, internalized ableism, fear of discrimination, past negative experiences, gaps in knowledge, and a lack of transition services focused on postsecondary education (Grimes et al., 2017; Lightner et al., 2012). IDEA 2004 places great significance on the transition process and students actively participating in their IEP process; however, data indicate that students are still leaving secondary school with little training in self-advocacy and knowledge of the contents of their IEPs (Fiedler & Danneker, 2007; Martin et al., 2006).

Over the years, many researchers have investigated the optimal instructional methods for increasing students' self-advocacy skills. Various in-person programs, such as SAS, student-led IEP meetings, "Go 4 It...Now," and SACR, have been explored and found to effectively increase these skills. Furthermore, due to the increased use of technology inside and outside of the classroom as well as distance learning, the first entirely virtual asynchronous self-advocacy program was designed in 2020 (Russell & Pearl, 2020). This training method aimed to create an asynchronous instructional method focused on increasing postsecondary students' ability to request accommodations.

The current study explored the effects of the UNICORNS program's IVMs on self-advocacy instruction provided to secondary students. This asynchronous program's effects were explored quantitatively using a single-case multiple-probe-across-participants study design. This intervention delivered instruction through IVMs on the self-advocacy required by college-bound

secondary students with hidden disabilities to self-identify and request postsecondary accommodations. The UNICORNS program included instruction on the subskill of knowledge of self through teaching students IEP literacy skills. The instruction also included a mnemonic to teach students target behaviors to use when requesting accommodations based on eight target behaviors adapted from the SACR method.

The following chapter will outline the current study's research questions, the location, and the intervention settings, which varied throughout the study due to the asynchronous nature of the independent variable. Chapter four will also detail the current study's participants, materials, and experimental procedures. The data collection methods will also be explained along with the study's social validity data collection methods

Chapter 3: Methodology

Background

In 2020, Russell and Pearl developed K2SA, an online asynchronous video training program for postsecondary students with disabilities. This intervention was developed to increase the self-advocacy skills of first-year college students who had already self-identified to their postsecondary institution. The authors' subsequent research found that postsecondary participants, after viewing the video modules, self-reported an increased understanding of their rights to accommodations and how to advocate for them with their current professors. The researchers reported that their study's lack of an LMS impacted their ability to ensure that participants viewed each training video with fidelity. The experimental design used in their 2020 study relied heavily on participants' self-reported self-advocacy abilities collected through pre- and postintervention surveys. Therefore, more research using quantitative data collection protocols is required to explore the proposed effect of asynchronous IVMs on the self-advocacy skills of participants. The work and online videos created in the 2020 study served as a foundational building block for the present study with express permission from the primary researcher.

The current study investigated the use of the asynchronous UNICORNS program, which delivered instruction to participants using IVMs integrated into an LMS. The IVMs were tailored to meet the needs of secondary students served by special education for hidden disabilities and who planned to transition to postsecondary education in the next 2 years. This study was developed to fill a research gap on the effect of the asynchronous self-advocacy skills of secondary students that enable them to self-identify and receive accommodations at the

postsecondary level. Self-identification at said level is the first step to receiving accommodations or services there. A recent study found that only 28% of students who received services in secondary settings self-identified at the postsecondary level (Newman & Madaus, 2015a). This may be the result of only a small number of secondary students receiving instruction in reading and understanding their IEP, which outlines the need for and use of accommodations (Agran & Hughes, 2008). This lack of instruction hinders students' ability to knowledgeably communicate their needs to others through their knowledge of self, which is a subskill of self-advocacy. Knowledge of self is a critical component of self-advocacy for students with hidden disabilities to be able to self-identify and receive accommodations at the postsecondary level, as their need for accommodations is not visually apparent to others (Izzo & Horne, 2016; Kranke et al., 2013; Test et al., 2005).

Another study indicated that students with hidden disabilities who do not receive needed accommodations only have a 50% completion rate in their chosen field of postsecondary study (Newman et al., 2016). The low completion rates for students with disabilities may be linked to students not receiving accommodations equivalent to the accommodations they received while in secondary school settings. In another study, only 19% of postsecondary students who identified as having a disability received services from their postsecondary institution, which contrasted sharply with the 87% who reported having services and accommodations in secondary settings (Raue et al., 2011).

Purpose of the Current Study

This study was designed to address the limitations reported in research on the K2SA intervention, which is the only other study to have examined the effects of self-advocacy instruction given through asynchronous video modules. The current study explored the effects of

asynchronous IVMs delivered in the UNICORNS program on the self-advocacy skills of secondary students. The newly developed intervention was named UNICORNS for the mnemonic device developed as part of the instruction. This mnemonic was used as part of the intervention to help students remember the steps for self-advocating for accommodations at the postsecondary level and was adapted from the 19 target behaviors of the SACR strategy (Holzberg, 2017; Holzberg et al., 2019; Lopez et al., 2020; McGahee et al., 2021; Palmer, 1998; Roessler & Palmer, 2000; Walker & Test, 2011).

The UNICORNS protocol included four IVMs to increase students' understanding of the self-advocacy skills required to self-identify and thus receive accommodations at the postsecondary level. The first IVM was developed to increase students' general knowledge of self-advocacy, including its four subskills. The second IVM addressed the need to increase secondary students' understanding of their IEP to increase their knowledge of self. The third IVM was designed to increase the knowledge of individuals with a disability regarding their legal rights to accommodations through the self-identification process. The final IVM used teacher modeling to show students how to use the UNICORNS mnemonic's eight target behaviors to request accommodations.

To address the limitations of the K2SA study, the UNICORNS program's IVMs collected quantitative data on the knowledge required by participants to effectively self-advocate at the postsecondary level using embedded questions. This design element allowed each participant's comprehension and viewing of the material presented in the IVMs to be tracked, recorded, and accessed. An LMS was also used to track participants' progress and provide academic coaching and feedback. Due to the limited number of students with disabilities served by special education with the same characteristics, experimental randomized control trials would not have been

possible. Therefore, the current study used a single-case design as this research methodology was the most appropriate based on the study's participant base and goal (Alqraini, 2017).

Research Questions

This study aimed to explore the effects of the asynchronous UNICORNS program, which was developed to instruct secondary college-bound students with hidden disabilities to increase their self-advocacy skills. This instruction included teaching IEP literacy skills to increase students' knowledge of self, one of the four subskills in the conceptual framework of self-advocacy (Test et al., 2005). The current study examined the following research questions:

1. To what extent does the UNICORNS program increase the self-advocacy knowledge required to receive postsecondary accommodations in college-bound students with hidden disabilities?
2. To what extent does the UNICORNS program increase the self-advocacy abilities required to request accommodations in college-bound students with hidden disabilities?
3. Do participants believe that the UNICORNS program positively impacted their ability to self-advocate for needed accommodations?
4. Do teachers believe that the UNICORNS program positively impacted students' ability to self-advocate for needed accommodations?

Based on past research, postsecondary students with increased skills in self-advocacy have higher satisfaction and program completion rates than those with lower self-advocacy skills (Fleming et al., 2017). Furthermore, students with hidden disabilities may struggle with self-identification, as research suggests that they have higher internalized ableism, fear of discrimination, past negative experiences, gaps in knowledge, and limited transition instruction focused on postsecondary education (Grimes et al., 2017; Lightner et al., 2012). Moreover,

studies have indicated that students are still leaving secondary school with little training in self-advocacy and knowledge of the contents of their IEPs (Agran & Hughes, 2008; Fiedler & Danneker, 2007; Martin et al., 2006).

Based on this information, the researcher hypothesized that asynchronous self-advocacy instruction using interactive video lessons, including IEP literacy instruction, would positively impact secondary students' abilities to self-advocate for accommodations. Additionally, this form of instruction could potentially help to fill the current instructional needs of secondary special education teachers. Research indicates that these teachers have reported lacking instructional time to provide instruction on skills related to self-advocacy and actively participate in their IEPs (Fiedler & Danneker, 2007). Data suggest that the rates of self-identification and accommodation usage at the postsecondary level are far below those at the secondary level (Newman et al., 2011; Raue et al., 2011). By increasing secondary students' self-advocacy knowledge, special education teachers could positively impact self-identification and accommodation usage rates once their students transition to the postsecondary level.

Institutional Review Board Approval

Before the current study was initiated, permission was obtained to conduct research on human subjects through Coastal Carolina University's Institutional Review Board (IRB). The university's IRB approved the current study's protocol #2022.86 as an expedited review. Permission to conduct research was granted for 1 year (see Appendix A). Permission was obtained from the school site's principal, where the current research study occurred (see Appendix B). Approval was also obtained from the Head of Special Education Services at the district level, since special education students were selected to participate in the study. This permission at the district level was obtained since the PI needed to review the IEP data of

participants were not on her caseload to ensure the correct selection (see Appendix C).

Participants were selected based on convenience sampling for information that could be obtained when reviewing the participant's current IEP. All participants were required to return a signed parent/guardian and student participant consent form (see Appendix D). No compensation or rewards were provided to those who participated to ensure that students participated in the study of their own free will.

Settings and Participants

This section describes all of the locations used in the current study to build a complete understanding of the school and intervention setting. These descriptions can aid generalizations drawn from the current study's data as well as help to lead further research in asynchronous instruction of self-advocacy.

School Setting

The study was conducted at a high school in the Southeastern United States. The school schedule was a four-by-four block schedule, therefore students took four 90-minute classes in the fall and a different set of four classes in the spring. On the last day of the first semester, the school's total enrollment was just under 1,000 students, among whom 32% were first-year students, 23% were sophomores, 25% were juniors, and 19% were seniors. When broken down by racial demographics, approximately 43% of the school's population was African American, 43% Caucasian, 13% Hispanic, and <1% within the categories of Asian, Native American, or two or more races. When broken down by gender, 52% of the student population was male and 48% was female.

Of the school's total population, 20.7% of students were served by special education services for at least one documented disability. These services could be broken down by the

number of blocks they received and the form of credentials they would receive when leaving secondary education. Of these students served by special education, approximately 21% were served in self-contained all-day settings (four blocks), while 9% were placed in partial day settings (two to three blocks) and were not projected to earn a standard state high school diploma. A further 63% of the students who received special education services were enrolled in one block of services, while 7% received services through the consultative model and were on track to receive a standard state high school diploma.

During the COVID-19 pandemic, the school district began educating students solely through virtual learning methods after a mandate closing public schools across the state was issued in March 2020. The district offered two different instructional formats during the 2020–21 school year. Parents and guardians could choose a hybrid model with 2-day in-person instruction with 3 days of instruction provided through online synchronous and asynchronous assignments. By October 2020, all students with IEPs or those who were English speakers of other languages (ESOLs) could opt into a hybrid model with 4 days of in-person instruction and 1 day of asynchronous instruction. At the start of the second semester of the 2020–21 academic year, parents and guardians could choose between two educational formats, including full 5-day in-person learning or the full virtual option. At the start of the 2021–22 academic year, the district only provided full 5-day in-person learning at the high school level.

Intervention Settings

Since the instruction through the UNICORNS program was developed for a fully asynchronous online format, all intervention instruction and data collection probes were delivered through the participants' laptops. Due to the asynchronous nature of the intervention, participants were allowed to complete the IVMs in any location on the school campus. They

were required to complete all interventions during the regular school day. This freedom to choose the location used for each invention session allowed the current study to assess the effectiveness of the asynchronous UNICORNS program fully. At the start of each intervention, participants were prompted to respond to three questions related to time and place, which enabled the tracking of the intervention locations. All of the intervention locations that the participants indicated using are described in detail in the following subsections. During all intervention sessions, no additional instruction was provided to participants.

Researcher's Classroom. One intervention space open to participants was the PI's classroom within the school setting, where a total of 30 interventions were completed. The classroom was decorated in a manner that was inviting to students of diverse cultural backgrounds. The outside of the classroom had various signs stating that it was a safe space for students of different sexual orientations and genders. These signs also stated that the teacher had hidden disabilities, including dyslexia and depression. The inside of the classroom had various lighting options, including overhead lighting, floor and tabletop lamps, string lights, and colored LED lights around the teacher's desk, paraprofessional's desk, and smartboard. The one window in the classroom was kept with the shades drawn to limit distractions from the outside. There were 18 student desks with attached tabletops in the classroom. Each had an attached Bouncy Band on the front legs so students could bounce their feet without making noise. There were two small tables attached to the teacher and paraprofessional's desks, where students could choose to sit if the student desks were uncomfortable. There was also one independent table behind the paraprofessional's desk. Flexible seating options were available for student use and included one wobble stool, a rolling yoga ball chair, one backless rolling stool, one padded desk chair, and

three plastic and metal school chairs. Participants were allowed to move to various locations in the classroom to complete their intervention based on their comfort level.

Twelfth-Grade Special Education Classroom. Participants who received in-school special education services could complete their interventions in the classroom where they received their special education services. Three of the four participants were 12th-grade students who had special education services for one block and had class in the same classroom. A total of 46 interventions were completed in the 12th-grade special education classroom. The teacher's desk was placed in the front of the classroom blocking the view from the one window to limit distractions from outside. All lighting in the classroom was provided by overhead fluorescent lights and the open window. The classroom had 15 student desks with attached tabletops and Bouncy Bands on the front legs. Two small group tables were attached to the teacher's desk, and another was adjacent to the paraprofessional's table. Students were allowed to sit in these locations if they wished to sit closer to the teacher or if their desks were too small to sit at comfortably. There was one independent table located in front of the teacher's desk. The only flexible seating options in this room were three school chairs. Two of these chairs were at the paraprofessional's small group table and one was at the independent table in front of the teacher's desk.

Twelfth-Grade Math Classrooms. Based on the high school diploma requirements of the state in which the current study occurred, all students had to complete and pass a Probability and Statistics class. Two participants were enrolled in this class when the study was being conducted. Each student took this class with different teachers and in two separate locations, which are described as follows.

Probability and Statistics Classroom 1. One student participant (Hunter) completed one of his interventions in this location. The classroom had 25 student desks with attached tabletops arranged in five rows on the left- and right-hand sides. All desks faced the middle of the classroom, creating an aisle in the middle of the room. The teacher often used the aisle to move around the classroom when helping the students. The interactive board and the teacher's desk were both located in the front of the classroom on the right-hand side. There was one window in the front of the classroom located to the side of the teacher's desk. The teacher typically kept the window shade up to allow natural light into the classroom. All lighting in the classroom was provided by overhead fluorescent lights and the open window. The classroom was sparsely decorated to limit distractions due to the teacher's preference.

Probability and Statistics Classroom 2. Another student (Ryleigh) also completed one of her interventions in her math classroom. This classroom had 27 student desks with attached tabletops. All student desks were arranged in rows facing the front of the classroom. Unlike the other math classroom, the student desks were all placed facing the front of the room with the door to the main hallway behind them. The teacher's desk was at the front of the classroom on the left-hand side of the room. The class's interactive whiteboard was on the left-hand side of the classroom and blocked the room's only window. The teacher typically kept the window shade drawn to minimize outside distractions. Overhead fluorescent lights provided all lighting in the classroom. This classroom was also sparsely decorated to limit distractions based on the teacher's preference

School Library. The pre- and postgeneralization sessions all took place in the school's library, where students were also allowed to complete intervention sessions. One intervention was completed by Ryleigh in this location. The library had ample open space in the middle for

whole-group instruction. The majority of the school's books and other resources were located around the library's perimeter, where various small-group study rooms were also located. Across from the main doorway were two small groups of rooms on the left-hand side of the library. On the front wall to the right of the main doorway was the circulation desk, and behind that was the librarians' workroom entrance. Past the entrance to the workroom was another small room that housed the library's collection of materials related to the history of the state where the school was located. The library housed various flexible seating options, including rolling chairs, moveable desks, high-top tables, S-curved high-top tables, bar height chairs, and moveable benches in front of the S-curved tables. All lighting was provided by overhead fluorescent lights.

Participants

Individuals from several distinct groups participated in the current study. Each of the participant groups is described in detail in the following subsections.

Student Participants. The participants were chosen through convenience sampling followed by a random selection. Three participants had previously been on the researcher's special education caseload during their high school careers. All participants selected were on the standard high school diploma track, with a transition goal and plan that included enrollment in postsecondary education institutions. The participants were required to meet the following five criteria to qualify for the study: (1) be current high school juniors and seniors on the standard high school diploma track; (2) be in good academic standing with a current anticipated graduation date between 2022 and 2023; (3) have a current IEP; (4) have been served for disabilities that were hidden, meaning that they displayed no outward appearance of a disability (e.g., an SLD or OHI); and (5) have an IEP transition plan that stated their enrollment goal in postsecondary education; these institutions included either 2- or 4-year colleges and universities.

To create a potential pool of participants, all special education teachers in the school setting who served students enrolled in the 11th or 12th grade were asked by the researcher to provide a list of students who met the study's participation criteria. Upon receiving the lists of potential participants, the researcher reviewed each participant's educational records and IEP to ensure they met the study's requirements. Once each participant's record had been reviewed, the researcher met with all of the potential participants to explain the current study, including the time requirements, potential benefits, and risks. These students were then given a Participant and Parent Informed Consent Form (see Appendix D) to take home. After this meeting, the PI contacted the parents of potential participants to explain the study and answer any questions. There was then a 1-week waiting period to allow for the return of signed consent forms. Those who returned a signed form with parent and student consent to participate were assigned a number based on the order in which their form was received. This number was used at the start of the study before pseudonyms were assigned. Four students returned signed participant letters from the pool of potential participants during the 1-week waiting period. The four participants' demographic information is summarized in Table 2 and then further explained in a narrative description:

Table 2

Participant Information

Pseudonym	Grade	Gender	Race	Disability	Documented Accommodations	Est. date of college enrollment
Hunter	12	M	Black	SLD OHI	1. Extended time for assignments, quizzes, and tests 2. Use of a calculator	2022
Octavia	12	F	Hispanic	SLD Speech	1. Small group setting for quizzes and tests 2. Extended time for assignments, quizzes, and tests 3. Spanish–English word–word dictionary	2022
Ryleigh	12	F	Black	OHI	1. Small group setting for quizzes and tests 2. Extended time for assignments, quizzes, and tests 3. Use of a calculator 4. Preferential seating	2022
Natalia	11	F	White	SLD	1. Extended time for assignments, quizzes, and tests 2. Use of a calculator 3. Use of a word processor with spellcheck function	2022

Note: This table contains the information reported in each participant’s current IEP printed by their special education case manager at the start of the data collection phase during the first baseline data collection period.

Hunter. Hunter (pseudonym), a Black male, was aged 18 years and 9 months when the study began. Hunter was instructed through the hybrid model at the start of the 2020–21 school year with 2 days of in-person learning and 3 days of asynchronous instruction. In January 2021, Hunter began the full 5 days of instruction and had remained on this instruction plan since that time. At the start of the study, Hunter was in the 12th grade and was enrolled in three academic classes during the second semester of the school year. He had earned all 26.5 high school credits that he had attempted and had a 2.49 GPA. Based on his current IEP, Hunter received direct special education services for 90 minutes daily and was served as a student with an SLD as his primary disability and an OHI as his secondary disability. His services were devoted to deficits in math, and all services were delivered in the resource service model. At the time of the study, his current documented accommodations included extended time for assignments, quizzes, and tests and the use of a calculator. Hunter’s transition goal included enrolling at the local 4-year college or university to earn a Bachelor of Science degree.

Octavia. Octavia (pseudonym), a Hispanic female, was aged 18 years and 6 months when the study began. At the start of the 2020–21 school year, Octavia was instructed through the hybrid model with 2 days of in-person learning and 3 days of asynchronous instruction. In January 2021, Octavia began the full 5 days of instruction and had remained on this instruction plan since then. At the start of the study, Octavia was in the 12th grade and enrolled in three academic classes during the second semester of the school year. She had earned all 28 high school credits that she had attempted and had a 3.16 GPA. Since starting school, Octavia had also received ESOL services. As an ESOL student, she had received only consultative services since she maintained passing grades in her classes but had yet to pass the “Access for ELLS” assessment.

Based on her current IEP, Octavia was served as a student with a speech-language impairment as her primary disability and an SLD as her secondary disability. Her special education services included 90 minutes daily to help address deficits in reading in the resource service model and 15 minutes of indirect services for speech services. These services were administered in the consultative indirect service model within Octavia's special education study skills class. At the time of the study, her documented accommodations included a small group setting for quizzes and tests; extended time for assignments, quizzes, and tests; and the use of a Spanish–English word-to-word dictionary. Octavia's transition goal included enrolling at the local 2-year college to earn an associate degree in nursing.

Ryleigh. Ryleigh (pseudonym), a Black female, was aged 18 years and 10 months when the study began. Ryleigh was placed on virtual learning for the 2020–21 school year. She then returned to full in-person learning at the start of the 2021–21 school year. At the start of the study, Ryleigh was in the 12th grade and only enrolled in two academic classes during the second semester of the school year. She had earned all 27 high school credits that she had attempted and had a 3.19 GPA. Based on her current IEP, Ryleigh received direct special education services for 90 minutes daily and was served as a student with an OHI. Her services were split equally (45 minutes daily) to help address deficits in reading and math administered in the resource service model. At the time of the study, her current documented accommodations included a small group setting for quizzes and tests; extended time for assignments, quizzes, and tests; the use of a calculator; and preferential seating. Ryleigh's transition goal included enrolling at the local 2-year college to earn a cosmetology certification.

Natalia. Natalia (pseudonym), a white female, was aged 17 years and 10 months when the study began. At the start of the 2020–21 school year, Natalia was instructed through the

hybrid model with 2 days of in-person learning and 3 days of asynchronous instruction. In October, she decided to start the hybrid instructional model with 4 days of in-person learning and only 1 day of asynchronous learning. In January 2021, Natalia began the full 5 days of instruction and had remained on this instruction plan since that time. At the start of the study, she was in the 11th grade and enrolled in four academic classes during the second semester of the school year. She had earned 20.5 of the 21 high school credits that she had attempted and had a 3.12 GPA. Based on her current IEP, Natalia received special education services for 30 minutes weekly indirectly and was served as a student with an SLD. All services were delivered in the consultative service model and devoted to a deficit in reading. At the time of the study, her documented accommodations included extended time for assignments, quizzes, and tests; use of a calculator; and use of a word processor with a spellcheck function for all written assignments. Natalia's transition goal included enrolling at the local 2-year college as part of the Technical Scholars program. Said program was designed to allow high school students to have dual enrollment at the high school and technical college levels; thus, they could simultaneously finish their high school classes while taking college-level classes for STEM careers at the local technical college. Natalia planned to dually enroll in the local technical college's half-day welding program while she completed her high school classes during the 2022–23 school year.

Primary Investigator. At the time of the study, the PI was a Ph.D. candidate at Coastal Carolina University. During the study, she was completing her Doctor of Philosophy in Education with a specialization in Curriculum, Instruction, and Assessment. She had completed her Master of Education in Literacy in 2017 and a Bachelor of Arts in Special Education Learning Disabilities in 2011. Her past research experience included serving as a research assistant (focus group observer and behavior coder) in conjunction with the late Dr. Samuel R.

Vaden on Positive Behavioral Interventions and Supports (PBIS) within a local school system. She published a book review in the journal *Theory & Practice in Rural Education* (TPRE). The PI had also presented at the South Carolina Council for Exceptional Children Regional Conference in a student presentation on the classroom use of PBIS while working on her BA. In the current study she served as the primary rater and scored all baseline, intervention, maintenance, and generalization data.

Her past experiences in special education include 11 years of teaching experience. These years break down into 4 years as a special education teacher at a middle school serving as a resource teacher; 1 year teaching at the intermediate level; and 6 years at the high school level as a teacher for students enrolled in transition math, occupational math, occupational science, 9th and 10th-grade resource, and also as a consultative special education case manager. She had worked to help build her students' willingness to speak in their IEP meetings by having them complete interviews before meetings.

The PI was an individual with hidden disabilities (SLD and ADHD). She was served by special education starting in first grade for a speech impairment and then began services in third grade for a disability in reading. After starting her professional program in special education, she learned about the formal process of self-identification and how to request accommodations at the postsecondary level. In 2010, she was retested due to insufficient and current testing data for proving her disability to receive accommodations at the postsecondary level. At that time she was also diagnosed with ADHD.

Secondary Rater. The secondary rater for the study was a Caucasian female special education teacher in the school setting. The secondary rater agreed to score at least 40% of all data collected during the baseline, intervention, maintenance, and generalization phases. Her

scores were used to calculate interobserver reliability. She completed her Master of Education in Special Education in 2019 and a Bachelor of Arts in Special Education Learning Disabilities in 2012. The secondary rater was a Doctor of Education (EdD) student working on an Educational Leadership and Administration doctoral program. She had worked for 7 years as a high school special education teacher as well as served as department head for the last 6 years in a high school setting in the Southeastern United States. Her research interests include working with students with emotional disabilities and the disproportionality in discipline of students with disabilities. She completed a secondary rater confidentiality form (see Appendix F) as well as a teacher social validity survey to evaluate the UNICORNS program.

College Instructors. The study's pre- and postgeneralization sessions required the participation of college instructors who were also general education teachers at the school where the current study occurred. Using two college instructors enabled more accurate role-playing sessions as they were familiar with one of the local college's requirements and protocols for requesting accommodations. One of these general education teachers worked at the high school as a history teacher. This teacher also worked as a history instructor at the postsecondary level within a local 2-year technical college's Fine Arts and Humanities Department and had 7 years of experience at the college level. The other general education teacher was one of the school's science teachers, who also worked as a Health Information Management Department instructor at the local 2-year technical college.

Since none of the participants were enrolled in classes with these teachers at the time of the study, any information on the participants' disability status was not part of their educational need-to-know basis. Therefore, both college instructors completed a confidentiality form (see Appendix D) and the necessary Collaborative Institutional Training Initiative (CITI) training

sessions before the start of the study. Both college instructors were Caucasian males. The college instructors had a mean of 8.5 years teaching experience at the secondary level and 11 years at the postsecondary level. Moreover, both completed the teacher social validity survey to evaluate the UNICORNS program.

Materials

The materials used in the current study included various electronic devices, online programs, computer-based software, and paper-based forms. These are explained in detail in the following subsections.

Google Classroom

An LMS was used to house the intervention instruction, collect data, and communicate with the participants. Since the district where the study was conducted already used Google Classroom as the district-supported LMS, the same platform was used for the current study. The researcher created a new Google Classroom and provided access only to the participants involved in the study. This LMS also allowed the researcher to send individual participants daily assignments based on their current stage in the intervention process as well as to provide academic coaching and feedback.

UNICORNS IVMs

The instruction for the study's intervention, namely UNICORNS, was broken into four IVMs that consisted of instructional footage and interactive closed- and open-ended response questions. Each of the four videos was then uploaded to Edpuzzle, which is an online learning platform that can be used to create interactive video lessons used by various teachers in the district where the current study was conducted. This web-based tool allows multiple-choice, open-ended, and short-answer questions to be added to any video uploaded to the Edpuzzle

platform (Ware, 2021). Edpuzzle allows teachers to create interactive videos and lessons for delivering instruction (Cesare et al., 2021). Once the videos used for the current study were completed, they were uploaded to Edpuzzle. Comprehension questions relating to the videos were added to the correct place in each one. Once the interactive close- and open-ended questions were embedded into each of the four videos, they were considered IVMs. When viewing the IVMs, participants were prompted to answer each embedded question by (1) selecting the correct response or (2) typing/recording their responses. The UNICORNS intervention transcripts in Appendix H list all of the Edpuzzle comprehension questions. Participants only had access to the videos through the Edpuzzle format. The data collected during baseline, intervention, and maintenance phases were collected through the 12 open-ended probe questions embedded at the end of each IVM (see Appendix J).

Laptop Computers

The participants had to use a computer to participate in all of the IVMs. Since the district had a one-to-one device ratio, all participants used their district laptops to access both the LMS and the IVMs. All students in the 11th and 12th grades were provided with a Dell Latitude 3380 laptop with the operating system Windows 10®. Participants had access through a WiFi connection to the Google Classroom on the LMS created for the current study. The school provided wireless Internet access to all students when they logged into their district-provided device using their district credentials. Each participant in the district had a personalized login linked to their student number.

Headphones

Since participants completed each intervention session in a location of their choice due to the current study's asynchronous design, they required headphones. They were allowed to use a

set of headphones from the special education department to complete the intervention videos. Each special education teacher in the school setting had multiple pairs of Sony headphones, and those provided were Sony ZX Series Wired On-Ear Headphones purchased in 2021 through Amazon. Only one of the four participants required these headphones. The other three used personal wireless Bluetooth headphones that they had already linked to their one-to-one student computers.

Copies of Participants' Current IEP

Before participants began the intervention sessions on the second IVM, they were given a paper-based copy of their IEPs. This material was provided to ensure that during the second video, which focused on IEP literacy, participants could use their own IEP to locate their current disability status, academic strengths, academic needs, and accommodations.

Hypothetical College Letter of Accommodations

All participants were given a copy of an individualized hypothetical college letter of accommodations to use in the pre- and postgeneralization sessions. The PI created the letters by using Word Publisher to modify a copy of the closest local university's college letter of accommodations. Each hypothetical letter was created to accurately describe each participant's current accommodations. Each one contained the participant's name, two hypothetical college classes, and the accommodations listed on each participant's current IEP. Participants received their individualized hypothetical college letter of accommodations in an unsealed single-window envelope. The window portion of the envelope displayed the participant's name and the words "Letter of Accommodations." The students could use this hypothetical letter when one of the college instructors objected to a participant's request for accommodations (see Appendix K).

Word-Based Data Collection Forms

Data collection forms were used during multiple phases of the current study. They were split between paper Word-based documents, electronic Word documents, and Google forms. The data collected during each intervention session was recorded in an electronic Word document (see Appendix L), printed, and stored in a locked filing cabinet. Data collected during the IVM interventions was reset on Edpuzzle at approximately 4:15 pm when the PI collected data on any intervention completed by the participants during that school day. Two copies of the intervention data form were printed and then hand-scored by the PI and secondary rater. Pre- and postgeneralization session data were collected on printed forms that detailed the operational definition of the target behaviors and then hand scored by the PI and secondary rater (see Appendix M). Finally, online Google forms were used to collect social validity data from the participants (see Appendix N) and teachers (see Appendix O) involved in the study. All hard copies of the printed Word documents were stored in a locked file cabinet in data collection files for each participant in the PI's classroom. All electronic Word documents were only accessible through a jump drive in the care of the PI.

Research Variables

Since the study collection process followed a single-case design methodology, the independent variable under study was given in the same manner to all participants. The independent variable was also assessed to determine whether it was socially valid for use with the participants in the current study (Kennedy, 2005). The dependent variables were operational, defined, and observable (Alqraini, 2017) and were measured consistently throughout the study and during two generalization sessions. Interobserver agreement was used to ensure reliability

and consistency in scoring (Horner et al., 2005; Kennedy, 2005). The primary, secondary, and independent variables are described in detail in the following subsections.

Primary Dependent Variable

The primary dependent variable was students' knowledge of the self-advocacy skills required to receive accommodations at the postsecondary level. Based on the conceptual framework developed by Test et al. (2005), self-advocacy requires knowledge in four subskills: knowledge of self, knowledge of rights, communication skills, and leadership skills. To guarantee that participants had accurate knowledge of self, instruction was provided on skills related to IEP literacy. IEP literacy was addressed to ensure that the participants knew their documented disability and the accommodations documented on their IEP. The primary variable was measured using a 12-question probe scored on a 0–3-point scale (see Appendix J). The probe measure used to collect data during the baseline, intervention, and maintenance stages was adapted from the probe used in a study by Test and Neale (2004) and another study by Cease-Cook et al. (2013). The protocol was expanded to 12 questions instead of 10 to ensure that each video module presented was related to three questions within the measure. The data collected through the baseline, intervention, and maintenance phases using the 12-question probe were then analyzed through visual data analysis. Questions on the 12-question probe related to the self-advocacy skills and personal information that a student with hidden disabilities must be knowledgeable of to enable them to self-identify and request accommodations at the postsecondary level. Each participant's current IEP was used to ensure their responses correlated to the information documented on their current IEP in the study. This information was related to their documented IEP, strengths, weaknesses, and current accommodations.

Operational Definition of the Primary Dependent Variable. This study's operational definition of self-advocacy aligned with Skinner's 1998 definition and Test et al.'s (2005) conceptual framework of self-advocacy. Skinner explained that an individual with a disability could be a self-advocate when they understand their disability, know their legal rights, and communicate their rights and needs to others (Skinner, 1998). This operational definition of self-advocacy also fits within the conceptual framework that Test et al. developed in 2005, which comprises the four subskills of knowledge of self, knowledge of rights, communication, and leadership. Knowledge of self includes students knowing their interests, strengths, needs, and learning style as well as understanding their disability; knowledge of rights includes students knowing their legal rights as citizens and individuals with a disability; the subskill of communication requires students to speak with and share their knowledge and rights effectively with others; and finally, the subskill of leadership involves students learning the roles of the group, functioning within it, and advocating for others (Test et al., 2005).

Secondary Dependent Variable

The secondary dependent variable was the participants' ability to use their IEP literacy skills to self-advocate and request their academic accommodations from college instructors. This form of response generalization required the participants to complete the previously taught or socially appropriate target behaviors when requesting accommodations (Kendall, 1981). The secondary dependent variable comprised the operationally defined target behaviors of the mnemonic "UNICORNS" (see Appendix M). The steps used in the current study were adapted by shortening and modifying the 19 target behaviors of the SACR strategy (Holzberg, 2017; Holzberg et al., 2019; Lopez et al., 2020; McGahee et al., 2021; Palmer, 1998; Roessler & Palmer, 2000; Walker & Test, 2011). The current study's target behaviors were related to the

program’s mnemonic “UNICORNS,” as detailed in Table 3. The target behaviors were discussed, explained, and modeled throughout all of the IVMs. Data on the secondary dependent variable were collected during the pre- and postgeneralization sessions and calculated using an event recording methodology on a scale of 0–2. This scoring required all observable target behaviors to be recorded during the pre- and postgeneralization sessions (Kennedy, 2005). These data were not graphed as part of the visual analysis of the primary dependent variable. However, the increase between the pre- and postgeneralization data was compiled into bar graphs and table formats for straightforward interpretation. These data were also used to help determine the usefulness of the IVMs that comprised the UNICORNS program concerning each participant’s ability to request accommodations in a postsecondary setting.

Table 3*Operational Definitions of UNICORNS Targeted Behaviors*

Key Word	Target Behavior
Unreserved	The student starts a conversation with a greeting and introduces themselves.
Needs	The student states that they have needs due to a disability.
Inform	The student states the accommodation(s) they are requesting.
Cite	The student explains how the accommodation has been beneficial and used in the past.
Object <i>The request was denied</i>	The student explains that their rights to accommodations are protected by law and/or hands the instructor their College Letter of Accommodations.
Reconcile	The student reaches an agreement on how the accommodation will be used.
Nutshell	The student restates the agreement that was reached.
Stop	The student ends the conversation by thanking the instructor.

Operational Definition of the Secondary Dependent Variable. The mnemonic “UNICORNS” was used to explain the steps that a postsecondary student may need to undertake to self-advocate for accommodations at the postsecondary level to a professor. First, the participants were expected to become (U) unreserved and start conversations with their college instructor. They were instructed to make introductions by greeting their instructor by name and stating their own name. Next, the participants were directed to state their (N) needs. This action was observed when the participants disclosed their disability status. However, they were not required to name their disability. Participants then had to (I) inform the instructor what accommodations they were requesting, before (C) citing how their accommodations had been beneficial or reduced academic stressors created by their disability. If the instructor did not initially agree with the accommodation request, the participants would need to deal with the (O) object[ion] by remaining respectful and reiterating why they needed the requested accommodations. They were also instructed to provide their professor with their College Letter of Accommodations. Next, the participants had to (R) reconcile differences by confirming that the accommodations sounded suitable. Next, they needed to restate the conversation in a (N) nutshell by summarizing the conversation. This behavior was demonstrated if a participant could restate what they and the instructor had agreed upon for accessing their accommodations. Finally, the participant was taught to (S) stop the conversation by thanking the instructor for their time and willingness to discuss the students needed accommodations. The generalization data collection forms included the operational definition for the steps required to request accommodations in the postsecondary setting.

Independent Variable

The current study used the asynchronous UNICORNS program to teach students the self-advocacy skills required to receive accommodations at the postsecondary level. To ensure that the participants had accurate knowledge of self, instruction was provided on IEP literacy skills, which ensured that they could name their documented disability and the accommodations on their IEP. The intervention was broken into four IVMs which were presented to the participants in numerical order. Each IVM was created to follow the three main principles of Universal Design for Learning (UDL). All IVMs included narration and multiple means of student expression. At the start of each IVM, the participants were prompted to answer three open response questions within Edpuzzle by typing or recording their spoken answers. They could respond to the three questions in short sentences or one-word responses. The questions were as follows:

- 1) Where are you completing this video module?
- 2) Are you in a comfortable and quiet location with limited distractions?
- 3) What time of the day is it?

Throughout each IVM, a set of forced-response, close-ended comprehension questions were presented. These questions were presented approximately every 3 minutes as closed multiple-choice or true-false-based questions. Each question was developed to relate to the content presented directly beforehand. The second IVM's forced-response questions related to information found on each participant's IEP, which was provided to the participants before they viewed the IVM. The total number of closed-response questions in each of the four IVMs ranged between 10 and 13. At the end of each IVM, the participants were presented with the 12 open-response probe questions within the Edpuzzle recording. All questions were presented on screen

and read aloud. Participants were directed to answer these questions in a typed or audio recording in as much detail as possible. The 12-question probe related to the self-advocacy skills and personal information that a student with hidden disabilities must be knowledgeable on to self-identify and request accommodations at the postsecondary level. These questions were related to the primary variable in the current study. Transcripts and comprehension questions for each of the IVMs are provided in Appendix H.

To help normalize disabilities, the PI presented and explained disabilities and self-advocacy by explaining their own educational needs as an individual with disabilities. This level of personalization was employed to reduce feelings of stigma, fear of discrimination, past negative experiences, gaps in knowledge, and a lack of transition services focused on postsecondary education for accessing the accommodations often required by individuals with disabilities (Grimes et al., 2017; Lightner et al., 2012).

IVM 1: Understanding Disabilities and Self-Advocacy. This IVM's goal was to help normalize the need for accommodations. It was designed to reduce internalized ableism and stigma related to accommodations in the postsecondary setting. Furthermore, this IVM helped set the foundation for participants to gain self-advocacy skills; the instruction in the video was related to growing the participants' knowledge of self. By building an enhanced understanding of what disabilities are, it was hoped that the students would be able to examine their own needs and develop an improved understanding and acceptance of learning differences. The instruction also correlated with the subskill of knowledge of self and the understanding of the impact that a disability has on one's learning (Skinner, 1998; Test et al., 2005). Furthermore, this IVM included information about accommodations and how they help participants with learning differences. A detailed explanation of hidden disabilities and their relationship with the

classifications of SLD and OHI was also provided. The instruction in this video module was designed to help participants respond to the first three questions in the 12-question probe, which were as follows:

1. How does self-advocacy impact your ability to receive help for your learning difference?
2. How does understanding your learning difference impact your ability to receive accommodations?
3. What major change happens with accommodations you already have when you transition to postsecondary schools?

IVM 2: Developing Your IEP Literacy. The second IVM was developed to help increase knowledge related to the information that students must self-disclose at the postsecondary level to self-identify and explain their needs to others. To ensure that the participants were provided with accurate information, they were asked to locate information on a copy of their current IEP. This IVM was also designed to fill the instructional gap discovered during the literature review, namely that few students at the secondary level have received any instruction in reading and understanding their IEPs (Agran & Hughes, 2008). This video module used a hypothetical IEP written using the Frontline Special Education Management (Enrich) program that met the PI's learning needs as an individual with disabilities (see Appendix I). The Enrich program was the program adopted statewide to create IEPs in the state where the current study was conducted.

Participants received a copy of their IEPs and were directed to follow along as the IVM provided instructions regarding its parts. The aim was to teach them to locate information regarding their learning strengths, weaknesses, and current accommodations. The instruction in this IVM also correlated with the self-advocacy subskill of self-knowledge by demonstrating an

understanding of the participants' documented disability, strengths, weaknesses, and current accommodations (Skinner, 1998; Test et al., 2005). The instruction was designed to help participants respond to questions 4–6 of the 12-question probe, which were as follows:

4. What learning difference do you have documented on your current IEP, and how does it impact your learning?
5. What are the strengths and weaknesses in reading, writing, or math that are documented in your IEP?
6. What accommodations do you currently have, and how do they support your learning?

IVM 3. Your Rights in Secondary and Higher Education. This IVM was developed to explain the role and responsibilities of the student, faculty, and postsecondary institution in requesting and receiving accommodations. The instruction in this IVM explained how students should self-identify at the postsecondary level. The video explained the differences in the role of the student when requesting accommodations at the secondary and postsecondary levels. Basic information was provided on the legal protections of accommodations under Section 504 of the Rehabilitation Act and ADA. Instruction was also provided on using College Letters of Accommodations by the PI, who presented a copy of their most recent College Letter of Accommodations and discussed the main components. Finally, the instruction concluded by explaining the grievance process typically used as part of a postsecondary school's due process, which a student can undertake if an instructor denies the accommodations granted by the postsecondary institution. This video module focused on participants learning about the subskill of knowledge of rights through increasing their awareness of legal rights and how to communicate them to others (Skinner, 1998; Test et al., 2005). The instruction in this IVM was

designed to help participants respond to questions 7–9 of the 12-question probe, which were as follows:

7. What laws protect individuals with disabilities' rights to accommodation?
8. What role do you play in self-advocating for your postsecondary needs in relation to the self-identification process?
9. What can you do in the college setting if you fail to receive your requested accommodations after self-identifying to a college and requesting your accommodations from a professor?

IVM 4: Becoming UNICORNS: Self-Advocacy 4 Accommodations. The purpose of this IVM was to outline the “UNICORNS” mnemonic and the target behaviors required to request accommodations. This IVM included two recorded role-playing demonstrations between the PI and the two college instructors who participated in the study. The researcher acted out the mnemonic's steps for requesting accommodations at the postsecondary level and provided voice narration to explain each step. The first recorded demonstration included the steps required if a college instructor or professor agrees to the accommodation request the first time, while the second included the steps required if he or she denies an accommodation request. Participants were directed that if their instructor denies their first request, they should supply them with a printed copy of their College Letter of Accommodations. They were also directed to explain how their accommodations benefited them due to their disability. This IVM was focused on providing participants with knowledge of the communication and leadership skills required to explain their rights and needs to others (Skinner, 1998; Test et al., 2005). The instruction was designed to help participants respond to the last three questions on the 12-question probe, which were as follows:

10. Why may you need to self-advocate for accommodations, and what should you bring with you when you do?
11. Why is it important to explain what accommodations you need and how they benefit you to others?
12. If a college professor or instructor refused to give you a needed accommodation after you asked, what could you do?

IVM: Data Collection Probe. One additional IVM was created to collect baseline and maintenance data on the 12-question probe. Participants were directed through a video recording of the PI that they should answer the following questions with as much detail as possible. The questions on the probe related to the current study's primary dependent variable, namely students' knowledge of the self-advocacy skills required to receive accommodations at the postsecondary level. The responses were then scored on a 0–3-point scale. At the end, the participants were presented with a recording of the PI thanking them for their time. Table 4 indicates how the questions developed for this study correlated to the four subskills in Test et al.'s (2005) conceptual framework of self-advocacy:

Table 4

Probe Questions' Correlation to the Self-Advocacy Conceptual Framework of Test et al. (2005)

Question	Knowledge of Self	Knowledge of Legal Rights	Communication	Leadership
1	X			
2	X			
3	X	X		
4	X			
5	X			
6	X			
7		X	X	
8	X	X	X	
9		X	X	X
10		X	X	X
11	X	X	X	
12		X		X

Experimental Procedures

The current research study included pre- and postgeneralization sessions along with the required baseline, intervention, and maintenance phases for a single case study. The following sections explain the procedures for each phase of the study.

Prebaseline Procedures

One week before beginning the baseline protocol, all potential participants met with the PI so that their role in the current study could be fully explained. This explanation included an outline of the expected behaviors for the asynchronous intervention and attendance of the intervention sessions. The potential participants were also informed when the pregeneralization session would be held. They were provided with information on their rights and informed that they were not required to participate in the study. At the end of the conversation, those who wanted to participate in the study were given an Informed Participation Consent Form for their

parents or legal guardians to sign and return. Four forms were returned, and these students formed the pool of participants for the study.

Pregeneralization Session

Before the baseline data collection started, all of the participants met in the library during the school's intervention time. The intervention time at the school where the current study was conducted lasted for 25 minutes daily. All students of the school were expected to report to different classes and their homeroom based on a weekly schedule. The PI, secondary rater, and the two college instructors met for this role-playing session using a pregeneralization probe. During this generalization session, participants were directed that they should pretend that they were asking to use one of their current accommodations for an upcoming test from each college instructor. Each role-playing session occurred in a study room off the main library so that the other participants could not listen to each other's requests for accommodations. These sessions were observed in person and scored by both the PI and secondary rater to determine the extent to which each participant completed each target behavior of the "UNICORNS" mnemonic (see Appendix L).

During these roleplaying sessions, participants participated in two different scenarios. In one scenario, a college instructor was directed to agree to any requests, while in the other scenario, the other college instructor was directed to deny the initial request to trigger the participants to complete the fifth target behavior – namely negotiating for the appropriate accommodations by presenting their College Letter of Accommodations. To determine their role, the instructors randomly selected one of two notecards before each participant's role-playing session, which either instructed them to agree to or deny the accommodations request the first time. Before the role-playing session, the instructors reviewed the steps and a suggested general

script for response options; however, their responses were allowed to vary based on the participants' actions. The instructors were also instructed to use their regular conversation styles and experiences as college instructors and high school teachers to help them act out their part in each role-playing session.

At the start of each generalization session, participants were handed a closed, but not sealed, window envelope. Visible in each envelope's view window was the statement "Letter of Accommodations," followed by the participant's name. Enclosed in each envelope was the edited hypothetical Letter of Accommodations, which listed each participant's accommodations at the time of the study, and enrollment in History 101 and Intro to Biology (see Appendix I). If the participant handed the denying instructor their envelope, the instructor was instructed to read and agree with the participant's accommodations request. Each participant's actions and verbal requests were scored against the "UNICORNS" mnemonic's target behaviors outlined earlier in this chapter in Table 3 (in the *Secondary Dependent Variable* section).

To request accommodations, the participants were expected to demonstrate all target behaviors outlined in the operational definition of the secondary dependent variable. While the other participants waited their turn to participate in the generalization sessions, they remained in the main section of the library. They were permitted to talk amongst themselves, work on assignments, or look for and read materials in the library. When participants completed their role-playing session, they were directed to return to their intervention location based on the day of the week.

Baseline Procedures

During the baseline phase of the study, all work was completed following an asynchronized format. Participants were permitted to select the most suitable location for them to

complete the Probe IVM as part of the intervention. Each baseline probe IVM was housed in the Google Classroom created for the study and posted at the start of each school day. At approximately 7:15 am, the baseline data collection probe was assigned to the participants during the baseline phase. Using Google Classroom, the PI ensured that all of the interventions were posted and assigned to the correct participants. Once assigned, the IVM assignment was placed under the topic heading created and labeled with each participant's name. None of the participants received outside instruction on self-advocacy or IEP literacy besides their assigned IVM intervention during this study phase.

Each baseline session consisted of the Probe Data Collection IVM, which had no instruction but included all of the questions that comprised the 12-question probes delivered in the same order each time. Each participant's responses were recorded and scored on the data collection form. At the end of the school day, at approximately 4:15 pm, the completed baseline session's data were copied onto the electronic data collection forms, which were then printed by making two copies – one for the PI and one for the secondary rater. The printed forms were then hand scored. The data from these sessions were then graphed to be visually analyzed daily. Baseline data were collected for a minimum of five sessions to ensure that a stable baseline was established. Subsequently, baseline data were reestablished for each participant before they could start the intervention phase of the study.

Baseline Decision Rules. All participants entered the baseline data collection phase simultaneously (Kennedy, 2005), while the participant with the most stable baseline entered the intervention phase first. If two participants exhibited an equally stable baseline, the participant with the shortest period between their planned entry into postsecondary education started the intervention phase first. The second round of baseline probes was sent to the remaining

participants after the first participant met all of the mastery criteria for the first IVM (see Table 5 below). Again, the participant who achieved the most stable baseline first was selected to start the intervention. This sequence of events continued until the last participant entered the intervention phase.

Intervention Procedures

Once a participant's baseline had stabilized, they could begin the intervention phase of the study. Intervention sessions were estimated to last 30 minutes to ensure enough time for the participants to view the instruction content and respond to the questions embedded within the IVMs. During the intervention phase, all work was completed following an asynchronized format. Participants were allowed to select the in-school location that was most suitable for their needs to complete their assigned IVM as part of the intervention. This location was allowed to vary throughout the study. Each IVM was housed on the Google Classroom created for the experiment and was posted at the start of the school day at approximately 7:15 am; moreover, the PI logged into Edpuzzle and "dropped" the correct IVM assignment for the participant so that it was visible as an active assignment on Google Classroom. From Google Classroom, the PI ensured that the right IVM was linked to the correct participant and posted the assignment under the heading labeled with the participant's name. The use of the LMS allowed each participant to see their assigned task throughout the study. Each intervention session consisted of participants logging into the Google Classroom and completing the assigned module without outside aid or support. At the end of each school day, at approximately 4:15 pm, each intervention session's data completed that day were copied and pasted onto the electronic Word data collection forms (see Appendix L). The IVM data included participants' active time, comprehension score, responses to the three procedural questions, and responses to the 12-question probe. Data forms

were then printed by making two copies for the PI and secondary rater. The printed form was then hand scored. Data from these sessions were then graphed, allowing for the daily and ongoing visual analysis to be accomplished by the PI.

While scoring, the PI also noted the areas within the probe or the comprehension questions that the participant should pay closer attention to. This information was used for academic coaching and feedback. This feedback was provided after the first viewing and posted within the description of the subsequent assignment as part of the Google Classroom assignment. Then, the next set of interventions was set up using the schedule feature in the Google Classroom. Outside of the asynchronous academic feedback from the PI, participants received their typical academic instruction and assistance in general education assignments from their special education teacher. However, this “normal” instruction did not include self-advocacy or IEP literacy instruction – it was provided to the participants regardless of whether they received services in the resource setting or through the consultative model. Participants had to meet four criteria after viewing one of the IVMs. Once all four mastery criteria had been met, a participant was then assigned the next IVM based on their numerical order. Total program mastery was achieved when a participant scored at least 29 out of 36 points (80%) on the 12-question probe, viewing the fourth IVM at least twice. The intervention decision rules for mastery are provided in Table 5:

Table 5*Intervention Decision Rules for Mastery*

Intervention Decision Rules for Mastery

1. The participant had an active time exceeding the video's run time in the IVM.
 2. The participant viewed the IVM at least twice in consecutive sessions.
 3. A comprehension score of 80% was achieved on the comprehension questions.
 4. An average of 2 points was obtained on the three questions in the 12-question probe that directly related to the instructional content of the completed IVM.
-

Maintenance Procedures

Once a participant had completed the full training protocol by obtaining total program mastery (29 out of 36 points on the 12-question probe) and 1 week had passed since the last intervention, the maintenance phase started. Participants again were permitted to select the location that was most suitable for their needs to complete the maintenance probe IVM as part of the intervention. Each maintenance probe IVM was housed in the Google Classroom created for the experiment and posted at the start of each school day at approximately 7:15 am. To do this, the PI again logged in to Edpuzzle, selected the data collection probe IVM, and assigned it to the correct participant within Google Classroom.

Then, the PI ensured that the maintenance probe IVM was linked to the correct participants and posted under the heading based on their names in the classwork section. These actions allowed the participants to see their assigned tasks. Each maintenance session consisted of the 12-question probe presented in a single IVM. Data were again collected at approximately 4:15 pm by the PI, who copied and pasted the participants' responses into the electronic Word data collection forms. Like these intervention data, maintenance data included the participants'

active time, comprehension score, responses to the three procedural questions, and responses to the 12-question probe. The data forms were then printed by making two copies for the PI and the secondary rater. Maintenance data were collected once a week until the last participant had reached the maintenance phase and continued for 1 additional week. Data collected from the maintenance sessions were also graphed daily to allow for the ongoing visual analysis of the data collected.

Postgeneralization Procedures

After all of the participants had completed at least one maintenance probe, a second round of the role-playing activity was conducted. Again, the participants met in the library during the school's intervention time with the PI, secondary rater, and the two college instructors for a role-playing session. During the postgeneralization session, participants were again directed to pretend that they were asking for one of their current accommodations for an upcoming test from each college instructor. Each role-playing session took place in a study room off the main library so that the other participants could not hear the other requests for accommodations. These sessions were again observed in person and scored by the PI and secondary rater to determine the extent to which each participant completed each target behavior of the "UNICORNS" mnemonic (see Appendix M).

During these roleplaying sessions, participants again participated in two different scenarios. As in the pregeneralization sessions, one college instructor was directed to agree with any requested accommodations in one scenario, while in the other scenario, the other instructor was directed to deny the initial request. This would trigger the participant to complete the fifth target behavior of negotiating the appropriate accommodations by presenting the College Letter of Accommodations. Again, the college instructors randomly selected one of two notecards

before each role-playing session, which indicated whether they should agree to or deny the request. Before the role-playing session, the instructors reviewed the steps and suggested a general script for response options. As in the pregeneralization sessions, their responses could vary based on the participants' actions. They were also instructed to use their regular conversation styles and experiences as college instructors and high school teachers to help them act out their part in each role-playing session.

At the start of each generalization session, participants were handed a closed but unsealed window envelope. Visible in the view window was the statement "Letter of Accommodations," followed by the participant's name. Enclosed was an edited copy of the closest university's Letter of Accommodations, which listed each participant's accommodations at the time of the study, and enrollment in History 101 and Intro to Biology (see Appendix I). If the participant handed the denying college instructor their envelope, the instructor had been directed to read and agree with the participant's accommodations request. Participants' actions and verbal requests were scored against the "UNICORNS" mnemonic's target behaviors using the Generalization Data Collection sheet (see Appendix M).

As in the pregeneralization sessions for requesting accommodations, the participants were expected to demonstrate all of the target behaviors outlined in the operational definition of the second variable. While the other participants waited their turn to participate in the generalization sessions, they remained in the main section of the library. They were permitted to talk amongst themselves, work on assignments, or look for and read materials in the library. When each participant completed their role-playing session, they were directed to complete the student social validity form on Google forms.

Research Design

This study was developed using a single-case multiple-probe-across-participants design (Kennedy, 2005). It was developed to gauge the effect of the UNICORNS program on the skills of a subgroup of students who receive special education services at the secondary level. Single-case research is a scientifically effective methodology used for studies within the special education field (Cakiroglu, 2012). Single-case research is also used to evaluate whether instructional practices have been effective (Maggin et al., 2018). Since the population of participants who met the participation criteria could be considered low within the bounded system of one school, a single-case design was the most suitable design for the current study. Since the intervention involved learning information, participants could not return to baseline conditions after the first intervention; therefore, using an across-participants design was necessary.

The single-case design for the current study allowed the PI to determine the effect of the UNICORNS program on individual responses over time before, during, and after the intervention process. Therefore, participants functioned as their own control during the baseline data collection phase. The multiple-probe-across-participants design was also selected (Gast & Ledford, 2009; Horner & Baer, 1978; Kennedy, 2005; O'Neill et al., 2011), which allows for the intermittent collection of baseline data, as opposed to their continuous collection. Since baseline probes were collected over consecutive days before any participant entered the intervention stage, the “day variation” (Gast et al., 2018, p.248) of the multiple-probe-across-participants design was employed (Murphy & Bryan, 1980). This form of single-case design was selected as it eliminates the extended baseline phase used in multiple-baseline studies, which would be redundant due to the nature of the dependent variable. The multiple-probe-across-participants

design also suited the current study due to a strong “*a priori*” assumption on the lack of knowledge of the dependent variable (Horner & Baer, 1978). In the currently study it was unlikely that participants already had a complete understanding of self-advocacy, the information on their IEP, or the steps needed to self-identify and request accommodations at the postsecondary level.

Baseline Decision Rules

All participants simultaneously entered the baseline data collection phase (Kennedy, 2005), while the participant with the most stable baseline entered the intervention phase first. If two participants exhibited an equally stable baseline, then the participant with the shortest period between their planned entry into postsecondary education entered the intervention phase first. The second round of baseline probes was sent to the remaining participants to determine when the next participant would enter the intervention phase after the first participant had successfully completed the criteria for mastery of the first IVM. Following this, the next participant who had the most stable baseline was then moved into the intervention phase of the current study. This sequence of events continued until the last participant entered the intervention phase.

Intervention Decision Rules

Due to the asynchronous design of the study, a set of rules was developed to determine whether a participant had mastered the content of an IVM and was, therefore, ready to move from one IVM to the subsequent one (see *Intervention Decision Rules for Mastery* Table 5 above). This set of rules was developed to help ensure that the participants were actively engaged in the IVM assigned for the day. If participants did not meet all four criteria, they were given the same IVM to watch during the next intervention session. The mastery criterion for each IVM was set to at least 80% mastery since this level is commonly used in published works and has

been researched (Fuller & Fienup, 2018). All participants had to meet all four criteria to move to the next IVM in the sequence. On the first viewing, if participants incorrectly answered any comprehension questions or did not receive a score of at least 2 on the probe questions related to the module viewed, they were provided with academic feedback and coaching via Google Classroom. This feedback related to what parts of the IVM participants needed to improve or pay more attention to when responding to the comprehension questions or the 12-question probe. In-person coaching sessions were also held to remind participants of the expectations and requirements to progress to the next IVM. These in-person sessions were only needed twice when two participants had watched the instruction sections but failed to respond to the 12-question probe at the end of the IVMs,

Data Collection Procedures

Data were collected and compiled using the PI's district-issued computer with Internet access. The PI used the cut-and-paste feature to copy each participant's typed responses collected through Edpuzzle (see Appendix L). Then, two copies of each participant's responses were printed so that the PI and secondary rater could hand score them. Once scored, the raw data were compiled in a Microsoft Excel spreadsheet. This data collection process allowed the PI to complete a daily visual analysis of the effects of the UNICORNS program IVMs on the primary dependent variable under study. The same Excel spreadsheet was used to compile the data collected during the pre- and postgeneralization sessions. The data collected during all study phases are reported in Chapter 4. Interobserver reliability was established to be reported and ensure that all data collected were scored accurately. Finally, the social validity of the independent and dependent variables was determined through participant and teacher participant feedback.

Primary Dependent Variable Scoring

The primary dependent variable under study was student knowledge of the self-advocacy skills required to receive accommodations at the postsecondary level. It involved participants gaining self-advocacy skills, including IEP literacy related to their disability and current accommodations, which are required in postsecondary settings for self-identifying and receiving accommodations. The Probe Data Collection Form (Appendix L) was designed and adapted from the questions used in a 2004 study by Test and Neale and again in 2013 by Cease-Cook et al.; however, the protocol in the current study was expanded to 12 questions instead of 10. The reason for increasing the number of questions was to ensure that each IVM administered during the intervention phase related to three questions per IVM within the current study.

The score assigned to each participant's response to the 12-question probe was a on a 0–3-point scale. Participants were given a score of 0 if they did not respond at all or responded with “I don't know” or “IDK”; a score of 1 was given if the participant responded with a statement to the question but the answer was not related to the question; a score of 2 was given if they gave a relevant but nonspecific answer; and a score of 3 was given if the participant's answer was specific and relevant and responded to all components of the question. Responses and scores were recorded on the Probe Data Collection Form (see Appendix L). Scores from each participant's intervention session were then totaled. The maximum possible score was 36 points on the 12-question probe. Each score was then graphed using Excel and reported in the current study's data analysis graph to allow for the ongoing visual analysis of the collected data.

Secondary Variable Scoring

The secondary variable under study was the participants' ability to generalize the skills and information learned through the asynchronous training and complete the target behaviors of

the “UNICORNS” mnemonic to request accommodations at the postsecondary level. Data on the secondary dependent variable were collected during the pre- and postgeneralization data collection sessions. While participants role-played the act of requesting accommodations from the two college instructors, the PI and secondary rater recorded their actions and statement to determine the extent to which they demonstrated each of the target behaviors on the Generalization Form (Appendix M).

To ensure that each participant would have to complete the target behavior for the “object” step, responding to a denial of their request for accommodations, one college instructor was directed to refuse the first request. During each round of role-playing, both college instructors selected cards that directed them to accept or deny the initial accommodations request. The scoring of participants’ actions was based on a 0–2-point scale. Participants were given a score of 0 if they did not complete the step; a score of 1 if they responded with an action or verbal response that was not complete or socially appropriate for the situation (e.g., greeting the college instructor with a statement like “waz up, Doc”). Participants were given a score of 2 if they fully completed the target behavior and their behavior was socially appropriate for the situation. Participants’ actions were recorded by hand on the Generalization Data Collection sheet (see Appendix M). Data collected during these sessions correlated to the secondary variable and the second research question. Data collected from the generalization sessions were used to determine the change in observable target behaviors before and after the intervention through a bar graph, an explanation of the percentage of change, and a narrative description of the participants’ actions.

Fidelity and Reliability

To ensure that data were collected and reported as consistently as possible, fidelity and reliability checks were used throughout the study. These checks ensured that each phase of the study and data was completed uniformly.

Procedural Fidelity

Due to the asynchronous nature of the study, using outside observation of all intervention sessions would have reduced the freedom that the asynchronous instruction created. Since there was no way to completely anticipate each participant's time or location for completing an assignment in asynchronous instruction, procedural fidelity was embedded through the Edpuzzle program, which allowed the PI to select the "no skip" option within the Edpuzzle learning platform. This feature prevented participants from skipping any instructional content and answering the comprehension questions before watching the instruction. Participants had to answer three questions to help monitor each one's time and location for completing each intervention session. When using Edpuzzle, participants could fast-forward through the video portion of each IVM using a keyboard shortcut. To monitor for this, when recording each participant's responses on the data collection form, the total time of each Edpuzzle was also recorded. If a participant did fast-forward, the active time would have been shorter than the Edpuzzle run time. If this was found, the participant had to rewatch the same IVM to meet the intervention decision rules.

In addition, embedded procedural fidelity was used to create the IVMs used in the current study. This included removing the option to skip instructional content to move directly to a question. The PI noted each intervention's start time, end time, and total duration of the intervention session. Finally, participants were restricted from completing IVMs outside of the

school day. The data collected through the Edpuzzle system revealed that of the 34 intervention sessions completed, only two did not meet the requirements for procedural fidelity. Therefore, procedural fidelity for the current study was calculated at 94%.

Interobserver Reliability

Due to the nature of the dependent variables and a single-case multiple-probe-across-participants methodology, interobserver agreement (IOA) was established. This ensured that the data reported from the current study were as reliable and consistent as possible (Kennedy, 2005). During the study, a secondary rater scored more than the required 40% of the sessions within the baseline, intervention, maintenance, and generalization phases. Before starting the study, the researcher trained the secondary rater on the data collection tools and scoring processes for the primary and secondary variables, which are explained in the following subsections.

Primary Dependent Variable. Training sessions occurred after the school day using the primary dependent variable scoring procedures. The PI and secondary rater independently hand-scored sample probe responses until 100% agreement was reached. An item-by-item comparison of agreements and disagreements was performed. Furthermore, all agreements were divided by 12, the total number of probe questions, and multiplied by 100 to yield a reliability coefficient (Cease-Cook et al., 2013). This method was used for the current study's baseline, intervention, and maintenance phases. The PI scored each participant's responses to the 12-question probe at approximately 4:15 pm each school day as they completed the data collection process through Edpuzzle. The secondary rater was then given copies of each participant's responses to score the following day. The participants' names were not on the printed forms to ensure the secondary rater scored their responses blindly.

The secondary rater scored 83% (65:78) of the sessions completed throughout all study phases. Overall, the current study's IOA was 85%, and ranged between 59% and 100%. The overall IOA for the primary dependent variable of 85% fell into the acceptable range for a single-case design study (Kennedy, 2005). The secondary rater scored 95% (35:37) of the baseline probes. The IOA for the baseline phase was 86%, and ranged between 67% and 100%. The secondary rater scored 76% (26:34) of the intervention probes. The IOA for the intervention phases was 82%, and ranged between 59% and 100%. The secondary rater scored 57% (4:7) of the maintenance probes. The IOA for the maintenance phase was 90%, and ranged between 75% and 100%.

Secondary Dependent Variable. Training sessions occurred after the school day using the secondary dependent variable's operational definitions. The PI and secondary rater independently hand-scored sample participants' oral responses until 100% agreement was obtained. The agreement was calculated through an item-by-item comparison of agreements and disagreements (Kennedy, 2005). The total number of agreements during both scenarios was divided by 15, the total number of target behaviors that a participant was expected to complete. The resulting number was then multiplied by 100 to yield a reliability coefficient (Cease-Cook et al., 2013). This method was used for the current study's pre- and postgeneralization sessions.

To determine the IOA for the secondary dependent variable, total points were scored during the pre- and postgeneralization sessions. The PI and the secondary rater scored the participants' observable behaviors on the Generalization Data Collection sheets. The secondary rater scored 100% of the completed pregeneralization sessions, in which three of the four participants completed two different role-playing scenarios. The secondary rater also scored 100% of the postgeneralization sessions. The current study's overall IOA was 90%, ranging

between 73% and 100%. The overall IOA for the secondary variable of 90% fell into the acceptable range for a single-case design study (Kennedy, 2005). The IOA of the pregeneralization sessions was 93%, and ranged between 87% and 100%. The IOA from the postgeneralization sessions was 88%, and ranged between 73% and 100%.

Social Validity

In single-case research, extreme emphasis is placed on the study's dependent variables having high social importance. Therefore, the current study's intervention was expected to produce a change in the dependent variable that would have socially significant outcomes (Horner et al., 2005). Initially, three aspects had to be addressed to ensure that the intervention was socially valid. First, the behaviors taught needed to be both functional and needed by society; second, the intervention needed to be appropriate for the participants; and finally, the stakeholders, including the participants and others, needed to be satisfied with the results after the intervention (Wolf, 1978). Horner et al. (2005) expanded the goal of social validity, focusing on the importance of the dependent variable and adding criteria. Thus, all four aspects had to be assessed to ensure social validity based on current requirements. This four-criterion check based on Horner et al. was as follows: (1) the topic was socially important; (2) the magnitude of change was socially important; (3) the intervention was practical and cost-effective; and (4) the intervention can be administered over time by a typical interventionist in a specific location (Horner et al., 2005).

The social importance of the current study lay in determining the impact of the asynchronous IVMs as part of the UNICORNS program on college-bound secondary students' IEP literacy and self-advocacy skills. Participants were expected to exhibit a positive increase in their IEP literacy, knowledge of legal rights, and ability to explain and justify their required

accommodations. A questionnaire format was used with all of the student and teacher participants (Cooper et al., 2007; Wolf, 1978). The social validity data for the current study were collected through an electronic questionnaire with open- and closed ended questions related to Horner et al.'s (2005) criteria for social validity (Creswell & Plano Clark, 2018). Two separate rating forms were created to assess the social validity of the intervention under study. These forms were given to the intervention's direct consumers (i.e., the student participants) and indirect consumers (i.e., the college instructors and the secondary rater). The collected social validity data are reported for the intervention's direct and indirect consumers in Chapter 4 and then discussed in Chapter 5.

Student Participants. At the conclusion of the study, after the postgeneralization session, participant satisfaction was recorded through closed-ended "yes" or "no" questions. Such a question format was used as the participant questions were based on the participants' knowledge of the information and skills taught throughout the intervention (Johnson & Morgan, 2016). Participants' responses were recorded using a Google-based form. Questions were related to the instructional delivery tool IVMs and the participants' knowledge while participating in the study. Participants were also able to provide additional feedback as they saw fit. The data collected using the student social validity questionnaires directly correlated to the third research question (see Appendix N). The data collected from this questionnaire were reported by calculating the ratio of "yes" and "no" responses.

Teacher Participants. After the intervention and postgeneralization sessions, the college instructors and the secondary rater were given a teacher Google-based form that included validity questions. Their responses were recorded using a 4-point Likert scale that was also based on a Google form (see Appendix O). The teacher scales were based on a 1–4-point scale, where

1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. There was no option for a middle position as neutral positions tend to decrease researchers' ability to distinguish between those who are satisfied and those who are not satisfied with the intervention (Johnson & Morgan, 2016). The indirect consumers were also permitted to view each participants' first and last copies of the Probe Data Collection Forms (see Appendix L). The teacher validity form asked the respondents to determine how impactful they believed the UNICORNS program's IVMs were on participants' postgeneralization requests for accommodations. The teacher participants could also offer additional feedback as they saw fit. The data collected from this questionnaire were reported by calculating the mean score of each question. The data collected using the teacher social validity questionnaire directly correlated to the fourth research question.

Data Analysis

The effect of the independent variable on the primary dependent variable was displayed in the form of a line graph to allow for a visual data analysis (Kennedy, 2005). The results of each participant's performance during the baseline, intervention, and maintenance stages were plotted on each participant's graph. Each graph was displayed in a tiered format based on the same sequence in which each participant entered the intervention phase, indicated by a slashed line separating the distinct study phases. A functional relationship was determined to exist if a positive slope was observable in each participant's scores plotted between the baseline and intervention phases. Each IVM's data were indicated by a different shape used as a plotting point to help depict how many times a participant watched each IVM. Due to the hypothesized short nature of the study, data were displayed with each intervention session represented as a single data point (Franklin et al., 1996).

As the collected data were entered in the graph throughout the study, they were analyzed frequently for level, trend, and variability (Kennedy, 2005; Spriggs & Gast, 2009). Spriggs and Gast explained that the magnitude of data can be observed when placed on an ordinate scale. These data points can be analyzed visually for level stability or change. Level stability was observed when low levels of variability existed, whereas level change was observed when the data points varied from one another. Low levels of variability within the baseline phase indicate that the baseline has stabilized (Kennedy, 2005). Statistically, this can be calculated when 80% of the data points graphed are within 20% of the calculated range. When this occurs, the data have become stable. However, the farther the data points are apart, the greater the variability that is observed. When multiple data points have been graphed, the steepness of the line of best-fit formed is referred to as the trend (Spriggs & Gast, 2009). Due to the nature of the current study, an accelerating positive trend indicated that the asynchronous IVMs within the UNICORNS program impacted the participants' scores. Finally, variability was observed by determining the extent to which a data point deviated from the trend line (Spriggs & Gast, 2009). The trend was found by determining the best-fit straight line placed within a phase.

Throughout the study, data were also analyzed for between-phase patterns. The immediacy of effect was analyzed when participants moved from the baseline data collection into the intervention phase. The immediacy of effect relates to how rapidly the intervention causes a change to the data collected once it starts. Due to the nature of the independent variable in the data collection probe, this immediacy could also have occurred as participants moved to the second, third, and fourth IVMs, as each IVM correlated to three questions within the 12-question probe. Second, the degree to which data points overlapped was also analyzed between the phases of the current study. An overlap refers to how data points share the same numerical

value in adjacent phases of the study (Kennedy, 2005). Percentage of nonoverlapping data (PND) values over 90% indicate a highly effective treatment; values of 70–90% are considered effective; values of 50–70% are considered questionable; and values below 50% are considered ineffective treatments (Pustejovsky, 2019; Scruggs & Mastropieri, 1998, 1994; Scruggs et al., 1987).

Summary

This chapter has outlined the current study's research questions, the location, and the intervention settings, which varied throughout the study due to the asynchronous nature of the independent variable. This chapter also explained the participants, materials, and experimental procedures of the current study to assist in generalization or future replication. The research design selected was also explained based on the nature of the study and the variables under investigation. Furthermore, the data collection methods were explained and the study's social validity data collection methods were discussed. Chapter 4 will present the results of the study, where the data collected are explained visually using graphs, percentages of change, and a narrative format.

Chapter 4: Results

The current study explored the effects of the asynchronous UNICORNS program, which delivered self-advocacy instruction through four IVMs. This instruction was developed to increase participants' skills in self-advocacy as well as those skills required at the postsecondary level to receive academic accommodations. The protocol included instruction in IEP literacy skills to improve participants' knowledge of self. This instruction was provided to ensure that the participants had accurate knowledge of their documented disabilities, current educational needs, and accommodations. The UNICORNS program was developed to provide instruction to secondary college-bound students with hidden disabilities. The current study's research questions were as follows:

1. To what extent does the UNICORNS program increase the self-advocacy knowledge required to receive postsecondary accommodations in college-bound students with hidden disabilities?
2. To what extent does the UNICORNS program increase self-advocacy abilities for requesting accommodations in college-bound students with hidden disabilities?
3. Do participants believe that the UNICORNS program positively impacted their ability to self-advocate for needed accommodations?
4. Do teachers believe that the UNICORNS program positively impacted students' ability to self-advocate for needed accommodations?

This chapter presents the results of the UNICORNS program's effects on the primary and secondary dependent variables. The results presented will also include the social validity data collected from the direct and indirect consumers of the UNICORNS program.

Data Analysis of the Intervention's Impact on Knowledge of Self-Advocacy

Research Question 1: To what extent does the UNICORNS program increase the self-advocacy knowledge required to receive postsecondary accommodations in college-bound students with hidden disabilities?

The primary dependent variable was each participant's self-advocacy knowledge needed to receive accommodations, as measured by the 12-question probe. This included knowledge of self, which is required to self-identify at the postsecondary level. Each question was scored on a 0–3-point scale, resulting in a possible maximum score of 36 points. Mastery was achieved when a participant scored at least 29 out of 36 points (80%) after viewing the fourth IVM. Data were analyzed for differences in levels, the immediacy of the effect between phases, data trends, and the PND. A visual analysis was performed by graphing the data collected to examine the changes in the participant's scores within and between each condition.

This visual analysis included the interpretation of the changes in each participant's differences in level. Level stability was observed in the baseline phase before all of the participants entered the intervention phase. After each participant was exposed to the intervention, a change in the level of their scores was observable. The mean score was calculated to determine each participant's level in each condition. The visual inspection of the participants' baseline and intervention phases indicated an increase in each participant's knowledge of the subskills that make up self-advocacy, including their knowledge of self.

Hunter

During baseline, Hunter completed five baseline sessions and obtained scores that ranged from 11 to 15 points, with a mean of 12.4 points. After moving from baseline to the intervention, Hunter completed eight intervention sessions and obtained scores that ranged from 15 to 36

points, with a mean of 25.13 points. Hunter's data indicated that the intervention resulted in a gradually positive effect that was observable after the second intervention session, in which he viewed IVM 1 a second time. After Hunter's first viewing of IVM 3, there was an observable decrease in his scores on the 12-question probe in comparison to this baseline scores. This lower score may have resulted from him moving from his first to his third block while completing his this intervention. Hunter achieved mastery after the eighth intervention session, which was the first time this was possible, as he watched IVM 4 twice and scored 35 out of 36 points. Hunter's linear trend was positive with low variability. He had a PND of 87.5%, suggesting that the intervention was fairly effective. After the eighth intervention session, Hunter moved to the weekly maintenance phase. During the maintenance phase, he completed three probes on which he scored 36 out of 36 points (100% accuracy) for all 3 weeks. Therefore, Hunter's maintenance data remained above the mastery criteria which was set at scoring at least 29 out of 36 points (80%).

Octavia

During baseline, Octavia completed eight baseline sessions and obtained scores ranging from 9 to 17 points, with a mean of 12.38 points. After moving from baseline to the intervention, Octavia completed 11 intervention sessions with scores ranging from 0 to 31 points, with a mean of 20.64 points. In her first intervention session, she started the IVM on Edpuzzle but only watched 42% of the video and did not complete the intervention before school was dismissed. Therefore, she received a score of 0 for her first intervention session. Additionally, after her first full completion of IVM 1, her performance level overlapped with baseline levels for the three intervention sessions. A positive effect was observable based on Octavia's score on the 12-question probe compared with her baseline scores on the day of the fifth intervention. Mastery

was achieved on the 11th intervention session. When Octavia watched IVM 4 for the second time, she scored 31 out of 36 points (86% accuracy), which was above the mastery criteria.

Octavia's intervention data indicated a positive trend but had higher variability than those of the other three participants. Moreover, her data exhibited a lower positive incline (slope) compared with the other three participants. Octavia had a PND of 63.6%, suggesting that for her the intervention was questionable. After the 11th intervention session, Octavia moved to the weekly maintenance phase during which she completed two probes. During both maintenance sessions, her score fell to 26 out of 36 points (72% accuracy), which was below the mastery criteria.

Ryleigh

During baseline, Ryleigh completed 11 baseline sessions and obtained scores that ranged from 3 to 17 points, with a mean of 12.09 points. After moving out of the baseline phase, Ryleigh completed eight intervention sessions and obtained scores ranging from 24 to 35 points, with a mean of 28.5 points. Ryleigh's data indicated a clear and immediate effect, as both clear level and trend changes were observable after the first intervention had been implemented. Ryleigh achieved mastery after the eighth intervention session, which was the first time this was possible, with Ryleigh watching IVM 4 for the second time and scoring 35 out of 36 points. Ryleigh's linear trend was positive, with low variability and only a slight dip in scores in the seventh intervention session. Ryleigh had a PND of 100%, suggesting that the intervention was highly effective. After the eighth intervention session, Ryleigh moved to the weekly maintenance phase and completed one probe in which she scored 32 points, which correlated to 88% accuracy. While Ryleigh's maintenance data fell slightly from her last intervention session, she remained above the mastery criteria.

Natalia

During baseline, Natalia completed 13 baseline sessions. On the 12-question probe, her total score ranged from 1 to 17 points, with a mean of 9 points. After moving from baseline to the intervention, Natalia completed eight intervention sessions and obtained scores ranging from 0 to 31 points, with a mean of 24.38 points. Natalia's probe data indicated a clear and immediate effect, as positive level and trend changes were observable after the first intervention had been implemented. However, Natalia's third intervention session significantly deviated from her other scores, where she received 0 points. This sharp decrease in scored was the result of her only watching 72% of the instructional phase of the IVM and not answering any probe questions. Natalia achieved mastery after the eighth intervention session, which was the first time this was possible, with her watching IVM 4 for the second time and scoring 31 out of 36 points. Natalia's linear trend was positive with high variability. She had a PND of 87.5%, suggesting that the intervention was reasonably effective. After the eighth intervention session, Natalia moved to the weekly maintenance phase and completed one probe on which she scored 32 points, which correlated to 88% accuracy. Natalia's maintenance data remained above the mastery criteria and was 1 point above her last intervention session score, which was the same score that she received in her seventh intervention session.

Overall Data

The data from all four participants revealed that there was an increase in their scores on the 12-question probe from the baseline sessions and throughout the course of the intervention phase. It was notable that in Octavia's first and Natalia's third intervention sessions, they both received scores of 0 points, which was the result of both participants not completing the full intervention sessions. In both sessions, Octavia and Natalia did not watch enough of the IVM to

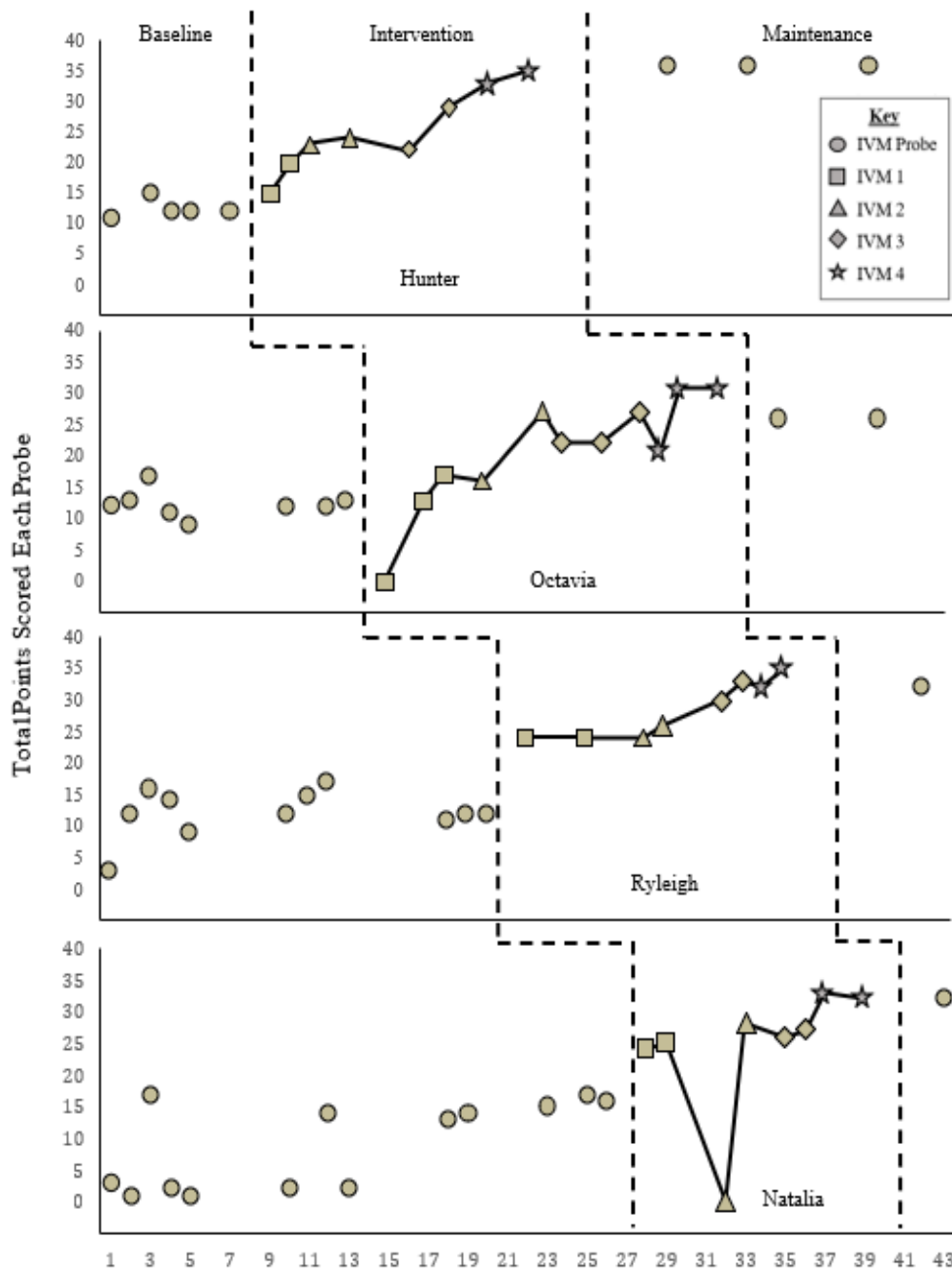
reach the section where the 12-question probe was presented; therefore, they received 0 points.

When visually inspecting each participant's data in graph form, a positive trendline was observed even with these intervention sessions considered. For all four student participants, the intervention led to an observable increase in their knowledge of self-advocacy and IEP literacy skills as scored by the 12-question probe.

In terms of the PND data of the four participants, Hunter, Ryleigh, and Natalia ranged from 87.5% (effective) to 100% (highly effective). By contrast, Octavia's PND (63.6%) was questionable. Therefore, only the intervention data collected from Hunter, Ryleigh, and Natalia indicated an experimental effect. The data collected from these three participants throughout the study indicated a repeated experimental effect; thus, the data collected indicated that a functional relationship existed between the intervention delivered through the UNICORNS program IVMs and the participants' advocacy knowledge of the skills required to receive accommodations, as measured by the 12-question probe. Below, the data used for this visual inspection are presented in Figure 2 and then summarized in Table 6:

Figure 2

Total Points Scored on the 12-Question Probe



Note: Each data point in the graph represents one intervention session in which data were collected using the 12-question probe. IVM probe = baseline and maintenance data; IVM 1: Knowledge of Disabilities and Self-Advocacy; IVM 2: IEP Literacy Skills; IVM 3: Knowledge of Educational Rights; and IVM 4: Knowledge of Self-Advocacy at the Postsecondary Level.

Table 6*Participant Mean and Range Scores During Experimental Conditions*

Name	Baseline		Intervention		Maintenance		PND
	Mean	Range	Mean	Range	Mean	Range	
Hunter	12.40	11–15	25.13	15–36	36	36	87.5%
Octavia	12.38	9–17	20.64	0–31	26	26	63.6%
Ryleigh	12.09	12–17	28.50	24–35	31	31	100.0%
Natalia	9.00	1–17	24.38	0–32	32	32	87.5%

Data Analysis of the Intervention’s Impact on Accommodations Requests

Research Question 2: To what extent does the UNICORNS program increase self-advocacy abilities for requesting accommodations in college-bound students with hidden disabilities?

Data were collected on the secondary dependent variable during the pre- and postgeneralization sessions. These sessions were held before the baseline data collection and after all of the participants had been in the maintenance phase for at least 1 week. The participants engaged in two role-playing scenarios in the pre- and postgeneralization sessions with two college instructors. In one scenario, one of the college instructors was directed to agree with the initial accommodations request; in the other scenario, one instructor was directed to deny the initial accommodations request until they were provided with the participants’ College Letter of Accommodations. Pregeneralization data were collected on three participants, as Octavia refused to participate in the session; however, all four participants engaged in role-playing during the postgeneralization session. Data from the pre- and postgeneralization sessions were inspected according to the total points scored during the role-playing activities. The data

were also compared by inspecting the number of target behaviors completed by the participants in each of the two scenarios.

Accommodations Requests Combined: Pre- and Postgeneralization

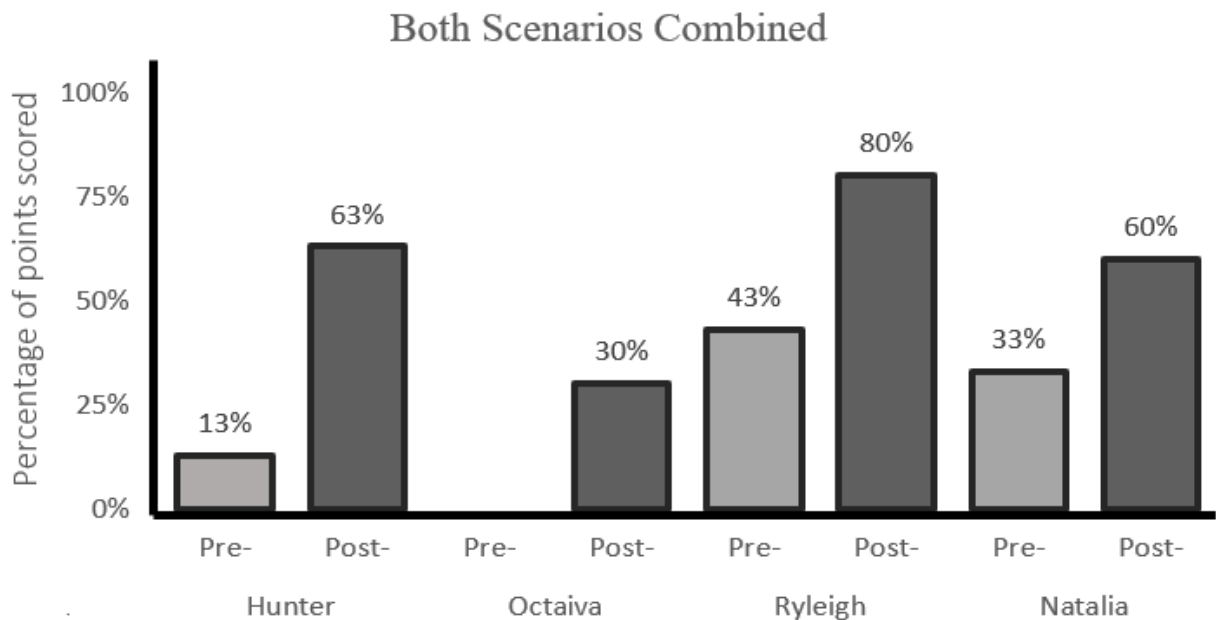
During the combined pre- and postgeneralization sessions in both scenarios, the participants could earn 30 points if they completed all of the target behaviors in the “UNICORNS” mnemonic. They could only receive a maximum of 2 points for the “object” target behavior, which was observable only after a college instructor had denied an accommodation request. The “object” behavior required participants to explain that their rights to accommodations are protected by law or provide the instructor with their College Letter of Accommodations. The other seven target behaviors could receive up to 4 points when the two scenarios were combined. The results indicated that when both scenarios were combined, all participants who completed the pre- and postgeneralization sessions increased their score based on the target behaviors in the “UNICORNS” mnemonic.

During the pregeneralization session, Hunter scored 4 out of 30 points (13%). After the intervention phase, he increased his score to 19 out of 30 points (63%) during the postgeneralization session in the combined scenarios. While Octavia did not participate in the pregeneralization session, she scored 9 points (30%) during the postgeneralization session in the combined scenarios. During the pregeneralization session, Ryleigh scored 13 out of 30 points (43%). After the intervention phase, she increased her score to 24 out of 30 points (80%) during the postgeneralization session in the combined scenarios. During the pregeneralization session, Natalia earned 10 out of 30 points (33%). After the intervention phase, she increased her score to 18 out of 30 points (60%) during the postgeneralization session in the combined scenarios.

Figure 3 presents the total number of points scored by the participants during the pre- and postgeneralization sessions:

Figure 3

Both Scenarios: Pre- and Postgeneralization Data Graph



Note: Octavia did not complete the pregeneralization session.

During the pre- and postgeneralization sessions with the scenarios combined, if participants performed all of the target behaviors in the “UNICORNS” mnemonic, they could complete all eight target behaviors. The results indicated that all of the participants who completed both the pre- and postgeneralization scenarios exhibited an increase in the total number of observable target behaviors when requesting accommodations in both scenarios.

Hunter completed two of the eight target behaviors (25%) during the pregeneralization session. After the intervention, during the postgeneralization session, he increased to six out of the eight target behaviors (75%). In the combined scenarios, Octavia did not participate in the pregeneralization session but completed five out of the eight target behaviors (63%) during the

postgeneralization session. Ryleigh completed the highest number of target behaviors during pregeneralization at five out of the eight target behaviors (63%). After the intervention, during the postgeneralization session, she completed seven of the eight target behaviors (88%). During the pregeneralization session, Natalia completed four of the eight target behaviors (50%). During the postgeneralization session, she completed seven of the eight target behaviors (88%). The data analysis also revealed that no participant completed an observable or appropriate action related to the “nutshell” target behavior.

Accommodations Requests Denied: Pre- and Postgeneralization

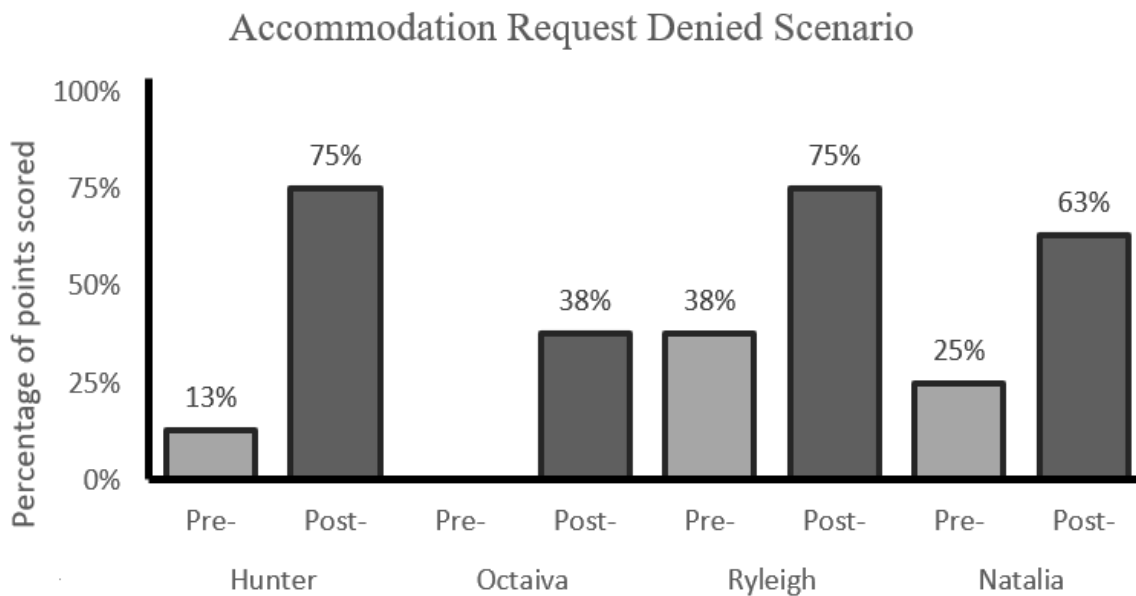
During the generalization sessions, in one of the two roleplay scenarios, one of the college instructors was prompted to deny the initial accommodations request. The participants were expected to complete all eight target behaviors in the “UNICORNS” mnemonic. Each participant could earn 1 point if a target behavior was observable and another point if the behavior was socially appropriate. Each of these scenarios allowed a maximum of 16 points. The results indicated that all participants who completed the pre- and postgeneralization sessions increased their score based on the target behaviors in the “UNICORNS” mnemonic when a college instructor denied their accommodations request. After receiving instruction through the UNICORNS program, all four participants provided the denying instructor with their College Letter of Accommodations.

During the pregeneralization session, Hunter scored 2 out of 16 points (13%). After the intervention phase, during the postgeneralization session, he increased his score to 12 out of 16 points (75%). After the intervention phase, Octavia – who did not complete a pregeneralization session – scored 6 out of 16 points (38%) during the postgeneralization session. During the pregeneralization session, Ryleigh scored 6 out of 16 points (38%). After the intervention, she

increased her score to 12 out of 16 points (75%) during her postgeneralization session when her request was denied. During the pregeneralization session, Natalia earned 4 out of 16 points (25%). After the intervention phase, during the postgeneralization session, she increased her score to 10 out of 16 points (63%). Figure 4 presents the total number of points scored during the pre- and postgeneralization sessions in the request-denied scenario:

Figure 4

Accommodations Request Denied: Pre- and Postgeneralization Data Graph



Note: Octavia did not complete the pregeneralization session.

During the generalization sessions in the request-denied scenario, the participants were expected to complete all eight target behaviors in the “UNICORNS” mnemonic. The results indicated that all of the participants who completed the pre- and postgeneralization sessions increased their ability to complete the target behaviors based on the mnemonic to request accommodations if a college instructor denied them.

During the pregeneralization session, Hunter completed the lowest number of behaviors by completing only one of the eight target behaviors (12.5%). After the intervention phase,

during the postgeneralization session, when his request was denied, he increased by completing six out of eight target behaviors (75.0%). Octavia did not participate in the pregeneralization but completed four of the eight target behaviors (50.0%) during the postgeneralization session.

During the pregeneralization session, Ryleigh completed the most target behaviors with four out of the eight target behaviors (50.0%) being observable. After the intervention, during the postgeneralization session, when her request was denied, she completed seven out of the eight target behaviors (87.5%). During the pregeneralization session, Natalia completed two of the eight target behaviors (25.0%). After the intervention, she also increased her observable behaviors as she completed seven out of the eight target behaviors (87.5%) during the postgeneralization session when her request was denied. Table 8 presents the eight target behaviors, and the number of points scored during the pre- and postgeneralization sessions in the request-denied scenario:

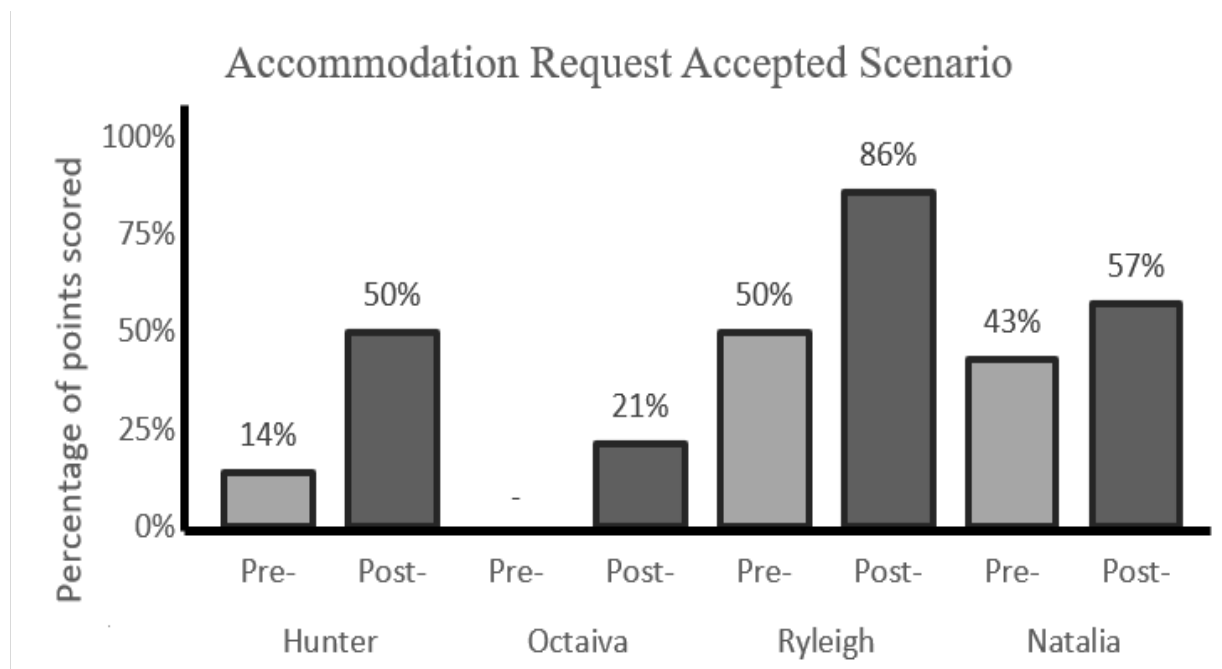
Accommodations Requests Accepted: Pre- and Postgeneralization

During the generalization sessions in the second scenario, one of the college instructors was directed to accept any accommodations request. In this situation, participants were expected to complete seven target behaviors in the “UNICORNS” mnemonic. This was due to participants' inability to complete the target behavior associated with the “object” step, as the college instructor did not deny their request. They could earn 2 points for each of the other seven target behaviors if their behavior was (1) observable and (2) socially appropriate, thereby earning 14 points. The results indicated that all of the participants who completed the pre- and postgeneralization sessions increased their score based on the target behaviors in the “UNICORNS” mnemonic when their request for accommodations was accepted without any objections.

Hunter scored 2 out of 14 points (14%) during the pregeneralization session. After the intervention phase, he scored 7 out of 14 points (50%) during his postgeneralization session. After the intervention phase, Octavia who only took part in the postgeneralization session had a score to 3 out of 14 points (21%) during her postgeneralization session, when her accommodation request was accepted. During the pregeneralization session, Ryleigh scored 7 out of 14 points (50%). After the intervention phase, she increased her score to 12 out of 14 points (86%) during her postgeneralization session. During the pregeneralization session, Natalia scored 6 out of 14 points (43%). After the intervention phase, during her postgeneralization session, she increased her score to 8 out of 14 points (57%). Figure 5 presents the total percentage of points scored during the pre- and postgeneralization sessions in the request-accepted scenario:

Figure 5

Accommodations Requests Accepted: Pre- and Postgeneralization Data Graph



Note: Octavia did not complete the pregeneralization session.

During the generalization scenario, when the instructor accepted the initial accommodations request, the participants were expected to complete seven target behaviors in the “UNICORNS” mnemonic, as they were not required to complete the target behavior for the “object” step. The results indicated that all of the participants who completed the pre- and postgeneralization sessions increased their ability to complete the target behaviors in the “UNICORNS” mnemonic when their request was accepted.

During the pregeneralization phase, Hunter completed the lowest number of target behaviors at two out of seven target behaviors (29%). After the intervention phase, he increased to four out of the seven target behaviors (57%) during his postgeneralization session, in which his request was accepted. After the intervention phase, Octavia completed three out of the seven target behaviors (43%) during her postgeneralization session. During the pregeneralization session, Ryleigh completed four out of the seven target behaviors (57%). After the intervention phase, she completed the highest number of target behaviors with six out of the seven target behaviors (86%) during her postgeneralization session, in which her request was accepted. During the pregeneralization session, Natalia completed four out of the seven of the target behaviors (57%). After the intervention phase, she completed five out of the seven target behaviors (71%) during the postgeneralization session.

Narrative Description of the Generalization Sessions

To further analyze the changes in behaviors between the pre- and postgeneralization sessions, this section examines each participant’s interactions in a narrative format to further understand the difference between their actions before and after the intervention sessions.

Hunter’s Pregeneralization Session. During Hunter’s pregeneralization session, he first spoke with the college instructor, who denied the first accommodations request. Hunter formally

greeted the college instructor by stating his name and that of the college instructor. For this action, he scored 2 points for the “unreserved” target behavior. However, he completed no other action after this point and instead looked at the PI and secondary rater and asked, “Now what?” The PI responded, “I cannot tell you what to do other than you have to ask for your accommodations.” Hunter then looked at the college instructor and stated, “Uh, I think I have accommodations?” He did not state that he had any services due to a disability or request any of his named accommodations. Therefore, he received no points for this action. When the college instructor said no, Hunter looked directly at the PI again and said, “Now, what?” In response to this question, the PI said, “Do what you think is right.” At this point, Hunter looked around the room and stated he was going to “sue.” After this statement, Hunter stopped talking; after waiting approximately 20 seconds, the PI asked if he was done, to which Hunter indicated that he was. For this interaction, Hunter completed one target behavior and had a total score of 2 points.

In the next scenario, Hunter spoke with the college instructor, who accepted the accommodations request. Hunter stated “Hello,” as his only greeting and received a score of 1 point for the “unreserved” target behavior. Hunter then handed the college instructor his accommodations letter, saying, “Okay.” While this was not an action required in this scenario, the PI and the secondary rate gave him a score of 1 point for the “needs” target behavior. The college instructor read the hypothetical accommodations letter and stated the following: “This will not be an issue for the upcoming exam.” Hunter responded with “Okay,” did not say anything else, and stood there for approximately 20 seconds. The PI asked if he was done, and Hunter stated that he was. After this, the PI instructed Hunter that if he was done, he could leave, and Hunter stated that he was done. He completed two target behaviors for this interaction and scored 2 points in total.

Hunter's Postgeneralization Session. During Hunter's postgeneralization session, he first spoke with the college instructor, who accepted the accommodations request. Hunter formally greeted the instructor, stating, "Good morning, Dr. [redacted]." For this action, he scored 2 points for the "unreserved" target behavior. Next, he stated the following: "I am here to request accommodations because I need to have extended time." He also handed the college instructor his College Letter of Accommodations. For this action, he received a score of 1 point for the "needs" target behavior and 2 points for the "inform" target behavior. The college instructor opened the accommodations letter, read it, and stated, "Okay, this looks good to me." Hunter responded with, "Thanks for your time." For this action, Hunter received 2 points for the "stop" target behavior. Hunter completed four target behaviors for this interaction and scored a total of 7 points.

Hunter then turned to talk with the second college instructor, who had been directed to deny the first accommodations request. He said, "Good morning, Dr. [name redacted]," and received a score of 2 points for the "unreserved" target behavior. Hunter then stated, "I needed to get accommodations." When the college instructor asked, "Accommodations for what?" Hunter stated, "Well, you see, I have ADHD, and it prevents me from getting my work done in the same amount of time [as other students]. So, I am requesting extended time and the use of a calculator." For this statement, Hunter received 2 points for the "needs," "inform," and "cite" target behaviors. The college instructor stated, "If I give you all that, I would have to give it to someone else." Hunter responded as follows: "Yes, that is true, but other students do not have this disability, and sometimes I struggle to do my work." The college instructor asked, "Well, how do I know that? Do you have a doctor's note?" Hunter stated, "No, sir, but I have this from the college." At this point, Hunter handed the college instructor his College Letter of

Accommodations, for which he received a score of 2 points for the “object” target behavior. The college instructor read over the letter and said, “Okay, just remind me to put the test in the testing center.” Hunter said, “Okay,” looked at both college instructors, and said, “Thank you both.” Hunter scored 2 points for the “stop” target behavior. For this interaction, Hunter completed six target behaviors and obtained an overall score of 12 points.

Octavia’s Pregeneralization Session. Octavia refused to participate in the pregeneralization session. All participants were reminded of the pregeneralization session during their first block class on the morning the trial was to take place. The PI stepped into Octavia’s class to ensure that the three participants would go to the library at the start of the 25-minute intervention session. Three participants met the PI, secondary rater, and college instructors in the library, but not Octavia. The PI waited for a few minutes and then called Octavia’s first block teacher to ask where she was. Octavia’s teacher reported that she had not reported back to her first block intervention class and that she may have gone home. At this point, the PI began the pregeneralization session with the other participants.

The next day the PI heard that Octavia had stayed in her second block class and had not returned to her first block intervention class or the library. The following day (2 days after the pregeneralization session), the PI met with Octavia to ask why she had not come to the library. In private, Octavia stated that she did not know what to do and did not want to try. The PI asked if she would be willing to try again later with fewer people present. Octavia again refused but stated that she still wanted to participate in the study and would be willing to try the role-playing sessions after the intervention. Therefore, since she refused to display any target behavior for the pregeneralization session, she received no score for any scenarios or actions.

Octavia's Postgeneralization Session. During Octavia's postgeneralization session, she first spoke with the college instructor, who denied the accommodations request. She started with an introductory greeting, "Hello, Dr. [redacted]." For this step, Octavia scored 2 points for the "unreserved" target behavior. She skipped the "needs" target behavior, stating "I have accommodations." While making this statement, she also handed over her accommodations letter. For this action, she received a score of 1 point for the "inform" target behavior. When the college instructor asked, "What is this?" Octavia then stated that it was her "accommodation letter." She handed the letter to the college instructor, stating, "It is from the college." She scored 2 points for the "object" target behavior for these actions. Since the college instructor was directed to deny any request unless handed the College Letter of Accommodations, this triggered him to accept the request. He read the letter and stated the following: "We can make this happen for you, but you may have to remind me to put it in the testing center." Octavia then replied, "Okay, thanks," for which she scored 1 point for the "stop" target behavior. She then stopped interacting with the college instructor and looked toward the PI. When the PI asked if she was done, she confirmed that she was. For this interaction, Octavia completed four target behaviors and scored a total of 6 points.

Next, Octavia was instructed to talk to the second college instructor, who was directed to accept the request. Octavia offered no greeting in this role-playing session but again stated, "I need accommodations." For this action, she scored 1 point for the "needs" target behavior. Octavia immediately handed the college instructor her accommodations letter. While this was not an action required in this scenario, the PI and the secondary rater gave her a score of 1 point for the "inform" target behavior. The college instructor opened the accommodations letter, read it, and stated, "Okay, this will not be a problem." He then handed the letter back to Octavia, who

again said, “Thanks,” for which she was again given a score of 1 point for the “stop” target behavior. The PI asked if she was done, and Octavia stated that she was. Octavia completed three target behaviors for this interaction and scored a total of 3 points.

During the postgeneralization session, Octavia performed five of the eight target behaviors and scored 9 out of 30 points. In the scenario where the college instructor agreed to the accommodations request, Octavia completed three out of seven target behaviors and scored 3 out of 14 points. In the request-denied scenario, she completed four out of eight target behaviors and scored 6 out of 16 points.

Ryleigh’s Pregeneralization Session. During Ryleigh’s pregeneralization session, she first spoke with the college instructor, who was directed to deny the accommodations request. In this scenario, Ryleigh stated, “Good morning, Dr. [redacted],” for which she scored 2 points in the “unreserved” target behavior. Ryleigh stated, “I have accommodations” and immediately handed the college instructor her accommodations letter. For this action, she scored 1 point for the “inform” target behavior. While she did not wait to hear the college instructor’s response, she still received a score of 1 point in the “object” target behavior. The college instructor opened the accommodations letter and stated, “That should not be a problem.” He then handed the letter back to Ryleigh, who stated, “Okay, thanks, Dr. [redacted].” Ryleigh received a score of 2 points for the “stop” target behavior. For this interaction, Ryleigh completed four target behaviors and scored 6 points.

Next, Ryleigh requested her accommodations from the second college instructor, who was directed to accept the request. In this role-playing session, Ryleigh again offered a formal introduction and stated, “Hello, Dr. [redacted],” for which she scored 2 points for the “unreserved” target behavior. Ryleigh then immediately handed the college instructor her

accommodations letter. While this was not an action required in this scenario, the PI and the secondary rater gave her a score of 1 point for the “needs” target behavior. The college instructor opened the accommodations letter, read it, and stated, “Okay, we can do this.” He then handed the letter back to Ryleigh. While she did not wait to hear the college instructor’s response, she still received a score of 2 point in the “inform” target behavior. She then stated, “Thank you so much, Dr. [name redacted].” Ryleigh again received a score of 2 points for this action for the “stop” target behavior. For this interaction, Ryleigh completed four target behaviors and scored 7 points.

Ryleigh’s Postgeneralization Session. During Ryleigh’s postgeneralization session, she first spoke with the college instructor, who denied the first accommodations request. In this scenario, Ryleigh stated, “Good afternoon, Dr. [redacted].” The college instructor said, “Hello, how are you?” Ryleigh responded, “Good. How about yourself?” For this interaction, Ryleigh scored 2 points for the “unreserved” target behavior. Ryleigh then said the following: “Uhm, I have a learning disability which makes it difficult for me to focus in class, and I need help to support the way I learn.” For this statement, Ryleigh was given 2 points for the “needs” target behavior and 1 point for the “inform” target behavior. The college instructor then asked, “What are you asking for?” Ryleigh responded as follows: “I need to use my accommodations granted to me, like extended time, so that I can do all my work.” Ryleigh scored 1 point for the “cite” target behavior for this statement. The college instructor stated, “But that would not be fair.” Ryleigh responded with, “I know, but the college granted me these accommodations.” Next, she handed the college instructor her Letter of Accommodations. For this action, Ryleigh scored 2 points for the “object” target behavior. The college instructor read the letter and said, “I see you have this from the college. Please just remind me.” Ryleigh stated, “Okay, I will. Thank you for

your time.” For this interaction, Ryleigh scored 1 point for the “reconcile” target behavior and 2 points for the “stop” target behavior. For this interaction, Ryleigh completed seven target behaviors and earned an overall score of 12 points.

Next, Ryleigh requested her accommodations again from the other college instructor, who was instructed to accept. In this role-playing session, Ryleigh again offered a formal introduction and stated, “Good morning, Doctor [name redacted],” for which she scored 2 points for the “unreserved” target behavior. Ryleigh stated the following: “Uh, I need to tell you that I have a learning disability, and I have accommodations granted by the college.” Ryleigh was given 2 points for this statement as a “needs” target behavior. She then stated, “They support the way I learn.” Ryleigh was given 2 points for this statement for the “inform” target behavior. The college instructor then asked, “What accommodations do you need?” Ryleigh responded as follows: “I need a calculator and, uh, extended time, so I can complete my assignments and not make mistakes.” Ryleigh was given 2 points for this statement as a “cite” target behavior. Ryleigh then handed her College Letter of Accommodations to the college instructor. After reading the letter, the college instructor stated, “Okay, we can do this.” Ryleigh then asked, “How can I use them?” For this statement, Ryleigh was given 2 points for the “reconcile” target behavior. The college instructor stated she could use them on the test, but added “but just remind me.” Ryleigh responded, “Yes, sir, thank you very much.” For this statement, Ryleigh was given 2 points for the “stop” target behavior. For this interaction, Ryleigh completed six target behaviors and earned an overall score of 12 points.

Natalia’s Pregeneralization Session. During Natalia’s pregeneralization session, she first spoke with the college instructor, who accepted the accommodations request. In this scenario, Natalia stated, “Hello, Dr. [redacted], how are you doing today?” Natalia scored 2

points in the “unreserved” target behavior for this step. She then stated the following: “I have accommodations, and I need extended time and for you to not count off my spelling for my exam.” Natalia received 1 point for the “needs” target behavior for this action as well as 2 points for the “inform” target behavior. The college instructor said, “I can do that for you.” Natalia said, “Thanks,” for which she received a score of 1 point for the “stop” target behavior. For this interaction, Natalia completed four target behaviors and earned 6 points.

Next, Natalia requested her accommodations again from the other college instructor, who was directed to deny the request. In this role-playing session, Natalia again offered a formal introduction and stated, “Doctor [redacted], how are you?” For this action, Natalia scored 2 points for the “unreserved” target behavior. She then stated the following: “I will need to have extended time for my exam and also for you to not count off for my spelling.” Natalia received a score of 2 points for the “inform” target behavior for this action. When the college instructor responded with, “No, I can’t do that, as it would be unfair to the other students,” Natalia looked at the PI and stated, “What? What do I do? I do not know what to do?” The PI reassured her by stating, “It is okay; just do what you think you should do in this situation.” Natalia became more distressed and said again, “But I do not know what to do. I did not think you would say no.” At this point, Natalia became upset and cried. She looked at the PI again and asked, “What do I do? I really do not know what to do. Dorr, what do I do?” The PI reassured her that it was okay but she could not tell her what to do. Natalia was then asked if she had any ideas of what to do next or if she wanted to end the generalization session. Natalia stated that she wanted to end it. For this interaction, Natalia completed two target behaviors and a earned a total score of 4 points.

Natalia’s Postgeneralization Session. During Natalia’s postgeneralization session, she first spoke with the college instructor, who denied the first accommodations request. In this

scenario, Natalia stated the following: “Dr. [redacted], I am here to request accommodations for your test.” For this step, Natalia scored 2 points for the “unreserved” target behavior. Since she stated that the purpose of the meeting was “requesting accommodations,” she also received a score of 1 point for the “needs” target behavior. The college instructor responded by asking, “What are the accommodations for?” Natalia responded, “I have accommodations for spell check and extended time to help me do my work.” For this action, Natalia received a score of 2 points for the “inform” target behavior and 1 point for the “cite” target behavior. The college instructor stated, “If I give you extended time, I have to give everyone extended time.” Natalia stated, “Not necessarily; I have accommodations.” She then handed him her College Letter of Accommodations and said that it was for the college. Here, Natalia received 2 points for the “object” target behavior. The instructor read the letter and asked Natalia to remind him so that he would not forget. Natalia said, “I can remind you, yes sir, thank you.” For this, she scored 1 point for the “reconcile” target behavior and 2 points for the “stop” target behavior. For this interaction, Natalia completed seven target behaviors and scored 10 points.

Next, Natalia was instructed to request her accommodations from the other college instructor, who was directed to accept. In this role-playing session, Natalia again offered a formal introduction and stated, “Good morning, Dr. [redacted].” For this step, Natalia scored 2 points for the “unreserved” target behavior. She then stated the following: “I am here to request accommodations for the test we have coming up this week.” For this action, Natalia scored 1 point for the “needs” target behavior. When the instructor responded with simply “Okay,” Natalia asked if he would like to see her letter and also stated the following: “I need to have extended time and the use of a spellcheck, so my work makes sense.” While giving the letter was not a required step, Natalia was given 1 point for the “inform” target behavior and 2 points for

the “cite” target behavior. The college instructor read the letter and stated, “This will not be a problem, but just remind me.” Natalia responded, “Yes, sir, I will.” She then turned and stated, “I’m done.” For this action, Natalia was given a score of 2 points for the “stop” target behavior. For this interaction, Natalia completed five target behaviors and scored 8 points.

Social Validity

Social validity data were collected at the end of the study after the postgeneralization session. Two separate Google forms were created for the direct and indirect consumers of the UNICORNS program. At the end of the postgeneralization role-playing sessions, the direct consumers (i.e., the student participants) were asked to complete an online Google form about the UNICORNS program intervention procedures. This questionnaire related to their feelings about the helpfulness of the UNICORNS program in teaching them about self-advocacy, the contents of their IEPs, and the postsecondary processes for self-identification and accommodations requests. Students were required to answer all questions to be able to submit the form. For the student form, the participants were asked to respond to each statement using the response choices of “yes” or “no.” After participating in the final postgeneralization sessions, all four participants completed the social validity form.

Social validity data were also collected from the intervention’s indirect consumers, who were two general education teachers and one special education teacher. The two general education teachers served as the two college instructors during the pre- and postgeneralization sessions. The survey was also sent to the special education teacher, who served as the secondary rater. This survey was sent on the same day that the postgeneralization role-playing session was held by mail. Respondents were asked to rate the social validity of the UNICORNS program based on broad social goals. The questionnaire asked the teachers to judge the observable

magnitude of changes in participants' use of the "UNICORNS" mnemonic when requesting accommodations after the intervention. To collect social validity data, the questionnaire used forced-response questions scored using a 4-point Likert scale, where 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. After participating in the final postgeneralization sessions, all three teachers completed the social validity form.

Student Participant Perceptions

Research Question 3: Do participants believe that the UNICORNS program positively impacted their ability to self-advocate for needed accommodations?

The direct consumer questionnaire related to the participants' feelings about the helpfulness of the UNICORNS program in teaching them about self-advocacy, the contents of their IEPs, and the postsecondary processes for self-identifying and requesting accommodations. The students were required to answer all the questions to submit the form. Based on the data collected, all four participants agreed with the statements that the UNICORNS program helped them understand their current IEP better, that they understood the importance of self-advocacy and requesting accommodations, and felt more confident in their ability to self-identify at the postsecondary level. Three of the participants believed that the IVMs were easy to understand and made them feel more confident when requesting accommodations. Furthermore, three participants found the program's mnemonic easy to understand, understood how to use the target behaviors to request accommodations, and knew what to do if an accommodations request was denied. Moreover, three participants indicated they would have liked to have a copy of the target behaviors when they participated in the generalization sessions. Table 7 presents a summary of these results:

Table 7*Results of Social Validity Questions for Students*

Question	Yes	No
1. The “UNICORNS” program’s IVMs (Edpuzzles) helped me better understand my current IEP and its contents.	4	0
2. During instruction, I found the IVMs (Edpuzzles) easy to understand.	3	1
3. I am now more aware of how important it is for me to know how to self-advocate for accommodations after watching the IVMs (Edpuzzles).	4	0
4. I feel more confident in my abilities to self-identify at the postsecondary (college) level.	4	0
5. I now better understand the importance of knowing how to request accommodations in a postsecondary (college) setting.	4	0
6. After this program, I feel more confident in my abilities to talk to and request accommodations from a college instructor.	3	1
7. The steps to request accommodations in the “UNICORNS” mnemonic were easy to use.	3	1
8. When asking for accommodations, I am confident I know how to use the information and steps I was taught for requesting accommodations.	3	1
9. After this program, I know what to do if a college instructor were to object to my request for accommodations.	3	1
10. I wish I had a copy of the steps as seen in IVM 4 when I completed the role-playing session with the college instructors to request accommodations.	3	1

Teacher Participants

Research Question 4: Do teachers believe that the UNICORNS program positively impacted students’ ability to self-advocate for needed accommodations?

Based on the data collected, all of the teachers strongly agreed that students with hidden disabilities should be taught how to request accommodations in an academic setting. In addition, the teachers agreed that the UNICORNS program increased students’ abilities to disclose their learning needs, request accommodations, and identify their needed accommodations. However, one teacher felt that the program did not help students to explain their needed accommodations

or strengthen the participants' confidence when requesting their accommodations. Table 8 presents a summary of these results:

Table 8

Results of Social Validity Questions for Teacher Participants

Question	Mean	Range
1. I believe that teaching students with Specific Learning Disabilities (SLD), Other Health Impairments (OHI), and other hidden disabilities how to request academic accommodations is important and necessary.	4	4
2. I believe that after the intervention, the student participants increased their ability to request their accommodations in a socially appropriate way.	3.33	3–4
3. I believe that after the intervention, the student participants could more clearly explain their disabilities and learning needs.	3.33	3–4
4. I believe that after the intervention, the student participants were better able to identify the accommodations they needed.	3.33	3–4
5. I believe that after the intervention, the student participants were better able to explain how accommodations had benefited them (now or in the past) or why the accommodation was needed.	2.67	2–3
6. I believe that after the intervention, the student participants were better able to maintain a positive tone of voice and appeared to be confident and assertive when requesting and negotiating academic accommodation.	3.33	2–4
7. I believe that the UNICORNS program is a useful secondary instructional tool that should help college-bound students with disabilities before they transition to postsecondary education.	3.67	3–4

Summary

The data collected throughout the current study indicated that the UNICORNS program positively impacted the participants' knowledge and ability to use self-advocacy skills to self-identify and request accommodations at the postsecondary level. Data collected on the secondary variable indicated that the UNICORNS program also positively impacted participants' ability to complete the eight target behaviors taught when requesting accommodations using the

“UNICORNS” mnemonic. Chapter 5 further explains the results of this study and their implications for future research and classroom instruction.

Chapter 5: Discussion

The purpose of the current study was to evaluate the effect of the asynchronous IVMs of the UNICORNS program on participants' knowledge of the self-advocacy skills required to self-identify and request accommodations at the postsecondary level. The following sections present a discussion of (1) the study's variables, the (2) results collected for those variables, (3) social validity, (4) limitations, (5) recommendations for future research, and (6) implications for practice.

The Current Study's Variables

The data collected through the 12-question probe embedded at the end of each IVM correlated to the primary dependent variable, namely participants' knowledge of the self-advocacy skills required to receive accommodations at the postsecondary level. Self-advocacy is based on the conceptual framework developed by Test et al. (2005) and comprises the following four distinct subskills: knowledge of self, knowledge of rights, communication, and leadership. To ensure that the participants possessed knowledge of self, they were instructed on skills related to IEP literacy. The objective of teaching IEP literacy skills was to ensure that the participants could name and describe the disabilities they were currently served for, along with the accommodations documented on their IEP. Based on the current guidelines from AHEAD, students with disabilities should be able to explain their identified disabilities and needed accommodations to others to self-identify and request accommodations at the postsecondary level (Association on Higher Education and Disability, 2012; Lovett et al., 2015).

The primary dependent variable was measured using a 12-question probe that collected data through the Edpuzzle online learning platform. This protocol was developed based on previous studies by Test and Neale (2004) and Cease-Cook et al. (2013). The score given to each

participant's response was based on a 0–3-point scale. The maximum score possible on the 12-question probe was 36 points. The questions related to the self-advocacy skills and personal information that a student with hidden disabilities must be knowledgeable about to self-identify and request accommodations at the postsecondary level. Each participant's current IEP was used to ensure that their responses correctly matched the information documented on their most recent IEP. They were expected to be able to provide information on their documented disability and their learning strengths and weaknesses as well as to explain their current accommodations.

The secondary dependent variable was the participants' ability to generalize the information they acquired through the UNICORNS program during role-playing scenarios when directed to request academic accommodations. Data on the secondary dependent variable was collected during the pre- and postgeneralization sessions held before and after the delivery of the intervention. The data collected during the generalization sessions were related to the eight target behaviors in the "UNICORNS" mnemonic. The target behaviors were developed to assist participants when requesting accommodations and were scored through direct observations. Participants were scored on a 0–3-point scale based on whether the target behavior was observable and socially appropriate for the situation. The mnemonic used in this program was based on a simplified version of the target behaviors used as part of the SACR and mSACR protocols (Holzberg, 2017; Holzberg et al., 2019; Lopez et al., 2020; McGahee et al., 2021; Palmer, 1998; Roessler & Palmer, 2000; Walker & Test, 2011).

The current study's independent variable was the asynchronous UNICORNS program and mnemonic that was developed for this study. This program was developed to deliver asynchronous instruction to secondary students with hidden disabilities who plan to transition to the postsecondary setting. The program was designed to fill an instructional gap related to

teaching students on how to transition to postsecondary institutions. The researcher's main objective was to develop an instructional intervention that ensured that participants knew how to use self-advocacy skills at the postsecondary level. To self-advocate, students must know and understand their current disability, as this enables them to self-identify their disability and request needed accommodations at the postsecondary level.

While qualitative research has examined the effectiveness of asynchronous video modules in teaching general education math skills and even medical emergencies, a gap in the literature exists concerning self-advocacy instruction in the field of special education. Limited research exists to prove the quantitative effectiveness of asynchronous IVMs in teaching self-advocacy skills. Russell and Pearl's (2020) research on their K2SA program, which used asynchronous IVMs, only reported qualitative data based on the self-reports of the study's participants. The authors could not report any other data to support the effectiveness of their asynchronous intervention, as the study also lacked an LMS.

Recent research has demonstrated that using LMS platforms positively impacts student engagement and productivity and promotes continuous learning (Ghodke, 2021). Russell and Pearl (2020) were unable to track their participants' completion of the video modules to prove that they had viewed the intervention. While their study was a starting point for exploring the effects of asynchronous video modules, the study's research design needed to be furthered by providing quantitative data collection using a single-case design. The current study filled that gap by using both Edpuzzle and Google Classroom as an LMS in conjunction with a single-case design to collect quantitative data on the effect of asynchronous IVM instruction on the participants' knowledge of self-advocacy skills.

The current study explored the effect of the UNICORNS program, designed to be used asynchronously using the Edpuzzle program to deliver instruction, track progress, and assess participants' knowledge of their IEP. While this intervention method was novel in design and purpose, to teach self-advocacy skills to secondary students, it was created based on past research in the areas of asynchronous instruction. The impact of this asynchronous design has been the subject of past research on interactive e-learning modules, which explored the use of set instructional paths and interactive questions. Suppan et al. (2021) found that highly interactive asynchronous e-learning modules enhanced the learning of senior medical students in an asynchronous learning environment. Hogue (2022) also found that using mathematical video modules delivered asynchronously correlated to an average increase of 4.6 points (+1.5 to +10.6).

The IVMs were also developed based on past research that indicated that video lessons created using the Edpuzzle platform, which elicits frequent student responses, provides feedback, and monitors performance, can be used to deliver explicit instruction (Cesare et al., 2021). To ensure that the instruction delivered in the current study could be considered, the explicit instructional criteria outlined by Cesare et al. (2021) were followed. The PI monitored participants' progress and offered academic feedback through the study's LMS while collecting quantitative data through the 12-question probe embedded into each IVM.

Discussion of the Intervention's Impact on Knowledge of Self-Advocacy

The first research question was aimed at gauging the effect of the UNICORNS program on participants' knowledge of self-advocacy related to self-identifying at the postsecondary level. The current study found a functional relationship between the intervention delivered through IVMs and the participants' self-advocacy knowledge required to receive

accommodations, as measured by the 12-question probe. This included knowledge of self, which is required to self-identify at the postsecondary level. The results collected at the end of each IVM through the embedded 12-question probe are discussed in the following subsections, which explain each IVM's learning goal. The increase in the scores indicated that after viewing the UNICORNS program's IVMs, participants increased their knowledge of the four subskills of self-advocacy. These results also indicated that the current study's intervention also increased participants' knowledge of the process of self-identifying and requesting accommodations at the postsecondary level.

IVM 1: Knowledge of Disabilities and Self-Advocacy

The first IVM in the UNICORNS program session was developed to decrease internalized ableism and stigma, which could be barriers to receiving accommodations at the postsecondary level. The baseline data suggested that no participants (0%) could explain how self-advocacy helped individuals to receive needed help or accommodations. Furthermore, no participants (0%) could explain how understanding one's disability impacted the help or accommodations received. The baseline data also indicated that no participants (0%) knew that they became responsible for obtaining their accommodations when they transitioned to the postsecondary level. After viewing the first IVM at least twice, all participants (100%) explained that having strong self-advocacy skills could help them obtain the accommodations and supports they require in college. All participants (100%) explained that knowing their disabilities, strengths, and needs would prepare them to receive the appropriate accommodations. All of the participants (100%) became aware that they were responsible for ensuring they had their needed accommodations without the help of a special education teacher.

One example of the growth seen after viewing the first IVM was observable in Hunter's pre- and postintervention responses to the third question on the 12-question probe, which was as follows: "What major change happens with accommodations you already have when you transition to postsecondary schools?" He responded in four of the five baseline sessions with "IDK," whereas in the last baseline session, he responded, "You get the same ones." After viewing the first IVM, he stated, "I become responsible for the accommodations I need when in the postsecondary setting."

IVM 2: IEP Literacy Skills

The second IVM in the UNICORNS program was developed to help increase participants' knowledge of self. Participants were instructed in IEP literacy skills and then asked to locate information related to their disabilities, strengths, weaknesses, and required accommodations in their IEP. The baseline data confirmed that no participants (0%) could name their current documented disability or its impact on their learning. Moreover, the baseline data suggested that only two participants could explain their basic strengths and weaknesses in reading, math, and writing. Only Hunter and Natalia could correctly name at least one of their current documented accommodations. Ryleigh's baseline data revealed that she believed that her study skills class was an accommodation instead of a service. After viewing the second IVM at least twice, all four participants (100%) could name their current documented disabilities and their effects on their learning. Furthermore, all participants could explain their learning strengths and weaknesses in reading, math, and writing. Finally, 100% of the participants could name their current accommodations.

An example of the growth seen after viewing the second IVM was observable in Ryleigh's pre- and postintervention responses to the sixth question on the 12-question probe,

which was as follows: “What accommodations do you currently have, and how do they support your learning?” During the baseline sessions, she could name none of her documented accommodations. However, after participating in the IEP literacy instruction included in the second IVM, she was aware that she required the accommodation of extended time. She stated the following: “I will need extended time on my assignments for writing.”

IVM 3: Knowledge of Educational Rights

The third IVM was developed to explain the role and responsibilities of students, faculty, and staff when requesting and receiving accommodations at the postsecondary level. The instruction explained how participants should first self-identify when enrolling at a postsecondary institution. During baseline, no participants (0%) could explain their role in the postsecondary level self-identification process. Two participants (50%) knew that ADA had something to do with protecting the rights of individuals with disabilities. However, no participants (0%) knew about the postsecondary-level grievance process. One participant reported they would sue the school if they did not receive their accommodations, and another reported that they would call their current special education teacher. After viewing the third IVM at least twice, all participants (100%) could identify that both ADA and Section 504 protected their rights to accommodations as individuals with disabilities. All four participants knew that they needed to bring their IEP paperwork to the college for self-identifying to receive accommodations. Moreover, three of the four participants (75%) knew that they should attempt to locate their college’s office of disabilities to self-identify. Lastly, all participants (100%) were able to explain the different steps they could take if they failed to receive accommodations. One participant reported that they would ensure that they gave their College Letter of

Accommodations to their professors. The other three participants named the postsecondary grievance process and explained that a written statement was necessary.

One example of the growth seen after viewing the third IVM was observable in Ryleigh's pre- and postintervention responses to the ninth question on the 12-question probe, which was as follows: "What can you do in the college setting if you fail to receive your requested accommodations after self-identifying to a college and requesting your accommodations from a professor?" During the baseline sessions, Ryleigh responded with inconsistent statements: In one instance, she gave no response to the question, while in another baseline session, she responded "IDK." Her most lengthy response during baseline was as follows: "[R]eport it with proof of your records and the information of your accommodation, and maybe [you will] get to improve your score [...] because at least someone is trying to improve their skills of [becoming] better than before." This response was scored with 1 point by both the PI and the secondary rater as it did not seem to be directly related to the question. After viewing the third IVM on the legal requirements of postsecondary institutions and the self-identification process, she stated the following: "[I will] have to [stay] calm and let my professor know that my accommodations are granted by the office of disability, and [I will] show the letter (of accommodations) and [I will] say thank you for your time."

IVM 4: Knowledge of Self-Advocacy at the Postsecondary Level

The purpose of the fourth IVM was to outline the mnemonic "UNICORNS." This mnemonic was based on a simplified version of the target behaviors used in SACR training (Holzberg, 2017; Holzberg et al., 2019; Lopez et al., 2020; McGahee et al., 2021; Palmer, 1998; Roessler & Palmer, 2000; Walker & Test, 2011). IVM 4 focused on participants receiving instruction on the target behaviors required to request and explain accommodations. The baseline

data suggested that two of the participants (50%) believed that they, when requesting accommodations from a professor, should bring their IEP paperwork from high school. One participant knew that if they talked to their professors, they would be more likely to receive accommodations. No participants (0%) knew that they should confirm whether their professor had received a copy of their accommodations letter if they denied their first request. After viewing the fourth IVM at least twice, all participants knew they should bring their College Letter of Accommodations to request accommodations. Three out of four (75%) participants knew that if they explained their needed accommodations, they would be more likely to receive them. Finally, all participants stated that if the professor refused to give them their accommodations, they could use their College Letter of Accommodations as support.

An illustration of the growth seen after viewing the fourth IVM was observable in Natalia's pre- and postintervention responses to the 10th question on the 12-question probe, which was as follows: "Why may you need to self-advocate for accommodations, and what should you bring with you when you do?" During baseline data collection, she responded with inconsistent statements, including two instances where she gave no response to the question. In five baseline sessions, she responded with "IDK." Her most lengthy response during baseline was as follows: "[I] think you have to have a copy of your IEP and proof of [...] disability." This response was scored with 1 point by the PI and the secondary rater, as IEP materials should be provided to the college's office of disabilities as part of the postsecondary self-identification process. After viewing the fourth IVM, Natalia explained that to request accommodations, one should "[bring] your accommodations letter from the school and go to your teacher/professor and explain [your accommodations] to them."

Overall Findings

The current study was conducted over a total of 37 baseline probes, 34 intervention probes, and seven maintenance probes across four participants. After exposure to the intervention, all of the participants increased their scores on the 12-question probe. The participants required an average of nine sessions to meet the mastery criteria (scoring at least 29 out of 36 points) after viewing all four IVMs. Three of the four participants reached mastery criteria after the seventh intervention session, which was the first session in which it was possible to obtain this score. Three of the four participants remained above 29 points for the remainder of their maintenance sessions. While the total point increase on the 12-question probe varied across participants, all participants demonstrated a positive increase overall. The participants' mean increased by approximately 12.98 points from baseline to intervention based on their responses to the 12-question probe. Their maintenance data also indicated that they could all maintain their skills for 1–3 weeks after the intervention ended.

It is essential for students to have a basic understanding of their disabilities and needs. Students who enter college without this knowledge are unprepared to self-identify and may not receive the accommodations they need. Students with disabilities who do not receive the needed accommodations have higher rates of program noncompletion (Raue et al., 2011). After the intervention phase, all of the participants (100%) could explain how self-advocacy skills helped them to receive accommodations. Moreover, all participants (100%) could explain how understanding their disabilities, strengths, and needs enabled them to receive beneficial accommodations. Lastly, all of the participants (100%) could explain that once leaving the secondary setting, they were responsible for self-identifying and advocating for their accommodations without the support of a special education teacher.

These findings are consistent with those of previous studies that have explored the benefits of explicit self-advocacy instruction and found positive increases in participants' self-advocacy skills after explicit instruction (Balint-Langel & Riden, 2021; Balint-Langel et al., 2020; Cease-Cook et al., 2013; Hammer, 2004; Konrad et al., 2017; Konrad & Test, 2007; Konrad et al., 2006; Lancaster et al., 2002; Martin et al., 2006; Schelling & Rao, 2013; Test & Neale, 2004; Van Reusen, 1996). Research on student-led IEP meetings resulted in higher self-advocacy skills (Martin et al., 2006). Furthermore, embedded self-advocacy instruction through mnemonics for writing goal statements has been successfully used to teach self-advocacy skills (Konrad et al., 2017; Konrad & Test, 2007; Konrad et al., 2006). Studies on the SAS using both in-person and CD-ROM instruction have also proven that the use of mnemonic devices to teach the self-advocacy skills required for student-led IEP meetings is beneficial (Balint-Langel & Riden, 2021; Balint-Langel et al., 2020; Cease-Cook et al., 2013; Hammer, 2004; Lancaster et al., 2002; Schelling & Rao, 2013; Test & Neale, 2004; Van Reusen, 1996).

One area that profoundly impacts the ability of individuals with hidden disabilities to successfully self-advocate at the postsecondary level is having a fully developed knowledge of self. According to Test et al.'s (2005) conceptual framework of self-advocacy, knowledge of self includes knowing one's disability and needs. The current study's findings indicated a functional relationship between the UNICORNS program and participants' IEP literacy skills concerning knowledge of their current disability, strengths, weaknesses, and current accommodations. Prior to the intervention phase, data collected through the 12-question probe indicated that 0% of the participants could name or explain their documented disability and its impact on their learning. Only 50% (two out of four) could explain their basic learning strengths and weaknesses. Furthermore, the baseline data indicated that only two of the participants could accurately name

at least one of their current documented accommodations. Moreover, two of the participants mistakenly believed that their enrollment in a “Study Skills” class taught by their special education case manager/teacher was an accommodation rather than a secondary-level service.

These baseline findings are consistent with those of Martin et al. (2006), who indicated that 21.9% of survey students reported that their special education teachers had not discussed the contents of their IEPs before holding a formal meeting about their accommodations. Agran and Hughes (2008) found that only 20% of high school students reported having background instructions on reading or understanding the contents of their IEP. Moreover, Fiedler and Danneker (2007) indicated that secondary students with disabilities were unfamiliar with their IEPs. The results of the current study are also consistent with another study that explored the effect of explicit self-advocacy instruction on students’ knowledge of their IEP (Test & Neale, 2004). Test and Neale indicated that before exposure to the SAS through in-person instruction, their students could provide little information about their IEP.

After the intervention in the current study, all four participants (100%) could name their current documented disabilities and their effects on their learning. All participants (100%) could also explain their basic learning strengths and weaknesses. Finally, all participants (100%) could state their current accommodations and how they benefited their academic pursuits. The current study’s data indicated that, like past research that has used in-person training, participants gained IEP literacy skills when given explicit instruction. Previous studies have found that various methods (e.g., the SAS) are effective at developing students’ knowledge of their IEP, enabling them to take an active role in student-led-IEP meetings or other self-advocacy activities (Balint-Langel & Riden, 2021; Balint-Langel et al., 2020; Cease-Cook et al., 2013; Hammer, 2004; Lancaster et al., 2002; Schelling & Rao, 2013; Test & Neale, 2004; Van Reusen, 1996).

However, the current study was the first to focus on using asynchronous instruction to ensure that students possessed the skills required to interpret their IEP, thus enabling them to self-identify and receive accommodations at the postsecondary level.

In addition, the intervention results were consistent with past research on the effects of student-led IEP instruction in relation to a student's ability to create more detailed long-range plans. After her final intervention session, Ryleigh approached the PI to ensure that she had located the correct person at the Office of Accessibility at the postsecondary institution where she had received an acceptance letter from. Ryleigh knew that she needed to provide her IEP paperwork to this individual to self-identify and request her needed accommodations. Octavia also stayed behind after she completed her postgeneralization session to discuss completing her enrollment process for the local 2-year technical college. These actions align with the case study of Woods et al. (2013), which indicated that explicit self-advocacy instruction using the Self-Directed IEP lesson package led to students developing a more detailed transition plan for postsecondary education.

The current study has extended the literature by indicating that students, when given explicit asynchronous instruction through IVMs, can acquire knowledge on self-advocacy skills, including knowledge of self. The participants in the current study all gained IEP literacy skills related to knowledge of self, including their documented disabilities, learning strengths, learning weaknesses, and current documented accommodations. This study found that using explicit asynchronous instruction through IVMs increased participants' ability to respond to questions on the 12-question probe related to self-advocacy knowledge. Due to the ease of delivering instruction through asynchronous means, these findings may result in more students gaining access to this form of self-advocacy training in secondary settings, where more traditional in-

person training is neither cost nor time-effective. The use of asynchronous instruction also increased participants' ability to develop more detailed future transition plans related to their enrollment in postsecondary education.

Discussion of the Intervention's Impact on Accommodations Requests

The second research question was aimed at gauging the effect of the UNICORNS program on the ability of participants to self-advocate for accommodations. Of the four participants, three completed both the pre- and postgeneralization sessions. One of the participants chose not to participate in the pregeneralization session, which was later determined to be due to the participant fearing not knowing what to do. Thus, one participant's growth could not be accurately measured in the current study. The data from the other three participants indicated a noticeable increase in the number of observable target behaviors performed after the intervention phase. This increase was also observable in the raw scores obtained during the postgeneralization sessions in which the participants role-played requesting their accommodations.

Unlike other studies on improving students' knowledge of self-advocacy skills, the current study used explicit asynchronous instruction through prerecorded IVMs. The UNICORNS program consisted of instruction through four IVMs, which participants viewed asynchronously through an online LMS and Edpuzzle. The findings indicated a functional relationship between the UNICORNS program and participants' ability to request accommodations in role-playing scenarios. Data collected through direct observations revealed an increase in the scores of the three participants who completed both pre- and postgeneralization sessions.

The increase in the number of observable target behaviors varied between participants during the pre- and postgeneralization sessions. Hunter had the most considerable growth of 61.7%, from completing only three of eight target behaviors (13.3%) to six of eight target behaviors (75.0%) in the combined role-playing sessions. Natalia exhibited growth of 37.5% completing seven of eight of the target behaviors (87.5%) during the postgeneralization sessions, up from four (50.0%) between the two scenarios. Ryleigh exhibited growth of 25% by completing seven of eight target behaviors (87.5%) during the two postgeneralization scenarios, up from five of eight target behaviors (62.5%). Noteworthy, during the postgeneralization sessions, Natalia was far more confident in her interactions with each college instructor during postgeneralization interactions. Her actions and manner of speech had significantly changed due to her increased confidence compared with her pregeneralization session, during which she cried. She laughed and made small talk with all of the adults in the room when she left to complete her social validity Google form and return to class.

Like the current study, past research has examined the effects of systematic instruction to teach the steps required to request accommodations. Systematic instruction uses multiple steps and set sequencing to reduce cognitive load when new skills are taught (Vaughn et al., 2012). The SACR and mSACR methods have been investigated several times, and each study has used systematic in-person instruction to teach target behaviors that students can use when requesting accommodations (Holzberg, 2017; Holzberg et al., 2019; Lopez et al., 2020; McGahee et al., 2021; Palmer, 1998; Roessler & Palmer, 2000; Walker & Test, 2011). SACR research has used 19 target behaviors to increase students' ability to request accommodations. Studies on the SACR method have indicated that, after being given in-person instruction, students could more effectively perform the 19 target behaviors during role-playing situations (Holzberg, 2017;

Holzberg et al., 2019; Palmer, 1998; Roessler & Palmer, 2000; Walker & Test, 2011). Additional research on the mSACR intervention which reduced the number of target behaviors to 17 or 13 steps also found positive impacts on students' self-advocacy skills (Lopez et al., 2020; McGahee et al., 2021).

The current study extended the literature base by finding that students could be taught how to request accommodations after being instructed using a reduced number of target behaviors. Reducing the steps to be taught through systematic instruction also reduces the cognitive load of students who are just starting to learn how to make accommodations requests. While the mnemonic used in the current study was based on the target behaviors of both the SACR and mSACR methods, it taught accommodations requests using only eight target behaviors. Studies on the mSACR method have sought to reduce the cognitive load of students while learning to make accommodation requests (Lopez et al., 2020; McGahee et al., 2021). However, by further reducing the steps for participants to remember when requesting accommodations, the current study created a more streamlined process for them to use. This study also found that participants could begin learning the steps required to request accommodations using asynchronous instruction and the eight steps of the "UNICORNS" mnemonic.

In addition, all studies on SACR and mSACR training have found that the use of in-person training and role-playing sessions during the intervention phase had positive impacts on students' ability to request accommodations (Holzberg, 2017; Holzberg et al., 2019; Lopez et al., 2020; McGahee et al., 2021; Palmer, 1998; Roessler & Palmer, 2000; Walker & Test, 2011). By contrast, the intervention in the current study was delivered to participants' using four asynchronous IVMs. Participants watched the modeling of the target behaviors as part of the

fourth IVM, which included a recording of the PI acting out the target behaviors while requesting their required accommodations as an individual with disabilities. Voice-over narration was used to explain the actions of the PI and how each spoken statement and behavior acted out correlated to the eight target behaviors in the mnemonic. This study found that using explicit asynchronous instruction through IVMs increased the participants' abilities to complete the target behaviors of the "UNICORNS" mnemonic when requesting accommodations. These findings indicate that this instructional method is valid. Due to the ease of delivering instruction through asynchronous means, more students may have access to self-advocacy instruction in this format, especially those still in secondary settings, where more traditional self-advocacy instruction using in-person training may not be cost or time-effective.

Discussion of Social Validity Data

Social validity data were collected from all of the students and teachers who were part of the current study. All of the teachers who responded to the social validity questionnaire had direct knowledge of the impact of the intervention on the participants' ability to request accommodations. The students and teachers completed separate questionnaires about the UNICORNS program's instructional strategies and the outcomes observable during the pre- and postgeneralization sessions. The social validity surveys were used to determine the social importance of the UNICORNS program, the observable changes in participants' behavior, and the practicability and usability of the program (Horner et al., 2005).

Student Participant Perceptions

The third research question was aimed at determining whether the participants believed that the UNICORNS program positively impacted their ability to self-advocate for needed accommodations. Based on the data collected, all of the participants agreed that the program

increased their understanding of how to self-identify and request accommodations at the postsecondary level. They also felt that the UNICORNS program helped them to obtain an enhanced understanding of the contents of their current IEPs, including their current disability and accommodations.

This study's results are consistent with those of a previous study on the SACR training program (Holzberg et al., 2019). The research indicated that after the training, the participants believed that they were more aware of the importance of learning how to request accommodations in a postsecondary setting. The results of the current study also correlate to research by Filippidis and Tsoukalas (2003) on the use of asynchronous digital videos for teaching math skills. Their participants reported that the video-based lessons were practical and easy to use, and that they felt satisfied with their instruction. In the current study, 75% (three) of the students agreed that the IVMs that comprised the UNICORNS program were easy to understand. Likewise, in Russell and Pearl's (2020) study, 80% of the participants stated that viewing the video modules that comprised the K2SA program were helpful for future accommodations requests.

Teacher Participant Perceptions

The fourth research question investigated whether the teachers believed that the UNICORNS program positively impacted students' ability to self-advocate for needed accommodations. Based on the collected data, the teacher participants believed overall that the social goals and impact of the UNICORNS program were socially important and observable. The survey results indicated that all teacher participants strongly agreed that students with hidden disabilities should be taught how to request accommodations in an academic setting.

This finding correlates with a previous study on the SAS, which reported that all of the general education teachers who participated agreed that all students should learn how to advocate for themselves (Prater et al., 2014). Likewise, in another study on the SACR strategy, teachers reported that students learned to request accommodations and that all students would benefit from self-advocacy training (Lopez et al., 2020). Most teachers in the current study also strongly agreed that the UNICORNS program was a useful secondary instructional tool for helping college-bound students with disabilities before they transition to postsecondary education (i.e., a mean of 3.6 on a 1–4 Likert scale). This finding also correlates with a study by Walker and Test (2011), in which a Director of Disabilities Services reported that interventions directed at teaching students how to request accommodations were socially important and needed. This Director also reported that they believed that students with disabilities did not know how to self-advocate because they had not been explicitly taught the skill.

In the current study, the perception of the high social importance of self-advocacy instruction was echoed by the special education teacher, who served as the secondary rater. This teacher believed that the UNICORNS program would also benefit middle school and secondary students who may not be college-bound. She felt that by starting instruction earlier and with a broader group of students, more students could start to practice self-advocating for their accommodations while in the protected secondary setting. This suggestion correlates with the SAS study of Prater et al. (2014), in which general education teachers requested that all students be instructed on how to self-advocate at the start of the school year. One of the teachers in that study stated that learning to self-advocate could be expanded to activities beyond academic work, such as clubs and sports.

Limitations

Although the current study's results demonstrated the effectiveness of the UNICORNS program, several limitations should be discussed. The first limitation of the current study was the limited representation of the disability classifications considered hidden disabilities. Based on the participant selection criteria and the fact that the study was conducted at only one high school, the students selected to participate were served for disabilities in only three of the 13 areas identified by IDEA 2004. The study results were limited as the participants were only served for SLDs, OHIs, and speech-language impairments, and one participant also received special education and ESOL services.

During the data analysis, a second limitation was uncovered concerning the need for increased support for ESOL students completing the UNICORNS program. During the intervention phase, data indicated that Octavia required 10 intervention sessions to meet the mastery criteria, while the other participants required only eight sessions. Octavia also required the most intervention sessions before an effect was observable in her scores obtained on the 12-question probe. She required three intervention sessions before her intervention data were above her baseline. Octavia also had the lowest PND score of only 63.6% which fell in the questionable range. Octavia was the only participant in the current study who received both special education services in writing and ESOL services. Her struggles may have resulted from both a receptive and expressive language barrier related to her needs as a student with a disability in writing and as an ESOL student. Therefore, the instructional practices used as the intervention in the current study may require more support for students with receptive and expressive language barriers or who have needs as ESOL students.

Suggestions for Future Research

Future research should explore the effects of asynchronous self-advocacy instruction on the self-advocacy knowledge and skills of individuals served for a broader range of special education disability categories. Research should be expanded to individuals with other hidden disabilities, such as autism spectrum disorder (ASD), traumatic brain injury, and hearing impairments, which may result in students' requiring accommodations at the postsecondary level.

Based on the finding regarding Octavia's performance, additional supports should be incorporated into future studies on asynchronous self-advocacy interventions. Future studies on the UNICORNS program should include additional support for students with ESOL services and documented writing deficits. One suggested support for students with receptive and expressive language needs is to teach mini-lessons focused on preteaching key vocabulary terms before starting the UNICORNS program. This prior instruction could help to increase students' comprehension of new or unfamiliar terms presented as part of the UNICORNS program (Calderón & Slakk, 2019). Future research may explore the effects of using preteaching of tier-three vocabulary terms before starting asynchronous self-advocacy instruction.

In addition, the lack of participant role-playing in the current study could be addressed in future research through open-ended, long-response questions or simulated virtual role-playing. The use of role-playing aligns with recent research by Ismailov and Chiu (2022) on the UDL elements used in the asynchronous environment. Their research suggested that, when serving diverse learners, teachers should find ways to enhance the level of social interaction in asynchronous learning environments (Ismailov & Chiu, 2022). The present data analysis revealed that none of the participants completed behaviors related to the mnemonic's "nutshell" target behavior, which required participants to restate the agreement on using their

accommodations reached between the college instructor and themselves. Due to the time allowed to complete the current study and the participants' class schedules, this program was developed without using virtual role-playing activities. The participants received instruction on the "UNICORNS" mnemonic target behaviors only through watching the fourth IVM, which included prerecorded modeling of the PI requesting her accommodations using the program's eight target behaviors. The current study found that none of the participants completed the "nutshell" target behavior. This finding may be related to participants having no active practice using the "UNICORNS" mnemonic's target behaviors before the postgeneralization sessions. Future research should investigate the impact of adding simulated role-playing in asynchronous self-advocacy programs, allowing for further comparison of the effectiveness of role-playing activities between in-person and simulation environments. Findings from past research on the SACR and mSACR methods have demonstrated the effectiveness of role-playing activities as part of self-advocacy instructional practices (Holzberg et al., 2019; Lopez et al., 2020; McGahee et al., 2021; Palmer, 1998; Roessler & Palmer, 2000; Walker & Test, 2011). This suggestion for future research would help to fill a current gap in the literature that compares the effects of simulated versus in-person role-playing activities as part of self-advocacy instruction.

Moreover, future research could explore the effects of using a lockdown browser when conducting asynchronous interventions. During some of the observed intervention sessions, it was noted that some participants chose to access their assigned IVM by logging directly into the Edpuzzle program through the URL. Through doing so, these participants bypassed the academic feedback provided as part of the current study's protocol. Academic feedback was included in the current study as researchers suggested that students with disabilities – whether online, face-to-face, or in hybrid formats – require continuous support to maximize their learning (Meda &

Waghid, 2022). In future studies, using a lockdown browser would force students to access their assigned IVMs through the LMS by removing access to the URL bar. A lockdown browser would also limit future participants' ability to use the split-screen feature in Windows 10®. During one of the observed intervention sessions, it was noted that one participant had opened their assigned IVM but had minimized the screen using the split screen feature to access and play YouTube videos on another side screen. Although Edpuzzle has an embedded feature that pauses the content if a student does not have the screen as the active tab, the video continues to play if the screen is made smaller.

Implications for Practice

In conjunction with previous studies, the findings of the current study support previous research that has demonstrated that self-advocating for accommodations is a skill that can be taught through explicit instruction (Holzberg et al., 2019; Lopez et al., 2020; McGahee et al., 2021; Palmer, 1998; Roessler & Palmer, 2000; Walker & Test, 2011). The current study also furthers the literature base that supports asynchronous self-advocacy instruction (Russell & Pearl, 2020). The current study found that the use of asynchronous IVMs to teach self-advocacy skills and IEP literacy skills, successfully delivered instruction to participants on the skills required to transition to postsecondary education. By using previously created asynchronous IVMs, teachers can teach multiple skills to distinct groups of students and mitigate the effects related to lack of time and resources (Hawbaker, 2007). Thus, teachers would be able to devote more classroom time to creating high-quality transition lessons, which may result in enhanced postsecondary outcomes for students with hidden disabilities (Morningstar et al., 2010). Due to the instructional ease that asynchronous IVMs create when used with an LMS, this instruction may be used to reach more students with disabilities. The increased accessibility may also result

in more students engaging in instructional practices directly correlated to increasing students' self-advocacy skills.

When using asynchronous instructional methods in the classroom setting, a critical implication for practice concerns the length of the IVMs used for instruction. Since the current study was completed in the last months of the school year, instruction was developed in four instructional IVMs that comprised the UNICORNS program (ranging from 20 to 25 minutes in length). The time participants required to respond to the probe questions and active time for completing one IVM ranged from 35 minutes to 1 hour 5 minutes. In a session observed by the PI, Ryleigh required over 1 hour to complete one of the IVMs. This time was used for watching, rewatching, and responding to the 12-question probe. While Ryleigh produced the most in-depth responses, a paragraph in length compared with the other participants' single-sentence responses, this study recommends that for future practice the IVMs could be shortened by reducing the content of each one. However, this may increase the number of IVMs required to present the entire UNICORNS program. Instead of teaching content related to three of the 12 probe questions, each IVM could be reduced to focus on the content for two or just one of the probe questions. This change would shorten the overall length of each IVM but increase the number of IVMs and sessions required to complete the intervention program.

Another crucial implication for practice relates to the current study's protocol, which allowed participants to audio-record their answers when responding to questions within the IVMs. While all of the IVMs allowed all participants to record their voices to respond to long response questions, no participants used this feature. In discussions after the study, three of the participants explained that they were unaware of this feature and how to use it. Natalia, who had a documented accommodation that allowed for dictation, expressed that she was uncomfortable

using this feature around other students. For practices that use asynchronous instruction, such as the UNICORNS program or the audio-recording or dictation feature for responses, one must ensure that students know how to use these features and are in a setting where they feel comfortable doing so.

Moreover, the current study's secondary rater, a special education teacher, felt that asynchronous self-advocacy instruction should be started earlier with students in the middle school setting. Thus, another implication for practice concerns starting asynchronous self-advocacy instruction with even younger students. An earlier start for the intervention could result in younger students learning how to more effectively self-advocate for their needs. The practice of starting asynchronous self-advocacy instruction could benefit students in two areas related to skills in the transition area, as defined by IDEA 2004. First, it could lead to students gaining more practice in self-advocating for their needs while still in a protected environment with special education support. Second, this practice may also help to increase student involvement in community-based activities and organizations, which could positively impact college acceptance and employment rates.

Finally, the current study found promising results when self-advocacy instruction was delivered using an asynchronous format to secondary students who had not yet self-identified with their postsecondary institution. By contrast, in their asynchronous self-advocacy instruction research, Russell and Pearl (2020) worked with students who had already enrolled and self-identified at the postsecondary level. Likewise, studies on the SACR and mSACR methods, which have been studied with secondary students, have employed in-person training and role-play activities (Holzberg et al., 2019; Lopez et al., 2020; McGahee et al., 2021). Therefore, the current study extends the literature by finding a functional relationship when using asynchronous

IVMs to deliver instruction regarding the skills secondary students with hidden disabilities require to request accommodations. Asynchronous self-advocacy instruction has a crucial implication for secondary classroom practice in that it increases the transition skills of students with disabilities.

Conclusion

As the enrollment rates of students with disabilities continue to increase in postsecondary settings, educators must continue to find ways to improve their completion rates in the postsecondary education setting. Secondary special education teachers can support their students by locating methods for helping them to develop self-advocacy and IEP literacy skills. This instruction should also include teaching students about the postsecondary self-identification process. Since IDEA 2004 placed greater significance on the transition process and students' active participation in their IEP process, studies have indicated that students have typically left secondary schools with little training in self-advocacy and knowledge of the contents of their IEPs (Fiedler & Danneker, 2007; Martin et al., 2006).

Moreover, researchers have investigated numerous strategies for increasing students' self-advocacy skills. Studies have indicated that in-person and hybrid programs, such as the SAS, student-led IEP meetings, "Go 4 It...NOW," and SACR, effectively increase student self-advocacy skills (Holzberg, 2017; Holzberg et al., 2019; Konrad et al., 2017; Konrad & Test, 2007; Konrad et al., 2006; Lopez et al., 2020; McGahee et al., 2021; Palmer, 1998; Roessler & Palmer, 2000; Walker & Test, 2011). Due to the increased use of technology inside and outside of the classroom and the impact of the COVID-19 global pandemic, research has increased on distance learning and asynchronous instructional methods. The first fully asynchronous self-advocacy program was designed in 2020 and developed for current college students (Russell &

Pearl, 2020). The current study sought to adapt the instructional method used by Russell and Pearl and deliver asynchronous self-advocacy instruction to secondary students before transitioning to the postsecondary setting. Using a multiple-probe-across-participants design, the current study explored the effects of the asynchronous UNICORNS program. It found that the use of this program had a functional relationship with students' ability to respond to questions based on their self-advocacy knowledge, their IEP's contents, and the postsecondary accommodations request process.

The current study offers contributions to secondary special education as it explored the use of asynchronous IVMs for teaching self-advocacy and IEP literary skills. Based on its results, the use of asynchronous self-advocacy instruction may enable special education teachers at the secondary level to more effectively aid in the transition to postsecondary learning for their students with hidden disabilities. Further research should continue to be conducted to further prove and increase the effectiveness of this form of instruction.

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Appendix A

Letter of IRB Consent



February 7, 2022

Kathleen Dorr
Coastal Carolina University
Conway, SC 29528

RE: Creating UNICORNS: Teaching IEP Literacy and Accommodation Self-advocacy Through Asynchronous Interactive Video Modules

Kathleen,

It has been determined that your protocol #2022.86 is approved as **EXPEDITED** by the Coastal Carolina University Institutional Review Board (IRB) under the Federal Policy for the Protection of Human Research Subjects Categories #6 & 7, (6) Collection of data from voice, video, digital, or image recordings made for research purposes, (7) Research on individual or group characteristics, behavior, or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

This approval is good for one calendar year commencing with the date of approval and concludes on 2/6/2023. If your work continues beyond this date, it will be necessary to seek a continuation from the IRB. If your work concludes prior to this date, please inform the IRB.

*Approval of this protocol does not provide permission or consent for faculty, staff or students to use university communication channels for contacting or obtaining information from research subjects or participants. Faculty, staff and students are responsible for obtaining appropriate permission to use university communications to contact research participants. For use of university email to groups such as **all** faculty/staff or **all** students, requests should be made to the Provost's Office after the research protocol has been approved by the IRB. Please allow at least one week to receive approval.*

Please note, it is the responsibility of the Principal Investigator to report immediately to the IRB any changes in procedures involving human subjects and any unexpected risks to human subjects, any detrimental effects to the rights or welfare of any human subjects participating in the project, giving names of persons, dates of occurrences, details of harmful effects, and any remedial actions. Such changes may affect the status of your approved research.

Be advised that study materials and documentation, including signed informed consent documents, must be retained for at least three (3) years after termination of the research and shall be accessible for purposes of audit.

If you have any questions concerning this review, please contact Patty Carter, IRB Coordinator, at pcarter@coastal.edu or extension 2978.

Thank you,

Stephanie Cassavaugh
Director, Office of Sponsored Programs and Research Services
IRB Administrator

cc: Suzanne Horn

Appendix B

Site Specific Authorization

Date:

Dear Coastal Carolina University Institutional Review Board:

The purpose of this letter is to inform you that I give Kathleen MC Dorr permission to conduct the research titled “Creating UNICORNS: Teaching IEP Literacy and Accommodation Self-advocacy Through Asynchronous Interactive Video Modules” at Georgetown High School. We have agreed to the following study procedures: Kathleen Dorr will recruit at least six students with special education services who intend to enroll in postsecondary education after high school graduation. In a single-case research design, she will implement an asynchronous intervention on self-advocacy and accommodation requests. Students’ names will not be used in the study, and no identifiable information will be shared. Students will receive intervention daily, for up to fifteen minutes each session. Instruction will occur in the special education classroom before, during, or after school based on the student and parent’s preference. Pre- and post-intervention test data will be collected on each student. Kathleen has plans to publish these research findings as partial fulfillment of the requirements for a degree of Doctor of Educational Philosophy. However, she may publish her finding in articles and present her findings at a conference in the future.

Sincerely,

[Name Redacted]

Principal

[Name Redacted] High School

Appendix C**District Specific Authorization**

Date:

Dear Coastal Carolina University Institutional Review Board:

The purpose of this letter is to inform you that I give Kathleen MC Dorr permission to conduct the research titled “Creating UNICORNS: Teaching IEP Literacy and Accommodation Self-advocacy Through Asynchronous Interactive Video Modules” at Georgetown School District. We have agreed to the following study procedures: Kathleen Dorr will recruit at least six students with special education services who intend to enroll in postsecondary education after high school graduation. In a single-case research design, she will implement an asynchronous intervention on self-advocacy and accommodation requesting. Students’ names will not be used in the study, and no identifiable information will be shared. Students will receive intervention daily times per week, for up to fifteen minutes each session. Instruction will occur in the special education classroom before, during, or after school based on the student and parent’s preference. Pre- and post-intervention test data will be collected on each student. Kathleen has plans to publish these research findings as partial fulfillment of the requirements for a degree of Doctor of Educational Philosophy. However, she may publish her finding in articles and present her findings at a conference in the future.

Sincerely,

[Name Redacted]

Executive Director for Special Services,

[Redacted]School District

Appendix D

Participant and Parent Informed Consent for Human Subject Research Participation



Introduction

My name is Kathleen Mahaley Clark Dorr, and I am a Special Education teacher at your student's school and currently a Doctoral Candidate at Coastal Carolina University. I would like to invite your student to take part in my research study entitled, "Creating UNICORNS: Teaching IEP Literacy and Accommodation Self-advocacy Through Asynchronous Interactive Video Modules" You are free to talk with someone you trust about your participation in this research and may take time to reflect on whether you wish to take part or not. If you have any questions, I will answer them now or at any time during the study

Purpose

The purpose of this research study is to explore the effect of asynchronous instruction using a modified version of the Keys to Self-advocacy to teach secondary students with disabilities self-advocacy skills. These skills include increasing your student's ability to self-identify and request academic accommodation at the post-secondary level upon entering a college or university of their choice.

Procedures

Students will be asked to participate in online asynchronous instruction during this research study, which will use EdPuzzles for instruction and google forms for data collection. All materials will be housed on a Google Classroom specialty created for this study. Additionally, students will participate in two generalization sessions at school in the library with two teachers who will role-play the process of requesting accommodation at the post-secondary level with you.

Duration

For this research study, your student's participation will be required during training sessions that will last up to 30 minutes daily. Sessions can take place before, during, and after school hours. Time will be selected and arranged before the study starts to meet each student's needs and their parent or guardian. Sessions may occur individually or in small groups, with students working independently on their own devices.

Rights

You do not have to agree with your students participating in this research study. If you do choose to allow your student to participate, you may choose not to at any time once the study begins. There is no penalty for your student not participating or withdrawing from the study at any time.

Risks

During this research study, no risks or discomfort are anticipated.

Benefits

By agreeing to participate in this research study, it is expected that your student will gain skills in the area of self-advocacy and increase their knowledge of educational rights as a student with a disability at the postsecondary level. Students may also learn how to request academic accommodation at the post-secondary level. This research also may help other researchers better understand others within our community or society as a whole as a result of finding an answer to the research question.

Incentives

For your student's participation in this research study, they may be provided with snacks during the intervention session if they request them.

Confidentiality

Unless you provide consent to the contrary, the confidentiality of your student's participation in this research study, their typed responses, any individual results, and audio recordings will be maintained by the Primary Researcher, the secondary rater (Ms. Haines), and all members of the generalization role-playing team (Dr. Cox and Dr. Thomas).

**Note that confidentiality will only be violated when required by law or the ethical guidelines of the American Psychological Association. This usually includes, but may not be limited to, situations when your responses indicate that you, or another identified individual, is at risk of imminent harm or situations in which faculty are mandated reporters, such as instances of child abuse or issues covered under Title IX regulations. For more information about Title IX, please see the University's webpage at: <https://www.coastal.edu/titleix/>.*

Sharing the Results

As the Principal Investigator of this research study, I plan to share the results of this study as part of my research findings as partial fulfillment of the dissertation requirements for a degree of Doctor of Educational Philosophy at Coastal Carolina University. However, in the future, I may publish my finding in articles or present information gathered by this study at an educational conference.

Contacts

If you have any questions about this research study, please feel free to contact me by school phone (843) 546-8516 ext. 2130 during school hours, or by my phone 843-344-0297 after hours. You may also reach me via my school email Kdorr@GCSD.k12.sc.us or my Coastal Carolina University email kmclark2@coastal.edu

My Dissertation Chair on this study is Dr. Suzanne Horn, and she can also be contacted by phone 843-349-4044 or by email at Shorn@coastal.edu.

***The Institutional Review Board (IRB) under the Office of Sponsored Programs and Research Services is responsible for the oversight of all human subject research conducted at Coastal Carolina University. If you have any questions about your rights as a research participant before, during, or after the research study, you may contact this office by calling (843) 349-2978 or emailing OSPRS@coastal.edu.*

The IRB approved this research study on 2/7/2022. This approval will expire on 2/6/2023 unless the IRB renews the approval before this date. IRB # 2022.86

Parent/Guardian Consent

I have read this form and have been able to ask questions of the PI and/or discuss my participation with someone I trust. I understand that I can ask additional questions during this research study and am free to withdraw from participation at any time.

I agree for my student to take part in this research study.

I DO NOT agree to allow my name or other identifying information to be included in reports, publications and/or presentations resulting from this research study.

Parent or Guardian’s Name: _____
Print

Parent or Guardian’s Signature: _____
Sign

Date: _____

Student Consent

I have read this form and have been able to ask questions of the PI and/or discuss my participation with someone I trust. I understand that I can ask additional questions during this research study and am free to withdraw from participation at any time.

I agree to take part in this research study.

I DO NOT agree to allow my name or other identifying information to be included in reports, publications, and/or presentations resulting from this research study.

Participant’s Name: _____
print

Participant’s signature: _____
sign

Date: _____

Appendix E

Generalization Participant Confidentiality Form

This agreement is between:

Kathleen Dorr, the primary researcher who, is completing a study as part of her Dissertation Requirement with Coastal Carolina University.

and

_____ who will serve as a generalization participant instructor for the dissertation study entitled: Creating UNICORNS: Teaching IEP Literacy and Accommodation Self-advocacy Through Asynchronous Interactive Video Modules, IRB # 2022.86

Summary of job description/service provision:

As the generalization participant as a college instructor, I will participate in the generalization sessions during the role-playing activity in which student participants request accommodations for a college class or exam. I will also take part in filming the fourth interactive video module.

I agree to:

1. Keep all the research information shared with me confidential. I will not discuss or share the research information with anyone other than with the Researcher(s) or others identified by the Researcher(s).
2. Keep all research information secure while it is in my possession.
3. Return all research information to the Researcher(s) when I have completed the research tasks or upon request, whichever is earlier.
4. Destroy all research information regarding this research project that is not returnable to the Researcher(s) after consulting with the Researcher(s).
5. Comply with the instructions of the Researcher(s) about requirements to physically and electronically secure records (including password protection, file/folder encryption, and use of secure electronic transfer of records through file sharing, use of virtual private networks, etc.).
6. Not allow any personally identifiable information to which I have access to be accessible from anyone but the Researcher or Coastal Carolina's IRB (unless specifically instructed otherwise in writing by the Researcher).
7. Share in the knowledge I gain about a student participant concerning their disability or special education needs (unless specifically instructed otherwise in writing by the Researcher).

Generalization Participant:

(Print Name)

(Signature)

(Date)

As the lead researcher, I agree to:

1. Provide detailed direction and instruction on my expectations for maintaining the confidentiality of research information so that _____ who is serving as a generalization participant can comply with the above terms.
2. Provide oversight and support to _____ who is serving as Generalization Participant: in ensuring confidentiality is maintained in accordance with the with the policies of Coastal Carolina University’s Institutional Review Board (IRB), which is registered with the Office for Human Research Protections (OHRP) and holds the Federal wide Assurance #FWA00004137 which provides assurances that CCU will comply with all applicable federal laws and regulations related to research involving the use of humans as participants.

Researcher(s):

(Print Name)

(Signature)

(Date)

Appendix F

Secondary Rater Confidentiality Form

This agreement is between:

Kathleen Dorr is the primary researcher who is completing a study as part of her Dissertation Requirement with Coastal Carolina University.

and

_____ who will serve as a Secondary Rater for the dissertation study entitled: *Creating UNICORNS: Teaching IEP Literacy and Accommodation Self-advocacy Through Asynchronous Interactive Video Modules*, IRB # 2022.86

Summary of job description/service provision:

As the secondary rater, I will take part in the scoring of probe data generalization session and observe produceorial fidelity as needed

I agree to:

1. Keep all the research information shared with me confidential. I will not discuss or share the research information with anyone other than with the Researcher(s) or others identified by the Researcher(s).
2. Keep all research information secure while it is in my possession.
3. Return all research information to the Researcher(s) when I have completed the research tasks or upon request, whichever is earlier.
4. Destroy all research information regarding this research project that is not returnable to the Researcher(s) after consulting with the Researcher(s).
5. Comply with the instructions of the Researcher(s) about requirements to physically and electronically secure records (including password protection, file/folder encryption, and use of secure electronic transfer of records through file sharing, use of virtual private networks, etc.).
6. Not allow any personally identifiable information to which I have access to be accessible (unless specifically instructed otherwise in writing by the Researcher(s)).
7. Share in the knowledge I gain about a student participant concerning their disability or special education needs (unless specifically instructed otherwise in writing by the Researcher

Transcriptionist/Research staff:

(Print Name) (Signature) (Date)

As the lead researcher, I agree to:

1. Provide detailed direction and instruction on my expectations for maintaining the confidentiality of research information so that _____ who is serving as the secondary rater can comply with the above terms.
2. Provide oversight and support to _____ who is serving as the secondary rater in ensuring confidentiality is maintained in accordance with the policies of Coastal Carolina University’s Institutional Review Board (IRB), which is registered with the Office for Human Research Protections (OHRP) and holds the Federal wide Assurance #FWA00004137 which provides assurances that CCU will comply with all applicable federal laws and regulations related to research involving the use of humans as participants.

Researcher(s):

_____ (Print Name) _____ (Signature) _____ (Date)

Appendix G

Permission to Use the Key to Self-advocacy Videos

Kathleen Dorr

From: Russell, Morgan <mrussell@richmond.edu>
Sent: Thursday, October 28, 2021 5:02 PM
To: Kathleen Dorr
Subject: Self-Advocacy Videos

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Hi Kat,

It was so great connecting with you and I am hoping that the videos I created are helpful for you as you modify this to fit students with disabilities in the secondary education setting. Of course as you know my videos were created for college students and reference the college jargon pretty often, but feel free to use them in whatever way that benefits your research. Thank you for furthering this work and I look forward to seeing your research published because it is certainly filling a huge gap.

Module 1(Knowing Your Learning Difference): <https://www.youtube.com/watch?v=TTC2o2f888A>

Module 2(Educational Rights): <https://www.youtube.com/watch?v=GyhvVZplqqw>

Module 3(Communicating Needs for Accommodations): <https://www.youtube.com/watch?v=xwOmbNpuD5Q>

Take care,
Morgan

Morgan Russell, Ed.D
Senior Associate Director
Multicultural Outreach and Programming
Student Center for Equity and Inclusion
Whitehurst Hall-Suite 210
804-289-8032

Pronouns: she,her

Appendix H

Transcripts from the IVMs with Edpuzzle Questions

UNICORNS Interactive Video Module 1: Understanding Disabilities and Self-advocacy

Hello friends, this is Ms. Dorr. Today I will be sharing the self-advocacy UNICORNS program with you. In this Interactive video module, we will talk about Understanding Disabilities and Self-advocacy.

In these four videos, you will learn vital information about disabilities, self-advocacy, your current IEP, and the law that protects your rights as a secondary or high school student and when you enroll at college as a student with a disability. In the last video, you will learn the steps to the mnemonic UNICORNS to help you request accommodations when in college.

Comprehension Question 1

This instructional plan is made up of four EdPuzzles which are also called interactive video modules (IVMs)?

True or False

This instructional method will also teach you how to use the eight steps in the “Unicorns” mnemonic to request accommodations from a college instructor or professor. These steps include...

1. Being unreserved by starting a conversation.
 2. Disclosing your needs.
 3. Informing others about what accommodations you need.
 4. Citing how accommodations have been helpful in the past.
 5. Learning how to react if someone objects to giving you an accommodation.
 6. Reconcile any difference and reach an agreement.
 7. Restate the conversation in a nutshell.
 8. Stop or end a conversation with your college instructor/professors.
-

Comprehension Question 2

The “UNICORNS” mnemonic will help you learn eight steps to use when requesting accommodations in college.

True or False

Before we start, I want to explain why I feel teaching you this information is important and why my dissertation focuses on this subject.

- 1) Like you, I am an individual with a disability that affects the way I learn, process information, and recall the information that I have learned.
 - 2) Like you, I had an IEP as a student, but I knew little about the information that was in my IEP.
 - 3) Since I did not start college right out of high school when I started college, I had to spend my own money to prove to my college that I still had a disability.
 - 4) I also had to learn how to navigate and find ways to help myself as a student with a disability.
 - 5) It is important that I share that having a disability is not a negative thing, and needing accommodations is not a terrible thing. However, accepting our strengths, weakness, and needs is particularly important
-

Before we go into more detail, let us take a minute to discuss what self-advocacy is.

Self-advocacy is the ability to speak for yourself and share with other people what you need. Being a good self-advocate means that you have developed skills in four different areas. These four areas are knowledge of self, knowledge of rights, communication skills, and leadership skills.

Today we will start to build on our “knowledge of self” by discussing what it means to have a disability.

Comprehension Question 3

There are four different sub-skills that makeup self-advocacy.

True or False

In this interactive video module, we will start working on knowledge of the self by talking about some of the most common disabilities that can affect how a person learns and how they relate to self-advocacy.

As individuals with disabilities or learning differences, we must understand how we learn best and how our disabilities impact our learning.

Understanding these two things makes it easier to explain what we need and why to others, which is the heart of self-advocacy.

Learning to be a self-advocate positively impacts the lives of individuals with disabilities. When we know how to self-advocate, we are more likely to receive the help we need in areas that may be affected by our disability. Also, when we can explain how we learn best and how our disability impacts our learning, we are more likely to receive the most helpful accommodations. Disabilities can affect many different aspects of a person’s life, such as reading, writing, math skills, and even the way someone speaks.

Comprehension Question 4

All disabilities only ever affect someone's ability to walk and read.

True or False

Research has found that if students with disabilities understand their needs and know how to self-advocate for them, they tend to complete their college classes with high grades and have higher satisfaction rates. Studies show that self-advocacy is a necessary skill for students with learning differences to learn before starting postsecondary education

Comprehension Question 5

Learning to be a good self-advocate can lead to higher grades in college.

True or False

While many people may think about wheelchairs or other visible signs, many disabilities can be called hidden disabilities. This is because many disabilities have no outward appearance or signs showing how people may differ from each other.

Two examples of hidden disabilities can be Specific Learning disabilities or other health impairments.

A "Specific Learning Disability" (SLD) is a disorder that interferes with someone's ability to listen, think, speak, write, spell, or do mathematical calculations. Those of us with a specific learning disability may struggle with reading, writing, or math. This can be defined as disorders such as dyslexia, dysgraphia, dyscalculia, and Dyspraxia. However, in the public-school setting, a Specific Learning Disabilities is not diagnosed to the level that a specific and named disorder

An "Other Health Impairment" (OHI) may impact or limit someone's strength, vitality, or alertness (heightened alertness to environmental stimuli), limits alertness, is an acute health to notice social cues, set realistic priorities, or while in the classroom by not focusing or prioritizing assignments or staying on task. Sometimes it just means that you have had to miss school because of a health issue like sickle cell aneme or asthma.

Remember, not all disabilities can be seen.

Comprehension Question 6

You can always tell if someone has a disability based on how they look?

True or False

I will tell you about my disabilities and how they affect my learning as a student both in high school and college. Even with a disability, we all have strengths and weaknesses, and I use my accommodation to help support my weakness and play off my strengths.

I was served by special education and had an IEP like you. In school, I was served for an SLD, which I later learned was dyslexia.

As a student in public school, my disability affects my ability to read and write, mostly in how I spell.

However, because my brain works differently, I also pick up math fast and am great at special awareness tasks.

This means that accommodations that are helpful for me are focused on supporting my weakness in reading and writing. So, the use of dictation may be helpful accommodation.

As an adult, I had to be retested while in college to get the support I needed in my college classes.

At that time, I learned I also had Attention Defected Hyperactive Disorder (ADHD) which is an OHI (Other Health Impairments).

For me, that means something. I struggle to stay focused on one task. I also struggle to stay organized and plan out which assignments to do first.

On a positive note, I can hyper-focus on things. I also like to try new things since I get bored easily

Even if you have the same two disabilities as me, remember that disabilities affect people differently, so what is hard for me may be easy for you.

Comprehension Question 7

Ms. Dorr only has one disability that affects the way she learns.

True or False

Because SLD and OHI disabilities affect people differently, different people need different accommodations based on what they do well and what they struggle with.

Being willing to talk about strengths and weaknesses with others is a critical skill in self-advocacy, which helps you find the right accommodations for you.

Comprehension Question 8

If two people have the same disability, they will always need the same accommodation.

True or False

Since learning differences impact everyone differently, so people's needs, or accommodations differ. However, common accommodations given in both high school and college can include

- recorded lectures
- extended time on assignments and tests
- Use of assistive technology like text readers or dictation software
- changes to the testing location
- testing on a computer
- small group or individual testing
- Even a foreign language waiver which is something I used in college

Remember, if you have and use accommodations in high school, you can also have accommodations in college

Comprehension Question 9

While you may have accommodation in high school, you cannot have any accommodation at college.

True or False

So why should self-advocacy be so important? It is essential because there is a process to get what you need if you do not know. It can be overwhelming to navigate the accommodations process if you do not understand how to ask for the accommodation you need. Ultimately, you can end up with an accommodation that is not right for you. Being a great self-advocate can empower you to make the right choices for your education and future. If you learn about your learning strengths, weaknesses, legal rights, and how to communicate them with others, you can be a better self-advocate which can help you reach your goals.

Comprehension Question 10

Learning about your own learning strengths, weaknesses, and legal rights and how to communicate them with others can help you be a better self-advocate and help you reach your goals.

True or False

Right now, in high school, your special education teacher will help you ensure you have the best accommodation and let your other teachers know what accommodations they **MUST** give you. Your accommodation is protected by law, and not giving your accommodation to you breaks the law.

While your accommodations are protected by the law in college, too, you are the one who must make sure you tell the college you need accommodations after you enroll, which is called self-identification. You also must request accommodations from your college instructors, so you must be willing to tell them what accommodations you need and when you will need them and set up how you will get them.

When you are in college, you are responsible for making sure you get the accommodation you need because you will not have a special education teacher to do it.

Comprehension Question 11

Like in high school, you will have a special education teacher in college.

True or False

To review having a hidden disability that affects your learning is not that big of a deal, especially if you get the accommodations you need. Being a great self-advocate means taking the time to get to know yourself

Self-advocacy is all about finding the best way to meet your own needs by knowing your strengths and weaknesses,

Learning how to self-advocate helps us all

Comprehension Question 12

Learning to be a self-advocate is only about learning about your weaknesses.

True or False

In this video, we discussed the first three major things you should remember.

- 1) Being a good self-advocate makes getting help or the accommodation and support you need easier because you know how to explain your needs to others.
 - 2) When you can explain your learning differences in terms of weaknesses, strengths, and current accommodations, it is easier to get the accommodation you need to succeed.
 - 3) When you transition to college, one significant change is that you become responsible for ensuring you have the accommodation you need, as you will not have a special education teacher to support you.
-

I will now give you the data collection probe you saw at the start of the baseline data collection phase.

While there is no right or wrong answer for many of these questions, you will score higher based on the amount of detail you give when answering questions. Some questions will also relate to the information within your IEP. Therefore, your responses to each question will be scored on a zero-to-three-point scale. Before we start, I want to explain how that scale system works so you have the best chance of getting the highest score you can.

Remember, you are scored on the content and quality of your answers. You will not be scored on sentence structure, writing mechanics, or spelling, so try your best to answer in as much detail as possible. Take your time answering these questions and be as detailed as possible. The answers to many of these questions relate to you personally and the contents within your IEP, so make sure the answers relate to you.

Probe Questions (aloud)

1. How does self-advocacy impact your ability to receive help for your learning difference?
 2. How does understanding your learning difference impact your ability to receive accommodations?
 3. What major change happens with accommodations you already have when you transition to postsecondary schools?
 4. What learning difference do you have documented on your current IEP, and how does it impact your learning?
 5. What are the strengths and weaknesses in reading, writing, or math that are documented in your IEP?
 6. What accommodations do you currently have, and how do they support your learning?
 7. What laws protect individuals with disabilities rights to accommodation?
 8. What role do you play in self-advocating for your post-secondary needs in relation to the self-identification process?
 9. What can you do in the college setting if you fail to receive your requested accommodations after self-identifying to a college and requesting your accommodations from a professor?
 10. Why may you need to self-advocate for accommodations, and what should you bring with you when you do?
 11. Why is it important to explain what accommodations need and how they benefit you to others?
 12. If a college professor or instructor refused to give you a needed accommodation after you asked, what could you do?
-

Thank you for participating in this study of the self-advocacy program UNICORNS.

UNICORNS Interactive Video Module 2: Developing Your IEP Literacy

Hello friends, (click) this is Ms. Dorr. Today I will be sharing the self-advocacy UNICORNS program with you. In this Interactive video module, we will talk about (click) Developing your IEP literacy skills

In the last interactive video module, we started working on our “knowledge of self” by discussing some of the most common hidden disabilities that can affect how a person learns. We talked about Specific Learning disabilities (SLD) and other health impairments (OHI).

We also discussed how having a disability that affects your learning means that you have protected accommodations by law. Today we will look at an IEP that would be like I had in high school. While I review the parts of an IEP, you will follow along with a copy of your IEP. Remember that my IEP will not have the same information as yours, but the information should be in the same places

Comprehension Question 1

This video will focus on learning about your current IEP

True or False

I will also show you how to use the information from your IEP with the eight steps in the “UNICORNS” Mnemonic when requesting accommodations from a college instructor professor. Remember these steps include

1. Being unreserved by starting a conversation,
 2. Disclosing your needs,
 3. Informing others about what accommodations you need,
 4. Citing how accommodations have been helpful in the past,
 5. Learning how to react if someone objects to giving you an accommodation,
 6. Reconcile any difference and reach an agreement.
 7. Restate the conversation in a nutshell, and
 8. Stop or end a conversation with your college instructor/professors
-

Comprehension Question 2

The “UNICORNS” mnemonic will help you learn the steps to request accommodations when in college.

True or False

Knowing what is in your IEP will help you better explain your strengths, weaknesses, and needs to others when you share with your instructors what accommodations you have. You will also

need to have this information when you self-identify at the postsecondary school or college in the future.

Before we go into more detail for this lesson, let us take a minute to review what self-advocacy is.

Self-advocacy is the ability to speak for yourself and share with others what you need to ensure you have the supports you need. To be a good self-advocate, you need to have skills in four areas. These areas are knowledge of self, knowledge of rights, communication skills, and leadership skills.

Today we will continue to build on our “knowledge of self” by discussing the parts of an IEP and what is in your IEP

Comprehension Question 3

Today we will be talking about leadership skills.

True or False

In the last video, we discussed the first three major topics we will review now.

- 1) Being a good self-advocate makes getting help with the accommodation and support you need easier because you know how to explain your needs to others, such as extended time to small group testing.
 - 2) When you can explain your needs to other people, it makes it easier to get the accommodations you need to be successful.
 - 3) When you transition to college, you become responsible for ensuring you have the accommodation you need.
-

Today we will look at “OUR” IEPs and review the various parts in the IEP so you can better explain your strengths, weakness, and the accommodations you need when you leave high school.

Comprehension Question 4

Today we will look at other states’ Individual Education Programs (IEPs).

True or False

Before I show you an example of my IEP and look at yours, you should know that IEP stands for Individual Education plan or program (depending on whom you ask) and has five main jobs.

1. IEPs are part of the law that covers students while in public education. So, after you leave high school, you have protection under two laws that we will discuss in the following video.
2. IEPs explain what disabilities you have.
3. IEPs explain individual strengths and weakness
4. IEPs outline what accommodations help you the most.
5. IEPs explain the services you should get while in public school.

Comprehension Question 5

IEPs often explain your disability, strengths, weakness, and accommodations.

True or False

In the following few slides, we will look at a copy of what an SC IEP would like if it were written for me. While we do that, I want you to look at the copy of your IEP that you have been given so you can look at the information in your IEP. You should have your IEP in from you so you can read it while I discuss the parts and how to interpret the most important sections of an IEP.

Today we will focus on three major parts of our IEPs

- 1) Section one, Enrollment, will contain your personal information and the disability you are currently served for
- 2) The second section we will look at is the Present Level of Academic Achievement and Functional Performance, which will contain your Strengths and your weaknesses
- 3) The third section we will look at is the Accommodations and Modification section, which says the accommodations you currently have

Comprehension Question 6

We will look at three main sections of the IEP today.

True or False

On the top of the first page, you should see information such as the name of our school district under that. You should see your full name. Yes, I change my name to Katie Unicorn for this, but on your IEP, you should see your information.

The first big section we need to discuss is in the Enrollment section that you see here. This section shows that I am served with an IEP for a Specific Learning Disability. Take a minute to look and see what your disability is listed as.

While you do not have to tell a professor at the postsecondary level what your diagnosis is, I have found that being able to say I have a specific Learning disability and have accommodations at this college to be very helpful.

When we self-advocate, being clear about why we need accommodations makes it harder for people to say no.

Take a few seconds, read your IEP, and try to find disability so you can answer the next question about your IEP.

Comprehension Question 7

You are served for a disability in the following area.
(Not Ms. Dorr's IEP)

- a) SLD
- b) OHI
- c) Both SLD and OHI

The following important part of your IEP is the Present Levels of Academic Achievement and Functional Performance. That is a long name, but you will find your special education teachers' strengths and weaknesses in this section.

Underneath where it says students' academic and functional strengths, you will see where your special education teacher has listed your strengths and a narrative form if we look at my copy

You will see here that my teacher has talked about my reading skills. While I know that this is a weakness for me, a special education teacher has found that there are some strengths

Take a few seconds, read your IEP, and try to find your strengths. You may even want to highlight them.

Comprehension Question 8

You have strengths in only reading.
(Not Ms. Dorr's IEP)

True or False

In the next section, we will look at my academic and functional needs. Special education teachers will often go ahead in this section and say what accommodation you are currently using and how they help you.

So, let us look at my IEP. At the top of this section, my special education teacher says I can do my classroom tasks with extended time and use a computer to type when needed.

A bit lower down, I can see that my special education teacher has listed my weakness

Here my IEP states that I misspell words when I write, even words I know how to spell. I write below grade level when asked to write without a computer, and my spelling makes it hard to read what I have written.

Here they have discussed my reading weakness. They say that I struggle to read aloud when I am reading because I might understand what a word is in my mind. I struggle with pronouncing the word aloud.

This information is vital information that you must share with your professors and your university to help them understand why you need accommodation.

In reading just these few sections, I can already go up to a teacher and say that I have a specific learning disability or a learning disability in reading which means I also struggle with spelling,

Remember when we self-advocate, we must tell somebody why we need accommodation. Being able to tell them the reason behind them makes it harder for people to say no to us again.

Take a few seconds, read your IEP, and try to find your weakness. You may even want to highlight them.

Comprehension Question 9

You have weaknesses in both reading and Math.
(Not Ms. Dorr's IEP)

True or False

So, we are going to skip a few sections like post-secondary, and we are going to Scroll down and pass the annual goals because, by the time you are in college, these would be out of date since they only matter while you are in a secondary school here

However, then we will get to this section entitled Accommodations and Modifications. These are the current accommodations that you have in high school. Looking at my list of accommodations, we see that I have

- multiple or frequent breaks
- extended time for assignments
- a small group setting for quizzes and tests
- preferential seating
- word processor
- extended time for quizzes and tests
- and visual cues

All these things are accommodations I can request after self-identifying at the college level.

Take a few seconds, read your IEP, and try to find your accommodation. You may even want to highlight as we go along.

Comprehension Question 10

**You have weaknesses in both reading and Math.
(Not Ms. Dorr's IEP)**

True or False

The rest of the IEP that I will scroll through quickly just contains information about how you are served in a secondary setting here at our high school. Still, it would be best if you gave the entire IEP to the college you enroll in when you first self-identify, which we will discuss in the next video. However, from reading these three main sections of my IEP, I have a better idea of how to request accommodations at the college level from my professor so let us look at that for one second.

Using the eight steps in the “UNICORNS” Mnemonic, which are

1. Being unreserved by starting a conversation,
2. Disclosing your needs,
3. Informing others about what accommodations you need,
4. Citing how accommodations have been helpful in the past,
5. Learning how to react if someone objects to giving you an accommodation,
6. Reconcile any difference and reach an agreement.
7. Restate the conversation in a nutshell, and
8. Stop or end a conversation with your college instructor/professors

With the information in my IEP, I can ask for my needed accommodations

Comprehension Question 11

The “UNICORNS” mnemonic has eight different steps.

True or False

To see how this would work, I would start by being unreserved by saying, “Hello, Dr. Whomever.”

Then I would state my needs by saying, “I have a specific learning disability that makes writing difficult for me.”

I would inform the professor, “I need to use the accommodation that the colleges granted me, such as extended time, or I need to use my word processor or computer to type my response.”

I would cite to the professor, “My accommodations help to ensure I have enough time to complete assignments, and the word processor allows me to spell information correctly, so my writing is understandable to others.”

If my professor objects, I would give them my college’s accommodation letter, which we will discuss in the following video

Then I would reconcile how I would use my accommodations, such as “How would you like me to take any exams with all my accommodations in place.”

Then I would, in a nutshell, restate what we agreed to “So, you would like me to take the exam at the Office of Disabilities Testing center on the same date as the other students? ”

Finally, I would stop the conversation by saying, “Thank you for your time.”

We will also discuss this more when we get to our interactive video module four, where you are going to see me with request accommodations using the mnemonic UNICORNS.

So far, we have talked about the following things in the first two IVMs

1. Being a good self-advocate makes it easier to explain and know how to get the accommodations and support you need in college and life.
2. When you can explain your disability to others, it makes it easier to get the accommodations that fit your needs best and helps you to be successful.
3. When you transition to college, you become responsible for ensuring you have the accommodations you need as there are no special education teachers.

Today you...

1. You looked at your IEP and saw what learning difference you had services for.
 2. You saw and read about your learning strengths and weaknesses.
 3. Finally, you saw and read about your current accommodations.
-

Today, we will collect data on your current understanding of the skills and knowledge needed to be the best self-advocate you can be. While there is no right or wrong answer for many of these questions, you will score higher based on the amount of detail you give when answering questions. Your responses to each question will be scored on a zero-to-three-point scale.

Remember, you are scored on the content and quality of your answers. You will not be scored on sentence structure, writing mechanics, or spelling, so try your best to answer in as much detail as possible. Take your time answering these questions and be as detailed as possible. The answers to many of these questions relate to you personally and the contents within your IEP, so make sure the answers relate to you.

Probe Questions (read aloud)

1. How does self-advocacy impact your ability to receive help for your learning difference?
2. How does understanding your learning difference impact your ability to receive accommodations?
3. What major change happens with accommodations you already have when you transition to postsecondary schools?
4. What learning difference do you have documented on your current IEP, and how does it impact your learning?
5. What are the strengths and weaknesses in reading, writing, or math that are documented in your IEP?
6. What accommodations do you currently have, and how do they support your learning?
7. What laws protect individuals with disabilities rights to accommodation?
8. What role do you play in self-advocating for your post-secondary needs in relation to the self-identification process?
9. What can you do in the college setting if you fail to receive your requested accommodations after self-identifying to a college and requesting your accommodations from a professor?
10. Why may you need to self-advocate for accommodations, and what should you bring with you when you do?
11. Why is it important to explain what accommodations need and how they benefit you to others?
12. If a college professor or instructor refused to give you a needed accommodation after you asked, what could you do?

Thank you for participating in this study of the self-advocacy program UNICORNS.

UNICORNS Interactive Video Module 3: Your Rights in Secondary and Higher Education

Hello friends, this is Ms. Dorr. Today I will be sharing the self-advocacy UNICORNS program with you. In this Interactive video module, we will talk about, Your Legal Rights in Secondary and Higher Education

Remember, in the first IVM, we discussed self-advocacy and started building on our knowledge of self. In the second video, we looked at our IEPs to discover our disabilities, strengths, weakness, and accommodations.

Today, we will work on the second subskill of knowledge of legal rights by discussing your legal rights or educational rights as an individual with a disability.

Comprehension Question 1

Today we will be talking about the knowledge of legal rights.

True or False

Remember these steps; all this information will help you when you use the eight steps in the “UNICORNS” mnemonic. As a reminder, these steps are

1. Being unreserved by starting a conversation,
 2. Disclosing your needs,
 3. Informing others about what accommodations you need,
 4. Citing how accommodations have been helpful in the past,
 5. Learning how to react if someone objects to giving you an accommodation,
 6. Reconcile any difference and reach an agreement.
 7. Restate the conversation in a nutshell, and
 8. Stop or end a conversation with your college instructor/professors
-

Let us take a minute to review what self-advocacy is.

Self-advocacy is speaking for yourself and sharing what you need with others. Being a good self-advocate means that you have developed skills in the following four areas. These four areas are knowledge of self, knowledge of rights, communication skills, and leadership skills. We have already worked on building your knowledge of self in the last two IVMs

Today we will start to build on our knowledge of rights by discussing what legal rights we have as individuals with a disability

Comprehension Question 2

We have already worked on building your skills in the subskill of communication.

True or False

As an individual with a disability or learning difference, you have legal rights and educational rights. These educational rights extend past just public education and your IEP that we looked at in the last IVM. Educational rights apply to all people with learning differences currently pursuing a degree.

Comprehension Question 3

Educational rights only apply to students in High school settings.

True or False

Both laws protect our rights to reasonable accommodations. The term reasonable means that my accommodations do not give me an advantage over my peers; instead, my accommodations make it easier for me to show my understanding.

For example, from the last video, we know that I have the accommodation to use a word processor. That word processor makes it easier for me to type my answer and spell my word correctly since my disability affects my spelling. The word processor does not allow me to look up information during a test, so it is a reasonable accommodation for a person with a learning disability that affects reading and writing.

Another vital part of being a self-advocate is knowing who is responsible and how to advocate for your accommodations. The right accommodations will support your needs but do not give you an unfair advantage.

Comprehension Question 4

Both ADA and Section 504 of the Rehabilitation Act protect the educational rights of a student with disabilities.

True or False

Both laws protect our rights to reasonable accommodations. The term reasonable means that my accommodations do not give me an advantage over my peers; instead, my accommodations make it easier for me to show my understanding.

Another essential part of being a self-advocate is knowing who is responsible and how to advocate for your accommodations. At the college level, you must self-identify as needing accommodations for your learning difference so that you can be granted the right accommodations. The right accommodations will support your needs but do not give you an unfair advantage

Comprehension Question 5

Accommodations give individuals with disabilities an unfair advantage over other non-disabled peers.

True or False

For example, from the last video, we know that I have the accommodation to use a word processor. That word processor makes it easier for me to type my answer and spell my word correctly since my disability affects my spelling. The word processor does not allow me to look up information during a test, so it is a reasonable accommodation for a person with a learning disability that affects reading and writing. Everyone's accommodations should be different based on their needs and strengths.

Comprehension Question 6

In college, everyone will get the exact same accommodations

True or False

Being a good self-advocate is knowing the process you need to undertake to get the accommodations you need.

Each college or universities campus's policies and procedures may be slightly different. However, as a college student, your first responsibility is to disclose your learning differences to the Disability Services Office. This office may use different names, such as CCU's Accessibilities and Disability Services (ADS). However, I will call it the Disability Services Office in this IVM.

To self-identify at the post-secondary level after you have been accepted into the college of your choice, you will need to take your paperwork from high schools. Your last IEP, your last three-year re-eval, and even your Summary of Performance written during your senior year are suitable paperwork to bring in. You should set up a meeting time and take this paperwork to the Disability Services Office at your college to start getting to prove you have needs as a student with a disability.

Comprehension Question 7

You should take paperwork such as your last IEP, last 3-year re-eval, and Summary of performance to the office of disabilities.

True or False

Some colleges like Coastal Carolina University also use online systems to help better serve students with learning needs. But by going to the office the first time or calling the Disability Services Office, you can meet with someone who works for the college who will help explain their process. If your college uses a system like Accommodate, the staff at your center can help you set up your account. They can also help you navigate the system to ensure you have uploaded the correct paperwork. You remember you should bring your IEP with you first go to meet with your college's Disability Services Office staff.

The Disability Services Office will help ensure you are provided reasonable accommodation, ensure students with disabilities are not discriminated against and create a grievance process on campus. After self-identifying by submitting your past IEPs and Re-Eval information to the office, you will be notified of the accommodations you have been granted. If you need to, you can discuss additional accommodations you may need. You will receive a letter of accommodations emailed through email or on their online accommodation system. You will only get the accommodation letter after self-identifying with the college.

Comprehension Question 8

After you have self-identified with the college, you will receive a letter of accommodations.

True or False

This is a copy of my most recent letter of accommodations from CCU. This letter serves a few major purposes. First, it will allow you to see what accommodations they have granted you, which allows you to discuss any other accommodations you may need. If you read my letter, you can see that CCU granted me extended time and the use of a Word Processor. However, when I started the process, they only gave me extended time, and I had to call a few times and self-advocate for that accommodation by explaining the need and how it fits my disability. Since I could explain my need and understood the paperwork, I sent in the use of a word processor with dictation was request was granted.

Secondly, the letter is also used to share your accommodation plans with your instructors. Some colleges like HGTC and CCU will send out accommodation letters for you. However, you have the let the Disability Services Office know what classes they need to send the letter to each semester.

Comprehension Question 9

You do not need to tell the office of Disabilities services what classes you have.

True or False

It would be best if you met with your professors at the start of each semester to ensure they know your accommodations.

It is a good idea to print a copy of your accommodation letter and give it to a professor in person at the start of the semester. This is the role a special education teacher plays while in high school, but once you reach the post-secondary level, it is your job to ensure your instructors know your accommodations.

To make your get your accommodations in each class, you should follow the following steps

1. Self-identify to the college's Disability Services Office
2. Enroll in your classes
3. Give your class information to the Disability Services Office
4. Then, they will create an accommodation letter for each of your classes.
5. Set up a meeting with your professor to discuss using your accommodations.
6. Use the steps in the "UNICORNS" mnemonic to discuss any accommodation you think you will need during class and exams.

Following these steps allow you to make sure you have a plan to use your accommodations in class. Never assume that a professor knows your accommodations until you have talked with

them in person. They teach a lot of students and get a lot of emails. After self-identifying, you must still self-advocate for your needs in each class. It would be best if you talked to your professor before you start using your accommodations

Comprehension Question 10

You do not need to talk to your professors about your accommodation ever.

True or False

Sometimes a professor may not understand what you are asking for or forget that accommodations are protected, so they may say “No” the first time you ask for your accommodations.

What you should do:

1. Do not become upset
2. Give them a copy of the accommodations letter you have brought.
3. Remind them **NICELY** that ADA and section 504 protect accommodations, and the college has already granted you the accommodations in the letter.
4. Let them read the letter and then ask if you can make the accommodations work in the class.

Faculty and staff share in the responsibility of the accommodation process. They must make sure that they implement your approved accommodations. You should see that Professors and college instructors often have a written statement about the school’s disability process in their syllabus. They also must keep your need for accommodations confidential.

I have never had a professor deny my accommodations, but I have had to stay later or come in early for a test to ensure I have my accommodations. That is why you should discuss accommodations in advance, not on the test day. Make sure to have your accommodation letter so if they say no at first, I can give it to them and remind them that the college is granting this accommodation and is not something you are just making up.

Comprehension Question 11

If a professor says no to giving you accommodation, you should start yelling at them.

True or False

In the last video, we talked about how a sample conversation with one of my professors may look like

1. I would be unreserved by saying, “Hello, Dr. Whomever.”
2. I would explain my needs by saying, “I have a specific learning disability that makes writing difficult for me.”

3. I would inform the professor, “I need to use the accommodation that the colleges granted me, such as extended time and using my word processor to type my response.”
4. I would cite how these accommodations help me. I could say, “My accommodations help ensure I have enough time to complete assignments, and the word processor allows me to spell information correctly, so my writing is understandable to others.”
5. If my professor says “No” or objects, I would give them my college’s accommodation letter, which we discussed in this IVM, and let them read it. If I need to, I can remind them **NICELY** that my accommodations are granted by the college and protected by both ADA and section 504.
6. Then I would reconcile how I should use my accommodations by stating, “How would you like me to take any exams with all my accommodations in place.”
7. Then, in a nutshell, restate what we agree to “so you would like me to take the exam at the Office of Disabilities Testing center on the same date as the other student?”
8. Finally, I would stop the conversation by saying, “Thank you for your time.”

Institutions are responsible for designating a disability provider on campus and remaining updated on current disability legislation. However, unlike in high school, because there are no special education teachers reminding professors that accommodations are protected, they sometimes forget or may say no the first time you ask for your accommodations.

Sometimes things go as planned. If you feel you have not received your approved accommodation at the college or university, you can file a complaint. If you have self-identified to the college and requested your accommodations from a professor, you will need to start the Grievance process. To start this process, you must submit an official written complaint to the Disability Services Office. Each institution must have an impulse grievance process for students to follow. Once a student has submitted their written statement to the Disability Services office. The correct personnel will investigate and provide both parties with the findings within 30 days.

While I have never had to file a complaint, I have had to remind the professor of my accommodations and make plans with them to ensure my accommodation is met.

Comprehension Question 12

After self-identifying and providing your professor with your accommodation letter, if your accommodation is denied, you may start the Grievance Process by writing a letter to the ODS.

True or False

So far, we have talked about the following things in the first two IVMs

1. Being a good self-advocate makes it easier to explain and know how to get the accommodations and support you need in college and life.
2. When you can explain your disability to others, it makes it easier to get the accommodations that fit your needs best and helps you to be successful.
3. When you transition to college, you become responsible for ensuring you have the accommodations you need as there are no special education teachers.

4. You looked at your IEP and saw what learning difference you had services for.
5. You saw and read about your learning strengths and weaknesses.
6. Finally, you saw and read about your current accommodations.

In this video, we discussed the first three major things you should remember.

1. Two laws that protect your accommodations are the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act.
2. To self-identify at the college level, you need to contact the college office of disabilities and provide them with your IEP paperwork to begin your services and redo your accommodations each semester.
3. If you fail to receive your accommodations, you can start the grievance process with your college by notifying the college's Office of Disabilities that you have not received your accommodations in writing.

Thank you for watching this module. I hope the information will help you be successful as you continue your educational journey. Next, I will collect data on your current understanding of the skills and knowledge needed to be the best self-advocate you can be.

Remember, these questions have no right or wrong answer. You will score higher based on the amount of detail you give when answering questions. Your responses to each question will be scored on a zero-to-three-point scale. You are scored on the content and quality of your answers. You will not be scored on sentence structure, writing mechanics, or spelling, so try your best to answer in as much detail as possible. Take your time answering these questions and be as detailed as possible. The answers to many of these questions relate to you personally and the contents within your IEP, so make sure the answers relate to you.

Probe Questions (read aloud)

1. How does self-advocacy impact your ability to receive help for your learning difference?
2. How does understanding your learning difference impact your ability to receive accommodations?
3. What major change happens with accommodations you already have when you transition to postsecondary schools?
4. What learning difference do you have documented on your current IEP, and how does it impact your learning?
5. What are the strengths and weaknesses in reading, writing, or math that are documented in your IEP?
6. What accommodations do you currently have, and how do they support your learning?
7. What laws protect individuals with disabilities rights to accommodation?
8. What role do you play in self-advocating for your post-secondary needs in relation to the self-identification process?

9. What can you do in the college setting if you fail to receive your requested accommodations after self-identifying to a college and requesting your accommodations from a professor?
10. Why may you need to self-advocate for accommodations, and what should you bring with you when you do?
11. Why is it important to explain what accommodations need and how they benefit you to others?
12. If a college professor or instructor refused to give you a needed accommodation after you asked, what could you do?

Thank you for participating in this study of the self-advocacy program UNICORNS.

UNICORNS Interactive Video Module 4: Becoming UNICORNS: Self-advocacy 4 Accommodations

Hello friends, this is Ms. Dorr. Today I will be sharing the self-advocacy UNICORNS program with you. In this Interactive Video Module will discuss Becoming UNICORNS: Self-advocacy for Accommodations.

In the first module of the self-advocacy UNICORNS program, we discussed that Self-advocacy is the ability to speak for yourself and share with others what you need.

In the second video, we looked at our IEPs to discover our disabilities, strengths, weaknesses, and accommodations.

In the third video, we discussed our legal rights as students with disabilities.

Today you will see how to use the steps in the “UNICORNS” mnemonic to request accommodations from a college professor.

Comprehension Question 1

Today we will be talking about the knowledge of self.

True or False

These steps will help you remember how to request accommodations at the postsecondary level. The eight steps in the “UNICORNS” mnemonic are

- Being unreserved by starting a conversation,
 - Disclosing your needs,
 - Informing others about what accommodations you need,
 - Citing how accommodations have been helpful in the past,
 - Learning how to react if someone objects to giving you an accommodation,
 - Reconcile any difference and reach an agreement.
 - Restate the conversation in a nutshell, and
 - Stop or end a conversation with your college instructor/professors
-

Comprehension Question 2

The eight steps in the “UNICORNS” mnemonic can help you request accommodations in postsecondary settings.

True or False

Before we move on, let us remember that self-advocacy is the ability to speak for yourself and share with others what you need. Being a good self-advocate means that you have developed skills in four different subskills. These four subskills are knowledge of self, knowledge of rights, communication skills, and leadership skills.

Today we will start to build on our communication and leadership skills by discussing the best way to request your accommodations at the postsecondary level from your future college professors and instructors

Comprehension Question 3

Today we will be talking about communication and leadership skills.

True or False

Today, you will watch as I request accommodations from a different professor.

Comprehension Question 4

Today you will watch as I request my accommodations from professors like I would in a postsecondary setting.

True or False

In the last video, we talked about how a sample conversation with one of my professors may look like

1. I would be unreserved by saying, “Hello, Dr. Whomever.”
2. I would explain my needs by saying, “I have a specific learning disability that makes writing difficult for me.”
3. I would inform the professor, “I need to use the accommodation that the colleges granted me, such as extended time and using my word processor to type my response.”
4. I would cite how these accommodations help me. I could say, “My accommodations help ensure I have enough time to complete assignments, and the word processor allows me to spell information correctly, so my writing is understandable to others.”

5. If my professor says “No” or objects, I would give them my college’s accommodation letter, which we have discussed in this IVM, and let them read it. At the same time, I remind them **NICELY** that my accommodations are granted by the college and protected by both ADA and section 504.
6. Then I would reconcile how I should use my accommodations by stating, “How would you like me to take any exams with all my accommodations in place.”
7. Then, in a nutshell, restate what we agreed to “so you would like me to take the exam in the Office of Disabilities Testing center on the same date as the other student?”
8. Finally, I would stop the conversation by saying, “Thank you for your time.”

In these situations, I will request extended time and use my computer with dictation software, two of my accommodations at CCU (Coastal Carolina University).

Comprehension Question 5

In these situations, I will request extended time and use my computer with dictation software.

True or False

Remember, college professors have many students, so you should always talk to your professor in person to ensure they are aware of your accommodations and how you will use them in their class. Before you can self-advocate for your accommodations, it is a good idea to set up a meeting with your professor during their office hours or tell them if they have time after class.

Remember, you should always bring a copy of your accommodations letter from the college or university so that if a professor objects, you have documentation to support your request.

Comprehension Question 6

When self-advocating for your accommodations, you should bring your Letter of Accommodations.

True or False

Speaker 1 (PI): Good morning, Dr. Cox. Thank you for meeting with me.

Speaker 2: Hey, how are you? Good to see you today.

Speaker 1 (PI): Good. I wanted to talk to you about the upcoming exam that we have in the American History 101 class.

Speaker 2: Okay. What about?

Speaker 1 (PI): I am not sure if you are already aware of this, but I have a disability that makes completing assignments in a timed fashion and without a word processor difficult.

Speaker 2: Okay, I was not aware of that. So how can I help you with that?

Speaker 1 (PI): Well, the College has granted me extended time and the use of a word processor, and I was wondering how I could use those accommodations to take the upcoming exam.

Speaker 2: So, you think you are going to need those accommodations in my exam in particular?

Speaker 1 (PI): I am sure I will need them since there is a written part. I am a little afraid of not having the dictation because I want you to be able to read everything because of my spelling and to ensure that I have the time to use the dictation and not disturb other students.

Speaker 2: Okay. I do not think that should be a problem. We can make that accommodation for you.

Speaker 1 (PI): How would you like me to take the exam with those accommodations in place?

Speaker 2: So, you will need to go in and schedule the exam with the disability services office, and then I can make sure that they have a copy of the exam and all the things you need for the exam.

Speaker 1 (PI): Okay. So, I will contact them the next day and schedule that and then make sure you know when to send the exam. Would that be okay?

Speaker 2: Sounds great.

Speaker 1 (PI): Okay. Thank you. Thank you so much for your time and for ensuring that I have the accommodations I need for the exams.

Comprehension Question 7

When I came to this meeting, I had my Letter of Accommodations in my hand.

True or False

In this example, Dr. Cox had no objections to my self-request for accommodations, but I still had my letter with me just in case.

Also, remember that explaining why you need the accommodation is essential, as it helps your professor understand why your accommodations are reasonable.

In this example, I explain that the accommodations ensure my written response is readable, and I do not want to disturb another student while I take my exam.

Comprehension Question 8

In this example, Dr. Cox Objected to my accommodation request, and I had to give him my Letter of Accommodations.

True or False

Sometimes things are not that easy. Sometimes your professor may not say yes, the first time you request accommodations, which is why you should bring your Letter of Accommodations with you. So, let us look at one more example.

Comprehension Question 9

Every time you request accommodations, your professors will always say “yes” the first time.

True or False

Speaker 1 (PI): Good morning, Dr. Thomas. Thank you for meeting with me today.

Speaker 2: Thank you for coming in on time. How can I help you today?

Speaker 1 (PI): I wanted to discuss the exam you mentioned in class that is coming up next month.

Speaker 2: Do you have an issue with the exam already?

Speaker 1 (PI): No, sir. I just wanted to check. I did not know if you knew that I am a student with a learning disability and ADHD, which make it a little difficult for me to finish things in short periods, and I have issues with spelling things correctly.

Speaker 2: I did not know that. What do you do about the exam?

Speaker 1 (PI): I have accommodations that help me with that time, and I use a computer with Dictation software to help with the spelling.

Speaker 2: I do not know if that would be fair for the other students. If I let you take an exam different from them, that would not be fair.

Speaker 1 (PI): I understand that you might feel that way. However, the College has granted me these accommodations, and because they are reasonable accommodations for my disability, they are also protected by ADA and Section 504. I also brought you my accommodation letter in case you have not seen it yet.

Speaker 2: All right, the College has already stated that you can use accommodations for this course. I did not know that you already self-identified with the University. All right, you can take your test or any of your exams in the office of disability services, or you can come to class two hours early and take it without any of the students there. Since we already have all the lab equipment there in the room would be familiar to you.

Speaker 1 (PI): Just let me know what you want to do if it is okay with you. Since you are available early, I think coming in early and being able to take it in the classroom with the lab equipment would be the best for me.

Speaker 2: Okay. Then I will meet you here about 2 hours early before the usual class time. Nobody will be here, and you can take the exam before other students arrive.

Speaker 1 (PI): Okay. I will remind you the day before so that you are aware and know that I am coming in early.

Speaker 2: All right, that sounds good.

Speaker 1 (PI): Thank you so much for being with us.

Speaker 2: You are welcome. Thank you.

Speaker 1 (PI): Thank you. Bye.

Comprehension Question 10

Dr. Thomas did not object to my request for accommodations the first time I asked.

True or False

In this example, Dr. Cox had no objections to my self-request for accommodations, but I still had my letter with me just in case.

Also, remember that explaining why you need the accommodation is important, so a professor understands why your accommodations are reasonable.

In this example, I explain I explained that the accommodations make sure my written response is readable, and I do not want to disturb another student while I take my exam

Comprehension Question 11

If a professor continues to deny your request for accommodations after giving your Letter of Accommodation you can start Due Process.

True or False

To wrap up this IVM, let us discuss the 12 things you have learned

1. Being a good self-advocate makes it easier to explain and know how to get the accommodations and support you need in college and life.
2. When you can explain your disability to others, it makes it easier to get the accommodations that fit your needs best and helps you to be successful.
3. When you transition to college, you become responsible for ensuring you have the accommodations you need as there are no special education teachers.
4. You read your IEP and saw what learning difference you had services for.
5. You have also read your IEP to learn your learning strengths and weaknesses.
6. You have also read your IEP to learn about your current accommodations.
7. Two major laws that protect your accommodations are the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act.
8. To self-identify at the college level, you need to contact the college office of disabilities and provide them with your IEP paperwork to begin your services and redo your accommodations each semester.
9. If you fail to receive your accommodations, you can start the grievance process with your college by notifying the college's Disabilities Office that you have not received your accommodations in writing.
10. You should make sure your professors are aware of your accommodations before you need to use them, and make sure to bring your accommodations letter
11. When you explain what your accommodations are and why you need them, it is harder for people to say no since they will understand it is a reasonable accommodation
12. If a college professor or instructor refuses to give you needed accommodation after you asked, you should give them your Letter of Accommodation and give them time to read I. You can always start the grievance process if they still refuse

Thank you for watching this module. I hope the information will help you be successful as you continue your educational journey. Next, I will collect data on your current understanding of the skills and knowledge needed to be the best self-advocate you can be.

Remember, there is no right or wrong answer for many of these questions. You will score higher based on the amount of detail you give when answering questions. Your responses to each question will be scored on a zero-to-three-point scale. You are scored on the content and quality of your answers. You will not be scored on sentence structure, writing mechanics, or spelling, so try your best to answer in as much detail as possible. Take your time answering these questions and be as detailed as possible. The answers to many of these questions relate to you personally and the contents within your IEP, so make sure the answers relate to you.

Probe Questions (read aloud)

1. How does self-advocacy impact your ability to receive help for your learning difference?
 2. How does understanding your learning difference impact your ability to receive accommodations?
 3. What major change happens with accommodations you already have when you transition to postsecondary schools?
 4. What learning difference do you have documented on your current IEP, and how does it impact your learning?
 5. What are the strengths and weaknesses in reading, writing, or math that are documented in your IEP?
 6. What accommodations do you currently have, and how do they support your learning?
 7. What laws protect individuals with disabilities rights to accommodation?
 8. What role do you play in self-advocating for your post-secondary needs in relation to the self-identification process?
 9. What can you do in the college setting if you fail to receive your requested accommodations after self-identifying to a college and requesting your accommodations from a professor?
 10. Why may you need to self-advocate for accommodations, and what should you bring with you when you do?
 11. Why is it important to explain what accommodations need and how they benefit you to others?
 12. If a college professor or instructor refused to give you a needed accommodation after you asked, what could you do?
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Thank you for participating in this study of the self-advocacy program UNICORNS.

Probe Data Collection Interactive Video Module

Hello friends, thank you for participating in this study of the self-advocacy program UNICORNS.

Today, we will collect data on your current understanding of the skills and knowledge to be the best self-advocate. While there is no right or wrong answer for many of these questions, you are righter and more detailed. Therefore, all your work on the questions to come will be scored on a zero-to-three-point scale. Before we start, I want to remind you how that scale system works, so you have the best chance of getting your best score.

Before we start, let us look at an example question and how you could score possible answers.

For this example, the question will be: What is your favorite food to eat in the whole world?

If you type the answer “I don’t know” or “I like dogs.” you would get a score of 0 because you did not answer the question at all.

If you type, I like Pizza. You would get a score of 1 because you could have more detail. You did answer the question but with very little detail.

If you type I like pepperoni pizza, you will get a score of two because you answered the question and gave a little bit of detail.

If you type, I love pepperoni pizza with a thin crust from Pizza Hut. I would give you a full score of three because you answered and gave enough details to have any more questions.

Remember, you are scored on the content and quality of your answers. You will not be scored on sentence structure, writing mechanics, or spelling, so try your best to answer in as much detail as possible.

Now that that has been explained again, you will see the 12 data collection probe questions in just a minute. Take your time answering these questions and be as detailed as possible.

Remember, the answers to some of these questions will relate to you personally and the contents within your IEP, so make sure the answers relate to you. In other words, if your favorite food is chicken nuggets, do not tell me about pizza. Okay, let us get started.

Probe Questions (read aloud)

1. How does self-advocacy impact your ability to receive help for your learning difference?
2. How does understanding your learning difference impact your ability to receive accommodations?
3. What major change happens with accommodations you already have when you transition to postsecondary schools?
4. What learning difference do you have documented on your current IEP, and how does it impact your learning?

5. What are the strengths and weaknesses in reading, writing, or math that are documented in your IEP?
6. What accommodations do you currently have, and how do they support your learning?
7. What laws protect individuals with disabilities rights to accommodation?
8. What role do you play in self-advocating for your post-secondary needs in relation to the self-identification process?
9. What can you do in the college setting if you fail to receive your requested accommodations after self-identifying to a college and requesting your accommodations from a professor?
10. Why may you need to self-advocate for accommodations, and what should you bring with you when you do?
11. Why is it important to explain what accommodations need and how they benefit you to others?
12. If a college professor or instructor refused to give you a needed accommodation after you asked, what could you do?

Thank you for taking the time the response to the questions within this data collection probe. I hope you have a wonderful day, and I will see you again soon.

Appendix I

Hypothetical IEP For Third Video

Coastal Carolina University Individualized Education Program

Katie L Unicorn <small>Legal Name of Student</small>	01/11/2004 <small>DOB</small>	49573066 <small>Local ID</small>	SUN S	01/11/2022 <small>IEP Meeting Date</small>
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TYPE OF PLAN

Transition - Annual Review IEP

STUDENT INVITATION

If Katie has questions about the IEP meeting she will contact Kathleen Heiss.

ENROLLMENT

Service District: Coastal Carolina University	Service School: CCU High
Home District: Coastal Carolina University	Home School: CCU High

Grade(s): 12
Primary Area of Disability: Specific Learning Disability

PARENT/GUARDIAN INFORMATION

DATES

IEP Start Date: 1/12/2022	IEP End Date: 1/10/2023
Next Annual Review: 1/10/2023	Next Reevaluation/Eligibility: 1/2/2025

CONSIDERATION OF SPECIAL FACTORS

Special Factor	Yes	No
The student's behavior impedes the student's learning or the learning of others.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The student exhibits behavior that requires a Functional Behavioral Assessment.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The student exhibits behavior that requires a Behavioral Intervention Plan.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The student has Limited English Proficiency.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The student is blind or visually impaired.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The student has communication needs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The student needs Assistive Technology devices or services.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Katie L Unicorn Legal Name of Student	01/11/2004 DOB	49573066 Local ID	SUNS	01/11/2022 IEP Meeting Date
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PRESENT LEVELS OF ACADEMIC ACHIEVEMENT AND FUNCTIONAL PERFORMANCE

Student's Academic and Functional Strengths

Katie is a 17-year-old 12th-grade student who served at Georgetown high school. She is served by special education for a specific learning disability. Currently, she receives services in the area of reading and writing. She is a pleasant young student who will complete assignments to the best of her ability.

Pro-Social

Since starting at Georgetown high school based on incident reports her behavior is within the normal range of a 12th grade student at Georgetown high school.

Since starting at Georgetown high based on attendance records. Her attendance is within the normal range for a 12th - grade student at Georgetown high,

She gets along well with peers and enjoys working with other students who she likes to complete assignments. She will ask for teacher help even assignment is too difficult.

Math

Based on IXL diagnostic data, CBM Data, and teacher observations Math is a relative strength. She is strongest in the area of algebra and algebra thinking is a relative strength for Katie. She is able to complete all her math assignments in her general education classes without aid from a special education teacher.

Reading

Based on IXL diagnostic data, CBM data, and teacher observation while reading is an activity that Katie enjoys. Katie's favorite types of books are fantasy novels which she will read for an extended period of time. She has a large vocabulary she is also able to use e is able to use context clues to determine the meaning of unknown words.

Writing

Based on writing records, IXL data, and teacher observations Katie is able to come up with responses to both informational and literary writing prompts. She understands how the writing process changes based on the type of writing she has been asked today.

Transition

Based on the last SCOIS 16 career classmate survey given her top three career clusters fall within the areas of Education and training, manufacturing, and information technology.

in a teacher-student interview, she stated that he would be interested in as an artist, but she knows this may not provide her with a full income. She would like to go to college to be a teacher

General Education Classes

Katie is enrolled in English 4, Probability and Statistics, and Art 4. Currently she is passing these classes with grades between A-Bs

Katie L Unicorn Legal Name of Student	01/11/2004 DOB	49573066 Local ID	SUNS	01/11/2022 IEP Meeting Date
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Student's Academic and Functional Needs

Katie is a 12th-grade student on the Standard high school diploma track. Katie benefits from the accommodations of extended time for quizzes and tests extended time for assignments, frequent breaks, preferential seating, and the use of a word processor for writing tasks. With these accommodations, he is able to complete assignments on her grade level.

Reading

Based on IXL diagnostic data, CBM data, and teacher observations Katie is performing slightly below grade level in the area of reading. IXL data places her at a total score of 1200, the score places her on a starting 12th grade reading level independently. She is weakest in the area of reading strategies in relation to informational texts. She struggles to use pronunciation rules to decode tier three-level vocabulary words.

On the last 12th grade curriculum-based measure in which she was given an informational text and asked to pronounce tier three vocabulary words, she had a baseline score of 35% accuracy. Therefore, this will serve as his baseline for her upcoming IEP goal in informational texts.

Writing

Based on IXL diagnostic data, writing records, and teacher observations Katie's writing is performing significantly below grade level in the area of writing she had an overall rubric score in all areas of 2 out of four. In the area of writing, she struggles the most with spelling. The use of a word processor with spell check enables her to use her large spoken vocabulary to write responses using the words she understands but is unable to spell accurately. When unable to use a word processor or spell check Katie will change the wording of her passage is to avoid words she cannot spell accurately. through the use of a word processor with spell check, Katie is able to meet grade-level expectations without additional special education support therefore a goal in this area is unnecessary at this time.

In the area of writing, Katie needs to increase her use of graphic organizers to structure her prewriting process. this will enable her to stay on topic and fully answer writing prompts. teacher observation and writing logs indicate that Katie currently uses graphic organizers to structure her writing on only one out of four writing assignments

Transition

based on Katie's transition go college or university to train to become a teacher Katie needs to continue to build her reading and writing skills to better enable her to complete college-level writing assignments and to fully understand college-level textbooks

Impact of Student's Disability

Based on Katie's current levels of academic performance she benefits from having time built within the require school day to complete assignments with repetitive instruction in the area of reading and writing. The time build within the normal school setting in the form of special education service in a resource setting allows Katie extending time to complete assignments in structured environment and receive academic support to continue to build skills in the areas of reading and writing.

Parent/Student Input on PLAAFP

Dad stated that Katie often forgets to do assignments at home is will become focused on video games and "forget" that she has homework. He would like her to work on building more structure and routines that are focused on getting her assignments completed.

Katie L Unicorn Legal Name of Student	01/11/2004 DOB	49573066 Local ID	SUNS	01/11/2022 IEP Meeting Date
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Academic Achievement

Area of Assessment: Written Expression

Date: 01/04/2022

Method or Name of Assessment:

IXL, CBM Data

Findings:

Based on IXL diagnostic data, writing records, and teacher observations Katie's writing is performing significantly below grade level in the area of writing she had an overall rubric score in all areas of 2 out of four. In the area of writing, she struggles the most with spelling. The use of a word processor with spell check enables her to use her large spoken vocabulary to write responses using the words she understands but is unable to spell accurately. When unable to use a word processor or spell check Katie will change the wording of her passage is to avoid words she cannot spell accurately. through the use of a word processor with spell check, Katie is able to meet grade-level expectations without additional special education support therefore a goal in this area is unnecessary at this time.

In the area of writing, Katie needs to increase her use of graphic organizers to structure her prewriting process. this will enable her to stay on topic and fully answer writing prompts. teacher observation and writing logs indicate that Katie currently uses graphic organizers to structure her writing on only one out of four writing assignments

Academic Achievement

Area of Assessment: Reading

Date: 01/05/2022

Method or Name of Assessment:

IXL, CBM data

Findings:

Based on IXL diagnostic data, CBM data, and teacher observations Katie is performing slightly below grade level in the area of reading. IXL data places her at a total score of 1200, the score places her on a starting 12th grade reading level independently. She is weakest in the area of reading strategies in relation to informational texts. She struggles to use pronunciation rules to decode tier three-level vocabulary words.

On the last 12th grade curriculum-based measure in which she was given a informational text and asked to pronounce tier three vocabulary words she had a baseline score of 35% accuracy. Therefore, this will serve as his baseline for her upcoming IEP goal in informational texts.

POST-SECONDARY CONSIDERATIONS**Assessment Information**

Assessment: SCOIS, Student Teacher interview, Date: 1/6/2022

Findings

Based on the last SCOIS 16 career classmate survey given her top three career clusters fall within the areas of Education and training, manufacturing, and information technology.

in a teacher-student interview, she stated that he would be interested in as an artist, but she knows this may not provide her with a full income. She would like to go to college to be a teacher

Based on Katie's transition plan to go to a college or university to train to become a teacher Katie needs to continue to build her reading and writing skills to better enable her to complete college-level writing assignments and to fully understand college-level textbooks.

Student's Interests and Preferences

Katie likes to read fantasy novels, draw, paint, and play RPG video games in her free time.

Katie L Unicorn Legal Name of Student	01/11/2004 DOB	49573066 Local ID	SUNS	01/11/2022 IEP Meeting Date
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Career Employment Goal

Katie will be a teacher at a local elementary school.

Post-School Education/Training Goal

After completing high school Katie will enroll in a two-year college and start taking the required courses to transfer to a university to earn a degree in education and become a teacher.

Independent Living Skills Goal (when appropriate)

SC Career Cluster: Education and Training

Course of Study: Standard Course of Study towards a State High School Diploma

Recommended courses to support post-secondary transition

Teacher cadets, Parent and child development

High School Objective: State High School Diploma

Month/Year of anticipated graduation/exit: 06/2022

Transition services needed to assist student in reaching post-secondary goals

- **Service:** Instruction **Location:** GHS **Outside Agency:** None

ANNUAL GOALS AND/OR OBJECTIVES

Frequency of progress reports to parents: 4.5 Weeks (Interim)

Goal 1

Area of Need: Reading - Instructional/Special Education, Transition

Start Date: 01/12/2022 **End Date:** 01/10/2023

Measurable Goal:

By the end of the IEP term when given instruction on pronunciation Katie will be able to pronounce tier three vocabulary words on a 12th-grade curriculum-based measure informational text increasing to an accuracy rate of 75% from a baseline of 35% accuracy as measured by the special education teacher bi-weekly using CBM data progress graphing.

Goal 2

Area of Need: Written Expression - Instructional/Special Education, Transition

Start Date: 01/12/2022 **End Date:** 01/10/2023

Measurable Goal:

By the end of the IEP given instruction in writing pre-writing graphic organizers, Katie will use pre-writing graphic organizers to structure her prewriting process on 12th-grade level writing topics to stay on topic and fully answer writing prompts increasing her usage of these organizers to three out of four writing prompts increasing from one out of four writing CBMs as measured by the special education teacher bi-weekly using CBM data progress graphing.

Katie L Unicorn 01/11/2004 49573066 01/11/2022
 Legal Name of Student DOB Local ID SUNS IEP Meeting Date

ACCOMMODATIONS AND MODIFICATIONS

Accommodations

What type(s) of accommodation(s), if any, is (are) necessary for the student to make progress in the general curriculum and participate in extracurricular and other nonacademic activities?

- Multiple Or Frequent Breaks
- Extended Time For Assignments
- Small Group Setting For Quizzes And Tests
- Preferential Seating
- Word Processor
- Extended Time For Quizzes And Tests
- Visual Cues

No curricular or non-curricular modifications were identified by the team.

NORMAL SCHOOL YEAR SERVICES

Category: Special Education/Specially Designed Instruction **Service:** Reading
Location: Special Education Classroom **Provider:** Special Education Teacher
Start Date: 1/12/22 **End Date:** 1/10/23
Direct/Indirect: Direct
Amount: 45 minutes daily

Category: Special Education/Specially Designed Instruction **Service:** Writing
Location: Special Education Classroom **Provider:** Special Education Teacher
Start Date: 1/12/22 **End Date:** 1/10/23
Direct/Indirect: Direct
Amount: 45 minutes daily

ASSESSMENT PARTICIPATION

Accommodations and modifications must reflect those used in daily classroom instruction

District Assessment(s)

Assessment	Participation	Accommodations
Probes and Benchmarks	Yes	None

Katie L Unicorn <small>Legal Name of Student</small>	01/11/2004 <small>DOB</small>	49573066 <small>Local ID</small>	SUN5	01/11/2022 <small>IEP Meeting Date</small>
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PROCEDURAL SAFEGUARDS

I have been provided with a notice of special education procedural safeguards.

Parent/Guardian/Adult Student Signature

Date

Parent/Guardian/Adult Student Signature

Date

MEETING PARTICIPANTS

Title/Role	Name	Signature	Date
Student			

Appendix J

Probe Questions

1. How does self-advocacy impact your ability to receive help for your learning difference?
2. How does understanding your learning difference impact your ability to receive accommodations?
3. What major change happens with accommodations you already have when you transition to postsecondary schools?
4. What learning difference do you have documented on your current IEP, and how does it impact your learning?
5. What are the strengths and weaknesses in reading, writing, or math that are documented in your IEP?
6. What accommodations do you currently have, and how do they support your learning?
7. What laws protect individuals with disabilities rights to accommodation?
8. What role do you play in self-advocating for your post-secondary needs in relation to the self-identification process?
9. What can you do in the college setting if you fail to receive your requested accommodations after self-identifying to a college and requesting your accommodations from a professor?
10. Why may you need to self-advocate for accommodations, and what should you bring with you when you do?
11. Why is it important to explain what accommodations need and how they benefit you to others?
12. If a college professor or instructor refused to give you a needed accommodation after you asked, what could you do?

Appendix K

Hypothetical College Letter of Accommodation(s)

Local University Logo Redacted

Accommodation Plan Memo

Student Name: **Student Legal Name**
 Chosen Name: **Student Chosen Name**
 Student ID: **Student ID Number**

DATE: **Date of Generalization Session**

University Name (redacted) is committed to equal opportunities for students by providing an inclusive and accessible learning environment. Accessibility and Disability Services (ADS) identifies accommodations and serves as a resource to consult and collaborate with faculty to remove barriers. If the design of the course cannot be adjusted to eliminate barriers, the student may use accommodations to access course content and/or demonstrate learning.

Faculty are encouraged to proactively design accessible courses and remove potential barriers. When an academic environment is inaccessible, accommodations remove barriers to create access. ADS should be consulted if it is believed an accommodation fundamentally alters essential elements or requirements of a course/program, including technical and performance standards, or if courses contain nontraditional components (i.e. clinicals, simulations, internships, etc.) to discuss potential alternative accommodations.

The following academic adjustments, coordinated services and/or auxiliary tools have been identified as accommodations necessary to remove barriers and create access in accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act (Section 504).

ADS recommends and encourages students and faculty to meet and discuss accommodation implementation for logistical purposes. Assess and accommodations are a collaborative process, and ADS is available for consultation as well.

Accommodations are not retroactive.

Student participants first accommodation

Anticipated semester of postsecondary enrollment

History 101

Intro to Biology

Student participants second accommodation

Anticipated semester of postsecondary enrollment

History 101

Intro to Biology

Student participants third accommodation

Anticipated semester of postsecondary enrollment

History 101

Intro to Biology

Accessibility and Disability Services

University Name (redacted)

Contact Information (redacted)

IMPORTANT - DO NOT REPLY DIRECTLY TO THIS EMAIL ADDRESS. ANY EMAIL REPLY TO THIS MESSAGE CANNOT BE READ BY ADS STAFF. PLEASE DIRECT ANY QUESTIONS TO **ADS office email address (redacted)**

Appendix L

Probe Data Collection Form

Date:

IVM completed:

Intervention Sessions Number:

Participant Self-reported Data on Session Location			
Where are you completing this video module?			
Are you in a comfortable and quiet location with limited distractions?			
What time of the day is it?			
IVM #	Total Active Time	Comprehension Accuracy	IVM Length
Probe Questions			
#	Participant Typed Responses		Score
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
Rater:			Total Score

Notes

Appendix M
Generalization Data Collection

Operational Definitional Definitions of Generalization Target Behaviors

Key Word	Target Behavior
Unreserved	The student starts a conversation with a greeting and introduces themselves.
Needs	The student states that they have needs due to a disability.
Inform	The student states the accommodation(s) they are requesting.
Cite	The student explains how the accommodation has been beneficial and used in the past.
Object <i>The request was denied</i>	The student explains that their rights to accommodations are protected by law and/or hands the instructor their College Letter of Accommodations.
Reconcile	The student reaches an agreement on how the accommodation will be used.
Nutshell	The student restates the agreement that was reached.
Stop	The student ends the conversation by thanking the instructor.

1. Unreserved

Target Behavior: They started the conversation with a greeting and introduced themselves.

Examples

“Hello, Dr. _.” “Good Morning / Good Afternoon.” or “I am ___, in your history 101 Class

0	1	2
----------	----------	----------

2. Needs

Target Behavior: States that they have needs due to a disability.

Example

“I have accommodations from the Office of Disability Services.” “I have ADHD/Dyslexia.”

0	1	2
----------	----------	----------

3. Inform

Target Behavior: States the Accommodation(s) they are Requesting

Example

“I will need extra time on your exam.” or “I need to take my test at the testing center.”

0	1	2
---	---	---

4. Cite

Target Behavior: The student explains the benefit of the past accommodation in class

Example

“I have had extra time on exams to help me process the material.” or “I use small group setting for exams to help me focus.”

0	1	2
---	---	---

5. Object

The Accommodation is Denied, or an Instructor Voices Concerns

Target Behavior: Explains that the right to use accommodations is protected by law and/or hands over their letter of accommodation(s)

Example

“I understand your concerns. Here is my letter of accommodation, which protects my rights.”

0	1	2
---	---	---

6. Reconcile

Target Behavior: The student asks the instructor if the accommodation is suitable

Example

“Is it okay for me to come early to start my test for my extra time”

0	1	2
---	---	---

7. Nutshell

Target Behavior: The student restates the agreement that was reached

Example

I will come 30 minutes early to class next week to take my exam, so I have my extended time

0	1	2
---	---	---

8. Stop

Target Behavior: The student ends the conversation with the instructor

Example

Thank you for talking with me about this today

0	1	2
---	---	---

Appendix N

Student Social Validity Questionnaire

5/3/22, 1:55 PM

Social Validity Questions for Students

Social Validity Questions for Students

Dissertation Study

The respondent's email (null) was recorded on submission of this form.

1. Email *

2. The "UNICORNS" program's IVMs (Edpuzzles) helped me gain a better understanding my current IEP and its contents.

Mark only one oval.

Yes

No

3. I am more of how important it is for me to know how to self-advocate for accommodations after watching the IVMs (EdPuzzles).

Mark only one oval.

Yes

No

4. During instruction, I found the IVMs (Edpuzzles) easy to understand.

Mark only one oval.

Yes

No

5/3/22, 1:55 PM

Social Validity Questions for Students

5. I now better understand the importance of knowing how to request accommodations in postsecondary (college) setting,

Mark only one oval.

Yes

No

6. I feel more confident in my abilities to self-identify at the postsecondary (college) level.

Mark only one oval.

Yes

No

7. The steps to request accommodations in the UNICORNS mnemonic were easy to use.

Mark only one oval.

Yes

No

8. After this program feel more confident in my abilities to talk to and request my accommodations from a college instructor.

Mark only one oval.

Yes

No

5/3/22, 1:56 PM

Social Validity Questions for Students

- 9. After this program I know what to do if a college instructor were to object to my request for accommodations.

Mark only one oval.

- Yes
- No

- 10. When asking for accommodations, I am confident I know how to use the information and steps I was taught for requesting accommodations.

Mark only one oval.

- Yes
- No

- 11. I wish I had a copy of the steps as seen in IVM four when I completed the role-playing session with the college instructors to request accommodations

Mark only one oval.

- Yes
- No

- 12. Do you have any other feedback about what you learned or the IVMs (EdPuzzles) that you watched during this program.

Appendix O

Teachers' Social Validity Questionnaire

5/3/22, 2:15 PM

Social Validity Questions for Teachers

Social Validity Questions for Teachers

The respondent's email (null) was recorded on submission of this form.

1. Email *

2. I believe that teaching students with learning disabilities (LD), Other Health Impairments (OHI), and other hidden disabilities how to request academic accommodations is important and necessary.

Mark only one oval.

1 2 3 4

strongly disagree strongly agree

3. I believe that after the intervention, the student participants could more clearly explain their disabilities and/or learning needs

Mark only one oval.

1 2 3 4

strongly disagree strongly agree

5/3/22, 2:16 PM

Social Validity Questions for Teachers

4. I believe that after the intervention, the student participants increased their ability to both self-disclose their disability or learning need.

Mark only one oval.

1	2	3	4	
strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree

5. I believe that after the intervention, the student participants were better able to identify the accommodations they needed.

Mark only one oval.

1	2	3	4	
strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree

6. I believe that after the intervention, the student participants were better able to explain how accommodations had benefits them now or in the past.

Mark only one oval.

1	2	3	4	
strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree

5/3/22, 2:16 PM

Social Validity Questions for Teachers

- 7. I believe that after the intervention, the student participants were better able to maintain a positive tone of voice and appeared to be confident and assertive when requesting and negotiating the academic accommodation.

Mark only one oval.

1 2 3 4

strongly disagree strongly agree

- 8. I think the UNICORNS program is a useful secondary instructional tool that should help college-bound students with disabilities before they transition to postsecondary education.

Mark only one oval.

1 2 3 4

strongly disagree strongly agree

- 9. Do you have any other feedback about what you what you observed, think, or feel about this this program?

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